



ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL SCIENCES
DEPARTMENT OF ZOOLOGICAL SCIENCES

ASSOCIATION OF SUBSTANCE USE AND RISKY SEXUAL BEHAVIOUR
AMONG DEMBECHA COMPREHENSIVE SECONDARY AND
PREPARATORY SCHOOL STUDENTS, IN DEMBECHA
WOREDA , WEST GOJAM, AMHARA REGION,
ETHIOPIA.

BY
AGERIE BIADIGLIGN

AUGUST, 2017
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LIST OF ACRONYMS

AOR - Adjusted odd ratio

COR- Crude odd ratio

CSAE - Central Statistical Agency of Ethiopia

CSW – Commercial sex workers

DACAЕ - Drug Administration and Control Authority of Ethiopia

DHS - Demographic Health Surveys

EDHS - Ethiopian Demographic and Health Survey

EHNRI - Ethiopian Health and Nutrition Research Institution

GYTS - Global Youth Tobacco Surveys

HIV/AIDS – Human immune virus/ Acquired immune deficiency syndrome

OR - Odd ratio

RHO - Reproductive health organization

SD- Standard Deviation

STIs – Sexual transmitted infections

UN- United Nation

UNAIDS- United Nation Program on HIV/AIDS

U.S _ United States

VCT – Voluntary counseling and testing

WHO – World health organization

Abstract

Substance use is a major public health concern in global setting, and is very common during adolescent period leading to physical and/or mental health complications. Young people are engaged in high risky behavior like smoking cigarette, drinking alcohol, use of drugs and gender based violence. These behaviors in turn lead them to engage in sexual risky behavior. In Ethiopia and many other developing countries, the epidemic of HIV/AIDS is high among young people which are mainly due to the risky sexual behaviors. This study was conducted to determine the relationship between substance use and risky sexual behavior among Dembecha comprehensive secondary and preparatory school students.

Institutional based cross-sectional study design was employed among Dembecha comprehensive secondary and preparatory school students. A total of 388 students were selected by using simple random sampling methods. A structured, pretested, and self-administered questionnaire was used to collect data. Collected data were entered and analyzed using SPSS version 20. Descriptive statistics was used to calculate the mean, standard deviation and frequency of the study population. Bivariate and multivariate analyses were performed to see the association between independent and dependent variables. Odds ratio with 95% confidence interval were calculated to determine independent predictors of risky sexual behavior.

Among 371 of the study subjects; 289(77.9%) respondents were used at least one substance in their life time. The most commonly used substance was alcohol 284(76.5%), khat 36(9.7%), cigarette 3(0.8%) and illicit drug (shisha) 1(0.3%). From the total number of substance use respondents, the majority of respondents' main reason to use substance were, to get personal pleasure 99(30.5%) and to increase pleasure during sexual intercourse 68(20.9%). 145(39.1%) respondents were sexually active. Among sexually active students, 121(83.4%) had at least one of the risky sexual behavior. Use of alcohol and khat was significantly and independently associated with risky behavior with AOR (95% CI) of 0.12(0.039 - 0.367) and 2.604(1.101- 6.156) respectively. The prevalence of substance use among Dembecha comprehensive secondary and preparatory school students was high. Alcohol was the most used substance among students. Students had developed substance use and risky sexual behavior that might predispose them to HIV/AIDS; school and community based educational program in reducing substance use and risky sexual behavior are important.

Key words: *substance use, Risky sexual behavior, comprehensive secondary and preparatory school students, Dembecha, Amhara, Ethiopia.*

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Substance use is a major public health concern in global settings, and is very common during adolescent period leading to physical and /or mental health complications. Globally, substance use of products such as alcohol, cigarette, and khat (*Cathus 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 (Odejide, 2006).

Young people are at high risk of part iciping high risk sexual behaviors, because of the risky taking behavior during this age group (Charine, 2008). In developing countries, the rate of risky sexual behaviors including unprotected sexual intercourse and early sexual initiation is increasing (Yi et al., 2010). Studies have showed that more than 50% of new sexually transmitted disease every year are due to young people aged 15 to 24 (Trepka et al.2008).Young people are engaged in high risk behavior like smoking cigarettes, drinking alcohol, use of drugs, and gender based violence. These behaviors in turn lead them to engage in sexual risky behavior (Tu et al., 2012). In Ethiopia and many other developing countries, the epidemic of HIV is high among young people who are mainly due to the risky sexual behaviors (Mengistu et al., 2013). The United Nation Program on HIV/AIDS (UNAIDS) reported on the global AIDS epidemic showed that Sub-Saharan Africa accounts for 60% of all people living with HIV/AIDS (UNAIDS, 2006).

The use of substance during sexual intercourse may engage young people in risky sexual behaviors since it affects their judgments (Woolf-King and Maisto, 2011).

A study done on substance use and risky sexual behaviors in southern Ethiopia, Hossana Health Science College revealed that practicing sex with multiple partners, inconsistent condom use and commencing sex with female commercial sex workers (CSWs), which were highly risky sexual behavior for HIV infection transmission among study participants, were commonly practiced (Likawunt and Mullugeta, 2012). Another study

done on substance use and risky sexual behavior among Haramaya University students reveal that use of khat, alcohol, and cigarette was significantly and independently associated with risky sexual activities (Andualem, 2007).

Alcohol is widely consumed among the youth of Ethiopia. Alcohol consumption increases sexual desire and arousal, although it lowers physiological arousal (Negussie, 1998). A study done in Dire Dawa high school students showed that the prevalence of life time and current alcohol drinking is 34.2% and 19.6% respectively (Negussie, 2012). Another study done among Addis Ababa high school students showed that the life time prevalence and current alcohol drinking was 45.7% and 26.5% respectively (Teshome, 2011).

Several studies showed that khat is also widely used among Ethiopian adolescents. Effect of khat on the chewers include increased level of energy, increased self-esteem, euphoria, increased libido, excitement, and increased proclivity for social interaction(Abebe et al.,2005). A study done among high school adolescents in Easter Ethiopia showed that the prevalence of khat chewing was 24.2% (Abebe et al., 2005). Another study done among Dire Dawa high school students the prevalence of khat chewing was 18.4% (Negussie, 2012).

As it has been mentioned previously both khat and alcohol are among those substances widely consumed by youth of Ethiopia. In a study done of over 10,000 adults in Butajira, a high prevalence of mental distress and suicide attempt was found in those using alcohol and khat (Alem et al., 1999). In case control study, khat use has also found to be risk factors for HIV infection (Abebe et al., 2005). In study of over 20,000 in school and out of school youth, daily khat intake was also associated with unprotected sex. There was also a significant and a linear association between alcohol intake and early initiation of sex, with those using alcohol daily having a three-fold increased odds compared to those not using alcohol. In this study use of substance other than khat was also strongly associated with sex initiation (Kebede et al., 2005).

A research on association between substance abuse and HIV among voluntary counseling and testing (VCT) users in Addis Ababa showed that concomitant use of khat and alcohol

could probably be one of the risk factors for exposed to HIV infection. The study indicated that people who were both drinkers and chewers were six times more likely to be HIV seropositive compared to both non- drinkers and non-chewers (Seme et al., 2005). Alcohol use is cited by several studies as it is one of the common factors which increase the risk of HIV acquisition (Woolf-King and Maisto, 2011). Such risky sexual behavior increases the risk of youth to acquire HIV (U.S.Department of Health and Human Services Centers for Disease Control and Prevention, 2012). Addressing the issue of substance use and its association with risky sexual behavior is important to reducing the risk of HIV/AIDS and sexual transmitted disease.

So this study was conducted to assess the prevalence of substance use and its association with risky sexual behavior among Dembecha comprehensive secondary and preparatory school students.

1.2 Study questions

1. What is the prevalence of substance use among Dembecha comprehensive secondary and preparatory school students?
2. What is the magnitude of risky sexual behavior among Dembecha comprehensive secondary and preparatory school students?
3. What are the factors associated with risky sexual behavior?
4. What is the association between substance use and risky sexual behavior?

1.3 Hypothesis of the study

1. Use of alcohol, khat, cigarette, and illicit drugs are strongly associated with risky sexual behavior.
2. The prevalence of substance use and magnitude of risky sexual behavior among Dembecha comprehensive secondary and preparatory school students are high.
3. Socio-demographic characteristics and use of substance are the factors that are associated with risky sexual behavior.

1.4 Objective of the study

1.4.1 General objective of the study

- The general objective of this study is to determine the relationship between substance use and risky sexual behavior among Dembecha comprehensive secondary and preparatory school students.

1.4.2 Specific objectives of the study

1. To determine the frequency of substance use among Dembecha comprehensive secondary and preparatory school students.
2. To assess the magnitude of risky sexual behaviors among Dembecha comprehensive secondary and preparatory school students.
3. To determine factors associated with substance use and risky sexual behavior.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 Substance use and risky sexual behavior in the world

Substance use is a major public health concern in global setting, and is very common during adolescence period leading to physical and/or mental health complications. Globally, substance use of products such as alcohol, cigarette, and khat leaves (*Cathus edulis*) has become a major public health concern with accompanying socio-economic problem. Studies show that substance use, particularly in developing countries, has dramatically increased (Odejide, 2006).

Evidence showed that nearly half of the global population was less than 25 years old and nearly 90% live in developing countries (UNFPA, 2011).

Adolescents and young adults have an increased interest in the opposite sex, highly concerned with physical and sexual attractiveness, and are frequently changing relationships. Besides, they are risk takers who are more likely to make decisions about the future without adequately considering the consequences (Nicholson, 2012).

It was declared that only less than half of all sexually active youth report using condom, even where prevalence of HIV/AIDS was high (UNAIDS, 2011). Studying the sexual behavior of youth is important because when compared to older adults, youth are at risk of contracting sexually transmitted disease (Nicholson, 2012).

Young people were at the heart of HIV/AIDS pandemic; globally in 2010, out of estimated 2.7 million people newly infected with the virus 41% were young people (UNAIDS, 2011).

Young people were engaged in risky sexual activities, which could result in sexually transmitted disease including HIV infection, and it was suggested that many young people have got information from different sources with regard to HIV/AIDS; however, the problem is to bring about a behavioral change (Rwenge, 2000).

Risky sexual behaviors encompass a variety of behaviors including premarital sex, multiple sex partners, unprotected sex, and others, which may likely result in contracting HIV/AIDS, unwanted pregnancies, and unsafe abortion (Charine, 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-year (WHO, 2002). The main health burden is due to illicit rather than banned substances. 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 substance contributed 0.8% (WHO, 2002).

Substance use has been documented as a contributing factor to sexual risk-taking, whereby substance use impairs individual judgment and decision-making and increases one's risk for a sexually transmitted infection. Several major observations were emerged from a study done in America on adolescent students. It showed that both causal and chronic substance users are more likely to engage in high-risk behaviors such as unprotected sex when they are under the influence of drugs or alcohol. The study further revealed that substance use was significantly associated with unprotected sexual behaviors. Adolescents who reported alcohol/drug use before their last sexual intercourse, smoking ≥ 3 days during the past 30 days, ever using marijuana, ever using cocaine, drinking alcohol ≥ 3 days during the past 30 days and being drinking during the past 30 days were more likely not to use condoms at their last sexual intercourse (Alice et al., 2007).

Research done on Slovak students showed that the risk of multiple sexual partners was associated with more psychological factors among females. It also showed that males reporting having been drunk at least once in the preceding month or reporting sexual experience before age 16 were more likely to have had more than three sexual partners in their life time. It also added that one behavioral factor in male (being drunk) and one in female (smoking) was associated with inconsistent condom use (Abdul Basir, 2008).

World health organization reported in 2011 that unsafe sex was second among the top ten risk factors in the global burden of all disease caused globally.

According to the joint United Nations program on HIV/AIDS (UNAIDS), in 2009 young people aged 15-24 years accounted for 42% of new HIV infection in people aged 15 and older and nearly 80% of this live in sub-Saharan Africa (UNAIDS, 2011).

Demographic health surveys (DHS) in many of the developing countries have shown that today, boys and girls experience puberty at younger ages than the previous generations; most of these changes are attributed to better health and nutrition (Blum and Mmari, 2005). As a result, the transition period from childhood to adulthood increases rapid reproductive maturity will be masked which could involve them in early and non-marital sexual activity, most of it being unsafe with the reluctance to use contraceptive and exposing them to all its consequences, such as, unwanted pregnancy, abortion, , and sexual transmitted disease (STD) including HIV/AIDS. As far as youths are exposed to high risk activities/behavior like alcohol drinking and addictive substances like khat chewing and shisha smoking, it is obviously associated with reproductive health risk (Kaiser, 2002).

A life time history of illicit drugs consumption decrease the probability of condom use at least sexual intercourse by half in the study done in Lima, Peru on sexual behavior and drug consumption. Among men, the use of illicit drugs doubled the probability of intercourse with a casual partner during the last year and tripled the probability of reported sexually transmitted infection symptoms (Galvez-Buccollini et al., 2009).

According to the United Nations, globally, cannabis (daga) is a widely consumed illicit drug. Although it is not a primary drug of abuse in most nations such as Europe, America, Australia or Asia, it has been found to be the primary drug of abuse in Africa, especially amongst young people (UN, 2011).

Studies in Iran have demonstrated that mean age of cigarette smoking for the first time is in adolescence. Likewise, such a situation has been reported from US and China (Fayaz-Bakhsh et al., 2011). In a study, 6.9% of high school students in Tehran experienced drug abuse and 16.9% experienced cigarette smoking. The most prevalent used drugs were alcohol, opium, and marijuana (Farhadinasab et al., 2008).

