



**RISKY SEXUAL BEHAVIOUR AND ASSOCIATED FACTORS
AMONG YOUTHS AT NIGHT SCHOOL PROGRAM IN JIMMA TOWN,
SOUTHWEST ETHIOPIA**

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**A THESIS TO BE SUBMITTED TO JIMMA UNIVERSITY, INSTITUTE
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JIMMA, ETHIOPIA

JIMMA UNIVERSITY
FACULTY OF PUBLIC HEALTH SCIENCES,
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TOWN, SOUTHWEST ETHIOPIA, 2022

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ABSTRACT

Background: Risky sexual behaviors are any behavior that increases the probability of a negative impact on sexual and reproductive health. Adolescents and young people aged 15–24 years are particularly at high risk sexual behaviors. Risky sexual behaviors predispose adolescent and young group to a variety of sexually associated problems.

Objectives: The objective of the study was to assess the magnitude of risky sexual behaviors and associated factors among night school students in Jimma town 2021/2022.

Methods: A cross-sectional quantitative study was carried out among night school students in Jimma town, South west Ethiopia. Three hundred eight two individuals were selected from a total of 3015 by multi- stage sampling method. The data were collected using a pre-tested structured self-administered questionnaire. Data were entered into Epi-Info version 7 and analyzed using SPSS version 25.0 software.

Result: A total of 382 night school students were enrolled in the study with response rate of 382(97.4%) among those 201(52.6%) of the study participants were females and, 220(57.6%) the study participants had sexual experience among study participant. Among the sexually active students, 105(47.7%) reported that they had two or more sexual partners in their lifetime, 59(27%) reported sexual contact with casual person, 12(5.7) with commercial sex workers and the overall risky sexual behavior was 155 (70%).

Multivariable logistic regression analysis showed that grade 9-10 are less likely to have risky sexual behaviors than grade 11-12 by 54.5 percent [AOR= 0.455 (95% CI: 0.248, 0.838)] and being Practicing drinking alcohol were 4.471 more likely to have risky sexual behaviors than non drink alcohol [AOR=4.471 (95% CI: 1.996, 10.013)]. Similarly being had jobs are 0.315 times less likely to have risky sexual behaviors than non job [OR=0.315(95% CI: 0.178, 0.559)].

Conclusion: Significant number of night school students had two or more sexual partners had risky sexual behavior that might predispose them to different sexual and reproductive health problems, There for reducing risky sexual behavior among night school students can be achieved through multi-sectored responses in the school.

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Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency syndrom
AOR	Adjusted odd ratio
ASRH	Adolescent sexual and reproductive health
CDC	Center Of Disease Control
CEDAW	Convention on the Elimination of All Forms of Discrimination against women
CI	Confidence Interval
COR	Crude odd ratio
CSW	Commercial Sex Workers
DHS	Demographic Health Survey
FGDs	Focus Group Discussions
FDRE	Federal Democratic Republic of Ethiopia
FP	Family Planning
HAPCO	HIV and AIDS Prevention and Control Office
HIV	Human Immune deficiency
IDI	In-depth Interview
MPH	Master of Public health
NGOs	Non-Governmental organizations
P	Proportion
RERC	Research Ethics Review Committee
RSBs	Risky Sexual Behaviors
SPSS	Statistical Package for social science
SPH	School of Public Health
SRH	Sexual and reproductive health
STDs	Sexual transmitted diseases
STIs	Sexually transmitted infections
UNFPA	United Nations Population Fund Framework
UN	United nation
WHO	World Health Organization
YSRH	Youth Sexual and Reproductive Health

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1. CHAPTER ONE: INTRODUCTION

1.1. Background

Risky sexual behaviors are behavior which increases the probability of unwanted sexual and reproductive health problems such as, unprotected sex, using unreliable birth control, and it also comprises practices which can lead to sexually transmitted infection, unintended pregnancies and psychological distress (1). Youths who have early sexual debut are more likely to have risky sexual behaviors, like multiple sexual partners and inconsistent condom use. As a result, they increase the risk of, unwanted pregnancy, sexually transmitted infection (STIs), unsafe abortion, early childbirth, poor school performance and school dropout rate. These practices are the main challenges to health and wellbeing of the youth and among the common precedents of risky sexual behaviors (2, 3). According to the World Health Organization (WHO) Adolescents are individuals aged Ten to Nineteen Youths are from Fifteen to Twenty-four years and “young people” constitutes the age from Ten to Twenty four years. Youths accounted the larger and growing share of the world population, and majority of these are in developing country (4). This period is the time in which youth face many challenges (1). Many useful life events and ill-health behaviors start during youth period. As a result, it is a time of both risk and opportunity. The time between initiation of sexual activity and marriage is a time of sexual experimentation and may involve risky behaviors (5). The factors for risky sexual behaviors are pleasure, curiosity, peer influence, financial benefit, biological, social, economic status and environmental factors (alcohol utilization pornography, chewing chat and night club smoking cigarette and taking ashish) (6, 7). Worldwide, risky behaviors related to sexual practices in young people are increasing. Reports from different studies shows that the magnitude of risky sexual behavior among students ranges from 19- 44.7% (8, 9, 10). Studies about risky sexual behavior on high school and preparatory night students are limited and different behavioral and socio-economic factors are affecting the sexual health of night students. Therefore, this study tried to assess risky sexual behaviors, which could lead to sexual transmitted infection, unwanted pregnancy and factors, which factors are affecting the sexual health.

1.2. Statement of the problem

Current statistics on HIV/AIDS indicate that one-half of all new HIV infections worldwide occur among young people ages 15 to 24. Every minute, five young people worldwide become infected with HIV/AIDS (11, 12, 22). Sub-Saharan Africa remains most severely affected with nearly 1 in every 20 adults 4.9% living with HIV and accounting for 69% of the people living with HIV worldwide (22, 23). Different studies also revealed that youths in Sub Saharan Africa were also tending to engage in having multiple sexual partners, concurrent sexual partners and unprotected sexual intercourse (23).

In developing countries, the rate of risky sexual behaviors including unprotected sexual intercourse and early sexual initiation is rising(24,25).Studies have showed that more than 50% of new STDs every year are due to young people aged 15to24 (26). Young people are engaged in high risk behaviors like smoking cigarettes, drinking alcohol, use of drugs, and gender based violence. These behaviors in turn lead them to engage in sexual risk behaviors (27). In Ethiopia and many other developing countries, the epidemic of HIV is high among young peoples who are mainly due to the risky sexual behavior (28).

While sexual initiation and sexual activity vary widely by region, country, and sex, in all regions young people are reaching puberty y earlier, often engaging in sexual activity at a younger age, and marrying later, consequently they are sexually mature for longer before marriage than has historically been the case (31, 32).

The risks of neglecting ASRH are great; painful or damaging transition to adulthood can result in a lifetime of ill effects. For girls, early pregnancy/ motherhood can be physically risky and can compromise educational achievement and economic potential. Youths girls in particular face increased risk of exposure to HIV and sexually transmitted infections (STIs), sexual coercion, exploitation, and violence. All of these have vast impacts on an individual's physical and mental health, as well as long-term implications for them, their families, and their communities (33).

Rights of the Child issued a General Comment recognizing the special health and development needs and rights of youths and young people (34).

