



ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL SCIENCE
DEPARTMENT OF BIOLOGY

ASSESSMENT OF SUBSTANCE USE AND RISKY SEXUAL
BEHAVIOR AMONG HIGH SCHOOL AND PREPARATORY SCHOOL
STUDENTS IN JABI TEHINAN WOREDA, ETHIOPIA

ALEMAYEHU WORKU

August, 2017

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL SCIENCE
DEPARTMENT OF BIOLOGY

ASSESSMENT OF SUBSTANCE USE AND RISKY SEXUAL
BEHAVIOR AMONG HIGH SCHOOL AND PREPARATORY SCHOOL
STUDENTS IN JABI TEHINAN WOREDA, ETHIOPIA

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS
ABABA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF BIOLOGY

BY

ALEMAYEHU WORKU

August, 2017

ADDIS ABABA, ETHIOPIA

ACKNOWLEDGMENT

First, I would like to express my deepest gratitude to my advisor Dr. Gurja Belay for his unreserved support and guidance throughout the whole process of this study.

I would also like to thank data facilitators and respondents for their patience and provide valuable response.

My heartfelt thanks also go to the director of the schools, who allowed me to get the necessary information needed for my thesis work.

Finally, I would like to thank all my friends, who have given their precious time in suggestions and supporting.

TABLE OF CONTENT

Contents	page
ACKNOWLEDGMENT.....	i
TABLE OF CONTENT	ii
LIST OF TABLE	iv
LIST OF FIGURE.....	v
ACRONYMS	vi
Abstract	vii
CHAPTER ONE	1
1. INTRODUCTION	1
1.1 Backgrounds of the study	1
1.2 Statement of the problem	2
1.3 Objectives.....	3
1.3.1 General objectives:-	3
1.3.2 Specific objectives	3
1.4 Research Questions	4
1.5 Rationale of the Study	4
1.6 Significance of the Study	4
1.7 Limitations of the Study	5
CHAPTER TWO	6
2. LITERATURE REVIEW	6
2.1 Substance Use	6
2.1.1 Alcohol use	6
2.1.2 Khat Use	7
2.1.3 Tobacco use	8
2.1.4 Cannabis and other substances	8
2.2 Impact of Substance Use	8
2.3 Prevalence of Substance Use.....	9
2.4 Substance Use and Risky Sexual Behavior.....	10
CHAPTER THREE	14

3. MATERIALS AND METHODS.....	14
3.1 Study Area.....	14
3.2 Study Design	14
3.3 Study Population	14
3.4 Sample Size Determination.....	15
3.5 Sampling procedure.....	16
3.6 Instruments	18
3.7 Study Variables	18
3.7.1 Dependent variables	18
3.7.2 Independent variables	18
3.8 Statistical Analyses	18
3.9 Permission and Consent	18
3.10 Operational Definitions.....	19
CHAPTER FOUR.....	20
4. RESULT	20
4.1 Socio Demographic Characteristics	20
4.2 Substance Use Behavior of the Respondents	21
4.3 Frequency of Using Substances	22
4.4 The Association between Substance Use and Risky Sexual Behavior	24
4.5 Reasons for Substance Use	25
4.6 Sexual Behavior of Respondents.....	27
4.7 Factors Associated With Risky Sexual Behavior.....	30
CHAPTER FIVE	32
5. DISCUSSION.....	32
CHAPTER SIX.....	36
6. CONCLUSION AND RECOMMENDATION.....	36
6.1 Conclusion.....	36
6.2 Recommendations	37
REFERENCES	38
Appendix A.....	44
Appendix B	48

LIST OF TABLE

Table 1 : Socio demographic characteristics of participants, Jabi-Tehinan Woreda Secondary and Preparatory Schools	20
Table 2: Life time and current use different substances among Jabi-tehinan Woreda High School and Preparatory School student.....	22
Table 3: Frequency distribution of substance ever use among the participants	23
Table 4: Type of alcohol and number of students that used these drinks.....	23
Table 5: The association between frequency of substance use and risky sexual behavior among Jabi-tehinan Woreda High School and Preparatory School student.....	24
Table 6: Reasons for substance use, Jabi-Tehinan Woreda Secondary and Preparatory School Students	26
Table 7: Different aspects of sexual practice, Jabi Tehinan woreda high school and preparatory school.	29
Table 8: Association of socio demographic characters with risky sexual behavior of Jabi Tehinan woreda secondary and preparatory school students.	30
Table 9: Association of substance use with risky sexual behaviour of Jabi tehinan woreda secondary and preparatory school students	31

LIST OF FIGURE

Figure 1: The schematic presentation of the sampling procedure employed to select participants in Jabi- tehinanworeda secondary and preparatory schools.....	17
Figure 2: Reasons for drinking reported by students	25
Figure 3: Reasons for chewing khat reported by students	26
Figure 4: Percentages of sexually active students by sex	27
Figure 5: Reasons for initiating sex reported by students.....	28

ACRONYMS

AIDS	Acquired Immuno Deficiency Syndrome
AOR	Adjusted Odds Ratio
CI	Confidence Interval
COR	Crude Odds Ratio
CSA	Central Statistical Agency
DALYs	Disability-Adjusted Life- Years
E.C	Ethiopian Calendar
ECA.PHSD	Edinburgh College of Art Philosophy of Doctor
EDHS	Ethiopian Demographic and Health Survey
HIV	Human Immuno Deficiency Virus
SNNPR	Southern Nations, Nationalities and Peoples' Region
SPSS	Statistical Package for Social Sciences
STDs	Sexually Transmitted Diseases
UNAIDS	Joint United Nation's Program on Aids
UNDP	United Nation Developments Program
UNODC	United Nations Office on Drugs and Crime
USA	United States of America
WHO	World Health Organization

Abstract

The use of substances such as alcohol, khat leaves (Catha edulis), and tobacco has become one of the rising major public health and socio-economic problems worldwide. High school and Preparatory school adolescents are assumed to be exposed to many risky sexual behaviors by the influence of substance use. However few studies have been explored about the pattern of risky sexual behavior and its association with substance use in Jabi Tehinan woreda high school and preparatory school students. The main objective of this study was to determine the prevalence of Substance Use (alcohol, khat, cigarette and illicit drugs) and Risky Sexual Behavior of students in Jabi Tehinan woreda High school and Preparatory School, Northwest Ethiopia. A cross-sectional study design was employed using a pre-tested self-administered questionnaire. The study was conducted in February 2017. A total of 411 students were selected using systematic random sampling method. The data were analyzed using SPSS for windows version 24. Descriptive statistics by using frequency, percentage distribution and logistic regression analyses were performed to ascertain association between dependent and independent variables after removing the incomplete responses. Of 411 study participants; use of alcohol, khat, cigarette and illicit drugs was reported by 39.4%, 4.4%, 1.5% and 0.7% students, respectively. There were significant differences between males and females with respect to substance use behavior; multiple sexual partner and unprotected sex were reported by 13.7% and 33.3% of the students respectively. Alcohol drink was associated with risky sexual behavior compared to those who did not take alcohol with adjusted OR (95% CI) of 2.46(1.03, 5.91). But khat chewing, cigarette smoking and illicit drugs did not have an association with multiple sexual partner and unprotected sex in the multivariate analysis. Use of alcohol was significantly associated with risky sexual behavior. This study suggests a need for interventions and designs a strategy to reduce the levels of substance use and enhancing protective sexual behavior.

Key words: substance use, risky sexual behavior, high school and preparatory school students

CHAPTER ONE

1. INTRODUCTION

1.1 Backgrounds of the study

The use of substances such as alcohol, khat leaves (*Catha edulis*), and tobacco has become one of the rising major public health and socio-economic problems worldwide (Odejide, 2006).

The global burden of disease attribute to alcohol and illicit drug accounts 5.4% of the total burden of disease. Another 3.7% of the global burden of diseases is attributable to tobacco use. Disorders due to psychoactive substance use including alcohol, drug, and tobacco dependency are the main underling conditions ultimately responsible for the largest proportion of the global burden of disease attributable to substance use (WHO, 2010).

A recent report on risky behaviors among American adolescents and youths aged 10-24 years indicated that 4.4 % ever had used illicit drugs, 75.0% ever had drunk alcohol, 47.8% ever had sexual intercourse, and 38.5% of currently sexually active adolescents/youths/ had not used a condom (Eaton et al., 2007).

Given the higher prevalence risky sexual behaviors and substance use, adolescents and youths aged 15 to 24 years represent approximately 25% of sexually active persons and account for nearly half of new HIV infection each year in the USA (Weinstock et al., 2000). Therefore adolescents, and youths are important subpopulation for sexual related prevention and intervention efforts.

In developing countries, substance use is emerging as a big problem than expected (UNAIDS and WHO, 2008). According to (Lori-Ann et al., 2009) among South African High School Students result showed that students in the sample were most likely to initiate substance use as their first risk behavior before moving on to sexual intercourse at a later time . Several studies indicate that substance misuse is considerably rising and a growing problem in Ethiopian adolescence (Kebede Yigzaw, 2002; Abebe Mamo et al., 2013). A study done on risky sexual behaviors among Preparatory School students in Jemma Zone, South West Ethiopia revealed that 37% and 35.5% current prevalence of alcohol and khat respectively. Out of the total respondents, 42.9% ever had sexual intercourse, 30.8% had two or more sexual partners in their life time and only 11.2% used

condom consistently (Abebe Mamo et al., 2013). There is a strong link between khat chewing and excessive alcohol consumption, it is believed to be one of the factors associated with unprotected risky behavior, predisposing youth for HIV infection and transmission (Abebe Dawit et al., 2005).

Two third of all people living with HIV are in Sub- Sahara Africa, which also has the highest prevalence of having episodic drinking in the world (UNDP and WHO, 2014).

Although HIV/AIDS affects all segments of the population, young people were largely affected by this disease and young females were largely affected than young males (WHO/UNICE, 2006)

Generally alcohol and drugs are thought to interfere with decision making, it has been suggested that their use in conjunction with sexual activity might increase the probability that risk behaviors will occur (Hingson and Struin, 1989). Few studies have been explored about the pattern of risky sexual behavior and its association with substance use in Jabi Tehinan woreda High school and Preparatory School Students. Thus, this study was conducted to determine Assessment of Substance Use (alcohol, khat, cigarette and illicit drugs), and Risky Sexual Behavior (no condom use, having sexual intercourse at age less than 18, sexual intercourse with multiple partners) of students in Jabi Tehinan woreda High School and Preparatory School.

1.2 Statement of the problem

Globally, substance use of products such as alcohol, cigarette, and khat leaves (*Catha edulis*) has become a major public health concern with accompanying socio-economic problems. Studies show that substance use, particularly in developing countries, has dramatically increased. As Odejide (2006) explained in his review of the Status of Drug Use/Abuse in Africa, the introduction of prescription drugs to Africa drastically increased the availability and use of psychoactive substances. This notwithstanding, alcohol, cannabis and khat still remain the most common substances of abuse in Africa. More recently, trafficking in heroin and cocaine has made narcotic drugs easily available across Africa despite the existing legal control measures. Complications arising from the

use/abuse of psychoactive substances often draw public attention to their deleterious effects, which culminate in drug control policy formulation.

Young people say that alcohol and drugs often go hand in-hand with sexual activity among their peers. Many young people report that they themselves have engaged in risky behaviors because of substance use. More than a third of sexually active young people report that alcohol or drugs have influenced their decisions about sex. Almost as many have “done more” sexually than they had planned while under the influence. Because of decisions they made while drinking or using drugs, young people also report having unprotected sex and worrying about STDs and pregnancy (Foundation THJKF, 2002). A study in Jiga secondary and preparatory school students, found the current prevalence of alcohol to be 44.3% (Getachew Mullu et al., 2016).

Even if substance use and risky sexual behavior has become a common problem among high school and preparatory students only scant information is available about the magnitude of substance use and risky sexual behavior among the students (Kebede Yigzaw, 2002).

Risk sexual behaviors and associated factors among Jiga high school and preparatory school students (Getachew Mullu et al., 2016) were assessed but the situation in Jabi Tehinan Woreda, West Gojjam Zone were not known. So this study assessed the relationship of substance use and risky sexual behaviors among Jabi Tehinan woreda secondary and preparatory school students, Ethiopia.

1.3 Objectives

1.3.1 General objectives:-

- To Assess the Prevalence of Substance Use and Magnitude of Risky Sexual Behavior and its Association with Substance Use among Jabi Tehinan woreda Secondary and Preparatory Students.

1.3.2 Specific objectives

- To Determine the Prevalence of Substance Use among Jabi Tehinan Woreda Secondary and Preparatory School Students.

