RISKY SEXUAL BEHAVIOR AND ASSOCIATED FACTORS AMONG HIGH SCHOOL STUDENTS IN GAMBELLA TOWN, SOUTH WESTERN ETHIOPIA: A CROSS SECTIONAL STUDY.

By: Ademe Mekonnen (BSc)

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Ademe Mekonnen (BSc)

Advisors:

1.Zewdie Birhanu (BSc, MPH, Assistant Professor)

2.Shifera Asfaw (BSc, MPH)

3.Seble Frehywot (MD, Professor)

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Jimma, Ethiopia.

Abstract

Background: *The health threats for adolescents(especially school students) today are predominantly behavioral rather than biomedical and more of today's adolescents are involved in risky sexual behaviors. Ethiopian government had designed reproductive health and Human Immuno deficiency Virus/Aquired Immuno Defficiency Syndrome strategies. But Ethiopian Demographic and Health Survey 2011 report showed behavioral gaps that women in the Gambella region report higher mean number of lifetime sexual partners 8.1 than women in other regions 1.2 to 2 partners. Gambella HIV prevalence is 6.5%, higer when compared to 1.5% of the country.*

Objective: *The objective of this study was to assess sexual behavior and associated factors among high school students in Gambella Town in 2014.*

Methods: *An institution based cross-sectional survey was conducted on a random sample of 415 students (97% response rate), on March 14, 2014 in Gambella town, using quantitative technique. Data was collected using pre -tested self administered questionnaire. Data was analyzed using SPSS for windows version 16 where descriptive statistics was computed. Binary and multiple logistic regression had done. P-value less than 0.05 was considered statistically significant.*

Result: From *415 respondents 178(42.9%) ever had sex; 253 (61%) of them were males. One hundred thirty six (76.4%) were sexually active. Parents income (AOR: 0.33, 95% CI:0.14-0.79), parental monitoring (AOR:0.4, 95% CI:0.27-0.60) and substance use (AOR: 1.82, 95% CI:1.23-2.67) were factors that shows statisticaly significant with risky sexual behavior. Prevalence of risky sexual behavior was 31.3%,,(35.6% male versus 24.7% female)*

Conclusion: *Many students were sexually active, and reported that they use substances. These students also report that they had an exposure of risk sex(inconsistent condom use, multiple sexual partner or never condom use). Government institutions, private sectors and NGOs should have target at substance use and parental monitoring as an intervention area.*

Keywords: *Risky sexual behavior, Associated factors.*

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Abbreviation

AIDS	Acquired Immuno Deficiency Syndrome
EDHS	Ethiopian Demographic and Health Survey
ETB	Ethiopian Birr
GREB	Gambella Regional. Education Bureau
GTEO	Gambella Town E-ducation Office
GRHB	Gambella Regional Health Bureau
GTHO	Gambella Town Health Office
HIV	Human Immuno Deficiency Virus
HPV	Human Papiloma Virus
RH	Reproductive Health
RTIs	Reproductive truct infections
SD	Standard Deviation
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
STIs	Sexually Transmitted Infections
VD	Venerial Disease
WHA	World Health Assembly
WHO	World Health Organaization

CHAPTER ONE: INTRODUCTION

Statement of the problem

Risky sexual behavior: is defined as; unprotected sex (inconsistent use of condoms), having multiple sexual partner, starting sex before age of 18 years and sex with commercial sex workers.(1). Sexual behavior among the adolescent and the youth is the core of sexuality matters for the fact that it affects adults life negatively (exposed them to STI/HIV) and, therefore, stimulated many research interests for the need to provide evidence for the discrepancy between the beginning of sexual life and that of conjugal life(2).

Sexually risk-taking behaviors are influenced by many diverse factors which include poverty, race, ethnicity, and religiosity, puberty, age, peer relations, school performance, and curiosity for sex, coercion, family composition and relationships. A number of studies also revealed negative consequences (like STI/HIV) of early sexual activity which can have physical, psychological, social, and economic dimensions(2).

The health threats for adolescents (especially school students) today are predominantly behavioral rather than biomedical and more of today's adolescents are involved in health behaviors with potential for serious consequences(3).

Adolescent sexual behavior is certainly a growing concern. Risk of STI of individuals can be influenced by their sexual behavior. The average age of first sexual relation is still too low, while unplanned pregnancies and STIs remain high(4).