Other supporting instruments are the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the right to health a concept included in

various inter-national agreements such as the Universal Declaration of Human Rights and the international Millennium Development Goals, which include indicators to reduce pregnancy rates among 15–19 year olds, increase HIV knowledge, and reduce the spread of HIV among young people (35). While sexual initiation and sexual activity vary widely by region, country, and sex, in all regions young people are reaching puberty earlier, often engaging in sexual activity at a younger age, and marrying later, consequently they are sexually mature for longer before marriage than has historically been the case (36).

Health programs at school, where they exist, address a variety of health issues but varying quality. The implementation of sexuality education, although inconsistent, is increasing in terms of coverage and quality. Policy-makers and public health program managers need to be convinced of the importance of young people's health. In addition, epidemiology and the evidence base of effective interventions need to be strengthened; funds need to be generated in order to support program implementation; and capacity building needs to be assigned a high priority. Finally, it is essential that the discomfort that can arise from the discussion and attempted management of sensitive subjects be acknowledged and dealt with in particular, with respect to sexuality, substance use, violence and mental health (37). The finding of the study will help to provide the current status on risky sexual behavior and its associated factors to identify the gaps and strengthen the existing strategies. Majority of students enrolled in high school are at mid adolescent level where sexual socialization, experimentation and identity building takes place; So that identifying risky sexual behaviors and associated factors among night school youth is crucial to design need base intervention for youth at school education. Thus, the aim of this study will show magnitude of risky sexual behaviors among youths in night school. The study also identified predisposing factors of risky sexual behaviors which will be important for policymakers and programmers in designing monitoring intervention in youths in school at night.

1.3. Significance of study

Worldwide, there are more than one billion people within the ages of 15-24 years, most of who live in developing countries. Young people constitute one-third of the total population in Ethiopia. This number is expected to grow from 20.3 million in 2000 to 25 million in 2010 (28). Youths face different challenges related to their sexuality which have an influence on their perception of the world and themselves. There has been increasing public health concern about the reducing age of initiation of youths into sexual activities. The rate of risky sexual behaviors and the spread of STIs continue to be on the increase due to many factors including dearth of information regarding adolescent sexuality(1). Each year, approximately one million young women aged 15-24 become pregnant and majority of these pregnancies are unplanned. Addressing the issue of sexual and non-sexual risk behaviors among young people is important in reducing the risk of HIV and other STI diseases (29).

Health care professional especially public health and policy makers should sensitize invariably help to empower youths on sexual issues and reduce their risk taking behaviors. Youths who engage in risky sexual behavior with multiple partners are less likely to use condoms, putting many at risk for STIs (8).

There are limited studies on risky sexual behaviors of students in the context of higher education institutions of Ethiopia (5). Even though there were studies done on risky sexual behavior in Ethiopia limited study had been done in the study area.

Studies about risky sexual behavior on high school night students are limited and different behavioral and socio-economic factors are affecting the sexual health of night students. Therefore, this study tried to assess risky sexual behaviors, which could lead to sexually transmitted infection, unwanted pregnancy and factors, which affect it.

Therefore, the aim of this study was to assess risky sexual behaviors and associated factors among students of Jimma town public high school night program and the finding of this study may reflect the realities on risky sexual behaviors in similar institutions in the study area. The findings of this study may reveal that youth's feelings about them self can be improved, thus contributing to increased self-acceptance and a more positive self-image. The awareness will help to clarify youth's misconceptions and make them useful to themselves, their families and the society at large.

2. CHAPTER TWO: LITERATURE REVIEW

Risky sexual behavior is any behavior that increase the probability of negative consequence associated with sexual contact like STI, HIV, unplanned pregnancy and abortion which can lead them to death and disability. It also includes behaviors like having multiple partners, early sexual initiation and failure to discuss risk topics with partner and inability to use protective methods like condom (21). Alcohol use is the main single contributor to risks to health in young people, as calculated by the number of disability-adjusted life years. Alcohol use starts at a young age: 14% of adolescent girls and 18% of boys aged 13–15 years in low- and middle-income countries are reported to use alcohol. It is associated with risks for the unborn child, increased injury risk, violence, and unsafe sex. It contributes to intentional and unintentional injuries, to mental health problems, to sexual and reproductive health problems and to HIV infections in high-income countries. Illicit drug use is the second largest contributor to risks to health in young people in high-income countries, as measured by the number of disability adjusted life years. Injecting drug use contributes to HIV transmission in some countries with concentrated HIV epidemics (39). Some behaviors initiated during adolescence have important consequences for health in adulthood. Unprotected sex, physical inactivity, and the use of tobacco, alcohol and illicit drugs all contribute to 17% of the global burden of disease in all ages. It is likely that half of the estimated 150 million young users multiple/concurrent sexual partner of tobacco who continue smoking into adulthood will die prematurely. Drinking patterns recognized early in life are associated with alcohol dependency or abuse in adulthood. STI can lead to infertility and cancers; and HIV infection leads to a chronic care burden on health systems and can be transmitted to infants (38, 40).

The literature review discusses the concept of magnitude of risky sexual behaviors, their associated factors and the conceptual framework.

2.1 Magnitude of risky sexual behavior

Magnitude of risky sexual behaviors of adolescents and young age are higher. Twenty-five to fifty-four percent of the adolescents and young have had lifetime sexual intercourse with higher proportion of male compared to females (6, 12)

2.1.1 Multiple/concurrent sexual partner

Among young female aged 15-24 years mean number 1.5 who ever had two or more sexual partners while for the same group of male 1.9 had two or more life time sexual partners (41). But the 2016 key indicators of EDHS report indicated in female sex little improvement has showed that is it decreases from 1.5 of 2011 to 1.3 in 2016. On the other hand for male it increases from 1.9 to 2.2 (31). A cross-sectional school based study done among preparatory school students in Gurage Zone, Ethiopia, revealed that of 108 students sexually practiced in their life time, 58(53.7%) have committed multiple sexual practice(27). In another cross-sectional school based study done in Boditti secondary and preparatory school South Ethiopia 70.3% of respondents who were committed sex had more than one sexual partner (35).

2.1.2 Sex for exchange of money/items

Sex for exchange of money also called transactional sex associated with a high risk of contracting STI and HIV. This is because of compromised power relations and the tendency to have multiple partnerships (36). Different studies done in high schools showed that significant proportion of sexually active young people ever had sexual intercourse with non regular partner for the sake of money 46(18.9%) and among those 22(7.4%) had sex with sex workers (38, 39).

2.1.3 Early sexuality

Early sexual intercourse is another problem of risky sexual behaviors. According to the 2011 EDHS 2011, with significant variation (39 % female, 13% male) of young women and men aged 15-24 who have had sexual intercourse before the age of 18 years (35). In a study done in eastern and northern western Ethiopia among in-school youth the percentage of pre-marital sex ranges from 22.7-28.8% in males' and 14.7- 15.5% (25, 26). But a cross sectional study done in east Gojjam Zone, Ethiopia, significance difference 80(66.6%) of sexually active youths in school that have engaged in premarital sexual relationship before their 18th birthday (26).

2.1.4 Inconsistent use of condom

Studies showed that among sexually active groups range from 25 to 49.5% of which did not use condom during their last sexual intercourse (26). A review of studies done on sexual behavior of in-school youth in sub-Saharan Africa prevailed that high prevalence rates of

sexual intercourse and significant proportions of adolescents who have two or more lifetime sexual partner are not use condoms and other contraceptives frequently(35).