- To Assess the prevalence of Risky Sexual Behavior.
- To Identify Factors Associated with Substance Use and Risky Sexual Behavior
- To Assess the Association between Substance Use and Risky Sexual Behavior among Jabi Tehinan Woreda Secondary and Preparatory School Students.

1.4 Research Questions

1. What proportions of Secondary and Preparatory School Students of Jabi Tehinan Woreda uses alcohol and other drugs?
2. What are some of the reasons people use alcohol or other drugs?
3. What proportions of Secondary and Preparatory School Students engaged in Risky sexual behavior in Jabi Tehinan Woreda.
4. What is the association between alcohol and sexual risk behaviors?

1.5 Rationale of the Study

In Ethiopia, the magnitude of risky sexual behavior is ever increasing. It is also believed that substance use is increasing in some of the Ethiopian secondary and preparatory students. However, data regarding the relation of substance use and risky sexual behavior is lacking in the study area. This study, therefore, is conducted to explore the relation between substance use and risky sexual behavior among those high school and preparatory students in Jabi Tehinan, and come up with recommendations to enable the responsible bodies and policy makers to design appropriate strategies and measures to control the responsible substances use and risky sexual behavior in the country.

1.6 Significance of the Study

The current study is significant along several dimensions. First, this current study contributes to the field by providing additional information on the relationship between risky sexual behavior and substance use among high school and preparatory student adolescents. Furthermore, although many studies have researched the sexual risky behavior of adolescents, very few have included in Jabi Tehinan woreda. The contributions of the current study, which does so, to the literature are important.

This gap in research is particularly significant among students in Jabi Tehinan woreda secondary and preparatory students. One of the primary focuses of the present study was to address this gap. Additionally, the results of the current study may aid in the development of social work prevention programs targeting at-risk adolescents in the school. Findings from the current study could subsequently be the basis for developing more effective strategies to reduce the rate of risky sexual behaviors and among adolescents living in Jabi Tehinan woreda. Finally, the results from the current study could be of help and reference for local public health practitioners and may inform local policy advocates who support regulations regarding the drug use and its relationship with risky sexual behaviors among secondary and preparatory school adolescents in Jabi Tehinan Woreda.

1.7 Limitations of the Study

There are a couple of limitations in this study. Firstly, discussions around sex and sexuality are quite sensitive some respondents may not have been completely honest while answering the questions, although they were assured of privacy and confidentiality. Secondly, as the response was self-reported, it was expected that respondents might deliberately conceal responses or might provide responses that are subject to limited recall. Finally, as the study focuses on high school and preparatory school youth and although school enrolment rate is high, the results may not represent out of school youth.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 Substance Use

A psychoactive substance is any substance that when taken by a person modifies perception, mood, cognition, behavior or motor functions. It includes licit and illicit substances, those that can lead to dependence (Foundation THJKF, 2002). The United Nations reported that about 230 million people, or 5 per cent of the world's adult population, are estimated to have used an illicit drug at least once in 2010 (UNODC, 2012). Sub-Saharan Africa has become increasingly vulnerable to illicit drug production, trafficking, and consumption. Substance misuse is a growing problem in Ethiopia, as in many developing countries. Alcohol and khat are the most frequent substances of use, followed by cannabis and solvents. Hard drugs such as heroin and cocaine are rarely used (Fekadu Abebaw et al., 2007).

2.1.1 Alcohol use

Singleton and Wolfston (2009) examined alcohol consumption, amount of sleep, and academic performance. The authors show the relationship between alcohol use and sleep, alcohol use and academic performance, and sleep and academic performance. The participants from Northeastern were 89% white, 98% ranged between the ages of 18-22 years, and 82% lived on campus. In short, they hypothesized and concluded that students who drink more alcohol maintain poor sleep patterns, which negatively affects academic performance.

Gillespie et al. (2007) examined alcohol, marijuana, and cocaine use among college students. The authors found that two out of five college students in the United States are binge drinkers. According to the Federal Bureau of Investigation, there were more than 1.25 million arrests for drug abuse violations in 2004 (Gillespie et al., 2007). Alcohol and drug use can lead to poor decision making, like breaking the law, sexual abuse, getting in fights, etc. Of the respondents, 92.4% were white and the average age was 22.3 years. This study found that a little more than 68% reported using alcohol and/or drugs during

the past year. Gillespie et al. (2007) looked at how many times a student drank alcohol in a week which then determined how many alcoholic drinks they consume on average.

Existing literature on alcohol consumption among adolescents in sub-Saharan Africa suggests that a substantial proportion of adolescents have consumed or currently consume alcohol. Two Ghanaian studies conducted among secondary school students and among nationally representative samples of in and out-of-school youth found that the prevalence of lifetime alcohol use was approximately 25% (Kabiru et al., 2010).

2.1.2 Khat Use

Khat is a natural stimulant drug that is indigenous to East Africa. It grows naturally on the sides of mountains in Ethiopia, Kenya and to a lesser extent Tanzania. In the past, use of this substance was occasional and largely restricted to the areas where it grows naturally. The recent past has seen the expansion of cultivation and export of this drug to various countries. It is a major export earner for Ethiopia and Kenya (ECA.PHSD, 1994; Omolo, 1985). Cultivation, trade and use of khat were prohibited in Kenya until 1977 when a presidential decree repealed the prohibition.

Khat is a legal drug like cigarette and alcohol in Ethiopia, openly sold at markets and chewed in streets. It has different legal status in Africa; legal in Djibouti, Kenya, Yemen and Uganda, but illegal in Tanzania and Eritrea (Moges Asefa et al., 2010).

The khat chewers experience a sense of increased energy levels, increased alertness and ability to concentrate, improvement in self-esteem and an increase in libido (Numan, 2004). There is fairly extensive literature on the potential adverse effects of habitual use of khat on mental, physical and social well-being. Some khat chewers experience anxiety, tension, restlessness, hypnologic hallucinations, hypomania and aggressive behavior or psychosis (George et al., 1994).

Alcohol intake following khat chewing, commonly known in Ethiopia as “*chebsi*”, is perceived to overcome the effect of khat chewing. Therefore, most khat chewers are believed to drink after chewing. Some people, however, use drugs with sedative or hypnotic effects (Mesefin Belew et al., 2000).

2.1.3 Tobacco use

The World Health Organization (WHO) attributes more than 4 million deaths a year to tobacco, and it is expected that this figure will rise to 10 million deaths a year by 2020. Moreover, it is now a growing public health problem in the developing world.

2.1.4 Cannabis and other substances

Illicit drug use in Africa is related with cannabis and other natural psychoactive plants.

Cannabis is a widely abused drug in the world. It is the most commonly used drug by adult smokers in rural areas in African region. Women in Cameroon often use cannabis pessaries in the vagina to increase the sexual desire of their partners (WHO, 1993). This practice can contribute to alteration of the vaginal mucosa and increase in exposure to HIV. While cannabis appears to have been introduced earlier in East and Southern Africa by oriental traders (Asuni, 1990), for many years it remained among few marginalized individuals. The name used for cannabis in East Africa is 'bhang' a term from the Indian sub-continent. Variations such as 'banga', 'mbanje', 'bangi', appear to be corruptions of the term 'bhang'. Soldiers returning from the two world wars may have spread the plant and smoking habit. There are some indications that Rastafarians from Jamaica who migrated to Shashemene in southern Ethiopia imported the plant and habit. Shashemene is well known for cannabis abuse in Ethiopia (ECA.PHSD, 1994). The habit spread to other parts of the country involving youth, at about the same time that this was happening in the rest of Africa (Asuni, 1992), coinciding with a period of expansion in industrial activities and urbanization.

2.2 Impact of Substance Use

Alcohol consumption increases sexual desire and arousal, although it lowers physiological arousal (Nigussie Taffa, 1998). Effects of khat on the chewer include increased levels of energy, increased self-esteem, euphoria, increased libido, excitement, and increased proclivity for social interaction (Dawite Abebe et al., 2006). Cigarette smoking has been shown to reduce sexual arousal by impeding the circulatory system's

delivery of oxygenated blood throughout the body (Fekadu Mazengia and Alemayehu Worku, 2008).

The global burden of substance use is substantial, accounting for 8.9% of productive life lost annually due to disability and premature mortality, as measured in disability-adjusted life-years (DALYs). Among the ten leading risk factors in terms of avoidable disease burden, tobacco was fourth and alcohol fifth in 2000 and both remain high on the list in the 2010 and 2020 projections. Tobacco and alcohol contributed 4.1% and 4.0%, respectively, to the burden of ill health in 2000, while illicit substances contributed 0.8% (Dawit Abebe et al., 2006).

Alcohol is a serious public health problem. Globally, harmful use of alcohol results in the death of 2.5 million people annually. Alcohol contributes nearly to 4% of deaths with 6.2% of all male deaths related to alcohol compared to 1.1% death of females worldwide. Annually, 320000 young people aged 15–29 years die from alcohol-related causes resulting in 9% of all deaths in that age group globally (WHO, 2012).

2.3 Prevalence of Substance Use

A study among Nigerian high school students indicated that lifetime prevalence of substance use was 87.3% whereas current use was 69.2% with multiple substance use being 57.4% (Oshodi et al. 2010). Lifetime prevalence rate of any substance use was found to be 69.8% among college students in Kenya (Atwoli et al., 2011)

Many studies in Africa and outside reveal that the life time prevalence and current prevalence of khat chewing in high school, college and university students vary from place to place. These could be explained as 24.2% in Eastern Ethiopia high schools (Moges Asefa et al., 2010), in south-western Ethiopia secondary school students was 64.9% (Adugna Fentahun et al., 1994), 21.4% in Jazan high school (Ageely, 2009) and 5% in selected high school adolescent Sidama Zone , South Ethiopia (Alemayehu Toma and Serawit Deyn, 2015).

Moreover, the prevalence increases as we go from high school to college and university students. A research done in Bonga town public college students showed that the

prevalence of khat chewing was 11.4% (Agegnehu Alemu et al., 2015). Research conducted by Kebede Yigzaw (2002) in North West Ethiopia colleges showed that life time prevalence was 26.7% and current prevalence was 17.5%. On the other hand, the prevalence of khat chewing in different universities of Ethiopia was indicated in researches conducted by different investigators, for instance 7.8% by (Tesfahun Aklog et al., 2013), and 30.3% by (Andualem Derese et al., 2014).

The above mentioned investigators findings depicted that there were many factors associated with khat chewing among students. Of which, most studies (Oshodi, 2010; Kebede Yigzaw et al., 2002) showed that being male, having peers who chewed khat, having family members who chewed khat, residence place, religion and seniority in the case of college/university students were statistically significant.

According to the Ethiopian Demographic and Health Survey (DHS) 2011, the prevalence of alcohol use among men and women is 53% and 45%, respectively, and 11% of women and 28% of men ever chewed khat (CSA and EDH, 2012).

There is a high prevalence of cigarette smoking in Africa. The prevalence rate of cigarette use was 42.8% in Kenyan college students (Atwoli et al., 2011). Another study in Nairobi documented a 32.2% prevalence of lifetime smoking (Kwamanga et al., 2003). A study in woreda town, North West Ethiopia found a 6.8% prevalence of cigarette smoking among school adolescents (Anteneh Messele et al., 2014).

The current prevalence of substance use among Woreda high school students was 47.9% and life-time prevalence was 65.4%. The current and lifetime prevalence of alcohol use was 40.9% and 59% respectively (Anteneh Messele et al., 2014)

2.4 Substance Use and Risky Sexual Behavior

Studies conducted indicate that a linear increase of substance uses like khat, alcohol and cigarette with a higher prevalence of having risky sexual behaviors (Andualem Derese et al., 2014, Getachew Mullu et al., 2016). Therefore, these substances are at the top of the list among the predictors of risky sexual behaviors.

People who use drugs and alcohol are also more likely to start having casual sex which is true even despite the concern about HIV infection. For both males and females, the uses of these substances have strongly associated with having sexual intercourse. For example, a study undertaken in the United States demonstrated that males who use alcohol are 40% more likely to have casual sex than those who do not use alcohol, and the likelihood of having sex increases as much as three times by males who use marijuana more than those who do not (Kammeyer et al., 1997).

For females, the importance of alcohol use is even greater as it increases their chance of having sex 80% more than those who refrain from this substance. Similarly, poly-drug use, for example, marijuana along with other illicit drug(s) was shown to increase the likelihood of having sex in as much as 5 times, more than the non-users (Rosenbaum and Kandel, 1990).