The people who have risky sex share a certain set of behaviours; these can be different in different epidemic situations, but are likely to include having many sexual partners and not using condoms(5). These risky behaviors exposes people to STI and HIV/AIDS, these diseases have a Global and national burdon. WHO reported that STIs are a major global cause of acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for millions of men, women and infants. The impact of these diseases is magnified by their potential to facilitate the spread of HIV infection(6).

WHO 2008 report also shows that, more than a million people acquire an STI every day; an estimated 499 million new cases of curable STIs like gonorrhoea, chlamydia, syphilis and trichomoniasis occur every year, the burden of STIs is greatest in low-income countries(7).

Sub-Saharan Africa continues to bear a disproportionate share of the global HIV burden. In mid-2010, about 1.9 million(70% Global HIV burden) of all people living with HIV resided in sub-Saharan Africa, a region with only 12% of the global population(8). EDHS 2011 report shows that, Gambela HIV prevalence among young women is much higher at 9 percent, than in other regions of the country; self reporting STI in Gambella is 1.7 percent for females and 1.2 percent for males, teenage pregnancy; among regions the percentage of women age 15-19 who have begun childbearing ranges from 3 percent in Addis Ababa to 21 percent in Gambela(9).

Holmes explained that, the primary mechanisms through which STI/HIV affects the economic well-being of individuals and their households, communities, and countries are the impacts of the infections on morbidity and mortality. Sexually Transmitted Infections are also an important cause of reduced fertility among women and some STIs such as Chlamydia can reduce fertility among men(10). In addition Mayaud says that, STIs constitute a huge health and economic burden for developing countries; 75–85% of the estimated annual new cases of curable STIs occur in these countries, and STIs account for 17% economic losses because of ill health(11).

Coyne and Barton says, STIs exert a global impact on public health and are a major cause of morbidity and mortality in women, particularly as a result of infertility, pregnancy complications and anogenital cancer. HIV has reached epidemic proportions in diverse populations across the globe, and the burden on healthcare resources to deliver effective antiretroviral therapy is ever increasing(12).

A study conducted in 2009 shows that, stigma, societal attitudes towards sex, inadequate resources, high levels of drug resistance, lack of diagnostic facilities, and lack of trained person-power are factors that challenges STI management(13).

WHO states that, the appearance of HIV and AIDS has focused greater attention on the control of STIs. There is a strong correlation between the spread of conventional STIs and HIV transmission, and both ulcerative and non-ulcerative STIs have been found to increase the risk of sexual transmission of HIV(14). According to EDHS 2011, Information about the incidence of STIs is not only useful as a marker of unprotected sexual intercourse but also because STI infection is a co-factor in HIV transmission(9).

Adler and et al says, there is a synergy between most STIs and HIV. Many research studies in both the developed and developing world have shown that HIV transmission and acquisition are enhanced by the presence of STIs, probably because of the inflammatory effect of STIs in the genital mucosa(15).

As WHO adolescence is the age range when persons are 10-19 years old. The definition of adolescents overlaps with that of the youth (aged 15-24 years) and young people (aged 10-24 years)(13). Adolescents are disproportionately affected by STIs because of their engagement in unsafe sexual practices such as multiple sexual partnerships, casual sex and inconsistent condom use; this implies that the group deserves due attention and neglecting this population has a major implication on sexual and reproductive behaviors as they grow into adults(16).

The sexual and reproductive health issues of young people are of international and national concern as a result of HIV/AIDS pandemic, growing rates of other STIs and complications of early, unplanned or unwanted pregnancy. The issues also have demographic and social dimension(17).

Youth health was identified as a major public health problem especially among developing nations of the world(18). About 63% of the total population of Ethiopia is below the age of 25 years. Young people of ages 10–24 are the largest group to be entering adulthood(19). Sexually Transmitted Infections, including HIV mainly affects sexually active young people(20). Epidemiological data demonstrating that high rates of STI decline with age suggest the existence of a biological vulnerability unique to adolescents(21).

As mentioned by WHO, Interventions to prevent and control STIs are among the most cost-effective public health measures, and contribute to the achievement of several MDGs namely: Goal 4 which seeks to reduce child mortality by 2015; Goal 5 which seeks to reduce maternal mortality by three-quarters by 2015; and Goal 6 which calls on nations to reverse the spread of diseases, especially HIV/AIDS among marginalized populations who frequently have poor access to services(22).