In Ethiopia comprising 30% of the population, youths in the age range of 15-24, represent a huge segment of potentially vulnerable population in Ethiopia and an increasing number of them are involved in unsafe sexual practices and hence face undesired health outcomes such as unplanned pregnancy, too early childbirth, unsafe abortion and sexually transmitted disease (38). There are evidences that show that some youths, who are left in the care of siblings without consistent adult supervision, have increased opportunities for sexual activity (39).

2.2 Factors associated with risky sexual behaviors of students

There are different contributing socio demographic factors of risky sexual behaviors. Various studies show that demographic factors (age, sex, religion, ethnicity, occupation, income, living attachment), risk factors Peer pressure, pornography house, night clubs/day parties, substance abuse (alcohol, khat, shisha and tobacco/cigarette), unfriendly youth sexual reproductive health (UYSRH) service(12,26,27,28). In addition, a study done in Bahir Dare University revealed Khat chewing, drinking alcohol, attending night clubs and watching porno videos independently associated with likely hood of ever had sex and having multiple sexual partners(30).

2.2.1 Socio-demographic

Some findings of researches showed that socio-demographic characteristics influence risky sexual behaviors of adolescents. For example, in a meta-analysis of risky sexual behavior among male youth in twenty developing countries done by Yifru B. and Asres B., shows that age, educational and economic status associate with male youth aged 15–19 were more likely to engage in higher-risk sexual activity than those aged 20–24 years. Among those, male youth living in urban areas that had completed secondary education and belonged to the middle to the highest economic status engage in risky sexual practice (29).

A cross sectional school based study done at Gurage Zone, Ethiopia revealed that study participants Whose age is between 15-19 years were three times at risk of having risky sexual behavior than age group above 20 years (21).

2.2.2 Peer pressure

According to a study done by Cherie A. Etal among school adolescents in Addis Ababa peer pressure is the most important factor associated with risky sexual behavior. The study showed that from 3543 respondents 723 were sexually active students who were involved in risky sexual practices and 377 (10.6%) of the study participants were involved in risky sexual behavior in the past 12 month's sex (5).

2.2.3 Pornography Films

One of the risk factors of risky sexual behaviors is watching pornography films. For instance, a cross sectional study at Bahir Dar University shows that among 817 study participants 534 (65.4%) watching porn videos, and significantly associated for ever had sex and having multiple sexual partners(28). A study done in Nekemte town, Ethiopia, among female private College students shows that, viewing pornographic films found to be strongest predictor for the initiation of pre-marital sex. The study participants who viewed sexual film were 10.7 times more likely to have sexual practice before marriage than those who didn't (31).

2.2.4 Night clubs/day parties

Researches evidences show that attending night clubs/day parties associated with risky sexual behaviors. For instance, a cross sectional study carried out by Mulu, W. et al among students at Bahir Dar University shows that the proportion of study participants who attending night clubs are 130 (15.8%)(28). It was significantly associated for ever had sex and having multiple sexual partners like that of watching pornography films.

2.2.5 Substance abuse (alcohol, khat, shisha and tobacco/cigarette)

Studies show that substance use suppresses the ability of thinking and judgment that leads to risky sexual behaviors. A cross-sectional study done among high school students in Addis Ababa shows those students who use substance like alcohol, khat and cigarette/shisha were more likely to have risky sexual practice than those who didn't (33). Chewing Khat and alcohol consumption was significantly associated with a higher number of risky sexual practices (24, 25).

2.13. Conceptual framework of risky sexual behavior and associated factors

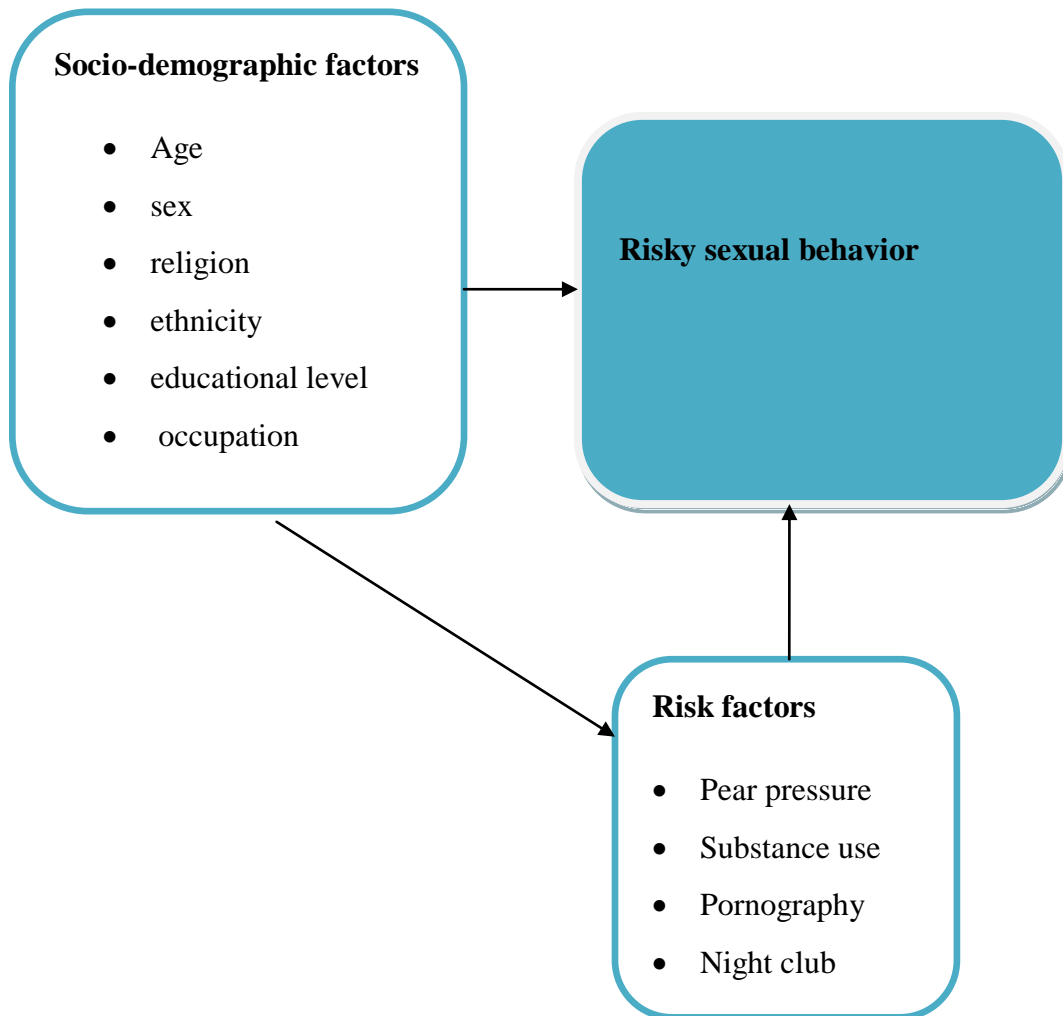


Figure.1. Conceptual frame work of risky sexual behaviors and associated factors adapted from various sources of literature with modification to suit the inquiry (12, 35)

3. CHAPTER THREE: OBJECTIVES

3.1 General objective

To assess risky sexual behavior and associated factors among high school youths at night program in Jimma town, Jimma Zone, South west Ethiopia, 2021/2022.

3.2. Specific objectives

To determine the magnitude of risky sexual behaviors among youths in Jimma town Public high school night program.