Recent literature highlights sexual risk behaviors such as early onset of sexual debut, multiple sexual partners, and unprotected intercourse linked to the increased rates of HIV/AIDS among this target population (Andualem Deresse, 2014).

Based on the study of Fekadu Mazengia and Alemayehu Worku (2008) about half, 51.3% of the youths have ever had sex. The median age at first sexual intercourse was 16 years for rural and 17 years for urban. Multivariate analysis showed that being female by gender, chewing Khat, drinking alcohol, watching pornographic materials at age < 18 years and being less connected with parents were associated with early sexual initiation .

Risk sexual behaviors, including early sexual debut, unprotected sexual intercourse, and multiple sexual partners, occur in a broader context. The intensity of involvement in sexual risk behavior ranges from no sexual relationship to unprotected sexual intercourse with multiple partners and prostitution. Sexual risk behaviors often cluster with other risk behaviors including substance use. Adolescents who engage in sexual intercourse at young ages are at higher risk for outcomes that can compromise their health. Sexually active teens who exhibit few positive or prosaically behaviors, such as involvement in organized actions at school or in the community, are at higher risk for outcomes such as early sexual activity and pregnancy during their teenage years (Lori-Ann et al., 2009).

According to the 2011 DHS HIV adult prevalence is estimated at 1.5%, the year in which the last Ethiopian Demographic Health Survey (DHS) was conducted. However prevalence varies according to age, sex, gender and geographical location. This adult prevalence was almost twice as high among females compared to males at 1.9% versus 1.0% respectively. The distribution of HIV prevalence also varies by age, peaking earlier in females in the 30-34 years age group compared to 35-39 years in males. Looking at the younger age groups it can be seen that young women have a two to six fold higher HIV prevalence than young men (ranging from 15-17 years: 0% males vs. 0.2% females to 20-22 years: 0.1% males vs. 0.6% (Central Statistical Agency (Ethiopia) and ICF International 2012).

High risk sexual behaviors have been reported among university and high school students. However, no representative seroprevalence data for university students are available and seroprevalence data for high school students show minimum HIV prevalence.

According to one study of students from five universities 81% of male and 63% of female students had sex with a non-regular partner in the last 12 months. In addition among currently sexually active male students almost two thirds (64%) had sex with at least one female sex worker in the past year (Federal HIV/AIDS Prevention and Control Office, 2011). However preventative behaviors were also reported in the same study: 62% of students had ever used a condom sometimes in their earlier sexual intercourse and 38% reported always using condoms.

A recent bio behavioral survey conducted in 2012 among secondary schools along roadside and urban areas in Amhara found one case of HIV among the 1,317 students tested (0.07% HIV prevalence). However only 46% of those with casual partners reported using a condom at last sex; indicating the presence of some risk behavior (CDC, 2012).

With regard to injecting drug use, the United Nations Office on Drugs and Crime (UNODC), the Joint United Nations Programme on HIV/AIDS (UNAIDS), the World Bank and the World Health Organization (WHO), drawing on the most recent data available, jointly estimate that the number of people who inject drugs is 12.7 million

(range: 8.9 million-22.4 million). That corresponds to a prevalence of 0.27 per cent (range: 0.19-0.48 per cent) of the population aged 15-64. The problem is particularly stark in Eastern and South-Eastern Europe, where the rate of injecting drug use is 4.6 times higher than the global average. The sharing of used injecting equipment makes people who inject drugs particularly vulnerable to HIV and hepatitis C (UNODC, World Drug Report, 2014).

It is estimated that an average of 13.1% of the total number of people who inject drugs are living with HIV. UNODC, the World Bank, WHO and UNAIDS jointly arrived at a global estimate of the number of people who inject drugs living with HIV of 1.7 million persons (range: 0.9-4.8 million). That situation is particularly pronounced in two regions of the world: South-West Asia and Eastern/ South-Eastern Europe, where it is estimated that the prevalence of HIV among people who inject drugs is 28.8 and 23.0 percent, respectively. More than half of the people who inject drugs are estimated to be living with hepatitis C. Addressing HIV among people who inject drugs, through the implementation of an evidence-based comprehensive package of nine interventions as a component of what is also known as “harm reduction services”, and is a major component of the global response to stop the spread of HIV. Of them, the four most effective interventions for HIV prevention, treatment and care are needle and syringe programmes, opioid substitution therapy (or other evidence based drug dependence treatment in the case of people who inject non-opioid drugs), HIV testing and counseling, and antiretroviral therapy (WHO, UNODC, UNADS, 2012).

Generally as different literatures mentioned in the above show a significant number of young people in the world, developing countries including Ethiopia are affected by risky sexual behavior under the influence of excessive substance use.

CHAPTER THREE

3. MATERIALS AND METHODS

3.1 Study Area

The study was conducted in Jabi Tehinan woreda Secondary and Preparatory School. The study area is located 380 km North West of Addis Ababa, in West Gojjam and 176 kilometers South east of the Amhara National Regional State capital city-Bahir Dar. Finoteselam is the capital city of Jabi Tehnan woreda. The geographical coordinates of the town are latitude $10^{\circ} 16' 30''$ N- $10^{\circ} 58' 30''$ N latitude north and $36^{\circ} 49' 30''$ E- $37^{\circ} 31' 30''$ E longitude east. Based on the 2008 Census conducted by the woreda plan and economy, this woreda has a total population of 277,590 with 139,616 male and 137,974 female. The largest ethnic groups reported in the woreda were Amhara (99.61%). The majority of the inhabitants practiced Ethiopian Orthodox Christianity, with 97.96%, while 2.02% of the populations were Muslim (Woreda Plan and Economy, 2008). There are four high schools and preparatory, among these two of them range from grade 9-10 and others from grade 9-12. The total number of students enrolled in these secondary and preparatory school for the academic year 2016/2017 in regular program were about 4283, with 2161 male and 2122 female students.

3.2 Study Design

School based cross-sectional quantitative study was conducted to determine prevalence of substance use and its association with risky sexual behavior among Jabi Tehinan woreda High school and Preparatory Schools. The study was conducted in February 2017.

3.3 Study Population

The sample which is selected from grade 9-12 students registered for 2016/2017 academic year in Jabi tehinan woreda High school and Preparatory School were considered for the study.

3.4 Sample Size Determination

Even though it is known that the more information is obtained from large sample size and reliable results on the finding, to make the study manageable the researcher sampled participants.

Sample size was determined using single population proportion formula of Jonathan (2001) for cross-sectional study and taking the proportion as 50% (In the absence of a study done in the area as a reference the value of p is taken as 50%), with confidence level of 95% and degree of precision of 5%. An additional 10 % was added to the sample size as a contingency for non-responses. The calculated sample size was 384 and adding a 10% of non-response rate, the total sample size was 423.

The estimations of the proportion were based on the following assumptions:

Prevalence of higher risk sexual intercourse or p- value =50%

Confidence interval of 95%

Margin of error (d) = 0.05

Non-response rate = 10%

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

n = Sample size required

Z= the standard normal deviation at 95% confidence level =1.96

P= 50% the proportion of study population with expected Prevalence of risky sexual behavior

d= the desired precision (marginal error) 5%

N=total population of school youth = 4283

Accordingly, the sample size calculated was

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

$$n = \frac{(1.96)^2 \times 0.5(1-0.5)}{(0.05)^2} = 384$$

10% non-response rate = 39

The final sample size was = 423

3.5 Sampling procedure

In sampling procedure, first students were divided into grade 9-10 and 11-12. Then, they were further stratified based on each grade level. Finally, stratified random sampling technique was applied to select individuals in each grade level from the list of students name in their respective grade level. Shortly, students' list was obtained from student registration books and stratified into grades. Students for each grade level were selected proportionally to their class size using systematic random sampling to obtain the total sample for the study (Figure 1).

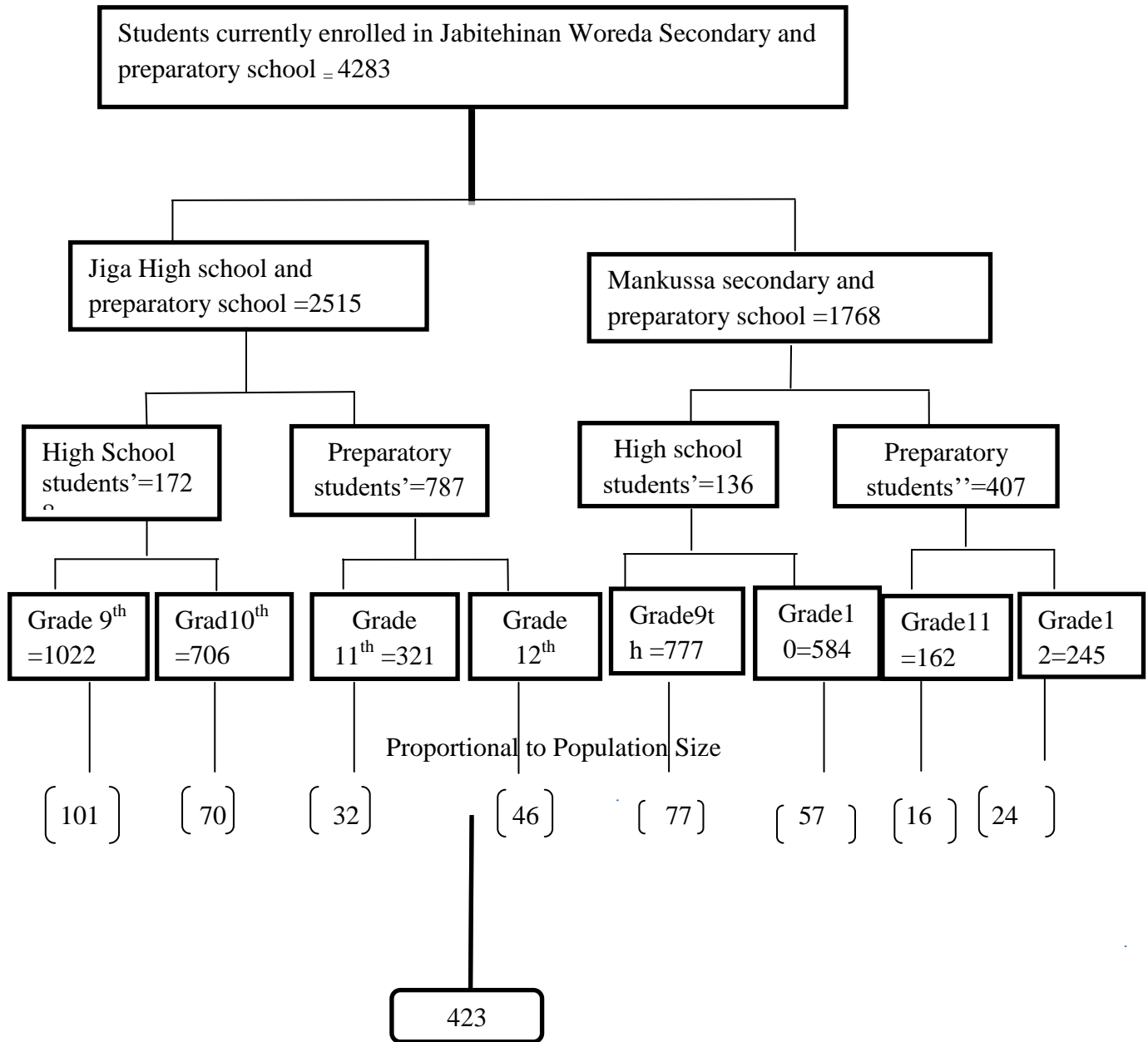


Figure 1: The schematic presentation of the sampling procedure employed to select participants in Jabitehinan woreda secondary and preparatory schools.

3.6 Instruments

To collect data, survey questionnaire was adopted from different literatures. Pre-test was done on 20 students of another high school which wasn't included in the study area. Necessary corrections were made based on the finding of pre-test before actual data collection.

The survey questionnaire was organized into five sections: which are socio demographic information, prevalence of substance use, reason for substance use, sexual behavior of respondents and factors associated with risky sexual behaviors.

Data were collected by facilitators, which were secondary and preparatory school teachers who received information from the researcher on how to conduct the survey. One facilitator per classroom was assigned to facilitate the data collection process.

3.7 Study Variables

3.7.1 Dependent variables: Includes risky sexual behavior

3.7.2 Independent variables: Includes socio demographic characteristics such sex, age, school grade level, religion, monthly income and marital status and also substance use; alcohol drinking; khat chewing; cigarette smoking; and illegal drug use

3.8 Statistical Analyses

Data was coded, entered and incomplete responses were removed using Epi-Info version 3.5.1. SPSS version 24 was used for statistical analysis. Descriptive statistics was used to analyze the data. Bi-variate and multivariate analysis were employed in order to infer associations and predictions. The level of significance used was 95%.