2.2 Substance use and risky sexual behaviors in Africa

Substances are used and abused widely in Africa youths. This situation poses serious social and public health problem similar to those in most western societies (Palen et al., 2006). A study among Nigeria high school students indicated that life time prevalence of substance use was 87.3% where as current use was 69.2% with multiple substance use being 57.4% (Oshodi et al., 2010). Life time prevalence rate of any substance use was found to be 69.8% among college students in Kenya (Atwoli et al., 2011).

The rapid economic, social, and cultural transitions that most countries in sub-Saharan Africa are now experiencing have created a breeding ground for increased and socially disruptive use of alcohol and drugs. Given the high prevalence of HIV/AIDS in the region and the increasing number of adolescents infected with HIV, an understanding of the role of substance use plays in the spread of HIV/AIDS is crucial to prevention efforts of disease among adolescent population (Kanakano Ishida and Mc Donald, 2011).

According to the work of Lori-Ann p. et al., 2009 in South Africa about transition to substance use and sexual intercourse among South Africa 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 point. The potential explanations for this sequencing fall into two categories. The initiation of substance use may be a direct or indirect cause of sexual initiation. Alternatively, substance use may precede sex because of an outside factor or process (Ibrahim, 2004). In South Africa, substance abuse is extremely serious, with drug usage reported as being at twice the world norm. Over 15% of the population suffers from a drug problem (Jordan, 2015).

Local studies have shown evidence of drug abuse amongst high school students in the various parts of the country. In a study amongst rural high school students in Mankweng, Limpopo Province, South Africa, the researcher documented that the prevalence rates for previous month (recent) use of alcohol, cigarettes, cannabis, glue and spirits were 6.4%, 10.5%, 1.4%, 1.2%, and 0.8% respectively (Onya and Flisher, 2008). It was further stated that, for all substance, male had higher prevalence rate than females; this is also supported by a study carried out in Nigeria (Oshodi et al., 2010).

Studies confirmed that having multiple sexual partners among young people is fairly a common behavior. Accordingly, a study among Lund University in Uganda indicated that 39% of sexually active students have had more than two sexual partners. The study further indicated that alcohol consumption was associated with a higher risk of having higher number of sexual partners among male students (Agardh et al., 2011).

Khat chewing is common in Africa and mostly in countries of the horn of Africa (Feyissa and Kelly, 2007). Khat consumption has a negative impact on family and social life (Beckerleg, 2008, Gebissa, 2008). It may act as a factor that exacerbates family disruption (Moges et al., 2011). 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.

Tobacco smoking also is becoming an important public health problem in the developing countries (Abdullah and Husten, 2004). There is a high prevalence of cigarette smoking in Africa. The prevalence rate of cigarette use was 42.8% in Kenya college students (Atwoli et al., 2011), 20.5% among 15 years old adolescents in Zambia, and even higher 37.2% among males younger than 12 years old in Zambia (Siziya et al., 2007). Another study in Nairobi documented a 32.2% prevalence of life time smoking (Kwamanga et al., 2003).

Illicit drug users are also more likely to have multiple sexual partners than non-user. A research on substance use and sexual behavior in adolescents of South Africa found that substance use, as measured by life time alcohol and marijuana use, is strongly predictive of adolescents' sexual behaviors even after controlling for the relevant social and economic background characteristics of the adolescents. In relative terms, smoking marijuana is a stronger predictor of life time sexually activity than life time alcohol use (Yaw Amoateng et al., 2007).

2.3 Substance use and risky sexual behaviors in Ethiopia

Ethiopia is one of the sub-Saharan country worst affected by HIV/AIDS pandemic. According to the ministry of health of Ethiopia report in 2008, approximately 1,345,970 people were living with HIV. In 2008, the national adult HIV prevalence was estimated to be 2.1%. In Ethiopia according to antenatal care sentinel surveillance (ANC), the prevalence of HIV/AIDS among young people of age 15-24 years was 2.6% (EHNRI, 2011).

Some studies have indicated that substance misuse is associated with psychological distress, suicide attempts functional impairment, physical ill-health and risk taking behavior (Alem et al., 1999).

Risky 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. According to Ethiopian health and demographic survey risky sexual behaviors is having multiple sexual partners, inconsistent condom use and commencing sex with commercial sex workers (EDHS, 2005). Risky sexual behaviors can result in sexually transmitted disease and unintended pregnancies (Kebede, 2002).

A study done on substance use and risky sexual behaviors in southern Ethiopia, Hossana health science college reveal that practicing sex with multiple partners, inconsistent condom use and commencing sex with female commercial sex workers, which were highly risky sexual behavior for HIV infection transmission among study participants, were commonly practiced (Likawunt and Mullugeta, 2012). Another study done on substance use and risky sexual behavior among Haromaya University students reveal that

use of khat, alcohol and cigarette was significantly and independently associated with risky sexual activities (Andualem, 2011).

Alcohol is widely consumed by Ethiopian adolescents. Alcohol consumption increases sexual desire and arousal, although it lowers physiological arousal (Negussie, 1998). The world health organization report show that beer 33%, spirits 22%, other 43% and wine 2% are consumed by people whose age is 15+ in Ethiopia (WHO, 2011).

The study done on alcohol drinking among Jiga secondary and preparatory school students revealed 44% life time prevalence of alcohol drinking (Getachew et al., 2016).

Several studies show that khat is also widely used among Ethiopian adolescents (Abebe et al., 2005). The study done in Jiga secondary and preparatory school students showed that prevalence of life time khat chewing was 4.7 % (Getachew et al., 2016).

A study done on cigarette smoking in Harer, eastern Ethiopia, a 12.2% prevalence of cigarette smoking among school adolescents (Reda, 2011) and in Jiga high school students the prevalence of life time cigarette smoking was 2.3% (Getachew et al., 2016). In Addis Ababa school the prevalence of life time smoking was 10.1% -11.5% and current prevalence was 3% -5.6% (DACAE, 2005).

A study done on cigarette smoking and khat chewing among college students in North west Ethiopia revealed 13.1% life-time prevalence of cigarette smoking and 26.7% life-time prevalence rate of khat chewing. In the study, prevalence of cigarette smoking was found to be 8.1%. 31.7% of the life-time smokers and 45.6% of the life-time chewers started smoking and chewing while they were senior secondary school students (Hussien, 2008).

A study done on illicit drug use in Jiga secondary and preparatory school students revealed 1.7% life time prevalence of using illicit drug (Getachew et al., 2016).

Based on the study conducted in 2008 in North east Ethiopia by Fekadu and Alemayehu about half, 51.3% of the youth have ever had sex. The median age at sexual debut 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 (Fekadu and Alemayehu, 2008).

According to Ethiopian demographic and health survey (EDHS), 1% of women and 4% of men aged 15-49 reported having had more than two sexual partners (EDHS, 2005 and ORC, 2006).


Condom use is an important tool in the fighting against the spread of HIV/AIDS; a truly effective protection usefully requires condom use at every sexual encounter. Studies revealed that thought youths were engaged in a risky sexual behavior, they were not using condoms consistently (Nigatu and Seman, 2011). Evidence indicated that females were more significantly reported they or their partners did not use condom during their last sexual intercourse. Besides, substance used likes alcohol and khat were significant predictors of inconsistent condom use (Abdulahakim, 2008).

A study conducted among high school students in Gonder, North west Ethiopia on risky sexual behavior indicated that 14.9% reported to have had sexual intercourse at least once in the past. 11.9% of the sexually active respondents had sex with commercial sex workers (CSW) in the past six month and 10.7% had contracted sexually transmitted disease (STDs). Out of the sexually active respondents, 54.8% did not use condoms, only 68.4% used always while the other 31.5% reported that they use condoms only sometimes (Adamu et al., 2003). The EDHS 2005 reported that condom use during last sexual intercourse in the last 12 months with a non-regular partner was 51.9% and 23.6% among 15-49 years old males and females, respectively. The 2005 EDHS also showed that condom use with a non-regular partner in the 12 months preceding the survey is much greater in 15-24 years-old men (50.2%) than 15-24 years-old women (28.4%). But the 2000 and 2005 EDHS, condom use has increased from 30.3% to 51.9% among males, where as a smaller increase was observed among females (13.4% to 23.6%). Use of condom in sexual episodes involving non-regular partners was higher in the urban area than in the rural area for both males and females in both 2000 and 2005 (EDHS, 2005).

CHAPTER THREE

3. MATERIALS AND METHODS

3.1 Study area description

The study was conducted at Dembecha comprehensive secondary and preparatory school, in Dembecha woreda, at Dembecha town. Dembecha is a town in northwestern Ethiopia 350 km north of Addis Ababa. Located in the West Gojjam Zone of the Amhara Region, this town has a latitude and longitude of 10°33'N 37°29'E Coordinates:  10°33'N 37°29'E with an elevation of 2083 meters above sea level.

This woreda has 29 kebeles, and its boundary: East Gojjam zone in the East and south, Bure-woreda in the West, Dega Damot woreda in the North and Jabitehena woreda in NorthWest.

Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this woreda has a total population of 129,260, an increase of 44.50% over the 1994 census, of whom 64,683 are men and 64,577 women; 17,913 or 13.86% are urban inhabitants. With an area of 971.29 square kilometers, Dembecha has a population density of 133.08, which is less than the Zone average of 158.25 persons per square kilometer.

The woreda has 29 health post, 6 health centers and 3 private clinics, 62 primary school, 4 high schools, 1 preparatory school and 1 TVET college. Based on education profile of Dembecha woreda, in 2016/17, a total of 6509 (3299 males and 3210 females) students were enrolled in secondary and preparatory schools in grade 9-12. From these the total number of high school students 4368 (2080 males and 2288 females) students were enrolled in Dembecha comprehensive secondary and preparatory school.

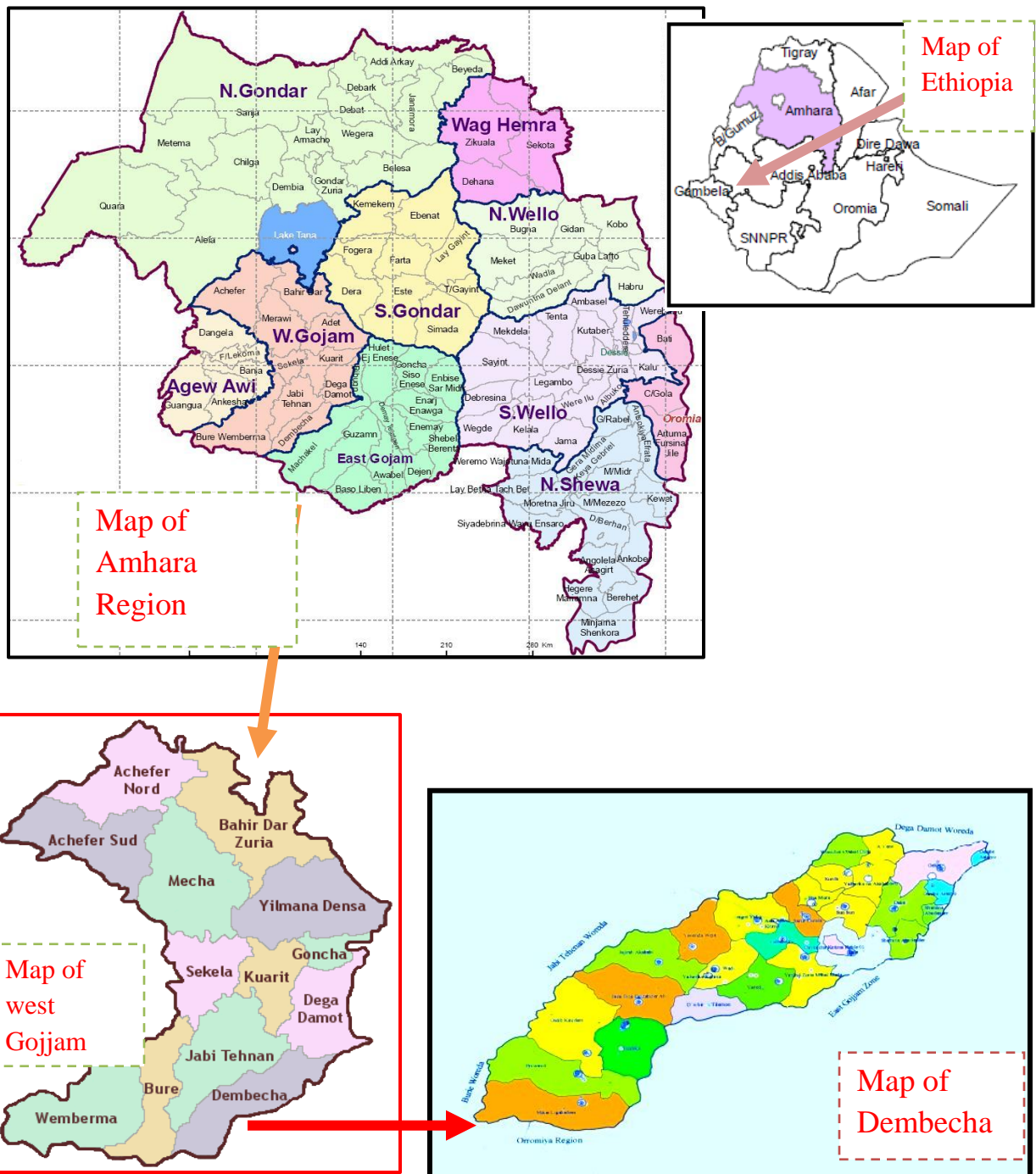


Figure 1: Geographical location of the study area

3.2 Study Design

Institution based cross-sectional study design was employed both quantitative and qualitative data collection methods, to determine the prevalence of substance use and its association with risky sexual behavior towards HIV/AIDS among Dembecha comprehensive secondary and preparatory school students from November 10/2016 to December 10/2017.

3.3 Source Population

Source population was all Dembecha comprehensive secondary and preparatory school students who were enrolled in grade 9th-12th in 2016/17 in Dembecha comprehensive secondary and preparatory school.