To identify factors associated with risky sexual behaviors among youths in Jimma town night program High school students.

4. CHAPTER FOUR: METHOD AND MATERIALS

4.1 Study Area and period

This study was conducted at Public high schools of Jimma town. Jimma town is located in Jimma zone, Oromia region, which is 352 km far apart from Addis Ababa, in south west of Ethiopia, the capital city of Ethiopia. It has a latitude and longitude of 7040'N and 36050'E, respectively. The temperatures are in a comfortable range, with the daily mean staying between 20°C and 25°C year-round and Jimma town. There are Six Public High schools and five Private high schools in Jimma town. A total of 11,806 students in public high school with 5,457 males and 6,349 females regular day time and a total of 3015 students in public high school with 2026 males and 989 females at night time. The current study will be carried out among high school students of Jimma Town at night program. The study was conducted among night time 9th -12th-grade students aged 15-24 years from May to August 2022.

4.2 Study design: School-based cross-sectional study was conducted.

4.3 Population

4.3.1 Source Population

All students who were registered and attending their education at Jimma town high school at night program in 2021/2022.

4.3.2 Study population

The study populations were all night school students (15-24 years) enrolled for academic year and attending class during the study period.

4.2 Inclusion and exclusion criteria

4.2.1 Inclusion criteria

Students who attend night time program & age (15-24)years

4.2.2 Exclusion criteria

4.5. Sample size determination and Sampling technique

4.5.1. Sample size determination

The sample size was determined by using a single population proportion formula:

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

$$n = \frac{(1.96)^2 * 0.5 * 0.5}{(0.05)^2} = \frac{3.8416 * 0.25}{0.0025} = 384$$

Where, n = sample size =384

$$q = 1-p$$

N= Total population of public high school night students in the Jimma town = 3015

p= proportion of high-risk sexual behaviors= 50%

Z= Percentiles of the standard normal value corresponding to 95 % level confidence

Z α /2= Coefficient at level of significance=1.96

d = precision (marginal error) = 0.05 (5%)

Finite corrected sample size: since total population of night school students (N) is 3,015 which are less than 10,000, should calculate sample size (n) using correction formula as bellow.

$$n = \frac{n}{1 + \frac{n}{N}} \quad n = \frac{384}{1 + \frac{384}{3015}} \quad n = \frac{384}{1.127} = 341$$

Taking non-response rate of 15 %, the total sample size = 392

4.6. Sampling Technique

Lists of night high school youths living in Jimma town were obtained and used as a sampling frame.

Proportionally allocated to the sample size of source population from each high school.

Then systematic random sampling technique method was used to select the study population.

Study participants was allocated to each school proportionally using formula,

$$n_i = n/N * N_i$$

Where

n=total sample size to be selected

N=total population

N_i = total population of each strata

n_i =sample size from each strata

$$HS1 (Ababuna) = \frac{340 * 392}{3015} = 44$$

$$HS2 (Mole) = \frac{626 * 392}{3015} = 81$$

$$HS3 (Jiren) = \frac{932 * 392}{3015} = 121$$

$$HS4 (Sexo) = \frac{405 * 392}{3016} = 53$$

$$HS5 (Geda) = \frac{160 * 392}{3015} = 21$$

$$HS6 (Jimma Secondary) = \frac{552 * 392}{3015} = 72$$

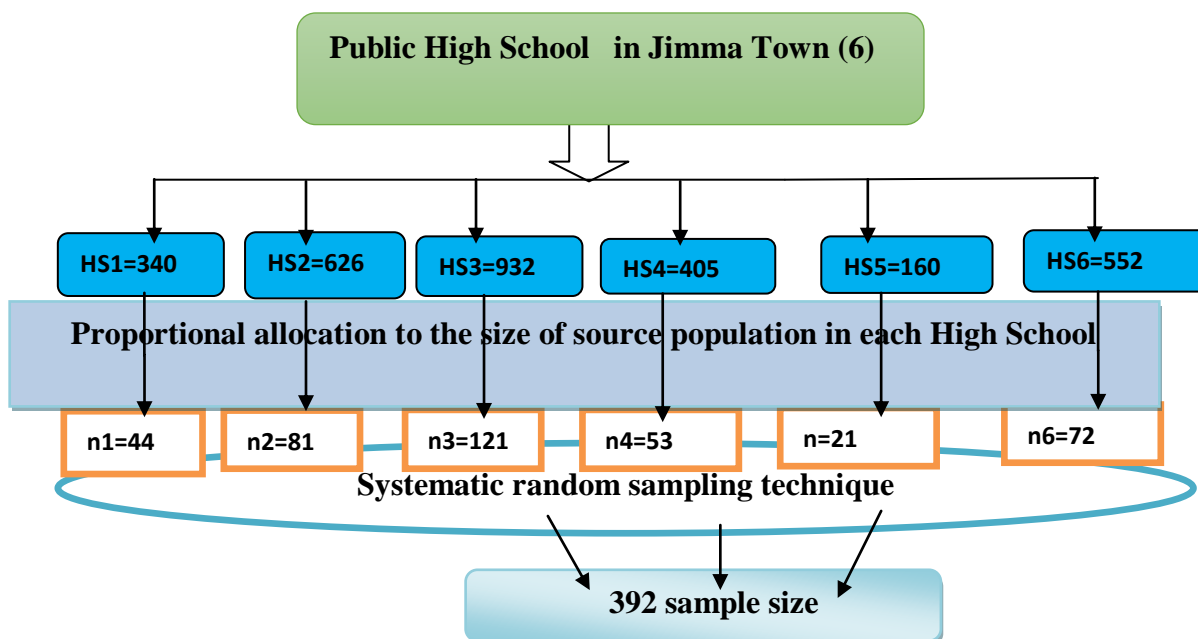


Figure.2. Schematic presentation of sampling procedures.

Study variables

4.6.1 Dependent variables

Risky sexual behaviors.

4.6.2 Independent (explanatory) variables

Socio-demographic: age, sex, religion, marital status, ethnicity, occupation, income and living attachment of participants and income of participants' family.

Risk Factors: Peer pressure, pornography movies, night clubs/day parties, substance abuse (alcohol, chat, shisha and tobacco/cigarette).

4.7. Data collection tools and procedure

A structured self-administered questionnaire was developed from different relevant literatures in the context of the study area. The questionnaire was initially prepared in English and then translated into the local language which is Afan Oromo and Amharic. The questionnaire was pretested to ensure the understandability of questions by study participants. Data were collected anonymously to ensure confidentiality and the serial number given to the questionnaire for cross-checking during the analysis if there is a missing value. The filled questionnaire was checked for completeness and consistency by the principal investigator every day. Finally, study participants are selected proportionately to the number of the students in schools based on their class attendance rosters using systematic random sampling methods.

Data were collected by three Diplomas holder nurses (two male and one female), and one BSc holder supervised the data collection process. In addition to their previous experience in data collection, one and half day training was given to data collectors and the supervisor. Data collection for the main survey took two weeks, starting from May 20, 2022.

4.8 Data Quality Control

To assure data quality, a supervisor with previous experience in data collection was recruited. And trained one and half day training was given for supervisor and data collectors. Moreover a pre-test was done on a 5% of the sample in two selected schools that were not included in the actual survey. Based on the pre-test necessary amendment was done.