3.9 Permission and Consent

Permission was obtained from the director of the school. Participation by respondents was based on consent and they were allowed to withdraw from the study at any time without explanation. The respondents were informed about the objective and purpose of the study then after written consent was obtained from each respondent within 5 minutes.

3.10 Operational Definitions

The following operational definitions are set based on study questions.

Substances: Any non-medical drugs used by study subjects such as alcohol, khat, tobacco, cannabis, heroin, cocaine, and marijuana to alter their mood or behavior.

Substance use- Is the repeated use of a substance even with the knowledge of its negative health consequences.

Drugs- are any chemical substances that affect a physical, mental, emotional, or behavioral change in an individual.

Khat- a stimulant from the buds or leaves of *Catha edulis* that is chewed or drunk as tea.

Illegal (Illicit) drugs- the use of psychoactive substances such as, hashis, cannabis and heroin for which the production, sale, or use is prohibited.

Marijuana- the dried leaves of cannabis or hemp plant.

Ever use- the use of any of the substances at least once in an individual life time.

Current user- a person who consumed any substance at list once in the past 12 months.

Risky sexual behavior- sex earlier than 18 years of age, have sex with non-regular sexual partners or have more than one sexual partner or use condom inconsistently.

.

CHAPTER FOUR

4. RESULT

4.1 Socio Demographic Characteristics

Out of the total 423 students that participated in the survey, questionnaires from 411 respondents were obtained for analysis making the response rate 97.2%. Of the total 411 respondent, most 291(71.0 %) were in 15-18 years of age with a mean age of 17.9 years and a SD of ± 1.5 years. From the total participant, 237(57.7%) were male and 174(42.3%) were females, 373(90.8%) were orthodox Christians. All of the participants (100%) were Amhara by ethnicity, Two hundred sixty nine (65.5%) students had no monthly personal income 398(96.8%) were never married as shown below in (Table 1).

Table 1 : Socio demographic characteristics of participants, Jabi-Tehinan Woreda Secondary and Preparatory Schools

Characteristics	Frequency(n=411)	Percentage
Sex: Males	237	57.7%
Females	174	42.3%
Age group: 15-18	291	71.0%
19-24	109	26.5%
Above 24	10	1.5%
Grade levels: 9 th	173	42.1%
10 th	124	30.2%
11 th	46	11.2%
12 th	68	16.5%
Religion: Orthodox	373	90.8%
Protestant	6	1.5%
Muslims	32	7.8%
Ethnicity: Amhara	411	100%
Income per month in No income	269	65.5%
Ethiopian No less than 100	44	10.7%
100 to 299	72	17.5%
birr From 300 to 499	15	3.6%
No response	11	2.7%
Marital status Married	13	3.2%

Single	398	96.8%
---------------	-----	-------

4.2 Substance Use Behavior of the Respondents

The study revealed that 208(50.6%) of the students drink alcohol at least once in their life time. While 162(39.4%) said that they drank alcohol currently. The prevalence among male 139(33.8%) was higher compared to females 69(16.8%).

Concerning khat chewing habits 44(10.7%) of the students' chewed khat at least once in their life time and 18(4.4%) currently chew khat. The prevalence among male 15(3.6%) was higher compared to females 3(0.7%). The study showed that 11(2.7%) of the respondents smoked cigarettes at list once in their life time whereas 6(1.5%) of the respondents have smoked cigarettes in the past 12 months. Respondents used illicit drugs at least once in their life time were 5 (1.2%) and 3 (0.7%) that they currently use illegal drugs. The prevalence among male was 2(0.49%) and 1(0.24%) for females, 232 (56.4%) students was used at least one substance in their life (Table 2).

Table 2: Life time and current use different substances among Jabi-tehinan Woreda High School and Preparatory School student.

Types of substances		Male,(n%,)	Female,(n%,)	Total (n %)
Substance ever use				
At least		152(36.9%)	80(19.5%)	232(56.4%)
One substance				
Alcohol	Yes	139(33.8%)	69(16.8%)	208(50.6%)
	No	98(23.8%)	105(25.5%)	203(49.3%)
Khat	Yes	34(8.3%)	10(2.4%)	44(10.7%)
	No	203(49.4%)	164(39.9%)	367(89.3%)
Cigarette	Yes	10(2.43%)	1(0.24%)	11((2.7%)
	No	227(55.2%)	173(42.1%)	400(97.3%)
Illegal drugs	Yes	4(0.97%)	1(0.24%)	5(1.2%)
	No	233(56.7%)	173(42.1%)	406(98.8%)
Substance currently use				
Alcohol	Yes	112(27.25%)	50(12.16%)	162(39.4%)
	No	125(30.4%)	124(30.2%)	249(60.6%)
Khat	Yes	15(3.65%)	3(0.73%)	18(4.4%)
	No	222(54%)	171(41.6%)	393(95.6%)
Cigarette	Yes	5(2.43%)	1(0.24%)	6(1.5%)
	No	232(56.4%)	173(42.1%)	405(98.5%)
Illegal drugs	Yes	2(0.49%)	1(0.24%)	3(0.7%)
	No	235(57.2%)	173(42.1%)	408(99.3%)

4.3 Frequency of Using Substances

The respondents were further asked on the frequency of using substances. The frequency of using alcohol was, always or every day 77(18.7%), twice a week 66(16.1%), once a week 42(10.2%) and occasionally 23(5.6%). Among khat chewers, the majority chews khat twice a week 7(1.7%) and occasionally 2(0.5%) were chewing khat but 5(1.2%) of the respondents were chewing khat always or every day. Cigarette smoking by the respondents reported as every day 4(1%), twice a week 3(0.7%), once a week 2 (0.5%)

and occasionally 2(0.5%). Illegal drug use were, once a week 3(0.7%) and occasionally 2(0.5%) (Table 3).

Table 3: Frequency distribution of substance ever use among the participants

Substance	Frequency				Total
	Every day	Twice a week	Once a week	Occasionally	
Alcohol	77(18.7%)	66(16.1%)	42(10.2%)	23(5.6%)	208(50.6%)
Khat	5(1.2%)	7(1.7%)	4(1%)	2(0.5%)	18(4.4%)
Cigarette	4(1%)	3(0.7%)	2(0.5%)	2(0.5%)	11(2.7%)
Illegal drug use	-	-	3(0.7%)	2(0.5%)	5(1.2%)

The type of alcohol and number of participants in alcohol drinking: tella 163 (70.3%), beer 27(11.7%), areke 30(12.9%) and teje 3(1.3%). The prevalence was higher than females (Table 4).

Table 4: Type of alcohol and number of students that used these drinks.

Type of alcohol	Male,(n%)	Female,(n%)	Total,(n%)
Beer	27(11.7%)	9(3.9%)	36(15.6%)
Areke	22(9.5%)	8(3.4%)	30(12.9%)
Tella	103(44.4%)	60(25.9%)	163(70.3%)
Teje	2(0.9%)	1(0.4%)	3(1.3%)

4.4 The Association between Substance Use and Risky Sexual Behavior

The study showed that 64(30.8%) of the students that drinks alcohol from 1-5 local measuring units were exposed for risky sexual behavior. That is daily users were 21 (10.0%), twice a week 16 (7.7%), once a week 13(6.2%) and occasionally were 14(6.7%) of them had risky sexual behavior. From these finding students who drink alcohol daily were more affected by risky sex than who drinks alcohol non- regularly. The prevalence of alcohol in males who drinks alcohol daily was 18(8.6%), significantly higher than from female daily drinkers which were 3(1.4%). Two students (40%) who chewed khat daily had a risky sex, from the smokers only 1 (2.5%) respondent had a risky sexual behavior (Table 5).

Table 5: The association between frequency of substance use and risky sexual behavior among Jabi-tehinan Woreda High School and Preparatory School student.

Type of substance used		Risky sexual behavior		
		Male, (n (%))	Female,(n%)	Total, (n%)
Alcohol	Amount of drink by local measuring unit	42(20%)	22(10.6%)	64((30.8%)
Daily	1-5	18(8.6%)	3(1.4%)	21(10.0%)
Twice a week	1-5	11(5.3%)	5(2.4%)	16(7.7%)
Once a week	1-5	5(2.4%)	8(3.8%)	13(6.2%)
Occasionally	1-5	8(3.8%)	6(2.9%)	14(6.7%)
Total		42(20.2 %)	22(10.6)	64(30.8%)
Daily khat user		2 (40%)	-	2(40%)
Daily cigarette user		1(25%)	-	1(25%)

4.5 Reasons for Substance Use

Different reasons were mentioned by students for the use of substances. The reason mentioned for drinking alcohol was to get personal pleasure 115(55.3%), to be sociable 57(27.4%), to get relief from tension 22(10.6 %), peer pressure 7(3.4%), to increase pleasure during sex 4(1.9%), to study hard 3(1.4%) (Figure 2).

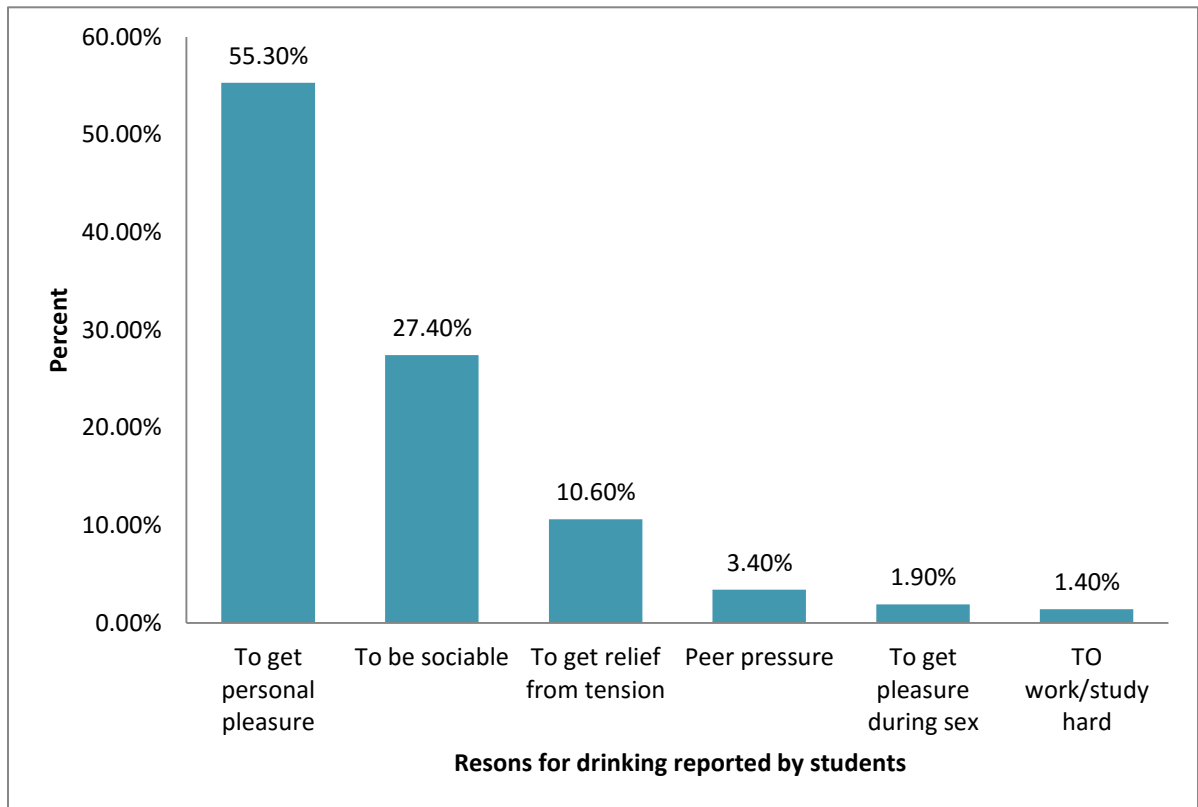


Figure 2: Reasons for drinking reported by students

Among 44 students who reported chewing khat, to work or study hard 18(40.9%) , to get relief from tension 12 (27.3%), due to peer pressure 6 (13.6%), to be sociable 5 (11.4%), to be active 2 (4.5%), to get acceptance by others 1 (2.3%) (Figure 3).