3.4 Study Population

Students were selected randomly from source population who attending their education during the study period. Also students who were anti- AIDS club members and members of students' council were involved. However, exclusion criteria for the study were those students who were critically medical ill and mentally disabled students.

3.5 Sample Size Determination and Sampling Procedures

The sample size was calculated using single population proportion formula. The value of "P" was taken as 50% as there is no previous study done in the study area and nearby. $n = z^2 \frac{P(1-P)}{d^2}$ the standard normal deviation at 95% confidence level=1.96, P=50% the proportion of study population with expected prevalence of assessment of substance use and risky sexual behavior" d" is the desired precision (marginal error) 5%," ni" is initial sample size," nf" is final sample and" N" is total population of school students=4368.

$$\text{Sample size} = \frac{(\text{Distribution of 50\%})}{(\text{Margin of error 5\%/confidence level})^2} = \frac{[P(1-P)]}{(d/z)^2}$$

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

n = 384 finite population correction formula was used since the total population is less than 10,000.

$$\text{True sample} = \frac{(\text{sample size} \times \text{population})}{(\text{Sample size} + \text{population} - 1)} = \frac{(n \times N)}{(n + N - 1)}, \quad n_i = 353$$

nf = 353 +10% non respondent rate the total sample size was 388. Dembecha comprehensive secondary and preparatory school students were selected by purposive sampling method from the four high schools in the district. The students were stratified first by their grade. Then, they were further stratified based on section, in the school there are 21 sections for each grade 9 and 10 and 16 sections for each grade 11 and 12. From these 36 sections, 10, 10, 8, and 8 from grade 9, 10, 11, and 12 were selected randomly respectively. Finally the number of students from each grade were selected using simple random sampling to obtain the total sample for the study by using list of the names of the students from the class attendances. Sample proportional to size allocated for each grade and random sampling technique was used to draw the required number of students. Then a total of 113, 101, 88 and 86 students were selected from grade 9, 10, 11 and 12 respectively.

3.6 Data Collection Methods

Data were collected using structured self-administered questionnaire prepared in English and translated to the local language Amharic. The Amharic version was again translated back to English to check for any inconsistencies. Four data collectors who teach in Dembecha comprehensive secondary and preparatory school, from grade 9 to 12 were selected.

To ensure the quality of data the questionnaire was pretested prior to the actual data collection on 19(5%) students of the total samples at Amanuel secondary and preparatory school in Machakl woreda which is outside of the study area. Participation was on a voluntary basis confidentiality was maintained to encourage accurate and honest self-disclosure. The questionnaire was distributed to the selected students in the class room and collected in the same day to avoid information contamination. From the questionnaire information on students' socio-demographic characteristics substance use behavior, reason for substance use, sexual behavior and other related data on substance use and risky sexual behavior towards HIV/AIDS was collected.

3.7 Study Variables and Operational Definition

The dependent variable of this study was risky sexual behaviors (age at first sexual intercourse, number of sexual partner, consistent condom use, and sex with commercial sex workers). Independent variables were socio-demographic characteristics (sex, age, grade, religion, marital status, current lived, place lived before, pocket birr and other); and substance use (alcohol, khat, cigarette, and illicit drugs).

The operational definitions of the study were the following:

- Substances: any non-medical drugs such as alcohol, khat, tobacco, and other illicit drugs (heroin, shisha, hashish, cocaine, cannabis, and marijuana) to alter their mood, thinking, feeling, and/or behavior.
- Substance use: taking of any non-medical drugs: alcohol, khat, cigarette, heroin, shisha, hashish, cocaine, cannabis, and marijuana in the past six months.
- Life time prevalence of alcohol drinking: the proportion of high school students who had used alcoholic drinks in their life time.
- Current prevalence of alcohol drinking: the proportion of high school students who are drinking alcohol in the six months preceding the study.
- Life time prevalence of khat chewing: the proportion of high school students who had ever chewed khat in their life time.
- Current prevalence of khat chewing: the proportion of high school students who are chewing khat within six months preceding the study.

- Life time prevalence of smoking: the proportion of high school students who had ever smoked cigarettes in their life time.
- Current prevalence of cigarette smoking: the proportion of high school students who are smoking cigarettes within six months preceding the study.
- Illicit drugs: drugs which are forbidden by law such as heroin, cocaine's, cannabis, hashish, and marijuana.
- Ever use of illicit drugs: the proportion of high school students who ever used heroine, cannabis hashish, shisha, and marijuana in their life time.
- Current use of illicit drugs: the proportion of high school students who use heroin, cocaine, cannabis, hashish, shisha, and marijuana within six months preceding the study.
- Risky sexual behavior: Are sexually active high school students who have at least one of the following: multiple sexual partners, sexual initiation before the age 18, inconsistent use of condom and sex with commercial sex workers.
- Consistent condom use: use of a condom during every sexual encounter.

3.8 Data quality assurance

The quality of data was ensured through pretest of the questionnaire, proper training of data collection and close supervision of the data collectors. All collected data was checked for completeness and accuracy by the principal investigator and communicated to the data collectors.

3.9 Data processing and analysis

After data collection; data was coded, entered, cleaned and analyzed using EPI-INFO version 3.5.3 and statistical package for social science (SPSS) version 20. Descriptive statistics was used, mean and standard deviation for continuous variables and frequency for categorical variables. Bivariate and multivariate logistic regression analyses were employed in order to infer associations and predictions. Odds ratio with 95% confidence interval was computed to assess the level of association and statistical significance. The P-value less than 0.05 were considered statically significant.

3.10 Ethical considerations

Ethical clearance was obtained and formal letter was written by Addis Ababa University, College of natural sciences, Department of Zoological sciences to Dembecha woreda. Prior to the data collection, permission letter was obtained from different authorities of Dembecha woreda and Dembecha comprehensive secondary and preparatory school administration office.

CHAPTER FOUR

4. RESULTS

4.1 Socio-Demographic Characteristics of Respondents

This study was conducted to determine the relationship between substance use and risky sexual behavior among Dembecha comprehensive secondary and preparatory school students. From a sample of 388, a total of 371 respondents complete the questionnaire and those questionnaires with inconsistent and incomplete response were excluded from the analysis which gives a response rate of 95.6%.

Out of the total respondents 190(51.2%) were males and 181(48.8%) were females. Most of the respondents, 366(98.7%) were age 16-19 years old. The mean age and standard deviation of the respondents was 17.2 ± 1.02 years. 105(28.3%), 95(25.6%), 86(23.2%) and 85(22.9%) were from grade 9, 10, 11, and 12 students respectively. Majority of the study participants, 365(98.4%) were followers of Orthodox religion followed by Muslim 5(1.3%), more over the study indicated that most of the participants 261 (70.4%) were not followers of religious education. The higher percentage of the respondents 282(76%) were from rural backgrounds. 280(75.5%) of respondents currently live alone, while 71(19.1%) and 20(5.4%) live with both their mother and father and live with either mother or father respectively. About 367(98.9%) were never married while the remaining 4(1.1%) were married.

Looking at pocket money(birr) receivers the majority participants, 205(55.3%) were receiving monthly pocket money of less than 100 followed by no pocket money 93(25.1%), grade 11 and 12 have had higher pocket birr receiver than other and male students have high pocket birr than female, as shown in table 1 and figure 2.

Table 1: Socio-demographic characteristics of Dembecha comprehensive secondary and preparatory school students.

Variables		Frequency	Percent
Sex	Male	190	51.2
	Female	181	48.8
Age	16-19	366	98.7
	≥20	5	1.3
Grade	Grade 9	105	28.3
	Grade 10	95	25.6
	Grade11	86	23.2
	Grade12	85	22.9
Religion	Orthodox	365	98.4
	Muslim	5	1.3
	Protestant	1	0.3
Marital status	Married	4	1.1
	Not married	367	98.9
Currently lived	Both their mother and father	71	19.1
	Either mother or Father	20	5.4
	Alone	280	75.5
Placed lived before	Urban	89	24
	Rural	282	76
Pocket birr	100-200	73	19.7
	<100	205	55.3
	None	93	25.1
Religious education followers	Follower	110	29.6
	Not follower	261	70.4

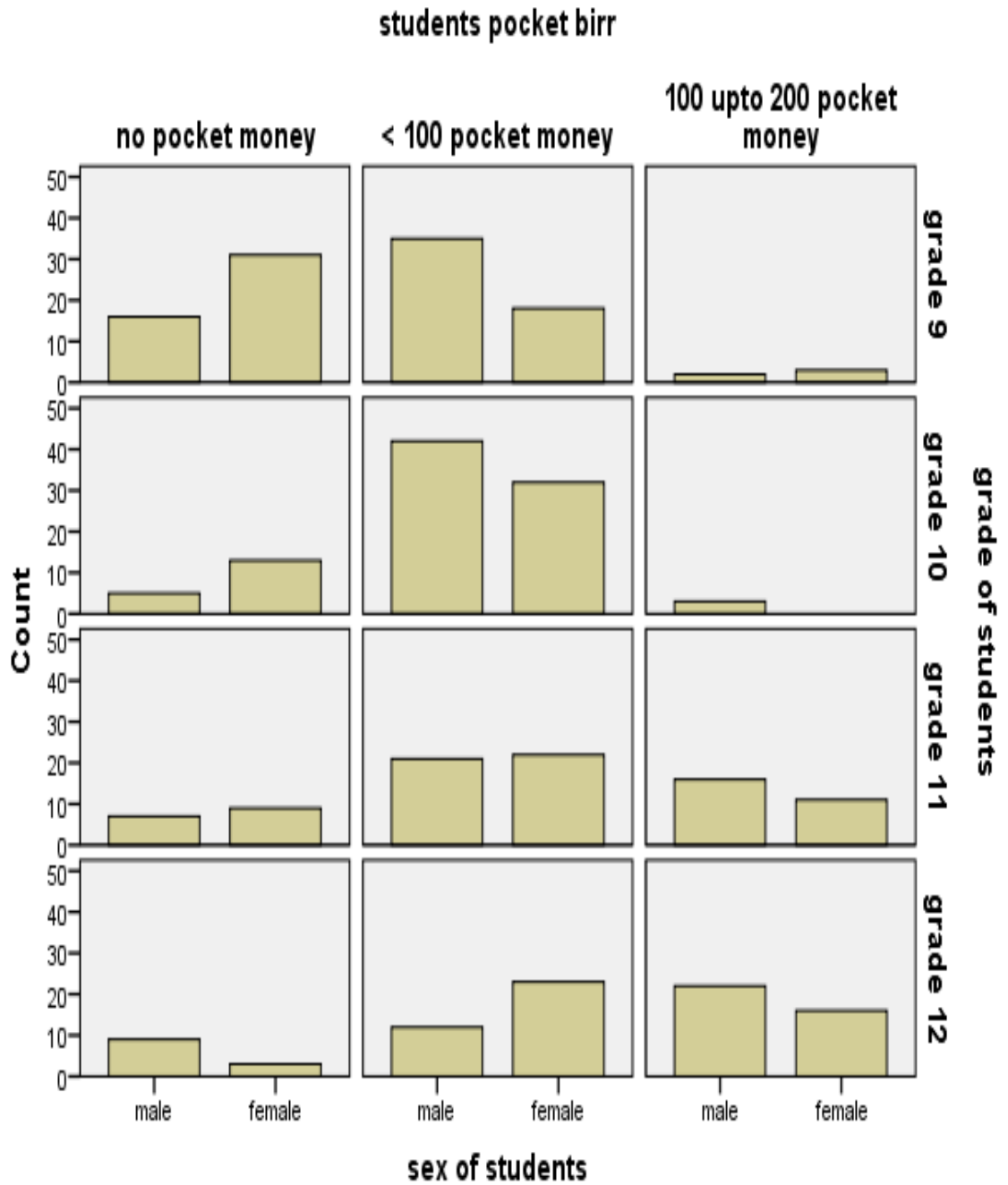


Figure 2: Amount of pocket money received per month by sex and grade level of Dembecha comprehensive secondary and preparatory school students.

4.2 Prevalence of Substance Use Behaviors

The practice of alcohol use, khat chewing, cigarette smoking and illicit drugs use was also examined. The study showed that a total of 289 (77.9%) respondents were used at least one substance in their life time. Also 277(74.6%) respondents were used substance currently. From the total substance use, 284(76.5%) respondents were drank alcohol at least once in their life time while 276(74.4%) reported that they drank alcohol currently (in the last six months). There were a significant difference between male and female students with respect to alcohol consumption behaviors; that is, 166(60.1%) of male reported they used alcohol currently while 110(39.9%) female students used alcohol currently.

Concerning khat chewing habits, 36(9.7%) participants were chew khat at least once in their life time, from this 33(8.9%) reported that they were currently khat chewers (in the last six months). When we compared the prevalence of khat chewers, 30(90.9%) males were higher than 3(9.1%) females' student.

Among substance used students, 3(0.8%) respondents were smoked cigarette at least once in their life time while 2(0.5%) reported that they were currently cigarette smokers (in the last six months). All cigarette smokers in the study were males and they smoked occasionally.

In addition from the total substance used respondents, 1(0.3) of participant used illicit drug (shisha) at least once in their life time, See table 2.

Table 2: Prevalence of ever and currently substance use among Dembecha comprehensive secondary and preparatory school students.