4.9. Data processing and analysis

Data were cleaned, coded, and entered in to Epi-data version 3.1 and analyze using SPSS Windows versions 25.0. Descriptive statistical procedures were utilized to present results with table, graph, mean and frequencies.

Model fitness was checked with the hosmers-Lemeshow test. Moreover multicollinearity checked among independent variables, Bivariable relationships between each independent variable and dependent variable were investigated using binary logistic regression, Multivariable logistic regression was fitted to identify associated with risky sexual behavior, Those independent variables with a p-value <0.25 at bivariable analysis level were eligible for multivariable logistic regression analysis to control confounder, Adjusted odds ratio,(AOR) at 95% confidence interval with p-value ≤ 0.05 was used to report statistical significance.

4.10 Ethical Considerations

Ethical clearance letter obtained from Institutional Review Board of Jimma University and Official support letter was taken from faculty of health science. The data collection process was explained to each respondent, and the objective of the study and the procedure were explained to the high school directors. After permission was obtained, the issues of confidentiality was explain to the Participant, inform about the purpose and objective of the study and written consent obtained from each study participant and for less than 18 years of age from their family and teachers were taken. Confidentiality of the information was assured and privacy maintained. Any information record anonymously and confidentiality was assured throughout the study period and after a while. In order to ensure anonymity, personal information coded with a number and stored in a pass word lock laptop and secured place. It was explained to the participants to which only those investigators would have access to the information and the content of the investigation used for research only. Contact address was given to participants if they may have any questions or concerns about this request and for farther explanation.

Based on their willingness respondents randomly selected as study participant in the research and information collect after obtaining verbal and written informed consent from each participant. Respondents are informed the option of withdrawing from the study whenever they fill any of discomfort and want to refuse for any reason at any time without consequence.

4.11 OPERATIONAL DEFINITION

Risky sexual behavior: students who have experienced at least one risky sexual behaviors such as having multiple sexual partners or doing sexual intercourse with casual sexual partner, or sexual intercourse with a commercial sex worker, or inconsistent use of a condom were considered as having a risky sexual behavior.

Multiple sexual Partners: having sexual contact with two or more partners.

Alcohol: drinking substance that contains alcohol (Tella, Teji, Areke, Beer, Wine)

Casual partner: all other sexual relationships or partnerships other than wife/ husband or one steady boy/girl friend.

Consistent condom use: using condom during each and every sexual intercourse with non-regular partner.

Living with family: living attachment either of parent/s or spouse.

Early initiation of sex: Experience of sexual intercourse before the age of 18 years.

Female sex worker: consensual sale of sex or exchange of money/goods/ for sex.

Substance use: use of at least any one of the following substances: alcohol, chat, cigarette, shisha that are assumed to affect level of thinking and increase risk of involving in risky sexual behavior.

4.12 Dissemination plan

The result of the study will be submit and present to Jimma University, institute of health science, Faculty of Public Health, Department of population and family health. It also disseminates to Jimma town Education office, to different high school and other concerned organizations. Health managers and policy makers at different level gain from the result of this study. Effort was made to publish the work on peer reviewed journal

CHAPTER FIVE

5. RESULT

A total of 392 individuals participated in the study with a response rate of 382 (97.5%). From the total study participants, 4(1%) of them did not respond to the questionnaire and 6(1.5%) questionnaires were found to be incomplete and excluded from the analysis.

5.1.1 Socio-demographic characteristics of the study subjects

The mean age of the respondents were 21.4 (SD±1.99) with a minimum of 17 and maximum 24 of years. Two hundred twenty six (59.2%) had their own job. Of those majorities 77 (34%) were daily laborer. Average monthly income of the 214 study participants' who have job and responded to the income item was 1700 Ethiopian birr with a range of 500 and 3500 birr. 201 Participants respond about their family income among those parents' average monthly income was 2174 birr the rest did not know and unwilling to express their family income. Regarding to the living attachment, 162(41.6 %) students were with their family and 116(31.6%) live alone, 69 (18%) with friends, 30(7.5%) with relatives, the rest 5(1.4%) others (Table).

Table.2. Socio-demographic characteristics of night school students, Jimma town, south west Ethiopia, August 2022 (n= 382)

Variable		Frequency	Percent
Sex of participant	Male	181	47.4
	Female	201	52.6
Age in year	15-19	85	22.3
	20-24	297	77.7
Religion	Orthodox	142	37.2
	Muslim	185	48.4
	Protestant	49	12.8
	Catholic	6	1.6
Ethnicity	Amhara	40	10.5
	Oromo	173	45.3

	Tigre	12	3.1
	Gurage	29	7.6
	Dawuro	40	10.5
	Yem	32	8.4
	Kefa	14	3.7
	Others	42	11
Grade level	grade 9-10	213	55.8
	grade 11-12	169	44.2
Marital status	Married	68	17.8
	Never married	292	76.4
	Divorced	16	4.2
	Widowed	6	1.6
Current job	Yes	226	59.2
	No	156	40.8
Work type	Homemade	42	28.2
	Government	25	11
	Petty trade	38	16.8
	Daily laborer	77	34
	Exchange of money for sex	3	1.33
	Others	41	18
Living attachment	live with family	162	41.6
	live with relatives	30	7.5
	live with friends	69	17.9
	live alone	116	31.6
	Others	5	1.4

5.1.2 Sexual behaviors of the respondents

Two hundred twenty (57.6%) of the study participants ever had sexual intercourse, Out of these about 197 (89.5%) of the participants were sexually active during the last 06 months before the study period. One hundred five (105 (47.7%)) students reported that they had two or more sexual partners in their life-time. Sexual initiation range between the age of 14 to 21 and for majority and the mean age at first sex was 17.5(SD±2.3) years ranging between 14-21 and for the majority 201 (91%) were between the age group of 15-20 years and Among the respondents who reported having sexual intercourse most 107 (48.3%) claimed with a steady boy/girl friends and 12(5.7%) with sex workers. The reasons reported for initiating sex was 86(38.4%) falling in love. Out of 220 students those had first sexual intercourse, 33(13.7%) were with husband/wife there for consistent condom use compute from study participants who had sex experience. Out of 220 participants only 70(31.8%) and 77(40.4%) were life time & last 06 months used condom consistently (Table 2).

Table.3. sexual history of night school students sexual experience of night school students of Jimma town, August 2022 (n= 220)

Variable		Frequency	Percent
Sexual experience	Yes	220	57.6
	No	162	42.4
Partner type	Husband/wife	40	17.2
	Steady boy/girl friend	107	48.3
	Casual/ unknown person	59	27
	Sex worker	12	5.7
	Others	2	.95
Reason to sex	get married	33	13.7
	Fell in love	86	38.4
	For trial	39	18
	Coercion (Rape)	8	3.8
	To get money/ gift	6	2.8

	Peer pressure	40	18.5
	Influence of substance	8	3.8
No of sexual partner	One	115	52.3
	Two & more	105	47.7
Consistent condom use	Yes	70	31.8
	No	150	68.2
Condom use last 6 month	Yes	79	40
	No	118	60

5.1.3 Risky sexual behaviors

Risky sexual behavior was computed by considering one of the following sexual behavior/s of study participants. Those students who had two or more sexual partners, consistently condom used, sex with casual partner/s and sex with sex workers. One hundred five (48%) were having two or more sexual partners in their lifetime and 59(27%) had sex with casual partner/s. Out of 220 night school students who had sexual experience only 70 (31.2 %) were used condom consistently and 12(5.5 %) were performed sex with sex workers. Overall, the prevalence of the risky sexual behavior was 70 %