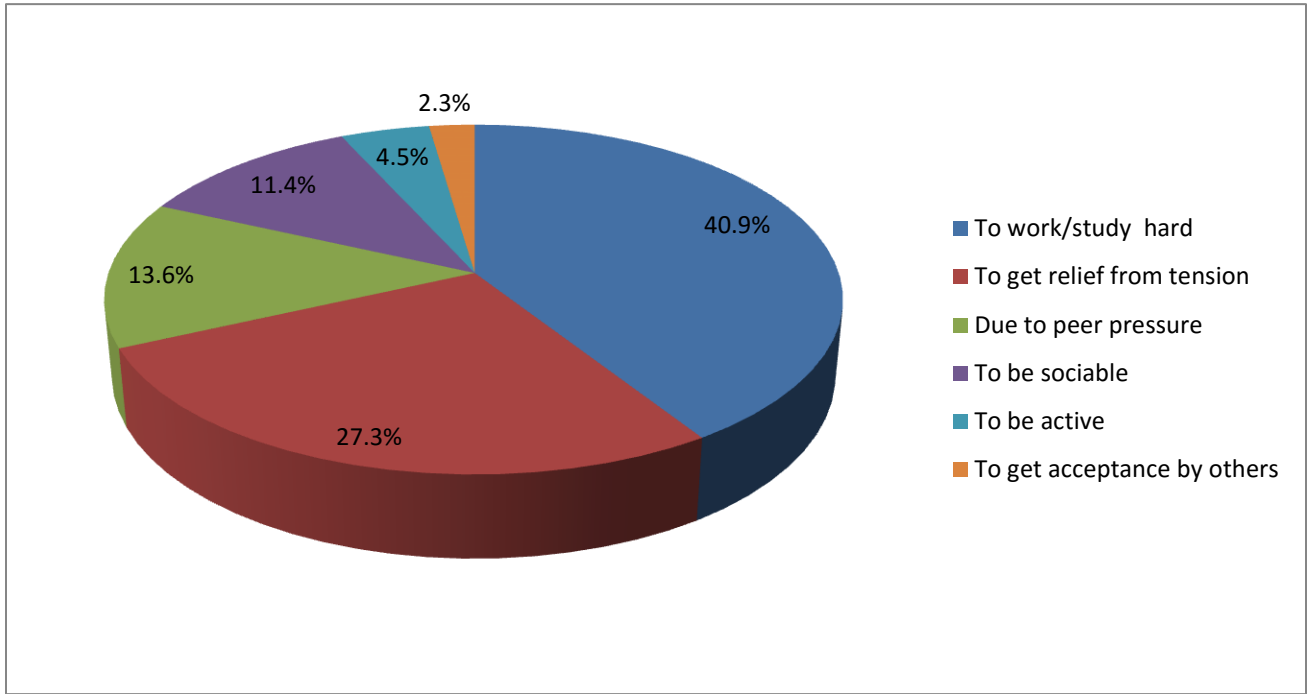


Figure 3: Reasons for chewing khat reported by students

Reasons for smoking cigarette were: to get relief from tension 6 (54.5%) due to peer pressure 3 (27.3%), to be active 1 (9.1%) and to get personal pleasure 1 (9.1%). Reasons for illegal drug use were: to get relief from tension 3 (60%) and due to peer pressure 2 (40%) (Table 6).

Table 6: Reasons for substance use, Jabi-Tehinan Woreda Secondary and Preparatory School Students

Variables	Level	N	Percent
Reasons for smoking (n= 11)	To get relief from tension	6	54.5%
	Due to peer influence	3	27.3%
	To be active	1	9.1%
	To get personal pleasure	1	9.1%
Reasons for using of illegal drugs(n=5)	To get relief from tension	3	60%
	Due to peer pressure	2	40%

Prevalence of cigarette smoking and illegal drug use were low. This may be small sample size and fear of respondents to give genuine response for the given questions due to illegality of the illegal drug use.

4.6 Sexual Behavior of Respondents

At the time of the study 117 (28.2%) of the total sample of participants (n=411) had experienced sexual intercourse. Of 117 sexually active students, 71(30%) were males and 46(26.4%) were females 15 to 24 years. The mean age at first sexual intercourse was 17.08 ± 1.05 .

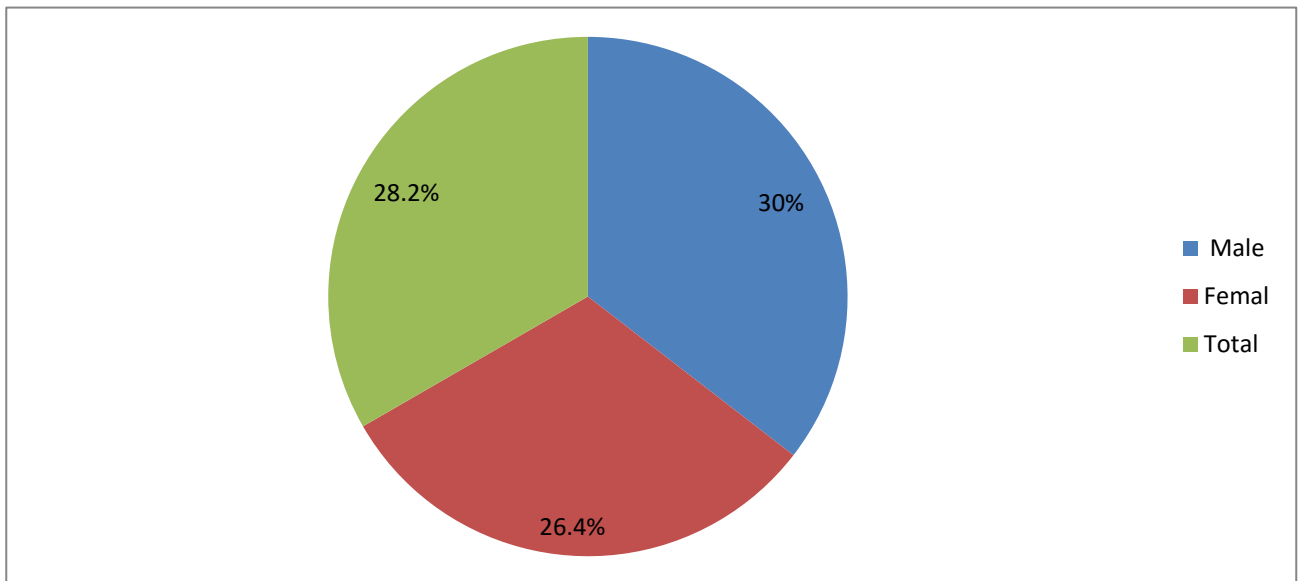


Figure 4: Percentages of sexually active students by sex

The main reasons for initiating sex were related to personal interest or curiosity 57(48.7%), promising words from partner for a marriage 19(16.2%), peer pressure 27(23.1%), sex with teachers to pass the exam.1 female student (0.9%), forced sex 5(4.3%) and marriage 8(6.8%) (Figure -5).

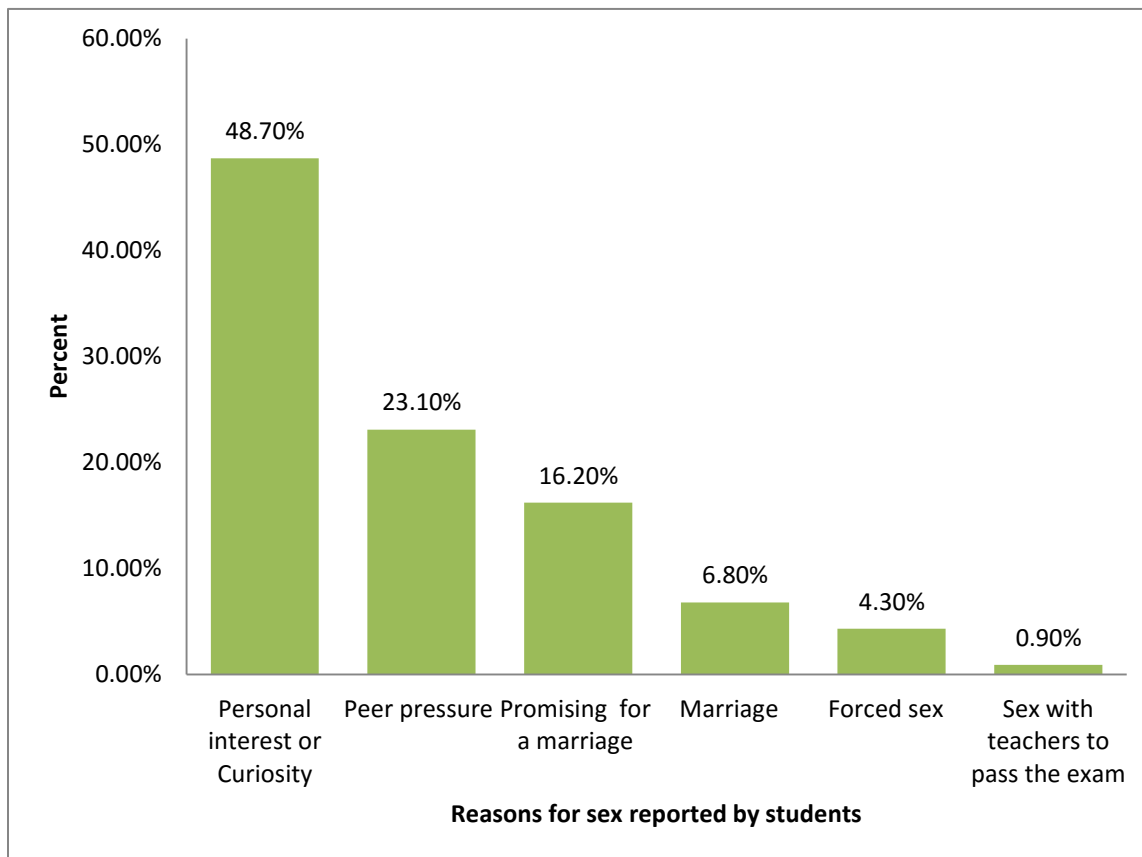


Figure 5: Reasons for initiating sex reported by students.

The majority of the sexual experienced students 77(65.8%) had first sex with their girl or boy friends, 5(4.3%) with their spouse and 35(29.9%) with none regular friends. From 117 sexually active students 81(69.2%) had at list one of the risky sexual behaviors. i.e. 48(41%) had respond no use of condom, 18(15.4%) had multiple sexual partners; 58(49.6%) used contraceptive methods; 53(45.3%) had started sexual intercourse before the age of 18. Respondents' condom use rate in the last 12 months was 78(66.7%) but 39(33.3%) of the sexually active students did not used condom in the last sexual intercourse . The most common reason cited for not using condom was trust on partner 18(46.1%), hating condoms 15(38.5%) and in love with partner 6(15.4%). Participants that used condom inconsistently in the last 12 month sexual intercourse were 7(6%). From the question about pregnancy, 5(10.9%) of females were pregnant from outside of marriage once in their life (Table 7).

Table 7: Different aspects of sexual practice, Jabi Tehinan woreda high school and preparatory school.

Variable	Male (n,%)	Female (n, %)	Total (n, %)
First sex with whom:			
girl /boy friends	47(40.2%)	30(25.6%)	77(65.8%)
Spouse	2(1.7%)	3(2.6%)	5(4.3%)
non-regular friends	22(18.8%)	13(11.1%)	35(29.9%)
Age at first sex:			
<18 years	30(25.6%)	23(19.7%)	53(45.3%)
≥ 18 years	41(35%)	23(19.7%)	64(54.7%)
Ever used condom in your first sex			
Yes	43(36.7%)	26(22.2%)	69(59%)
No	28(23.9%)	20(17.1%)	48(41%)
Number of sexual partners:			
One	62(53%)	37(31.6%)	99(84.6%)
Two and above	9(7.7%)	9(7.7%)	18(15.4%)
Ever used contraceptive methods:			
Yes	25(43.1%)	33(56.9%)	58(49.6%)
No	46(39.3%)	13(11.1%)	59(50.4%)
Do you use condom in your the last			
12 months sexual encounter: Yes	55(47%)	23(19.7%)	78(66.7%)
No	16(13.7%)	23(19.7%)	39(33.3%)
Ever used condom consistently :			
Yes	51(43.6%)	20(17.1%)	71(60.7%)
No	4 (3.4%)	3(2.6%)	7(6%)
Reasons for not using condom			
Trust on partner	11(28.2%)	7(17.9%)	18(46.1%)
Hating condom	8(20.5%)	7(17.9%)	15(38.5%)
In love with partner	5(12.8%)	1(2.6%)	6(15.4%)
Respondents exposed for risky sexual behavior			
	52 (44.4%)	29(24.8%)	81(69.2%)
Have you ever been pregnant		5(10.9%)	5(10.9%)

4.7 Factors Associated With Risky Sexual Behavior

In bivariate analysis different variables including sex, grade level and income in Ethiopian birr were associated with risky sexual behavior. After controlling for the effects of potentially confounding variables using multivariate logistic regression sex and ever use of alcohol were found to be significantly associated with risky sexual behavior. The odds of performing risky sexual behavior among males were about three times higher than that of females (AOR=2.7, 95% CI=1.09, 6.88) (Table 8).