Variable		Frequency	Percent
Substance ever use(n= 371)	Alcohol	284	76.5
	Male	170	59.8
	Female	114	40.1
	Khat	36	9.7
	Male	33	91.7
	Female	3	8.3
	Cigarette	3	0.8
	Male	3	100
	Female	–	–
	illicit drug	1	0.3
	Male	1	100
Female	–	–	
Currently substance use (n=371)	Alcohol	276	74.4
	Male	166	60.1
	Female	110	39.9
	Khat	33	8.9
	Male	30	90.9
	Female	3	9.1
	Cigarette	2	0.5
	Male	2	100
	Female	–	–
	illicit drug	1	0.3
	Male	1	100
Female	–	–	

In case of alcohol and khat consumption habits male students were higher than female students, and also grade 11 and 12 students were higher user of alcohol and khat than grade 9 and 10, this difference might be due to pocket money difference, as showed in figure 3.

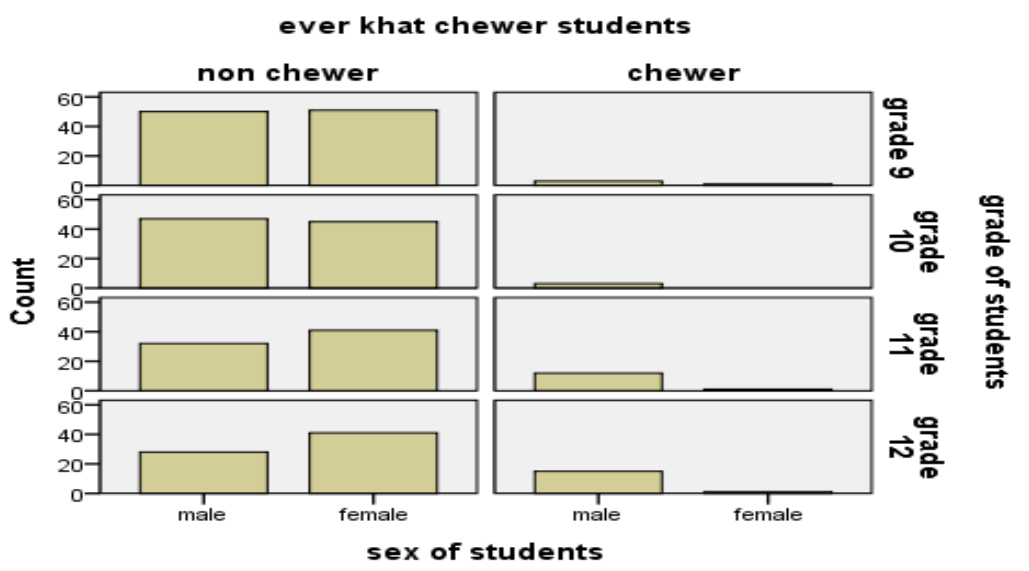
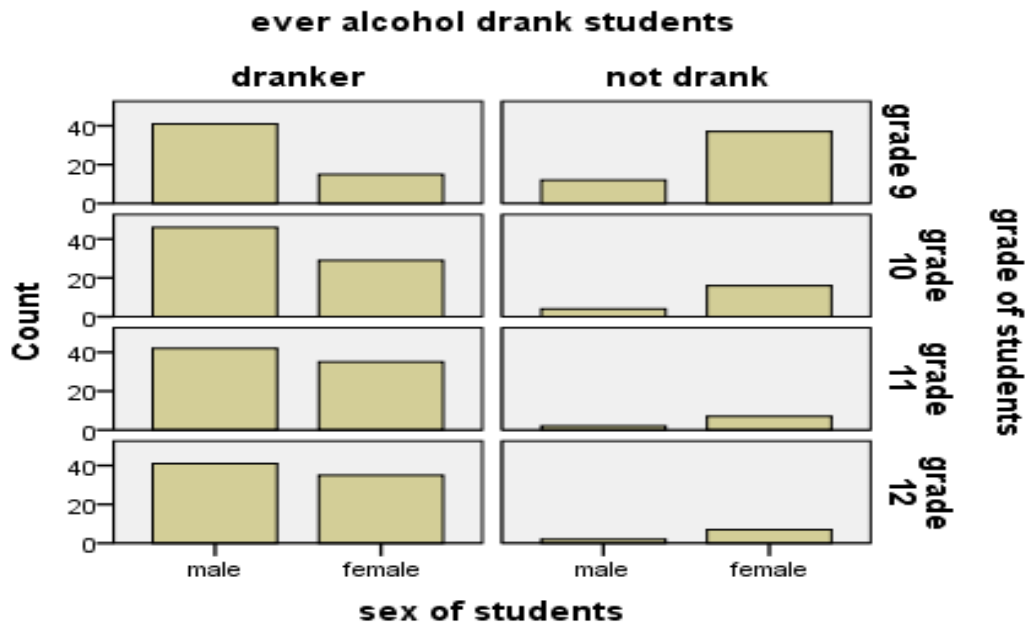


Figure 3: Ever alcohol and khat consumption by grade and sex among Dembecha comprehensive secondary and preparatory school students.

4.3 Reason for substance use

Different reasons were mentioned by respondents for the use of substance. Among 284(76.5%) students who reported consuming alcohol, 93(32.7%) drank alcohol to get personal pleasure, from this the majority of respondents were male students, 63(22.2%) to increase pleasure during sexual intercourse, 41(14.4%) to get relief from tension, 36(12.7%) to be sociable, 20(7.0%) due to peer pressure, 16(5.6%) to study hard, 9(3.2%) to be alert, and 6(2.1%) due to religious practice. The reason mentioned above by respondents for drinking alcohol except due to peer pressure the rest majority respondents were male students compared to female students. Also the participants who said drank alcohol due to religious activity were all orthodox religion followers.

Among 36(9.7%) participants who reported chewing khat the following reasons were mentioned by participants, 12(33.3%) to study hard, 5(13.9%) due to peer pressure, 5(13.9%) due to religious practice, 4(11.1%) to get personal pleasure, 4(11.1%) to increase pleasure during sexual intercourse, 3(8.3%) to be alert, 2(5.5%) to get relief from tension, 1(2.8%) to be sociable. In case of khat chewing habits the respondents who said due to religious practice are Muslims. From the additional question the respondents reported that khat chewing is forbidden in Muslim religion, but they simply chewing khat as its religious practice.

Reason for cigarette smoking were, to get personal pleasure 2(66.6%), to get relief from tension 1(33.3%). All smokers were male students.

Only 1(100%) respondent use illicit drug (shisha) to get personal pleasure during sexual intercourse, in case of substance use respondents that is illicit drug (shisha) users was male student, as shown in table 3.

Table 3: Reason for substance use, among Demebecha comprehensive secondary and preparatory school students.

Variables	Frequency	Percent
Reason for drinking alcohol (n=284)	To get personal pleasure	93 32.7
	To study hard	16 5.6
	To get relief from tension	41 14.4
	To be alert	9 3.2
	To be sociable	36 12.7
	To increase pleasure during sexual intercourse	63 22.2
	Due to peer pressure	20 7
	Due to religious practice	6 2.1
	Reason for chewing khat (n=36)	To get personal pressure
To study hard		12 33.3
To get relief from tension		2 5.5
To be alert		3 8.3
To be sociable		1 2.8
To increase pleasure during sexual intercourse		4 11.1
Due to peer pressure		5 13.9
Due to religious practice		5 13.9
Reason for smoking cigarette (n=3)	To get personal pleasure	2 66.6
	To get relief from tension	1 33.3
Reason for using illicit drug (n=1)	To get personal pleasure during sexual intercourse	1 100

4.4 Sexual Behaviors of Respondents

Among 371 of respondents, 145(39.1%) participants were sexually active, from these 69(47.6%) males and 76(52.4%) females were reported that they had practiced sexual intercourse. Among the study participants who had practiced sexual intercourse, 121(83.4%) were bellow the age of 18 years. The mean age and SD of first sexual initiation were 16.8 ± 1.0 years, from these minimum 15 years and maximum 20

years for males and the mean and SD of first sexual initiation were 16.6 ± 1.2 years , minimum 14 years and maximum 20 years for females. The mean age and SD of first sexual initiation for both sexes was 16.7 ± 1.1 years. Among sexually active respondents, the majority 115(79.3%) respondents started sex after joining high school while 30(20.7%) sexually active participants started sex at primary school.

The main reason given by the respondents to start sex were personal interest 87(60.0%), promising word from partner for marriage 29(20.0%), peer pressure 19(13.1%), marriage 4(2.7%), force sex 4(2.7%), and to get money 2(1.4%). Among 145 sexually active students, 121(83.4%) had at least one of the risky sexual behavior. From sexually active students the majority of them 130(89.6%) reported to engage in sexual activity with their boy/girl friends, 8(5.5%) with their teachers, 4(2.7%) with their spouse and 3(2.1%) participants had reported to have sex with commercial sex workers. Regarding the life time sexual partners of the respondents majority 103(71.0%) of participants reported they had only one sexual partners and 42(28.9%) respondents claimed to have two or more sexual partners.

From the total number of sexually active respondents, 109(75.2%), 27(81.8%), 2(100%) and 1(100%) respondents were using alcohol, khat, cigarette, and illicit drug (shisha) before sexual intercourse respectively, while only 36(24.8%), and 6(18.2%), respondents were not used alcohol, and khat, before sexual intercourse respectively.

From sexually active students, 88(60.7%) respondents had not used condom; out of these 57(39.3%) students who were sexually active and ever use condom during the previous time, 15(26.3%), 18(31.6%), and 24(42.1%) of students were using condom sometimes, most of the time, and always respectively. The reason none/ inconsistent use of condom were trust of partner 49(40.5%), don't like 32(26.4%), partner objection 24(19.8%), don't think of it 10(8.3%), and couldn't find condom 6(4.9%).

Among sexually active male students, only 3(2.1%) of them had history of sexual intercourse with commercial sex workers (CSW) and from these 2(66.6%) of participants had used condom with commercial sex workers while 1(33.3%) had not used condom during sexual intercourse with CSWs, as indicated in Table 4 and 5.

Table 4: Sexual behavior of respondents among Dembecha comprehensive secondary and preparatory school students.

Variables		Frequency	Percent
Ever had sexual intercourse (n=371)	Yes	145	39.1
	No	226	60.9
Sexually active (n=145)	Male	69	47.6
	Female	76	52.4
Age at first sex (n=145)	<15	5	3.4
	15-17	116	80
	≥18	24	16.6
When was first sex (n=145)	At primary school	30	20.7
	After joining high school	115	79.3
Reason for initiating first sexual intercourse (n=145)	Personal interest	87	60
	Peer pressure	19	13.1
	Promising word from partner	29	20
	To get money	2	1.4
	Marriage	4	2.7
	Force sex	4	2.7
First sex with whom (n=145)	Boy/girl friend	130	89.6
	Spouse	4	2.7
	Teachers	8	5.5
	CSWs	3	2.1
Number of sexual partners (n=145)	One	103	71
	Two or more	42	28.9
Ever condom use (n=145)	Yes	57	39.3
	No	88	60.7
Frequency of condom use (n=57)	Some times	15	26.3
	Most of the time	18	31.6
	Always	24	42.1
Reason for not/inconsistent condom use (n=121)	Trust partner	49	40.5
	Do not like	32	26.4
	Could not find condom	6	4.9
	Partner objection	24	19.8
	Do not think of it	10	8.3
Sexual intercourse with CSWs (n=145)	Yes	3	2.1
	No	142	97.9
Condom use with CSWs (n=3)	Yes	2	66.6
	No	1	33.3

Table 5: Substance uses and sexual behaviors among Dembecha comprehensive secondary and preparatory school students.

Substance		Frequency	Percent
Alcohol use before sexual intercourse (n=145)	Yes	109	75.2
	No	36	24.8
khat use before sexual intercourse (n=33)	Yes	27	81.8
	No	6	18.2
Cigarette use before sexual intercourse (n=2)	Yes	2	100
	No	–	–
Illicit drug use before sexual intercourse (n=1)	Yes	1	100
	No	–	–

Drinking alcohol and chewing khat were associated with ever had sexual intercourse. Chewing khat is associated with number of sexual partners. Drinking alcohol had associated with at least one of the risky sexual behavior, like; number of sexual partners, age of first sex, ever condom use, and sex with commercial sex workers. And also when we see the relationship between sex with alcohol and khat use, drinking alcohol and chewing khat are associated with sex (figure 4, 5 and 6).