Magnitude of Risky Sexual Behaviors

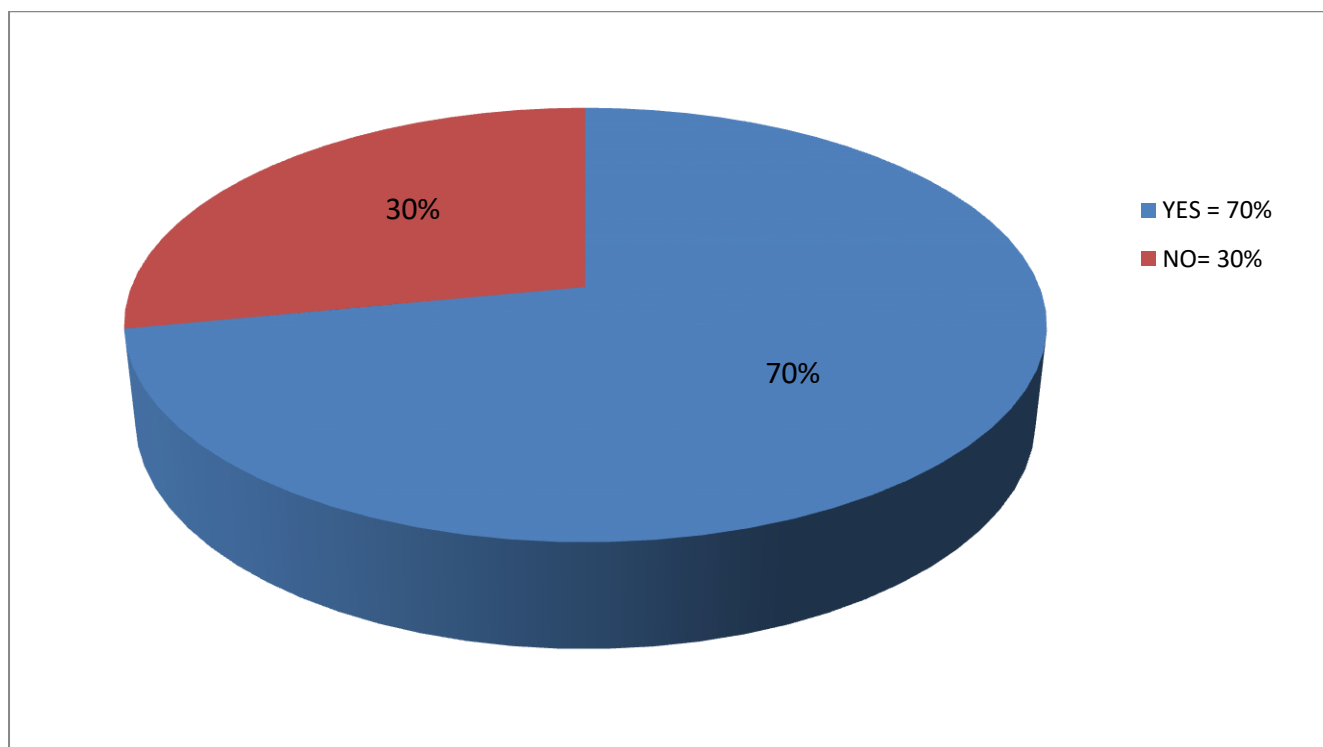


Figure 4: Risky sexual behaviors among night school student who had sexual experience of Jimma town, August 2022 (n= 382)

5.1.4 Predisposing factors among the study subjects

Ninety four (24.6%) of the night school students of Jimma town consumed alcohol and from those 80(85%) were practicing sex after drinking alcohol. One hundred nine (28.5%) and 51(46.8%) of the students were involved in chewing chat and practicing sex after chewing respectively. Sixty five (17.3%) and 45(69.2%) of the students were involved in taking shisha and practicing sex after using shisha respectively. Seventy seven (20.2%) and 61(79.2%) of the students were involved in watching pornographic movies and practicing sex after watching respectively and Regarding to night club 57(15%) the study participants visited night club and among those 40 (70%) reported they practiced sex after visited night club. Twenty four (6.3%) of the respondents smoked cigarette and of those 17(70.8%) were practicing sex after smoking (Table 4).

Table.5. Shows the predisposing factors among night high school students in Jimma town, August2022.

Variable		Number	Percent
<i>Drunk alcohol</i>	<i>Yes</i>	94	24.6
	<i>No</i>	288	75.4
<i>Sex after drink alcohol</i>	<i>Yes</i>	80	85
	<i>No</i>	14	14.8
<i>Smoking cigarette</i>	<i>Yes</i>	24	6.3
	<i>No</i>	358	93.7
<i>Sex after smoking</i>	<i>Yes</i>	17	70.8
	<i>No</i>	7	29.2
<i>Chewing khat</i>	<i>Yes</i>	109	28.5
	<i>No</i>	273	71.5
<i>Sex after chewing</i>	<i>Yes</i>	51	46.8
	<i>No</i>	58	53.2
<i>Take shisha</i>	<i>Yes</i>	65	17
	<i>No</i>	317	83
<i>Sex after take shisha</i>	<i>Yes</i>	45	69.2
	<i>No</i>	20	30.8
<i>Watch Pornography</i>	<i>Yes</i>	77	20.2
	<i>No</i>	305	79.8
<i>Sex after watching pornography</i>	<i>Yes</i>	61	79.2
	<i>No</i>	16	20.8
<i>Visit night club</i>	<i>Yes</i>	57	14.9
	<i>No</i>	325	85.1
<i>Sex after visiting night club</i>	<i>Yes</i>	40	70
	<i>No</i>	17	30

5.1.5 Socio-demographic factors associated with risky sexual behaviors

The variable included in bivariate were age, sex, religion, ethnicity, grade level, marital condition, job condition, living attachment, sex experience, income, drinking alcohol, smoking cigarette, chewing chat, taking ashish, watching pornography movie, and visiting night club. From those variable that were age, grade level, marital condition, job condition, living with, sex experience, drinking alcohol, smoking cigarette, chewing chat, taking ashish, watching pornographic movie and visiting night club candidate to multivariable analysis. Multivariable analysis indicated the students who were 9-10 grade were less likely to have risky sexual behaviors than 11-12 grade by 54.5 percent [AOR= 0.455 (95% CI: 0.248, 0.838)] and who were age 15-19 years 4.821 times more likely to have risky sexual behavior than age 20-24years [AOR=4.821(95% CI: 2.435, 9.548)]. Regarding jobs condition those who have job were less likely to have risky sexual behaviors than non jobs by 68.5 percent [AOR= 0.315(95% CI: 0.178, 0.559)]. In relation to marital status of the multivariable analysis married study participant were less likely to have risky sexual behaviors than non married by 83.7 percent [AOR=0.163 (0.046, 0.578) with 95% CI (Table4).