Table 8: Association of socio demographic characters with risky sexual behavior of Jabi Tehinan woreda secondary and preparatory school students.

Variable	Level	Risky sexual behavior		COR	AOR	P-value
		No	Yes	(95% CI)	(95%CI)	
Sex	Male	14(38.9%)	52(64.2%)	2.81(1.25, 6.33)*	2.7(1.09,6.88)*	0.03
	Female	22(61.1%)	29(35.8%)	1		
Grade level	Grade 9 th					
	10 th	10(27.8%)	9(11.1%)	1		
	11 th	17(47.2%)	25(30.9%)	1.63(0.55,4.87)	1.87(0.57,6.18)	0.30
	12 th	2(5.6%)	11(13.6%)	6.11(1.06,35.35)*	6.80(1.07,43.37)*	0.04
Pocket money per month	No income					
	≤100	9(25%)	11(13.6%)	1	1	
	100-299	16(44.4%)	18(22.2%)	0.92(0.3, 2.79)	0.855(0.25,2.82)	0.79
	300-499	10(27.8%)	41(50.6%)	3.35(1.1, 10.28)*	1.88(0.55,6.37)	0.3
Ethiopian birr		1(2.8%)	11(13.6%)	9(0.97, 83.58)*	3.54(0.34,36.31)	0.28

There was significant association between risky sex and alcohol use in this study with odds of ratio (AOR= 2.46, 95% CI=1.03, 5.91). Khat chewing was significantly associated with risky sex, but disappears in the multivariate analysis (Table 9).

Table 9: Association of substance use with risky sexual behaviour of Jabi tehinan woreda secondary and preparatory school students.

Variables	<u>Risky sexual behavior</u>		COR (95% CI)	AOR (95% CI)	P-value
	No (%)	Yes (%)			
Alcohol ever use					
Yes	20(55.6%)	64(79%)	3.01(1.29,7.03)*	2.46(1.03,5.91)*	0.04
No	16(44.4%)	17(21%)	1	1	
Khat ever use					
Yes	6(16.7%)	31(38.3%)	3.1(1.16, 8.3)*	0.40(0.15, 1.11)	0.08
No	30(83.1)	50(61.7%)	1		

N.B* =statistically significant at $p<0.05$.

1=Reference factor

CHAPTER FIVE

5. DISCUSSION

This study has made an attempt to assess the magnitude of risky sexual behaviors and the association between risky sexual behavior and substance use. The overall prevalence of “ever used drug” for at least one “drug” is 56.4%. This is lower than a similar study done among high school adolescents in Woreta town, which was 65.4% (Anteneh Messele et al., 2014). The reason for such difference could be attributed to the difference in residency and using of substance by the family. This can be supported by a study done among Debre Markose Poly Technique College students; being male coming from urban areas and parental use of substances were strongly and positively associated with students ever use of drugs (Tesfahun Aklog et al., 2013). Woreta town is more urbanized than the town found in Jabi Tehinan Woreda. The finding of Anteneh Messele et al. (2014) indicates that students coming from urban areas were more likely to abuse in substances and students whose families use substances were 2.7 times more likely to abuse in substances. Also lower than public college students in Bonga Town, which was 72.7% (Agegnehu Alemu et al, 2015) and a study done in Haromya University where the prevalence of substance use was 62.4% (Andualem Derese et al., 2014). This greater variation due to the increased freedom and can get more income from families and their relatives in the university and college students than high school students. From the sample of 396 respondents of Haromya university students all of the participants, 396(100%) of them had a monthly income of hundred and above Ethiopian birr, and also indicates that as the income increases exposing for using of substances also increases (Andualem Derese et al., 2014). This is significantly higher than this study which is reported by 269(65.9%) participants has no a monthly income.

The study shows lower prevalence than a study done in Nigerian high school 87.3% (Oshodi et al., 2010). The difference in magnitude from Nigerian high school might be due to the difference in the study area where in the Nigeria there is high economy and easy availability and accessibility of substances especially alcohol and khat which are frequently taken by students, and are relatively socially acceptable due to different sociocultural environments. As Emeka (2013) indicates consumption of alcohol among

different ethnic groups in Nigeria has a long history, and now changing rapidly following the socio-political and economic development of Nigeria, giving rise to new norms of alcohol use.

The prevalence rate of alcohol in this study was 50.6% which is significantly higher than the rate of life time alcohol use among adolescent in high school student of SNNPR which was 11.5% (Alemayehu Toma and Serawit Deyno, 2015), and a study on Preparatory School students in Jemma Zone, South West Ethiopia which was 37% (Abebe Mamo et al., 2013). The possible reason for this difference can be students and family connectedness. Students that have a close connection with their parents are less expected to using substances. This can be supported by the study done among preparatory school students in Jemma Zone which is out of 273 students, 147(48%) was exposed to family connectedness and less prevalence of alcohol use. Also lowers than study in woret town high school students which was 59% (Anteneh Messele et al., 2014). The current prevalence of khat chewing was 4.4% which is comparable to a study done among adolescents in high school students in SNNPR, 5% (Alemayehu Toma and Serawit Deyno, 2015).

The life time prevalence of khat chewing was found to be 10.6% which is much lower than a study done in Agaro secondary school students which was 64.9% (Adugna Fentahun et al., 1994), high school students in Eastern Ethiopia which was 24.3% (Reda Ayalu et al., 2012) and Saudi Arabia Jazan region secondary (high) school students which was 19.2% (Ageely, 2009). This might be the presence of more number of Muslims and males in the study population. Khat use was associated with being male, Muslim and younger age group (18 to 24 years) (Kebede Yigzaw, 2002). As Ageely (2009) indicates from the study of Jazan region secondary school students Muslims were more than Christians and males more than females, those between the age 15 and 34 years more than other age groups were habitual users of khat.

The prevalence rate of lifetime cigarette use in this study was 2.7% which is comparable with a study among selected high school adolescents in Sidama Zone which was 2.8% (Alemayehu Toma and Serawit Deyno, 2015) and also a study among Jiga high school and preparatory school students which was 2.3% (Getachew Mullu et al., 2016), and

lower than the Study conducted among Debre Markos Town Poly Technique College which was 7.8% (Tsfahun Aklog et al.,2013).

The prevalence rate of current cigarette use in this study was 1.5% which is lower than woreta town high school students which was 6.8% (Anteneh Messele et al., 2014).

In the life time prevalence of illicit drug very few students had tried it. Most of the respondents were not familiar with even what is illegal drug. This might be due to lack of access to illicit drugs easily, and the possession and use of these drugs result in penalty under the law of the country.

From the total sample, 28.2% of the participating students admitted having sexual experience which accounts 30% for males and 26.4% females. Curiosity to test new things and peer- pressure and daily drinking of alcohol were the contributing factor for this higher rate of sexual experience. This result is higher than the study done in Jiga high school and preparatory school students 16% (Getachew Mullu et al., 2016), among adolescents in high school students in SNNPR which was 24% (Alemayehu Toma and Serawit Deyno, 2015) and also higher than a study among sexually experienced Ghanaian youth which was 25% (David, 2012), in China senior high school students the prevalence was 7% (Shenghui et al., 2013). This might be due to difference in cultures, attitudes and life style which lead students towards sexual debut. This can be supported by a study done in Ghanaian youth; sex education by families is given to only girls usually by their mothers or an elderly woman in the family during puberty rites (David, 2012).

The prevalence of sexually experienced students in this study was lower than a study done on preparatory school students of Jimma Zone which was 42.9% (Abebe Mamo et al., 2013), public college students in Bonga town, which was 38.1% (Agegnehu Alemu et al., 2015) and Haromiya University students which was 33.5% (Andualem Derese et al, 2014). This greater difference might be due to the variation in age. Most of the students 315(79.5%) in the study of Haromiya university students under the age of 19-24 years old (Andualem Deresse et al., 2014), but in the study of Jabi Tehinan Woreda were 291(71.0%) under the age of 15-18 years old.

The condom use rate during the last intercourse among those sexually active students was 78(66.7%) but consistent condom use was reported by 71(60.7%). The result is consistent with a study done among adolescents in high school students in SNNPR which was 62.6% (Alemayehu Toma and Serawit Deyno, 2015).

Regarding to multiple sexual partner, the current finding is 15.4%, which is much lower than among sexually experienced Ghanaian youth which was 31% (David, 2012). The difference is due to different cultural background and socio economic environment.

Based on the finding of the result alcohol was positively associated with risky sexual behavior. Especially the student who drinks alcohol daily had more association with risky sexual behavior than who drinks alcohol non-regularly. Alcohol users were 2.46 times more likely to involve in risky sexual behavior than non-users, AOR at (95%CI), 2.46(1.03, 5.91). This might be due to the nature of alcohol in decreasing inhibitions, altering rational decision making and increasing risk taking behavior. A study in adolescence of Jimma preparatory school students reported alcohol use as a predictor of involving in risky sexual behavior (Abebe Mamo et al., 2013) and a study conducted in high school students in SNNPR have also indicated alcohol use and involving in risky sexual behavior (Alemayehu Toma and Serawit Deyno, 2015). Association between Khat chewing, cigarette smoking and using illicit drugs with risky sexual behavior was not found. This might be as a result of small number of users of these substances.

CHAPTER SIX

6. CONCLUSION AND RECOMMENDATION

6.1 Conclusion

In conclusion, these findings provided information regarding Jabi Tehinan Woreda secondary and preparatory school adolescents' substance use and sexual behaviors. The prevalence of sexual intercourse in Jabi Tehinan Woreda secondary and preparatory school adolescents' were higher than other high schools and preparatory schools. However, some risky sexual behaviors, such as unprotected sex and multiple-partner sex, were more prevalent among those who are sexually experienced.

The overall life time prevalence of substance use among Jabi Tehinan Woreda Secondary and Preparatory School Students was high. The most commonly used substance among students was alcohol. Daily users of alcohol were significantly associated with risky sexual behavior.

6.2 Recommendations

- ❖ Advising students to use alternative past time activities instead of using alcohols and other substances.
- ❖ Education and awareness creation especially on the students who used substances daily should be done.
- ❖ Students should resist peer pressure and avoid unwanted sex and substance abuse.
- ❖ Some teachers especially those who forced female students for sex because of the exam should be corrected.
- ❖ Any interventions that can affect the above risk factors may be helpful to protect adolescents' health in school.
- ❖ A further research should be conducted to explore the association of substance use and risky sexual behavior using broader population.

REFERENCES

- Abebe D, Debella A, Dejen A, Degefa A, Abebe A, Urga K.(2005). Chat chewing habit as a possible risk behavior for HIV infection: a case control study, *Ethiopia Journal of Health Development*. 19(3): 174-181.
- Abebe M., Tsion A. and Netsanet F. (2013). Living with parents risky sexual behaviors among preparatory school students in Jimma zone, south west Ethiopia. *African Health Science*. 13: 498-506.
- Adugna F., Jira C. and Molla T. (1994). Khat chewing among Agaro secondary school students, Agaro, Southwestern Ethiopia. *Ethiopian Medical Journal*. 32(3): 161-6.
- Ageely M. H. (2009). "Prevalence of chat chewing in college and secondary (high) school students of Jazan region Saudi Arabia," *Harm Reduction Journal*. 6(11): 1-7.
- Agegnehu A., Mulugeta S.,Teshome G.,Hailay A., Gebremaryam T., Yohannes M. (2015). Assessment of substance use and risky sexual behavior among public college students in BongaTown, South West Ethiopia. *American Journal of Biomedical and Life Sciences*. 3(5): 91-97.
- Alemayehu T., Serawit D. (2015). Association between Substance Abuse and Risky Sexual behaviors among selected high school adolescents in Sidama Zone, South Ethiopia. *Kenkyu Journal of Pharmacology*. 1:100102.
- Andualem D., Assefa S., Chalachew M. (2014). Assessment of Substance Use and Risky Sexual Behavior among Haramaya University Students, Ethiopia, *Science Journal of Public Health*. 2(2): 102-110.
- Anteneh M.,Telake A. and Solomon M., (2014):High prevalence of substance use and associated factors among high school adolescents in Woreta Town, Northwest Ethiopia: multi-domain factor analysis. *Bio Medical Center Public Health* 201414:1186.DOI: 10.1186/1471-2458-14-1186
- Asuni T. (1990). Impact of research on designing strategies for preventing and treating dependence on drugs: the case for developing countries especially African countries. *Journal of Drug and Alcohol Dependence*. 25: 203-207.