ever had sexual intercourse students

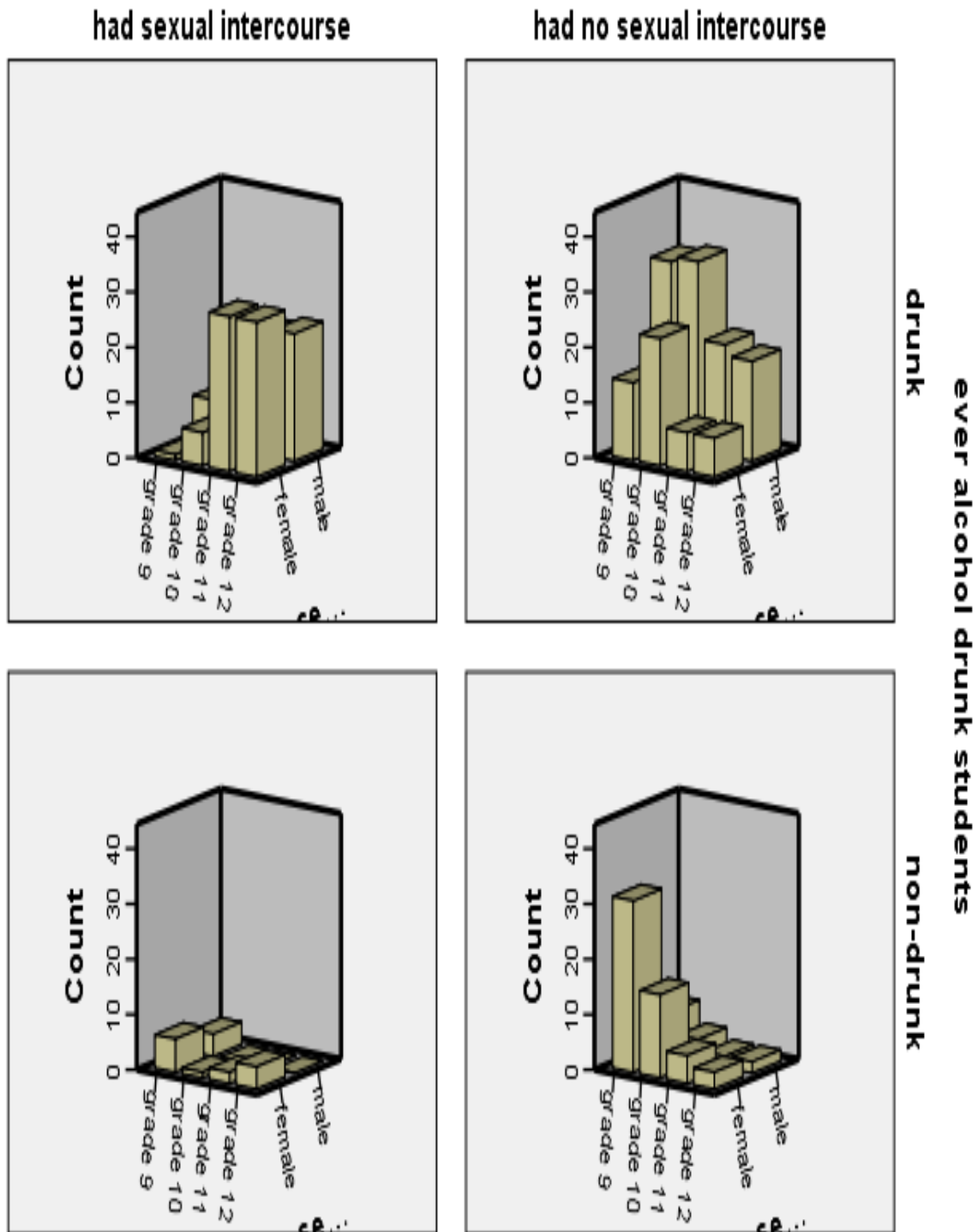


Figure 4: Ever alcohol drunk with ever had sexual intercourse by sex and grade among Dembecha comprehensive secondary and preparatory school students.

number of sexual partners

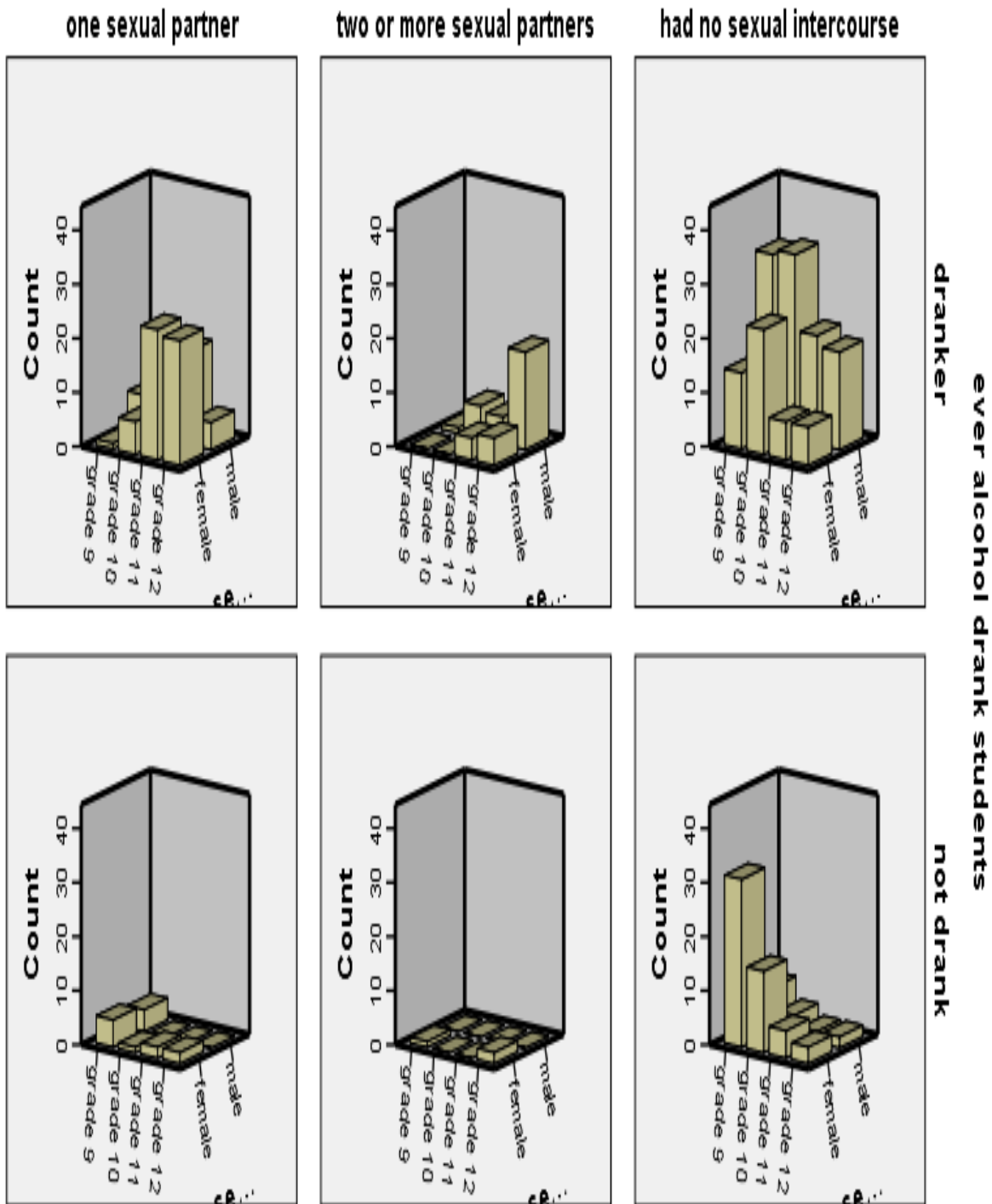


Figure 5: Ever alcohol drunk with number of sexual partners by sex and grade among Dembecha comprehensive secondary and preparatory school students.

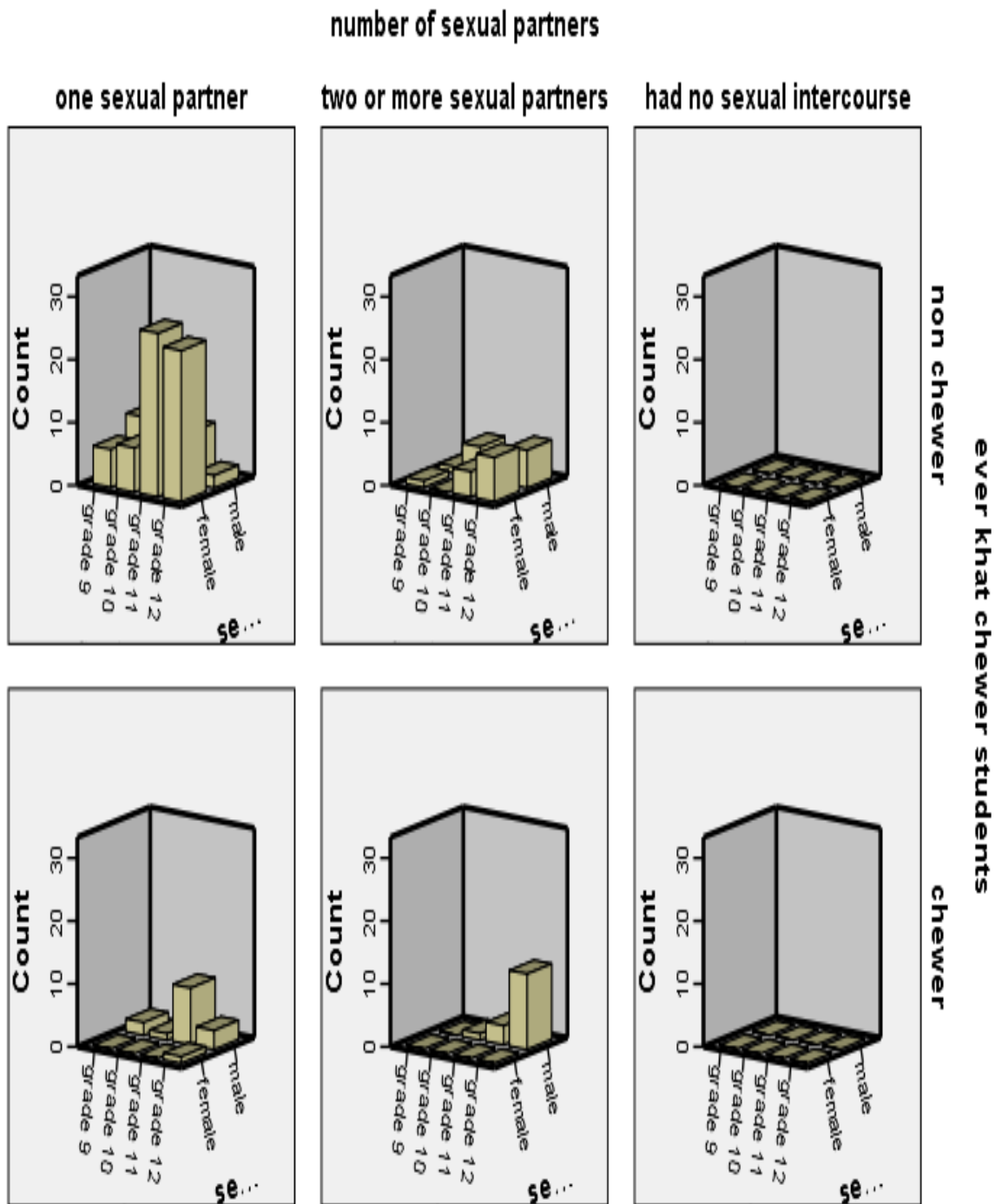


Figure 6: Khat use with number of sexual partners by sex and grade among Dembecha comprehensive secondary and preparatory school students.

4.5 Factors associated with substance use

Bivariate association showed a statistically significant association between life time prevalence of substance use and sex, grade level, currently lived, students pocket birr and religion education. Variable which are significantly associated in the first model are taken and analyzed together by multivariate logistic regression.

After controlling for the effect of potentially confounding variables using multivariate logistic regression, sex, grade level and students pocket money were found to be statistically significant predictors of ever substance use. The association between life time substance use and currently lived students and religion education were disappears in the multivariate analysis. Being male was associated with life time substance use of at least one substance [AOR (95% CI) = 0.141 (0.071 - 0.277)]. The odd of substance use behavior with in grade level; grade 12 students odd ratio greater than grade 11 students [AOR, (95% CI) = 0.114 (0.037- 0.352)] and [AOR (95% CI) = 0.107 (0.038 - 0.297) respectively. The odd of substance use in grade 10 was [AOR (95% CI) = 0.261(0.118 - 0.574)]. There was no statically significant association in grade 9 with respect to substance use. In case of students pocket money; students who have had 100-200 pocket money associated with life time substance use at least one substance [AOR, (95% CI) = 0.246 (0.058 - 1.039)]. But there was no statically significant association between no pocket money and less than 100 pocket money with respect to substance use (table 6).

Table 6: life time substance use variation with socio-demographic variable, Dembecha comprehensive secondary and preparatory school.

Variables (n= 371)	Life time substance use		Odd Ratio		P-value	
	Yes	No	COR (95% CI)	AOR (95% CI)		
Sex	Male	173	17	0.175(0.098-0.314) *	0.141(0.071-0.277)*	0.000
	Female	116	65	1	1	
Age	16-19	284	82	1	1	
	≥20	5	0	0.000(0.000)	0.000(0.000)	0.999
Grade	Grade 9	59	46	1	1	
	Grade 10	76	19	0.321(0.170-0.604)*	0.261(0.118-0.574)*	0.001
	Grade 11	78	8	0.132(0.058-0.300)*	0.107(0.038-0.297)*	0.000
	Grade 12	76	9	0.152(0.069-0.335)*	0.114(0.037-0.352)*	0.000
Religion	Orthodox	284	81	0.000(0.000)	0.000(0.000)	1.000
	Muslim	5	0	0.00 (0.000)	0.000(0.000)	1.00
	Protestant	0	1	1	1	
Marital status	Single	285	82	1	1	
	Married	4	0	0.000 (0.000)	0.000(0.000)	0.999
Currently Lived place	Both their mother and father	47	24	1	1	
	Either mother or father	16	4	0.490(0.147-1.627)*	0.786(0.157-3.932)	0.770
	Alone	226	54	0.468(0.263-0.831)*	0.514(0.196-1.350)	0.177
Place lived before	Urban	67	22	1	1	
	Rural	222	60	0.823(0.470-1.441)	0.830(0.413-1.665)	0.599
Students pocket money	No money	52	41	1	1	
	< 100	168	37	0.279(0.162-0.481)*	0.550(0.237-1.275)	0.163
	100-200	69	4	0.074(0.025-0.218)*	0.246(0.058-1.039)*	0.050
Religion education	Follower	75	35	1	1	
	Not follower	214	47	0.471(0.282-0.784)*	1.182(0.598-2.338)	0.631

NB. * Remained significant at P- value < 0.05

4.6 Factors Associated With Risky Sexual Behavior

Use of alcohol and khat were found to be significantly associated with having sex. Alcohol drunker had 0.118 times more chance of having risky sexual behavior than non drunker [COR, (95% CI) = 0.118(0.040 - 0.352)] and khat chewers had 3.346 times more chance of having risky sexual behavior than non chewers [COR, (95% CI) = 3.346(1.474 - 7.596)]

After controlling for the effect of potentially confounding variables using multivariate logistic regression grade level and substance use like drinking alcohol and chewing khat were found to be significant associated with risky sexual behavior. Grade 11 and 12 have had odds of performing risky sex [AOR, (95% CI) = 0.197(0.047- 0.829)] and [AOR, (95% CI) = 0.101(0.019 - 0.543)] respectively. There was no significant association between other socio-demographic characteristics with risky sexual behaviors. (See table 7). Khat chewing had a higher odd of risky sexual behavior with [AOR, (95% CI) = 2.604(1.101 - 6.156) and drinking alcohol with odd of [AOR, (95% CI) = 0.120(0.039 - 0.367)]. There was no significant association between other substance use such as smoking cigarette and using illicit drugs with risky sexual behavior; as shown in table 8.