Table 6. Association of risk sexual behaviors with socio demographic factors among night school student, August 2022 (n= 382)

Variable	Risky sexual behaviors		COR	AOR (95%CI)	P-value
	Yes N (%)	No N (%)			
Sex					
male	78 (50.6)	103(45.2)	1.350(0.485, 2.428)	0.857(0.557, 1.321)	0.342
Female	76(49.4)	125(54.8)	1		
Age					
15-19	27(17.4)	58(25.6)	3.714(2.242, 6.154)	4.821(2.435, 9.547)*	0.001*
20-24	128(82.6)	169(74.4)	1		
Religion					
Orthodox	58(37.4)	84(37)	2.410(0.513, 6.844)	1.381(0.245, 7.790)	0.381
Muslim	73(47.1)	112(49.3)	2.621(0.074, 6.914)	1.304(0.233, 7.300)	0.763
Protestant	22(14.2)	27(11.9)	1.942(0.583, 9.886)	1.630(0.273, 9.744)	1.630
Catholic	2(1.3)	3(1.8)	1		
Grade level					
9-10	76(49.4)	137(60.1)	0.632(0.419, 0.954)	0.455 (0.248, 0.838) *	0.011*
11-12	78(50.6)	91(39.9)	1		
Marital status					
Married	29(18.8)	126(81.3)	0.049(0.015, 0.160)	0.163(0.046, 0.578)*	0.005*
Not married	39(17.2)	188(82.8)	1		
Current have job					
Yes	67(43.2)	88(56.8)	0.421(0.179, 0.560)	0.315(0.178, 0.559)*	0.001*
No	159(70)	68(30)	1		
Living condition					
Living with family	59(38)	96(62)	0.118(0.071, 0.197)	0.155(0.080, 0.3.1)*	0.001*
Living out of family	107(48)	120(52)	1		

5.1.6 Association of risk sexual behavior with predisposing factors

Association of risk sexual behavior with predisposing factors drinking alcohol, watch pornography, was significantly associated with risky sexual behaviors in multivariable analysis. The study subjects who drank alcohol and practiced sex after drank alcohol were [AOR = 4.471 (95% CI: 1.996, 10.013)] times more likely to have risky sexual behaviors than non drink alcohol. The students who watch pornography and practiced sex after pornography watch [AOR = 2.054 (95% CI: 1.801, 5.268)] times more likely to had higher risky sexual behaviors (Table 5).

Table. 7. Association of risk sexual behavior with Predisposing factors among night high school student, Jimma town, August 2022.

Variable	Risky sexual behaviors		COR	AOR (95%CI)	P-value
	Yes	No			
	N (%)	N (%)			
Drinking alcohol					
Yes	72(46.5)	83(53.5)	6.083(4.704, 12.889)	4.471(1.996, 10.013)*	0.001*
No	22(9.7)	205(90.3)	1		
Cigarette smok					
Yes	22(14.2)	133(85.8)	0.054(0.012, 0.232)	3.267(0.420, 25.435)	0.258
No	2(0.9)	225(99.1)	1		
Chat chew					
Yes	67(43.2)	88(56.8)	0.298(0.188, 0.473)	1.570(0.778, 3.171)	0.208
No	42(18.5)	185(81.5)	1		
Take ashish					
Yes	53(34.2)	102(65.8)	0.107(0.055, 0.210)	3.610(0.907, 14.359)	0.068
No	12(5.3)	215(94.7)	1		
Watch pornography					
Yes	60(38.7)	95(61.3)	0.128(0.071, 0.231)	2.054(1.801, 5.268)*	0.025*
No	17(7.5)	210(92.5)	1		
Night club visit					
Yes	46(30)	109(70)	0.121(0.060, 0.242)	1.421(0.98, 1.810)	0.245
No	11(4.8)	216(95.2)	1		

CHAPTER SIX

6. DISCUSSION

The overall magnitude of risky sexual behavior of the study population is 70 percent. This finding is higher than the study done in Boditti secondary and preparatory School South Ethiopia and study done in Addis Ababa, Ethiopia, 2014 which were reported prevalence 91(61.5%) and 223 (26.7%) respectively (5, 35), the possible explanation for the difference could be a variation of the period of the study, difference between day and night study participants and place of the study conducted.

In this study among socio-demographic characteristics age, grade, level of marital status, living with and job condition of the study participants significantly associated with risky sexual behavior. This study shows that Concerning age those who were 15-19 age group 4.821 times more likely to have risky sexual behaviors than 20-24 years. However a cross sectional school based study done at Gurage Zone, Ethiopia revealed that study participants whose age between 15-19 years were three times at risk of having risky sexual behavior than age group above 20 years(21). This difference might be area and time variation of the study conducted and the program difference day and night. Regarding to marital status multivariate analysis shows married study participants were 0.163 times less risky sexual behavior than non married.

Regarding risky sexual behavior in this finding 105(47.7%) of participants were having two or more sexual partners in their lifetime. This is more than a study done Madawalabu University, Ethiopia among sexually active participants, 81(36.8%) had history of multiple sexual partners (19).This discrepancy was arise due to the deference of study area and time and also level of knowledge difference between higher and lower education on risk sexual behavior. Another cross-sectional school based study done among preparatory school students in Gurage Zone, Ethiopia and another cross-sectional school based study done in Boditti secondary and preparatory school South Ethiopia reviled that 53.7% and 70.3% of respondents had committed sex with more than one sexual partner (5, 21). This might be difference in setting and time of study conducted. This study revealed out of 220 study participant who had sexual experience, 59(27%) had sex with casual partner/s and out of

those sexual experience study participants only 70(31.8) were used condom consistently the rest 150(68) did not used condom consistently. This finding is in line to a study done in Mizan-Tepi 211 (69.4%) of them never used condom (23) and also higher than 319 (55.6%) didn't use condom consistently Addis Ababa high schools (6). The discrepancy might be due to the variation of study time and settings. This study also revealed from 220 students who had sexual experience, 12(5.7) were performed sex with sex workers. This is less to study done in high school and out of sexually active young people ever had sexual experience 22 (7.4%) had sex with sex workers (15). Some of study participants had multiple risk behavior.

Regarding to predisposing factors drinking alcohol, sex after drinking alcohol, watching pornography and sex after watching pornography were significantly associated with risky sexual behaviors in multivariable analysis. In this study practicing sex after alcohol drink were 4.471 times much higher as compared to non-drinker. This finding is alike the 33 finding of a study done on alcohol use and risky sexual behavior among College students and youth in University of Missouri-Columbia, drinking was strongly related to the decision to have sex and to indiscriminate forms of risky sex but was inconsistently related to protective behaviors like condom use(34). Likewise study conducted on preparatory students at Jimma Zone, South West Ethiopia discovered higher likelihood of risky sexual behavior significantly associated with higher levels of alcohol consumption (7). The finding of this study showed that study participants who seen pornographic movies and committed sex were 2.054times likely to have higher risky sexual behaviors compared to non-seen. This finding was comparable with different studies showed watching pornography were associated with youths risky sexual behaviors (7, 8).

6.1. Strength

1. To guarantee data quality and ensure confidentiality experienced, data collectors and supervisors were recruited and trained to instruct the data collection using self administered questionnaire.
2. The study was done to address erratic/marginalized groups.
3. The study had high response rate.

6.2. Limitation

1. Might be recall bias for age at first sex and life time consistently condom use questions.
2. Social desirability bias due to highly sensitive questions related to sexuality.

7. CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion

This study revealed that risk sexual behaviors of the night school students were relatively high among the respondents. Concerning age students from 15-19 years were identified to have significant association with risky sexual behaviors. Regarding to work condition having jobs study participants were less likely exposed to risk sexual practice than non jobs. In addition alcohol drinks were found to be risk factors for risk sexual behaviors.