- Asuni T. (1992). Drug Trafficking and Drug Abuse in Africa. *Criminology in Africa*, UNICRI SERIES, Criminology in Developing Countries. Rome, Publication No. 47.
- Atwoli L., Mungla PA, Ndung'u MN, Kinoti KC, Ogot EM. (2011). Prevalence of substance use among college students in Eldoret, western Kenya. *Bio Medical Center Psychiatry*. 11(34):11–34. [[PMC free article](#)] [[PubMed](#)].
- CDC (2012). Serological and behavioral survey of students attending secondary schools in hotspot woredas with the Amhara Regional state.
- Central Statistical Agency [Ethiopia] and ICF International (2012). Ethiopia Demographic and Health Survey (2011). Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International.
- Central Statistical Agency and ORC Macro, Ethiopia Demographic and Health Survey (2011), Central Statistical Agency, Addis Ababa, Ethiopia; ORC Macro, Calverton, Md, USA (2012).
- David D. (2012). Substance use and risky sexual behaviors among sexually experienced Ghanaian youth. *Bio Medical Center of Public Health*. V.12.PMC3517501.
- Dawit A., Debela A., Dejene A., Abebe A., Mekonnen Y., Degefa A.(2006). Is khat-chewing associated with HIV risk behaviour? A community-based study from Ethiopia. *African Journal of AIDS Research*. 5(1): 61-9.
- Eaton DK., Kann L., Kinchen S.(2007). Youth risk behaviors surveillance. MMWR. Surveillance summaries: Morbidity and mortality weekly report. Surveillance summaries/CDC; United States. 57(4): 1-131 [Pub Med]
- ECA.PHSD/SDU/94 [5:5(b)(ix)] (1994). Report on Seminar on Youth, Drugs and Health, Africa Hall, Addis Ababa, 11 - 15 July.
- Emeka D. (2013). Changing Patterns of Alcohol Consumption in Nigeria: An exploration of responsible factors and consequences. *A Journal of Medical Sociology*.7(1):11-33.

- Federal HIV/AIDS Prevention and Control Office (2011).
- Fekadu A., Atalay A, Charlotte H. (2007). Alcohol and Drug Abuse in Ethiopia: Past, Present, and Future. *African Journal of Drug and Alcohol Studies*. 7(1): 1-15.
- Fekadu M., Alemayehu W. (2008). Age at sexual initiation and factors associated with it among youths in North East Ethiopia. *Ethiopian Journal of Health Development*. 23 (2): 154-62.
- Foundation THJKF. (2002). Substance Use and Risky Sexual Activity: The Henry J. Kaiser Family Foundation.
- George Y., Zahid H., Tim L. (1995): Khat chewing as a cause of psychosis. *British Journal of Medicine*. 54: 322-326.
- Getachew M., Genet D., Meseret Y., Worku M., Mikiyas M., Tiguated D., Meless M, and Melat A.(2016). Risky Sexual Behaviors and Associated Factors among Jiga High School and Preparatory School Students, Amhara Region, Ethiopia. *International Scholarly Research Notice*. Volume 2016 (2016), Article ID 4315729.
- Gillespie, Wayne, Jessica L. Holt and Roger L. Blackwell. (2007). “Measuring Outcomes of Alcohol, Marijuana, and Cocaine use among College Students: A Preliminary Test of the Shortened Inventory of Problems – Alcohol and Drugs (SIP-AD).” *Journal of Drug Issues*. 37(3): 549-568.
- Hingson R., Strunin L. (1989). “AIDS transmission: changes in knowledge and behaviors among adolescents, Massachusetts statewide surveys, 1986-88. *Pediatrics* 85:24-29.
- Jonathan B. (2001). Sampling and Sample Size.
<http://www.surveysystem.com/sscalc.htm>.
- Kabiru CW, Beguy D., Crichton J. and Ezech AC. (2010). Self-reported drunkenness among adolescents in four Sub-Saharan African countries: associations’ with adverse childhood experiences. *Journal of Child and Adolescent Psychiatry and Mental Health*; 4: 17.

- Kammeyer K.C.W., Ritzer G & Yetman N.R. Sociology. (1997): Experiencing changing societies. Allyn and Bacon. Boston: 190-211.
- Kebede Y. (2002): Cigarette smoking and Khat chewing among college students in North West Ethiopia. *East African Medical Journal*. 79(5): 274-278.
- Kwamanga DH, Odhiambo JA, Amukoye EI. (2003). Prevalence and risk factors of smoking among secondary school students in Nairobi. *East African Medical Journal*. 80(4): 207–212.
- Lori-Ann P., Linda L. Caldwell CM, Vergnani AT. (2009). Transitions to Substance Use and Sexual Intercourse among South African High School Students: 1-16. November 2006.
- Mesfin B., Dereje K., Mesfin K., and Fikre E. (2000). The Magnitude of Khat Use and its Association with Health, Nutrition, and Socioeconomic Status, *Ethiopian Medical Journal*. 38(1): 11-2
- Moges A., Biadglin S., Yazew B. (2010). Prevalence and Predictors of Chat Chewing Among School Going Adolescents: Cross-Sectional Study, Eastern Ethiopia, 2010 In *22nd Annual Ethiopian Public Health Association Conference*. Addis Ababa: Ethiopian Public Health Association (EPHA).
- Negussie T. (1998). Sexual activity of out-of-school youth, and their knowledge and attitude about STDs and HIV/AIDs in Southern Ethiopia, *Ethiopian Journal of Health Development*. 12 (1): 17-22, Addis Ababa, Ethiopia.
- Numan N. (2004). Exploration of adverse psychological symptoms in Yemeni khat users by the Symptoms Checklist-90 (SCL-90). *Addiction*. 99(1): 61-5.
- Odejide.O.A., “Status of drug use /abuse in Africa (2006): A Review,” *International Journal of Mental Health and Addiction*. 4(2): 87-102.
- Omolo O. (1985). Medical Problems among Khat Users. M.Med. dissertation, department of psychiatry, University of Nairobi.

- Oshodi OY., Aina OF., Onajole AT. (2010). Substance use among secondary school students in an urban setting in Nigeria: prevalence and associated factors. *African Journal of Psychiatry*. 13(1): 52–57. doi: 10.4314/ajpsy.v13i1.53430. PubMed [Cross Ref]
- Reda.A.A, Mogess A., Biadgilign S., and Wondmagegn B. (2012). “Prevalence and determinants of khat(*Catha edulis*) chewing among high school students in eastern Ethiopia: a cross sectional study.” *PLoS ONE*.7(3), Article ID e33946.
- Rosenbaum E., Kandel DB. (1990). Early onset of adolescent sexual behavior and drug involvement. *Journal of Marriage and Family*. 52: 112-117.
- Shenghui L., Hong H., Gang X., Young C., Fengrong H., and Xiuxia Y. (2013). Substance use, riskysexual behaviors, and their associations in a Chinese of senior high school students. *Bio Medical Central Public health*: 1-10.
- Singleton R., Wolfston R. Amy. (2009). “Alcohol Consumption, Sleep, and academic Performance among College Students.” *Journal of Studies on Adolescence Health* 1995. 16: 304-308.
- Tesfahun A.,Gebeyaw T. and Girma T., (2013): Assessment of substance abuse and associated factors among students of debre markose poly technique college in debremarkos town, east gojjam zone, amhara, regional state, Ethiopia, *Journal of Medical research*. 13(4): 1-12.
- UNAIDS and WHO (2008). Sub-Saharan Africa AIDS epidemic update regional summary: UNAIDS and world Health organization; Geneva.
- UNAIDS, WHO, author (2009). AIDS Epidemic updates of 2009, Geneva: UNAIDS, WHO.
- UNDP and WHO (2014), A strong message on alcohol, gender-based violence and HIV/AIDS, Nambia.
- United Nations Office on Drugs and Crime (2012), World Drug Report, New York.
- UNODC, World Drug Report 2014 (United Nations publication, Sales No. E.14.XI.7),Vinnena.

- Weinstock H., Berman S., Cates W. (2000): Sexually transmitted diseases among American youth: Incidence and prevalence estimates. *Prospect sex Recorded Health* 2004. 36: 6.
- WHO, ATLAS on Substance use (2010). Resources for the Prevention and Treatment of Substance use disorders, WHO, Geneva, Switzerland.
- WHO, Women and Substance (1993) : In program on substance abuse, 1993 Country assessment report, WHO.
- WHO/UNICE (2006). Global consultation on strengthening the Health Sector Response to care, support, Treatment and prevention for young people Living with HIV, Blantyre Malawi.
- WHO, UNODC, UNAIDS (2012): Technical Guide for Countries to Set Targets for universal access to HIV Prevention, Treatment and Care for Injecting Drug Users: Revision (Geneva, World Health Organizations, 2012).
- Woreda Plan and Economy (2008).
- World Health Organization (2012). WHO Global alcohol report: Action needed to reduce health impact of harmful alcohol use.

APPENDIX

Appendix A

**ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL SCIENCE
DEPARTMENT OF BIOLOGY**

GENERAL INSTRUCTION:

Dear respondents, First of the entire researcher came from Addis Ababa University, college of natural science, biology department. Currently, I am a graduate student in Biology and conducting a thesis to the impartial fulfillment of the requirement of Master of Science in Biology. So that first of all I would like to say thank you all respondents for your help to fill this questionnaire.

The purpose of this questionnaire is to collect the information from Jabi tehinan woreda Secondary and Preparatory School students in the **Assessment of Substance Use and Risky Sexual Behavior**.

This questionnaire has five parts; every part of questionnaires' has its own instructions please read instruction carefully and responds accordingly. The questionnaire may appear to be quite easy, and should not take about 5 minutes to complete. There is no right or wrong answers. In most cases it is simply a matter of circling a letter or ticking a box (✓). Therefore, each response that you replay to a researcher on a questionnaire has a great input to the success of this study. So, you are kindly requested to respond to the questionnaire frankly.

With regard to the information you give me, in the questioner, I would like to assure you that all of them would be keep confidential. I used only for the research purpose. You are not required to write your name.

Thank you very much four your cooperation

14. Have you currently use these illegal drugs? A. yes B. no
15. Do these drinks and drugs increase your sexual desire and risky behaviors?
A. yes B. no C.no response
16. Have you ever chewed khat? A. yes B. No C. No response
17. If your answer is **yes** from question number 15 how often did you chew khat?
A. Every day B .Every two days C. Twice a week D. Once a week
E. one's a month
18. Have you currently chew khat? A. yes B. No C. No response
19. If your answer is yes from question number 17 how often did you chew khat?
A. Every day B. Every two days C. Twice a week D. Once a week
E. one's a month
20. Have you ever smoked cigarette? A. yes B. No C. No response
21. Have you currently smoke a cigarette? A. Yes B. No C. No response

Section 3: Reasons for substance use

22. Reasons for drinking (N=) A. To work study hard
B. To get relief from tension C.To get acceptance from others
D. To be sociable
E. To get personal pleasure F. To gets pleasure during sexual intercourse
23. Reasons for chewing khat (N=); A. To work study hard
B. To get relief from tension C .To get acceptance from others
D.To be sociable E. To get personal pleasure F. Due to peer influence
24. Reasons for smoking (N=); A. Due to peer influence
B. To get relief from tension C. To be alert D. To get personal pleasure
25. Reasons for using of illicit drugs (N=); A. Due to peer influence
B. To get relief from tension C. To gets pleasure during sexual intercourse

Section 4. Sexual behaviors of Respondents'

26. Have you ever had sexual intercourse? A. yes B. No C. No response
27. If your answer is "yes" what was the reason for your first sex? 1. Personal interest or curiosity 2. Promising words from partner for a marriage 5. Forced sex and
3. Peer pressure 6. Marriage
4. To pass the

28. How old were you when you first had sexual intercourse? Age-----.
29. Have you used condom in your first sex? A. yes B. No
30. During your life with how many different partners have you had sexual intercourse?
 A.1 person B. 2 persons C. 3 persons D. 4 persons E. or more

Variables for the above questions

“none” (having no sexual partner) “multiple” sexual partner
 “One” sexual partner

31. What kind of contraception did you use in your more recent sexual intercourse?
 A. condom B. Oral contraceptives C. Condom and Oral contraceptives
 D.I did not use any contraception, E. Other, what?
32. Have you ever used condom in the last 12 months of your sexual intercourse?
 A. yes B. No
33. From the above question if you say “No” why did not you and your partner use a
 condom that time? 1. Trust on partner 2. Hating condoms 3. In love with partner
34. From question no 30 if you say “yes” have you used the condom consistently?
 A. yes B. no
35. Have you ever been pregnant in your life time? A. Yes B. No
36. How many of them had made risky sexual behavior?