Table 7: Association of selected socio-demographic variables with risky sexual behavior of Dembecha comprehensive secondary and preparatory school students.

Variables (n=121)		Risky sexual behavior		Odd Ratio COR(95% CI)	AOR(95% CI)	P-value
		Yes	No			
sex	Male	58	11	0.919(0.382-2.213)	0.830(0.316-2.181)	0.705
	Female	63	13	1	1	
Grade	Grade 9	11	8	1	1	
	Grade 10	18	1	0.076(0.008-0.696)*	0.070(0.007-0.701)*	0.024
	Grade 11	44	8	0.250(0.077-0.815)*	0.197(0.047-0.829)*	0.027
	Grade 12	48	7	0.201(0.060-0.671)*	0.101(0.019-0.543)*	0.008
Currently lived	Both mother and father	15	5	1	1	
	Either mother or father	6	1	0.500(0.048-5.224)	0.174(0.010-3.005)	0.229
	Alone	100	18	0.540(0.174-1.671)	0.197(0.036-1.083)	0.062
Students pocket money	No pocket money	12	4	1	1	
	<100	70	12	0.514(0.142-1.862)	1.737(0.338-8.911)	0.508
	100-200	39	8	0.615(0.157-2.406)	3.589(0.465-27.713)	0.220
Religion education	Follower	13	6	1	1	
	Not follower	108	18	0.361(0.122-1.072)	0.691(0.182-2.616)	0.586

NB. * Remained significant at P- value < 0.05

Table 8: Association of substance use with risky sexual behavior of Dembecha comprehensive secondary and preparatory school students.

Variables (n=121)	Risky sexual behavior		Odd Ratio		P-value
	Yes	No	COR(95% CI)	AOR(95% CI)	
	Alcohol ever use	Yes 113	No 15	0.118(0.040-0.352)*	
khat ever use	Yes 28	No 4	3.346(1.474-7.596)*	2.604(1.101-6.156)*	0.004
Cigarette ever use	Yes 3	No 0	0.000(0.000)	0.000(0.000)	0.999
Illicit drug ever use	Yes 1	No 0	0.000(0.0000)	0.000(0.000)	1.000

NB. * Remained significant at P- value < 0.05

CHAPTER FIVE

5. DISCUSSION

This study attempted to determine the prevalence of substance use (Alcohol, khat, cigarette, and illicit drug), magnitude of risky sexual behaviors and the association between substance use and risky sexual behavior.

5.1 Prevalence of Substance use

In this study the life time substance use prevalence was 77.9%, however similar study done among Woreta high school students the prevalence was 65.4% (Anteneh et al., 2014), and among college students in Kenya was 69.8% (Atwoli et al., 2011). Also the study done among Shiraz high school students prevalence was 30.2% (Ahmadi J. and Hasani, 2003). But the life time substance use prevalence in Nigeria high school students was 87.3% (Oschodi et al., 2010).

The current prevalence of substance use in this study was 74.6%, but the prevalence found among Woreta high school students was 47.9% (Anteneh et al., 2014) and Nigeria high school students 69.2% (Oschodi et al., 2010).

The most commonly used substances in this study in descending order are: alcohol (76.5%), khat (9.7%), cigarette (0.8%) and illicit drug (0.3%), and the sequence of used substance were similar with the above mentioned study done.

The life time prevalence of alcohol drinking in this study was 76.5%, but the life time prevalence in Woreta high school students was 59% (Anteneh et al., 2014), the study done among Addis Ababa high school students was 45.7% (Teshome, 2011) and Jiga secondary and preparatory school students was 44% (Getachew et al., 2016). The life time prevalence of drinking alcohol in Dire Dawa high school students was 34.2% (Negussie, 2012), and among Nigeria high school students 9.2% (Oschodi et al., 2010). When we compared to the study done in similar setting among adolescent students in Cape Town, South Africa was 50.6% (Hamduly and Mash, 2011).

Similarly the current prevalence of alcohol drinking in this study was 74.4%, the study done in Woreta high school students was 40.9% (Anteneh et al., 2014), the study done in Addis Ababa was 26.5% (Teshome, 2011), other study done in Dire Dawa was 19.6% (Negussie B., 2012) and the study in Nigeria high school students was 8.9% (Oschodi et al., 2010). Generally in this study alcohol consumption was higher than all other studies. The reason for this difference might be the high availability of alcohol in the town was this school is found; Dembecha is the main source of traditional alcohol in Ethiopia like, Areki, Tela, and Teji.

The life time prevalence of khat chewing in this study was 9.7%, similar study done among Jiga high school students was 4.7% (Getachew et al., 2016), the study done in Woreta high school students showed 34.9% (Anteneh et al., 2014), the study done among Dire Dawa high school students was 18.4% (Negussie, 2012), and Saudi Arabia students was 21.5% (Ageely, 2009).

The current prevalence of khat chewing in this study was found to be 8.9%, a study done among high school students in Easter Ethiopia was 24.2% (Abebe et al., 2005), and a study done among Woreta high school students was 13.8% (Anteneh et al., 2014). This difference can be possible attributed to the availability of plantation of the khat in other study than this study area.

The life time prevalence of cigarette smoking in this study was 0.8%, but the study done in Jiga high school students was 2.3% (Getachew et al., 2016) , the prevalence among Dire Dawa high school students was 13% (Negussie, 2012), and the study done in Addis Ababa high school students was 10.1% (Teshome, 2011). Also the life time prevalence of cigarette smoking among Woreta high school students was 22.9% (Anteneh et al., 2014) and Nairobi high school students was 32.2% (Kwamanga et al., 2003).

The current prevalence of cigarette smoking in this study was 0.5%, the study done in Dire Dawa high school students was 5.6% (Negussie, 2012), other study done among Woreta high school students was 6.8% (Antenehe et al., 2014), the prevalence among Addis Ababa high school students was 3% (Teshome, 2011). And also the current prevalence of cigarette smoking in in South Africa, Mankweng, rural high school

students was 10.5% (Onya and Flisher, 2008). The possibility of this variation is socio-economic difference.

The life time prevalence of illicit drug use in this study was 0.3%, but the study done among Jiga high school students was 1.7% (Getachew et al., 2016).

The current prevalence of illicit drug use in this study was found to be 0.3%, the study done in South Africa, Mankweng, rural high school students was 1.4% (Onya and Flisher, 2008). Over all in this study use of illicit drug was much lower than other studies. The variation of using illicit drug might be difficult to get easily, socio-economic, and using illicit drug which leads to penalty under the law.

5.2 Reason for Substance Use

The reasons given by the study participants for drinking alcohol were to get personal pleasure 32.7%, to get relief from tension 14.4%, and due to peer pressure 7.0%. These is in line with other research done in Haramaya University students; 66.9% used alcohol to get personal pleasure, 18.5% to get relief from tension and 16.9% took it due to peer influence (Andualem, 2011). But in this study additional reasons were mentioned for drinking alcohol, these were to increase pleasure during sexual intercourse 22.2%, to be sociable 12.7%, to study hard 5.5%, to be alert 3.2% and due to religious practice 2.1%.

The reason given by the respondents for chewing khat were to study hard 37.5%, due to peer pressure 13.9%, due to religious practice 13.9%, to get personal pleasure 11.1%, to be alert 8.3% to get relief from tension 5.5%, and to be sociable 2.8%. These are also in line with other research done in Haramaya university students (Andualem, 2011). But in this study the prevalence of khat chewing was lower than the result of the study done in Haramaya university students. The possible reason for this difference might be the availability of khat in Haramaya University is higher than Dembecha high school and it may be university students can get more income from families than high school students.

Similarly the reason given by the respondents for cigarette smoking were to get personal pleasure 66.6% and to get relief from tension 33.3%. This reason also mentioned the study done in Haramaya University students (Andualm, 2011).

The reason to use illicit drug (shisha) in this study was to get personal pleasure during sexual intercourse 100%. These reason also cited in Haramaya University students (Andualem, 2011).

5.3 Risky Sexual Behaviors

In this study 39.1% of respondents reported that they had practiced sexual intercourse. A study conducted in Aleta Wondo town showed similar finding to ever have sexual experience during their life time 37.6 % (Alemayehu, 2009). The mean age and standard deviation at first sexual intercourse in this study was 16.7 ± 1.1 years. The study done among high school students in Bullen woreda showed similar finding in that the mean age and standard deviation of at first sexual intercourse was 16.1 ± 2.1 years (Desalegn and Mesganaw, 2010) and the study done among high school students in Bahir Dar town showed similar finding in that the mean age and standard deviation of at first sexual intercourse was 15.5 ± 2.3 years (RHO, 2003). But this study showed inversely finding in sex than the study done in Bullen woreda and Bahir Dar town high school student. The mean age and standard deviation at first sexual intercourse in this study was 16.8 ± 1.0 years for male and 16.6 ± 1.2 years for female. So in this study female students were found to start sexual intercourse earlier than male and were found to be more exposed to risky sexual behavior than male students; 44.1% females initiate sex early compared to 39.3% males. This difference might be due to socio-economic and cultural difference in the study area. This might suggest that students begin sex too early, which could as a result expose them to develop risky sexual behavior. Generally from the finding one can understand students were started to practice sexual intercourse in the early age of their life, which point out the need to give an attention in building life skill for students.

In this study the reason reported by the students for the initiation of sexual intercourse in those who ever practice sexual intercourse were personal interest 60.0%, promising word from partners 20.0%, peer pressure 13.1%, marriage 2.7%. Similarly a study conducted in Bale, Oromia region found that personal desire 39.1% and peer pressure 23.3% (Ibrahim, 2004) and a study done in Aleta Wondo town among high school students reported the reason of sexual activity were to prove love of boy/girl friends 29.4% and peer pressure

23.5% (Alemayehu, 2009). In addition, the qualitative finding showed that the main factors that push high school students to engage in an early sexual intercourse are personal interest, peer pressure, early marriage and substance use. The result also showed that substance use like; alcohol, khat, and cigarette smoking were among the factors that pushed students to sexual initiation in an early age and reasons why students do not perceive themselves at risk of HIV/AIDS are due to over pleasure in alcohol and khat which make them not to think of risk.

In this study 71.0% of the respondents had one sexual partner in the last time, and 28.9% respondents reported to have two or more sexual partners, the study done in west Gojam zone on school students 33.3% reported having had two or more sexual partners (Adamu et al., 2003). But the study conducted in Bale Zone and in Mojo town which showed that 47.7% and 53.1% of students reported to have sexual intercourse with two or more than two sexual partners respectively (Ibrahim, 2004). This difference might be due to cultural and income difference, growth level of town and the life style put the health of students at sexual risk.

Among sexually active respondents in this study 60.7% of students have never used condom during any sexual intercourse, 22.7% reported ever used condom and only 16.5% of them to claim to have used condom consistently in the last time. The study in Aleta Wondo town among high school students reported majority of school students 64.1% have never used condoms during any sexual intercourse, 35.9% reported ever used condom and only 23.9% of them claim to have used condom consistently (Alemayehu, 2009). This features that are none or inconsistent use of condom which makes sexually active of students at high risk to HIV/AIDS. In addition the qualitative finding of in this study indicates that the reason for non or inconsistent use of condom were trust partner 40.5%, do not like 26.4%, partner objection 19.8%, do not think of it 8.3%, and cannot find condom 4.9%. Similar study conducted in Aleta Wondo town high school students revealed that the reason not to using condom were lack of information 28.7%, decrease sexual pleasure 26.1%, partner influence 18.3%, fear to buy and condom unavailable nearby were accounts 15.7% each (Alemayehu, 2009). Therefore low consistent utilization of condom in this study is indication of the fact that high risk sexual behaviors

are still widely practiced among high school students. This might indicate that the risky taking behavior among high school students is high which needs concentration in changing their sexual behavior.

Among sexually active male respondents, 2.1% of male students reported to had sex with commercial sex workers, the study done among high school students in Bale Zone 20.5% of male had sexual intercourse with commercial sex workers (Ibrahim N. 2004) and the study done among south Gonder Zone high school students 14.8% of respondents had sexual intercourse with commercial sex workers (Adamu et al., 2003). This variation might be due to cultural and economic difference between the study areas.

There was a significant association between alcohol intake and risky sex with those using alcohol having about 0.12 times higher odds compared to those not using it. This might be due to the nature of alcohol in decreasing inhibitions, altering rational decision making and increasing risk taking behavior. Similar finding were also observed in studies conducted in Jiga secondary and preparatory school and among in-school and out-of-school youths in Ethiopia (Getachew et al., 2016, Kebede et al., 2005). There was also a significant and linear association between Khat chewing and risky sexual behavior with those using khat having about 2.6 times higher odds compared to those not using it. This result is similar to the findings of similar studies done among in-school and out-of-school youth in Ethiopia and Shanty town in Lima (Kebede et al., 2005, Galvez-Buccollini et al., 2009). Studies showed that there is a strong association between khat chewing and alcohol consumption, and the combined use of both drugs had an amplifying effect on sexual risk behaviors that predispose to HIV and other STIs (Abebe et al., 2005). In this study there were no association between cigarette smoking and illicit drug use with risky sexual behavior in both bivariate and multivariate analyses. The relationship of cigarette smoking and illicit drug use with risky behavior were strong in many literatures. (Seme et al., 2007, Kaiser, 2002). But absence of relationship between cigarette smoking and illicit drug use with risky sexual behavior in this study could be as a result of socio- economic problem which leads to small number of users and small use of illicit drug by students due to cultural or legal issues.