7.2 Recommendations

Based on the findings the following recommendations were forwarded:

1. School based behavioral change communication and other reproductive health services should be accessible in the school for night students.
2. Jimma town health office should give attention on reproductive health services provision.
3. Governmental, NGOs and other stakeholders should intervene the risk of sexuality of night school students.

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ANNEX: I QUESTIONNAIRES

Jimma University Department of population and family health,

Questionnaire format on the Risk Sexual Behaviors and associated factors among high School youths in Jimma Town, Southwest Ethiopia

INFORMATION SHEET FOR CONSENT

Introduction

Greeting!

Hello!

Dear respondents my name is_____ and I am working as data collector for the study being conducted in Jimma town high school by Mr. Chala Kabeta who is studying for his master's degree at Jimma university Department Population and Family health. I kindly request you to lend me your attention to explain you about the study and how you have been selected as study participant.

Study title: Risk Sexual Behavior and associated factors among high school youths at night program in Jimma Town, Southwest Ethiopia

Purpose: To assess the magnitude of risky sexual behavior and associated factor among high school youths at night program in Jimma town, Jimma Zone, Oromia Regional state, south west Ethiopia,2022.

Procedure and duration: First of all, I selected you to take part in this study randomly. There are different questions to answer which will be take20-30 minutes.

Risks: The risks of being participating in this study are very minimal, only taking few minutes.

Benefit: At this moment you may not get any direct benefit by being involved in this study but the information you provide is very important to solve problems related to risky sexual behavior and associated factors.

Confidentiality: The information that you provide us will be confidential. The questioner will be coded to exclude showing your name on questioner and consent form.

Rights: Participation in this study is fully voluntary. You have the right to declare not to participate in this study and you have the right to with draw from participating at any time.

Contact address: If there is any questions or unclear idea any time about the study or the procedures, do not hesitate to contact and speak to principal investigator with cell phone number:0940617830 or e-mail address chalakabeta2@gmail.com.

I have read this form and I comprehend and understand all condition stated above.

Are you willing to participate in this study?

1. No (say thank you)
2. Yes (continue interviewing)

Informed consent form

I have read/heard and understood the sheet telling me what will happen in this study and why it is important. I have been able to ask questions and to have them answered. I understand that while the information is being collected, I can stop being part of this study whenever I want and that it is perfectly ok for me to do this. If I stop being part of the study, I understand that all information about me will be discarded. I agree to take part in this research.

Name and signature of interviewer's _____ Date ___/___/___

Name and signature of supervisor's _____ Date ___/___/___ Time taken _____

Structured Questionnaire form (English)

Code No: _____

School: _____

Part I: Socio demographic characteristic

S. no	Questions and filters	Alternative answers (coding category)	Skip to
101	Sex	1. Male 2. Female	
102	How old are you?	_____years 99=don't know	
103	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4.Catholic 88. Others, specify /_____/	
104	To which ethnic group do you belong to?	1. Amhara 2. Oromo 3. Tigray 4. Guragie 88.Others, specify/_____/	
105	What grade are you currently attending?	.1. grade 9-10 2. grade 11-12	
106	What is your current marital status?	1. Currently married 2. Never married 3. Divorced 4. Widowed 88.Others,specify /_____/	
107	Currently have you a job?	1. Yes 2. No	NO 110
108	If your answer for Q # 107 is yes what your occupation is, a type of work do you mainly do?	1. Homemade 2. Government office 3. Petty trade 4. Daily laborer 5. Exchange of money for sex 88.Others,specify /_____/	
109	Currently on average how much do you earn per month?	_____birr 99. Don't know/ remember	
110	Currently on average how	_____birr	

	much do your parents earn per month?	99. Don't know/ remember	
111	Currently with whom do you live	1. I live with my family 2. I live with my relatives 3. I live with my friends 4. I live alone 5. I live with employer/s 88.Others,specify /_____/	

Part: II Risky sexual behaviors related questions

201	Have you ever had sexual intercourse?	1. Yes 2. No	No 301
202	If yes, at what age did you first have sexual intercourse?(give estimated age if not sure)	_____ Age in years	
203	With whom did you make your first sexual intercourse?	1. Husband/wife 2. Steady boy/girl friend 3.Casual/unknown person 4. Sex worker 5. Older age 88. Others, specify /_____/	
204	Why did you decide to have sexual intercourse the first time?	1. I get married 2. Fell in love 3. For trial 4. Coercion (Rape). 5. To get money and other gifts. 6. Peer pressure 7. Influence of substance 88.Others, specify /_____/	
205	Did you use condom in your first time sexual intercourse?	1.yes 2.No	
206	How old were your partner when you had sex for the first time?	1. Older than me 2. Younger than me 3. Equal with me	
207	If there was age difference how many was it in year/s?(give estimated age or ages if not sure)	_____ year/s	
208	How many sexual partners have you ever had?	1. _____ partner/s	
209	Have you had sexual intercourse last 06 months?	1.Yes 2.No	

210	If yes: with whom did you make sexual intercourse? [multiple answers are possible]	1. Husband/wife 2. Steady boy/girl friend 3. Casual/unknown person 4. Sex worker (for males only) 5. Older age 88.Others,specify /_____/	
211	If yes, did you use condom consistently?	1. Yes 2.No	

Part: III Risk factors for sexual behavior related questions

301	Have you or your partner drunk alcohol?	1.Yes 2.No	No 305
302	Did you have sex when you are drinking alcohol?	1.Yes 2.No	
303	Did you or your partner smoke cigarettes?	1.Yes 2.No	No 309
304	Did you have sex when you are smoking cigarette?	1.Yes 2.No	
305	Have you or your partner ever chewed Khat?	1.Yes 2.No	No 313
306	Did you have sex when you are chewing chat?	1. Yes 2. No	
307	Did you or your take shisha?	1.Yes 2.No	NO 317
308	Did you have sex when you are taking shisha?	1. Yes 2. No	
309	Have you or your partner seen pornography?	1.Yes 2.No	No 321
310	Did you have sex after watching pornography?	1. Yes 2. No	
311	Have you or your partner visited night clubs/day parties?	1.Yes 2.No	No 325
312	Did you have sex after visiting night clubs/day parties?	1. Yes 2. No	

Thank you very much for your time and participation! Your genuine response in combination with others will help to be valuable of the study!

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university, and that all sources of materials used for the thesis have been fully acknowledged.

Name: **Chala Kabeta**

Signature: _____

Name of the institution: **Jimma University, Institute of health , Jimma, Ethiopia**

Date of submission: _____

This thesis has been submitted for examination with my approval as a university advisor.

Name of the first advisor: **Misra Abdulahi (PHD, Candidate)**

Signature _____ Date _____

Name of the second advisor: **Mr. Gali Nega (MPH, RH)**

Signature _____ Date _____

APPROVAL SHEET FOR SUBMITTING FINAL THESIS

As member of board of examining of the final MPH thesis open defense, we certify that we have read and evaluated the thesis prepared by **Chala Kabeta** under the title Risky sexual behavior and associated factors among youths at night school program in Jimma town, Jimma Zone, South West Ethiopia and recommend that, the thesis be accepted as fulfilling the thesis requirement for the degree of Master of Reproductive Health.

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Chairperson	Signature	Date

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Internal examiner	Signature	Date

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External examiner	Signature	Date

Final Approval and Acceptance

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Department Head	Signature	Date

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Faculty Dean	Signature	Date