Appendix B

አዲስ አበባ ዩኒቨርሲቲ

የተፈጥሮ ሳይንስ ኮሌጅ

የባዮሎጂ ዲፓርትመንት

አጠቃላይ መመሪያ

ውድ ተሳታፊዎች፡ በመጀመሪያ የዚህ ጥናት አጥኝ የመጣሁት ከአዲስ አበባ ዩኒቨርሲቲ የተፈጥሮ ሳይንስ ኮሌጅ ከባዮሎጂ ዲፓርትመንት ትምህርት ክፍል ነው። በአሁኑ ጊዜ በባዮሎጂ የ2ኛ ዲግሪ ተማሪና ይህንን ለማሟላት በጃቢጠህናን ወረዳ 2ኛ ደረጃ እና መሰናዶ ትምህርት ቤት ውስጥ ባሉ ተማሪዎች ሱስ የሚያስይዙ ነገሮችን መጠቀም እና አደገኛ የወሲብ ባህርያትን መዳሰስ በሚል ጥናትና ምርምር እየሰራሁ እገኛለሁ። በቅድሚያ ይህንን መጠይቅ ለመሙላት ስለተባበራችሁኝ አመሰግናለሁ።

የጃቢጠህናን ወረዳ ሁለተኛ ደረጃ እና መሰናዶ ትምህርት ቤት ተማሪዎች ሱስ የሚያስይዙ ነገሮችን የመጠቀም ሁኔታ እና አደገኛ የወሲብ ባህርያትን ለመዳሰስ መረጃ መስጠት የጥናቱ ዋና አላማ ነው።

መጠይቁ አምስት ክፍሎች አሉት፡ እያንዳንዱ የመጠይቅ ክፍሎች የየራሳቸው መመሪያ ስላላቸው እባክዎ በጥሞና አንብበው በቅደም ተከተል ይመልሱ።

ጥያቄዎቹ በጣም ቀላልና ለመሙላት ለአንድ ጥያቄ ከ 5 ደቂቃ በላይ አይወስድም። ምንም ዓይነት እውነት ወይንም ወሽት የሚል መልስ የለም። ከጥያቄው ፊት ለፊት የማክበብ (✓) ምልክት የማድረግ ጉዳይ ነው።

ስለዚህ በመጠይቁ ላይ የምትሰጡት መልስ ለጥናቱ ስኬታማነት ትልቅ ግብዓት በመሆኑ መጠይቁን በግልፅነት እንደትሞሉት በትህትና እጠይቃለሁ።

ለመጠይቁ የምትሰጡት መላሽ ለጥናቱ ዓላማ ብቻ ስለሚውል ለማንም አይገለፅም በተጨማሪም በመጠይቁ ወረቀት ላይ ስማችሁን ማስፈር አያስፈልግም።

ስለትብብራችሁ አመሰግናለሁ።

Appendix B

ክፍል 1: ግላዊ መረጃ

1. የታዎን ይሙሉ: ወንድ ሴት
2. በቅርብ ልደት-ህን/ሽን ስታኩብር/ሪ ዕድሜህ/ሽን ስንት ነበር? 15_18
19-24 ከ 24 በላይ
3. የክፍል ደረጃ 9ኛ 10ኛ 11ኛ 12ኛ
4. ሀይማኖት-ህ/ሽ ምንድን ነው? ኦርቶዶክስ እስልምና
ፕሮቴስታንት ካቶሊክ የለኝም
5. ብሄረሰብህ/ሽ/ምንድን ነው? 1. አማራ 2. ኦሮሞ 3. ትግራይ
4. አገዳ 5. ሌሎች
6. የግል የወር ገቢህ/ሽ በብርስንት ይሆናል? የለኝም ከ 100 ያላነሰ
ከ100-299 ከ300-499 አላውቅም
7. ትዳር ይዘህ ታወቃለህ/ቲያለሽ/? 1. አዎ 2. የለም

ክፍል 2: የሱስ አስያዥ ነገሮችን የመጠቀም ሁኔታ

8. ከዚህ በፊት የአልኮል መጠጦችን ጠጥተህ/ሽ/ ታወቃለህ/ቲያለሽ/?
ሀ. አዎ ለ. የለም
መልስህ/ሽ አዎ ከሆነ በየስንት ጊዜው ትጠጣ/ጭ/ ነበር? ሀ. በየቀኑ
ለ. በሳምንት ሁለት ቀን ሐ. በሳምንት አንዴ መ. በጭራሽ አልጠጣሁም
9. በአሁኑ ሰዓት አልኮል ትጠጣለህ/ሽ/ ሀ. አዎ ለ. የለም
መልስህ/ሽ አዎ ከሆነ በየስንት ጊዜው ትጠጣ/ጭ/ ነበር? ሀ. በየቀኑ
ለ. በሳምንት ሁለት ቀን ሐ. በሳምንት አንዴ መ. በጭራሽ አልጠጣሁም
10. ምን አይነት መጠጥ ነው ስትጠጣ/ጭ የነበረው? ሀ. ቢራ
ሐ. አረቂ መጠጥ ሰ. ጠጅ
11. ብዙውን ጊዜ ምን ያህል ትጠጣለህ/ጭለሽ? በመለኪያ/ በብርሌ/ በብርጭቆ ወይም በጠርሙስ ሀ. ከ 1 እስከ 5 ለ. ከ 6 እስከ 10
ሐ. ከ 10 በላይ

12. ሱስ የሚያስይዙ ዕዎችን ተጠቅመህ/ሽ ታውቃለህ/ሽ?
 ሀ. አዎ ለ. የለም ሐ. መልስ የለኝም
13. እንግዲያውስ ከተጠቀምህ/ሽ የትኛውን ተጠቅመሃል/ሽ?
 ሀ. ኮኬይን ለ. ሄሮይን ሐ. ካናቢስ መ. ማሪጁዋና
14. አሁን እነዚህን ሱስ አስያዥ ዕዎችን ትጠቀማለህ/ሚያለሽ?
 ሀ. አዎ ለ. የለም
15. እነዚህ መጠቆችና መድሀኒቶች የወሲብ ፈላጎትን ይቀሰቅሳሉ ወይንም ይጨምራሉ? ሀ. አዎ ለ. አይቀሰቅሱም/አይጨምሩም ሐ. መልስ የለኝም
16. ጫት ቅመው ያውቃሉ? ሀ. አዎ ለ. የለም ሐ. መልስ የለኝም
17. ከጥያቄ ቁጥር 15 መልስዎ “አዎ” ከሆነ በየስንት ጊዜው ነበር የሚቅመውት?
 ሀ. በየቀኑ ለ. በየሁለት ቀኑ ሐ. በሳምንት አንዴ መ. በወር አንዴ
18. በአሁኑ ስዓት ጫት ትቅማለህ/ሚያለሽ? ሀ. አዎ ለ. የለም ሐ. መልስ የለኝም
19. ከጥያቄ ቁጥር 17 መልስህ/ሽ/ ”አዎ” ከሆነ በየስንት ጊዜው ነበር የምትቅመው /ሚው/? ሀ. በየቀኑ ለ. በየሁለት ቀኑ ሐ. በሳምንት አንዴ መ. በወር አንዴ
20. ሲጋራ አጭሰህ/ሽ ታውቃለህ/ያለሽ? ሀ. አዎ ለ. የለም ሐ. መልስ የለኝም
21. በአሁኑ ስዓት ሲጋራ ታጨሳለህ/ሻለሽ? ሀ. አዎ ለ. የለም ሐ. መልስ የለኝም

ክፍል 3: ሱስ የሚያስይዙ ነገሮችን የመጠቀሚያ ምክንያቶች

22. የመጠጣትህ/ሽ ምክንያቶች: ሀ. ጠንክሮ ለመስራት ለ. ጭንቀትን ለማቃለል ሐ. በሌሎች ዘንድ ተቀባይነት ለማግኘት መ. ማህበራዊ ለመሆን ሰ. ግላዊ ደስታን ለማግኘት ረ. በወሲብ ግንኙነት ወቅት ደስታን ለማግኘት
23. ጫት የመቃመህ/ሽ ምክንያቶች: ሀ. ጠንክሮ ለመስራት/ለማጥናት

ለ. ጭንቀትን ለማቃለል ሐ. በሌሎች ዘንድ ተቀባይነትን ለማግኘት
መ. ማህበራ ሠ. ንቁ ለመሆን ቀ. በጓደኛ ተዕዕኖ ሰ. ግላዊ ደስታን
ለማግኘት

24. የማጨስ ምክንያቶች ሀ. በጓደኛ ተዕዕኖ ለ. ጭንቀትን ለማቃለል
ሐ. ንቁ ለመሆን መ. ግላዊ ደስታን ለማግኘት

25. ሱስ የሚያስይዙ ዕዎችን የምጠቀም ምክንያቶች ሀ. በጓደኛ ተዕዕኖ
ለ. ጭንቀትን ለማቃለል ሐ. በወሲብ ግኑኝነት ወቅት ደስታን ለማግኘት

ክፍል 4. የመላሾች ወሲባዊ ባህሪ

26. የወሲብ ግንኙነት አድርገህ/ሽ ታውቃለህ/ሽ? ሀ. አዎ ለ. የለም
ሐ. መልስ የለኝም

27. ከተቁ 25 መልስህ/ሽ/ አዎ ከሆነ ለወሲብ ያነሳሳዎ ዋነኛ ምክንያት ምንድን ነው?

- | | |
|-------------------|----------------------|
| 1. ግላዊ ፍላጎት/ ጉጉት/ | 2. የፍቅረኛየ የጋብቻ ቃልኪዳን |
| 3. የጓደኛ ግፊት | 4. ፈተና ለማለፍ |
| 5. ተገድጄ | 6. ስላገባሁ |

28. የመጀመሪያ የወሲብ ግንኙነት ስታደርግ/ጊ ዕድሜህ/ሽ ስንት ነበር? _____

29. በመጀመሪያ የወሲብ ግንኙነት ወቅት ኮንዶም ተጠቅመህል/ ሻል?
ሀ. አዎ ለ. የለም

30. በህይወትዎህ/ሽ ከምን ያህል ጓደኞች ጋር የወሲብ ግንኙነት አድርገህል/ሻል?

- | | |
|---------------|---------------|
| ሀ. ከ 1 ሰው ጋር | ለ. ከ2 ሰዎች ጋር |
| ሐ. ከ3 ሰዎች ጋር | መ. ከ 4 ሰዎች ጋር |
| ሰ. ከብዙ ሰዎች ጋር | |

ከላይ ያለው ጥያቄ ተለዋዋጮች

“ምንም” /የትዳር ጓደኛ የለኝም/

“አንድ” ፍቅረኛ

“ብዙ” ፍቅረኞች

31. በቅርብ ጊዜ የወሲብ ግንኙነት ስታደርግ/ጊ የተጠቀምህው/ሽው የወሲድ መከላከያ ምን አይነት ነው? ሀ. ኮንዶም ለ. በአፍ የሚወሰድ የዎሊድ መከላከያ ሐ. ኮንዶም ና በአፍ የሚወሰድ የዎሊድ መከላከያ መ. ምንም አይነት የዎሊድ መከላከያ አልተጠቀምሁም ሰ. ሌላ ካለ ይገለጥ_____.
32. ባለፉት 12 ወራት ውስጥ ወሲብ ስታደርግ/ጊ ኮንዶም ተጠቅመህል/ሻል ? ሀ. አዎ ለ. የለም
33. ከተቁ 30 መልስህ/ሽ/የለም ከሆነ እርስዎና ጓደኛዎ ኮንዶምን ለምን አልተጠቀማችሁም? 1. ስለማምነው/ናት/ 2. አልወድም 3. ስለማፈቅረው/ራት/
34. ከተቁ 30 መልስህ/ሽ/ አዎ ከሆነ ኮንዶምን በአገግባቡ ተጠቅመህል/ ሻል ? ሀ. አዎ ለ. የለም
35. ነፍሰ ጡር ሁነሽ ታወቁያለሽ? ሀ. አዎ ለ. የለም
36. ምን ያህሉ ተሳታፊዎች ለአደገኛ የወሲብ ባህርያት ተጋልጠዋል?