CHAPTER SIX

6. CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Ever prevalence proportion of substance use among Dembecha comprehensive secondary and preparatory school students was 77.9%, so the prevalence of substance use in the study area is high. This study revealed that the commonly used substance were alcohol 76.5%, khat 9.7%, cigarette 0.8% and illicit drug (shisha) 0.3%. Alcohol was the most common used substance among students. The study also showed that there was a significance difference between male and female students with respect to substance use; that is 46.6% of male students were ever use substances while 31.3% of female students were ever used substances. Although from the total number of substance use respondents, the majority reason to use substance were, to get personal pleasure, to increase pleasure during sexual intercourse, to get relief from tension, to be sociable, and to study hard.

In this study substance use and risky sexual behavior were significantly higher among the study participants. The use of alcohol and khat were found to be significant risk factor for risky sexual behavior among Dembecha comprehensive secondary and preparatory school students.

The study also showed that grade 11 and 12 students who practiced sexual intercourse were at high risky sexual behavior than grade 9 and 10 students. Among sexually active respondents (83.4%) of sexually active students had at least one of the risky sexual behaviors, like; early sexual initiation, inconsistent use of condom, having multiple sexual partners, and having sexual intercourse with commercial sex workers.

6.2 Recommendation

Based on the finding, this study recommended the following:

- ❖ Based on the association between substance use with risky sexual behavior, high schools, Woreda education office and other stakeholders need to focus on teaching the prevention of substance use.
- ❖ School administration and teachers should take the initiative to bring about health sexual behavior among their students by strengthening anti-AIDS and reproductive health clubs in the school.
- ❖ Put an intervention activities to bring about behavioral changes among high school students on the side effect use of alcohol, khat, cigarette, and illicit drug are important.
- ❖ Teaching high school students to delay sex until marriage is one the main way to avoid risky sexual intercourse.
- ❖ Health center and other stakeholder should create awareness on condom use and the significance of using condom by well organized information, education and communication to bring behavioral change.
- ❖ Consistent use of condom for sexually active students before marriage should be encouraged among high school students.
- ❖ Finally, Religious leaders need to give attention to make students regularly visit religious service and teach them about the consequences of risky sexual behaviors.

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APPENDIX I: ENGLISH QUESTIONNAIRE

In order to keeping students' health and allowing healthful life style, we should have understand and identifying the existing health problems and related behavioral problems around them and then solve the problem helps to produce reproductive citizen that make a well developed country. Therefore you are cordially invited to practice in the study in titled "Assessment of substance use and risky sexual behavior towards HIV/AIDS among Dembecha comprehensive secondary and preparatory school students. The study attempts to assess prevalence of substance use and its association with risky sexual behavior towards HIV/AIDS. This research will help us to understand the magnitude and relationship between substance use and risky sexual behavior towards HIV/AIDS. In order to succeed this aim and this study will be reliable, accurate, valid and important you should be answering each question carefully. All your answers must be secured. Do not Wright your name on the questionnaire. It will take only a short time to complete the questionnaire, so before answer the question please read and follow the instruction and question carefully and set aside enough time to provide thoughtful responses.

This questionnaire is not an examination. There is no correct or wrong answer. However you should have read each question carefully and answer your own correct chooses by circles the choice number.

First of all I would say deeply thank you to participate in this questionnaire!

Questionnaire SN_____

Date of data collection_____

Name of data collector_____

Grade_____

Signature_____

Section_____

Section 1: Socio-Demographic Information

No	Questions	Choices
1	sex of the respondent?	1. Male 2. Female
2	How old are you?	_____years old
3	What is your grade?	1. Grade 9 2. Grade 10 3. Grade 11 4. Grade 12
4	What is your religion?	1. Orthodox 2. Islam 3. Protestant 4. Catholic 5. others_____
5	Do you have follow religious education by going to church or mosque?	1. Yes 2. No
6	What is your marital status now?	1. Married 2. Not married 3. Divorced
7	Currently lived with	1. Both their mother and father 2. Either mother or father 3. Alone
8	Where you lived before?	1. Urban 2. Rural
9	What is your average monthly pocket Money you get from family/relatives in birr?	1. > 200 2. 100-200 3. < 100 4. None

Section 2: Substance Use

The following questions focuses on alcohol drinking, khat chewing, cigarette smoking and illicit drug use, so you are requested to answers authentically about your personal behavior on the use of these substances and circle on your choice.

No	Questions	Choices
10	Have you ever used alcoholic drinks (like; Tela, Areki, Teji, Beer, or others) in your life?	1. Yes 2. No
11	If your answer is yes for question 10 when did you start drinking alcohol?	1. when I was primary school 2. After joining high school
12	Have you drink any alcohol currently?	1. Yes 2. No
13	If your answer is yes for question 12 how often do you drinking alcohol?	1. occasionally 2. most of the time 3. always
14	If your answer is yes for question 10 what was your reason to drink alcohol? (Multiple answer are possible)	1. to get personal pleasure 2. to study hard 3. to get relief from tension 4. to be alert 5. to be sociable 6. to increase pleasure during sexual intercourse 7. due to peer pressure 8. due to religious practice 9. others _____
15	Do you have your religious give freedom or Permission to drink alcohol?	1. Yes 2. No
16	Have you ever used khat in your life?	1. Yes 2. No
17	Have you chewing khat currently?	1. Yes 2. No
18	If your answer is yes for question 16 when did you start chewing khat?	1. when I was primary school 2. After joining high school

19	If your answer is yes for question 17 how often do you chew khat?	1. occasionally 2. Most of the time 3. Always
20	If your answer is yes for question 16 what was your reason to use khat? (Multiple answer are possible)	1. to get personal pleasure 2. to study hard 3. to get relief from tension 4. to be alert 5. to be sociable 6. to increase pleasure during sexual intercourse 7. due to peer pressure 8. due to religious practice 9. others _____
21	Do you have your religion give freedom or permission to use khat?	1. Yes 2. No
22	Have you ever used cigarette in your life?	1. Yes 2. No
23	Have you smoking cigarette currently?	1. Yes 2. No
24	If your answer is yes for question 22 when did you start smoking?	1. When I was primary school 2. After joining high school
25	If your answer is yes for question 23 how often do you smoking?	1. Occasionally 2. Most of the time 3. Always
26	If your answer is yes for question 22 what was your reason to smoking?(multiple answer are possible)	1. to get personal pleasure 2. to study hard 3. to get relief from tension 4. to be alert 5. to be sociable 6. to increase pleasure during sexual intercourse 7. due to peer pressure

		8. due to religious practice 9. others_____
27	Do you have your religion give freedom or permission to smoking cigarette?	1. Yes 2. No
28	Have you ever used illicit drug like; shiha, hashish, canabis, ganja, heroin or other in your life?	1. Yes 2. No
29	Have you use any illicit drug currently?	1. Yes 2. No
30	If your answer is yes for question 28 when did you start to use illicit drug?	1. When I was primary school 2. After joining high school
31	If your answer is yes for question 29 how often do you use illicit drug?	1. Occasionally 2. Most of the time 3. Always
32	If your answer is yes for question 28, what was your reason to use illicit drug?(multiple answer are possible)	1. to get personal pleasure 2. to study hard 3. to get relief from tension 4. to be alert 5. to be sociable 6. to increase pleasure during sexual intercourse 7. due to peer pressure 8. due to religious practice 9. others_____
33	Do you have your religion give freedom or permission to use illicit drugs?	1. Yes 2. No

Section 3: Risky Sexual Behaviors

The following questions assess the risky sexual behaviors of students.

No	Questions	Choices
34	Have you ever had sexual intercourse?	1. Yes 2. No
35	If your answer is yes for question 34 , when did you have your first sexual intercourse?	1. When I was primary school 2. After I join high school
36	How old were you when you had sexual intercourse for the first time?	1. _____years old
37	What was the reason for initiating sexual intercourse ?	1. Personal interest 2. Peer pressure 3. Promising word from partner for marriage 4. To get money 5. By force 6. In marriage 7. Had no sexual intercourse 8. Others _____
38	With whom did you make your first sexual intercourse?	1. Boy/girl friend 2. Spouse 3. Teacher 4. commercial sex workers 5. Had no sexual intercourse 6. Others _____
39	How many people do have had sexual intercourse with you, during your life?	1. _____partners 2. Had no sexual intercourse
40	How many people do have had sexual intercourse with you, during the past 6 month?	1. One 2. Two 3. Three or more 4. Had no sexual intercourse

41	Did you use alcohol, before you had sexual intercourse for the last time?	1. Yes 2. No 3. Had no sexual intercourse
42	Did you use khat, before you had sexual intercourse for the last time?	1. Yes 2. No 3. Had no sexual intercourse
43	Did you use cigarette, before you had sexual intercourse for the last time?	1. Yes 2.No 3. Had no sexual intercourse
44	Did you use illicit drugs, before you had sexual intercourse for the last time?	1. Yes 2. No 3. Had no sexual intercourse
45	Did you use condom during any sexual intercourse?	1. Yes 2. No 3. Had no sexual intercourse
46	IF your answer is yes for question 45 , how often do you use condom?	1. Occasionally 2. Most of the time 3. Always
47	If your answer is NO/inconsistent for question 45 and 46 , what were the reason for you not/ inconsistent to use condom during sexual intercourse?(multiple answer are possible)	1. I have trusted my partner 2. I dislike condom 3. Could not find condom 4. Do not think of it 5. Partner objection 6. Others _____
48	Have you ever had sexual intercourse with Commercial sex workers?	1. Yes 2. No
49	Do you use condom with commercial sex Workers?	1. Yes 2. No

አዲስ አበባ ዩኒቨርሲቲ ድህረ-ምረቃ ት/ቤት

አዲስ አበባ

APPENDEX II: የአማርኛ መጠይቅ

የተማሪዎችን ጤንነት ለመጠበቅና ጤናማ ሂደት እንዲመሩ ለማስቻል በዙሪያቸው ያሉትን የጤና ችግሮች(እንቅፋቶች) እና ተዛማጅ የባህሪ ችግሮችን በማወቅና በመለየት ለችግሮቹ መፍትሄ በመስጠት አምራች ዜጋ በመፍጠር የበለፀገች አገር መፍጠር ይቻላል። ስለዚህ እርስዎ ለዚህ ጥናት በሙሉ እምነት(ስሜት) ተጋብዘዋል። በመሆኑም በዚህ ጥናት በደምበጫ አጠቃላይ ሁለተኛና መሰናዶ ት/ቤት ውስጥ ያሉ ተማሪዎች ስለንጥረነገር አጠቃቅም እና ለኤች አይ ቪ/ኤዲስ አጋላጭ የሆኑ አደገኛ ወሲባዊ ባህሪ በሚለው ርዕስ ላይ ጥናት በማድረግና ከተጠኘው አካል ትክክለኛ መረጃ በመስጠት በት/ቤቱ ውስጥ ባሉ ተማሪዎች ያለውን ንጥረነገር የሚወስዱ ተማሪዎች ብዛት፣ ለኤች አይ ቪ/ኤዲስ አጋላጭ የሆኑ አደገኛ የወሲባዊ ባህሪን እና ንጥረነገር መጠቀም ከአደገኛ ወሲባዊ ባህሪ ለኤች አይ ቪ/ኤዲስ ተጋላጭነት ያለውን ግንኙነት ማወቅ የጥናቱ ዋና ዓላማ ሲሆን፤ ይህንን ዓላማ ለማሳካት እና ይህ ጥናት ታማኝ፣ ተገቢ፣ ትክክለኛና ጠቃሚ እንዲሆን እያንዳንዱን ጥያቄ በጥንቃቄ መመለስ አለበት። የሚመለሱት መልሶች ሙሉ በሙሉ በሚስጥር ይጠበቃሉ። በመጠይቁ ላይ ስም አይጻፍም። ጥያቄዎችን መልሰው ለመጨረስ የሚፈጁብዎት ጊዜ አጭር ስለሆነ ለእያንዳንዱ ጥያቄ መልስ ከመስጠትዎ በፊት መመሪያዎችንና ጥያቄዎችን በትክክል ማንበብዎን እርግጠኛ ይሁኑ።

ይህ መጠይቅ ፈተና አይደለም። ትክክለኛ ወይም ስህተት መልሶች የሉትም። ነገርግን እያንዳንዱን ጥያቄ በጥንቃቄ በማንበብ ለእርስዎ ትክክለኛ የሚሉትን ምርጫ በማንበብ እና ትክክለኛ መልስ የያዘውን ቁጥር መርጠው በማክበብ መልስዎን ይስጡ።

በቅድሚያ መጠይቁን ለመሙላት ስለተባበሩን ክፍል የመነጨ ምስጋናየን አቀርባለሁ!!

የመጠይቁ መለያ ቁጥር----- መረጃዎ የተሰበሰበበት ቀን-----

መረጃዎን የሰበሰበው ስም----- ክፍል-----

ፊርማ----- ሴክሽን-----

ክፍል 1: ማህበራዊና ዲሞክራሲያዊ ሁኔታ

ተ.ቁ	ጥያቄዎች	የመልስ አማራጮች
1	ጾታ	1. ወንድ 2. ሴት
2	እድሜህ/ሺ. ስንት ነው?	1.-----ዓመት
3	ስንተኛ ክፍል ነህ/ነሺ?	1. 9ኛ ክፍል 2. 10ኛ ክፍል 3. 11ኛ ክፍል 4. 12ኛ ክፍል
4	ሃይማኖትህ/ሺ?	1. ኦርቶዶክስ 2. እስላም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ-----
5	ሃማኖታዊ ት/ቶችን ቤተክሪስቲያን ወይም መስጊድ በመሄድትከታተላለህ/ትከታተያለሺ?	1. አዎ 2. አልከታተልም
6	የጋብቻ ሁኔታ(በአሁኑ ጊዜ)?	1. ያላገባ/ች 2. ያገባ/ች 3. አግብቶ የፈታ/ች
7	አሁን ከማን ጋር ነው የሚኖሩት?	1. ከእናትና አባቴ ጋር 2. ከእናቴ ወይም ከአባቴ ጋር 3. የብቻየን 4. ሌላ-----
8	እዚህ ት/ቤት ከመምጣትህ/ሺ በፊት የኖርህበት/ የኖርሺበት ቦታ?	1. ከተማ 2. ገጠር
9	ከቤተሰብ/ከዘመድ የምታገኝዎ/ኛው ወርሃዊ የኪስ ገንዘብ ምን ያህል ነው?	1. ከ200 ብር በላይ 2. ከ100-200 ብር 3. ከ100 ብር በታች 4. ምንም የለም

ክፍል 2: ንጥረነገሮችን መጠቀም በተመለከተ

ከዚህ በታች የተዘረዘሩት ጥያቄዎች ስለአልኮል፣ ጫት፣ ሲጋራና አደገዛዥ ዕቃዎች ላይ ያተኮረ ሲሆን ስለእርስዎ ትክክለኛውን መልስ የያዘውን ቁጥር ያክቡት።

ተ.ቁ	ጥያቄዎች	የመልስ አማራጮች
10	በህወት ዘመንህ/ሺ አልኮል(ማለትም ጠላ፣ አረቂ፣ ጠጂ፣ ቢራወይም ሌላ) ጠጥተህ/ሺ ታወቃለህ/ቂያለሻ?	1. አዎ 2. አላወቅም
11	ለጥያቄ ቁጥር 10 መልስህ/ሺ አዎ ከሆነ አልኮል መጠጣት የጀመርከው/ሺው መቼ ነው?	1. አንደኛ ደረጃ እያለሁ 2. ሁለተኛ ደረጃ እያለሁ
12	በአሁኑ ጊዜ አልኮል ይጠጣሉ?	1. አዎ 2. አልጠጣም
13	ለጥያቄ ቁጥር 12 መልስህ/ሺ አዎ ከሆነ አልኮል የሚጠጡበት ጊዜ?	1. አልፎአልፎ 2. አብዛኛውን ጊዜ 3. ሁልጊዜ
14	ለጥያቄ ቁጥር 12 መልስህ/ሺ አዎ ከሆነ አልኮል ለመጠጣት ምክንያትህ/ሺ ምንድን ነው?(ከአንድ በላይ መልስ መስጠት ይቻላል)	1. ለመደሰት 2. ጠንክሮ ለማንበብ 3. ከመንፈስጨንቀት ለማረፍ 4. ንቁ ለመሆን 5. ተግባቢ ለመሆን 6. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለማግኘት 7. በጉአደኛ ግፊት 8. ሃይማኖታዊ ልማድ ስለሆነ 9. ሌላ-----
15	ሃይማኖትዎ አልኮል እንዲጠጡ ይፈቅዳል?	1. አዎ 2. አይፈቅድም
16	በሂወት ዘመንዎ ጫት ቅመወ ያወቃሉ?	1. አዎ 2. አላወቅም
17	ባሁኑ ጊዜ ጫት ይቅማሉ?	1. አዎ 2. አልቅምም
18	በጥያቄ ቁጥር 16 መልስዎ አዎ ከሆነ ጫት መቃም የጀመሩት? መቼ ነው	1. አንደኛ ደረጃ እያለሁ 2. ሁለተኛ ደረጃ እያለሁ
19	ለጥያቄ ቁጥር 17 መልስዎ አዎ ከሆነ ጫት የሚቅሙበት ጊዜ?	1. አልፎአልፎ 2. አብዛኛውን ጊዜ 3. ሁልጊዜ
20	ለጥያቄ ቁጥር 16 መልስዎ አዎ ከሆነ ጫት የሚቅሙበት ምክንያት ምክንያት ምንድን ነው?(ከአንድ በላይ መልስ መስጠት ይቻላል)	1. ለመደሰት 2. ጠንክሮ ለማንበብ 3. ከመንፈስጨንቀት ለማረፍ 4. ንቁ ለመሆን 5. ተግባቢ ለመሆን 6. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለማግኘት 7. በጉአደኛ ግፊት

		8. ሃይማኖታዊ ልማድ ስለሆነ 9. ሌላ-----
21	ሃይማኖት ጫት እንዲቅሙ ይፈቅዳል?	1. አዎ 2. አይፈቅድም
22	በሂወት ዘመን ሲጋራ አጭሰው ያወቃሉ?	1. አዎ 2. አላወቅም
23	በአሁኑ ጊዜ ሲጋራ ያጨሳሉ?	1. አዎ 2. አላጨሰም
24	ለጥያቄ ቁጥር 22 መልስዎ አዎ ከሆነ ሲጋራ ማጨስ የጀመሩት መቼ ነው?	1. አንደኛ ደረጃ እያለሁ 2. ሁለተኛ ደረጃ እያለሁ
25	ለጥያቄ 23 መልስዎ አዎ ከሆነ ሲጋራ የሚያጨሱበት ጊዜ?	1. አልፎአልፎ 2. አብዛኛውን ጊዜ 3. ሁልጊዜ
26	ለጥያቄ ቁጥር 22 መልስዎ አዎ ከሆነ ሲጋራ ለማጨስ ምክንያቱ ምክንያቱ ምንድን ነው?	1. ለመደሰት 2. ጠንክሮ ለማንበብ 3. ከመንፈስጨንቀት ለማረፍ 4. ንቁ ለመሆን 5. ተግባቢ ለመሆን 6. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለማግኘት 7. በጉዳዩ ግፊት 8. ሃይማኖታዊ ልማድ ስለሆነ 9. ሌላ-----
27	ሃይማኖት ሲጋራ እንዲያጨሱ ይፈቅዳል?	1. አዎ 2. አይፈቅድም
28	በህወት ዘመን አደንዛዥ ዕዕችን ማለትም ሺሻ፣ ሃሺሽ፣ ካናቢስ፣ ጋንጃ፣ ሄሮይን እና የመሳሰሉትን ተጠቅመው ያወቃሉ	1. አዎ 2. አላወቅም
29	በአሁኑ ጊዜ አደንዛዥ ዕዕ ይጠቀማሉ?	1. አዎ 2. አልጠቀምም
30	ለጥያቄ ቁጥር 28 መልስዎ አዎ ከሆነ አደንዛዥ ዕዕ መጠቀም የጀመርኩ/ሺሻው መቼ ነው?	1. አንደኛ ደረጃ እያለሁ 2. ሁለተኛ ደረጃ እያለሁ
31	ለጥያቄ ቁጥር 29 መልስዎ አዎ ከሆነ አደንዛዥ ዕዕ የሚጠቀሙበት ጊዜ?	1. አልፎአልፎ 2. አብዛኛውን ጊዜ 3. ሁልጊዜ
32	ለጥያቄ ቁጥር 28 መልስዎ አዎ ከሆነ አደንዛዥ ዕዕችን የሚጠቀሙበት ምክንያት ምንድን ነው?(ከአንድ በላይ መልስ መስጠት ይቻላል)	1. ለመደሰት 2. ጠንክሮ ለማንበብ 3. ከመንፈስጨንቀት ለማረፍ 4. ንቁ ለመሆን 5. ተግባቢ ለመሆን 6. በግብረሰጋ ግንኙነት ጊዜ ደስታን ለማግኘት 7. በጉዳዩ ግፊት 8. ሃይማኖታዊ ልማድ ስለሆነ 9. ሌላ-----
33	ሃይማኖት አደንዛዥ ዕዕ እንዲጠቀሙ ይፈቅዳል?	1. አዎ 2. አይፈቅድም

ክፍል 3: ለኤች.አይ.ቪ/ኤዲስ የሚያጋልጡ አደገኛ ወሲባዊ ባህሪያትን የሚመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	የመልስ አማራጮች
34	የግብረሰጋግኘኝነት አድርገው ያወቃሉ?	1. አዎ 2. አላወቅም
35	ለጥያቄ ቁጥር 34 መልስዎ አዎ ከሆነ፤ ለመጀመሪያ ጊዜ የግብረ ሰጋግኘኝነት ያደረጉት መቼ ነው?	1. አንደኛ ደረጃ እያለሁ 2. ሁለተኛ ደረጃ እያለሁ 3. ግንኙነት አድርጌ አላወቅም
36	ለጥያቄ ቁጥር 34 መልስዎ አዎ ከሆነ፤ ለመጀመሪያ ጊዜ የግብረሰጋ ግንኙነት ያደረጉት በስንት ዓመትዎ ነው?	1. -----ዓመት
37	የግብረሰጋግኘኝነት ለመጀመር ምክንያትዎ ምንድን ነው?	1. በግል ፍላጎት 2. በጉዳደኛ ግፊት 3. በፍቅር ጉዳደኛየ የጋብቻ ቃል ስለተገባልኝ 4. ገንዘብ ለማግኘት 5. ተገድጀ 6. ስላገባሁ 7. ግንኙነት አድርጌ አላወቅም 8. ሌላ-----
38	ለመጀመሪያ ጊዜ የግብረሰጋግኘኝነት ያደረጉት ከማን ጋር ነው?	1. ከወንድ/ሴት ጉዳደኛየ ጋር 2. ከባል/ሚስት ጋር 3. ከአስተማሪየ ጋር 4. ከቡና ቤት ሴት ጋር 5. ግንኙነት አድርጌ አላወቅም 6. ሌላ-----
39	በህይወት ዘመንዎ ከስንት ሰዎች ጋር የግብረ ሰጋ ግንኙነት አድርገዋል?	1. -----ሰዎች ጋር 2. ግንኙነት አድርጌ አላወቅም
40	በባለፉት 6 ወራት ከስንት ሰዎች ጋር የግብረ ሰጋ ግንኙነት አድርገዋል?	1. ከአንድ ሰው ጋር 2. ከሁለት ሰው ጋር 3. ከሶስትና ከዛ በላይ 4. ግንኙነት አድርጌ አላወቅም

41	ለመጨረሻ ጊዜ የግብረ ስጋ ግንኙነት ከማድረግዎ በፊት አልኮል ጠጥተዎ ነበር?	1. አዎ 2. አልጠጣሁም 3. ግንኙነት አድርጌ አላወቅም
42	ለመጨረሻ ጊዜ የግብረ ስጋ ግንኙነት ከማድረግዎ በፊት ጫት ቅመወ ነበር?	1. አዎ 2. አልቃምሁም 3. ግንኙነት አድርጌ አላወቅም
43	ለመጨረሻ ጊዜ የግብረ ስጋ ግንኙነት ከማድረግዎ በፊት ሲጋራ አጭሰወ ነበር?	1. አዎ 2. አላጨሰሁም 3. ግንኙነት አድርጌ አላወቅም
44	ለመጨረሻ ጊዜ የግብረ ስጋ ግንኙነት ከማድረግዎ በፊት አደንዛዥ ዕዕ ተጠቅመወ ነበር?	1. አዎ 2. አልተጠቀምሁም 3. ግንኙነት አድርጌ አላወቅም
45	የግብረ ስጋ ግንኙነት ሲያደርጉ ኮንዶም ይጠቀማሉ?	1. አዎ 2. አልጠቀምም 3. ግንኙነት አድርጌ አላወቅም
46	ለጥያቄ ቁጥር 45 መልስዎ አዎ ከሆነ፤ የኮንዶም አጠቃቅምዎ እንዴት ነወ?	1. አልፎ አልፎ 2. አብዛኛወን ጊዜ 3. ሁልጊዜ
47	ለጥያቄ 45 እና 46 መልስዎ አልጠቀምም ከሆነ ምክንያትዎ ምንድን ነወ?	1. ጉዳደኛየን ስለማምነወ/ናት 2. ኮንዶም ስለምጠላ 3. ኮንዶም በቀላሉ ስለማላገኝ 4. አስቤወ አላወቅም 5. ጉዳደኛየ ኮንዶም እንድንጠቀ አይፈልግም/አትፈልግም 6. ሌላ-----
48	በህይወት ዘመንዎ ከቡና ቤት ሴት ጋር የግብረ ስጋ ግንኙነት አድርገህ ታወቃለህ?	1. አዎ 2. አላወቅም 3. ግንኙነት አድርጌ አላወቅም
49	ለጥያቄ ቁጥር 48 መልስዎ አዎ ከሆነ የግብረ ስጋ ግንኙነት ሲያደርጉ ኮንዶም ይጠቀማሉ?	1. አዎ 2. አልጠቀምም

DECLARATION

First, I declare that this thesis is my solely work and that all sources of material used for this thesis have been appropriately acknowledge. This thesis has been submitted in partial fulfillment of the requirement for masters of education degree at Addis Ababa University and I do not have any objection if it is reserved at the university library to be available for borrowers under the rule of the library. I seriously declare that this thesis is not submitted to any other institution anywhere for the award of any academic degree, diploma, or certificate. Brief questions from this thesis are allowed able without special permission provided that accurate acknowledgment of source is made. Request for permission for extended quotation from or copy of this manuscript in whole or in part may be granted by the head the major department or the Dean of the school of Graduate studies. In all other instances, however, permission must be obtained from the author.

By: Agerie Biadiglign

Signature-----

Addis Ababa University

AUGUST, 2017