The global strategy for the prevention and control of STIs 2006–2015 was developed in response to World Health Assembly resolution WHA53.14 which called for development of a global health-sector strategy for responding to the epidemics of HIV/AIDs and STIs(22).

Ethiopian Health policy priorty directs to health promotion and disease prevention(23). In Ethiopia there are RH and HIV/AIDS strategy ,which focuses on HIV/AIDS, adolescents, maternal and new born health(24). Population groups most at risks of HIV infection include female sex workers, migrant workers, long distance drivers, in-school youth, people in uniformed forces, displaced populations, discordant couples, people interfacing small towns and night markets, people engaged in harmful traditional activities(25).

Even though there are Prevention and control efforts done ,EDHS 2011 showed behavioral gaps that women in the Gambella region report a markedly higher mean number of lifetime sexual partners 8.1 than women in other regions 1.2 to 2 partners. In Gambella HIV prevalence is 6.5%, higher when compared to 1.5% of the country(9).

CHAPTER TWO: LITERATURE REVIEW

2.1 Risky sexual behavior

Those who cosumed alcohol were more likely at risk in practicing unsafe sex when compared to their counter parts(26). A study conducted in India showed that, large number of students 12.6% had risky heterosexual intercourse(27). A cross sectional study conducted in Chicago, America revealed that, both sexes were more likely to report inconsistent condom use in the previous 30 days(28). A study conducted in Nepal showed that, risky sexual behavior were reported by the respondents(29). A cross sectional study in Rwanda showed that, when asked about their current romantic relationship,10.5% indicated having more than one sexual partner (12.9% for males; 7.8% for females)(30).

A community based cross sectional study conducted in Gonder showed that, a total of 61.7% respondents had sexual intercourse in their life time, from these 80.5% of them used condom inconsistently in the last 12 months. The main reasons for not using were perceived reduction of sexual pleasure (34.8%), followed by negligence to use condom (26.2%) and too expensive to buy condom (12.3%)(31). A Hospital based comparative cross sectional study conducted in Ethiopia showed that, 6.4% and 5.1% of the sexually active respondents had sex with non regular and commercial sexual partner respectively(31).

2.2 Factors affecting sexual behavior

2.2.1 Substance use

Adolescent alcohol use is significantly associated with a higher likelihood of engaging in risky sex for both sexes; adolescent smoking is significantly associated with risky sexual activity among males, but not females(32). Substance users were about three times more likely to ever have sexual intercourse as compared to non users. This is also revealed by many studies that students are initiated to have sexual intercourse after having substances like alcohol, chat and shisha(33). A cross sectional study conducted in Ethiopia showed that, initiation of Khat use before 18 years of age may increase a potential exposure to HIV/AIDS by causing loss of inhibition and involvement in risky sexual behaviors such as early sexual initiation, unprotected sex, multiple sexual partners, prolonged and traumatic sex(47).

2.2.2 Parental monitoring

A close parental monitoring among students was associated with condom use at last sexual intercourse. Students who are closely monitored may feel especially loved and cared for by their parents. For that reason, they may refrain from risky sexual behaviors to avoid disappointing their parents, particularly when it may result in STIs and pregnancy. Students may refrain from risky sexual behaviors to avoid being punished by their parents when undesired outcomes such as pregnancy occur(34).

Parents were motivated to control and monitor their children's behaviour for reasons such as social respectability and protecting them from undesirable sexual outcomes. Study conducted in Tanzania, revealed that close parental monitoring has a positive influence on preventive sexual behavior(35). A comparative cross sectional study conducted in Ethiopia, revealed that, youths who reported that their parents always knows (close parental monitoring) what they are doing when they are away from home were less likely to had premarital sex when compared to their counter parts(1).

2.2.3 Knowledge about HIV/STI

A study conducted in Wolaita Sodo University, knowledge regard to modes of transmission, 96.7% mentioned unprotected sex causes for STIs; 1.8% study participants reported that they didn't know how STIs are transmitted and 96.2% reported as people can get protected from STIs, of which consistent condom use 60.7%; being faithful 66.4%; and abstaining 62.5% were reported as preventive measures by study participants(36).

A study conducted in Nekemte Town high school students, shows that adolescents,81.8% of the respondents claimed to have ever heard about sexually transmitted diseases, of which, HIV/AIDS 92.3%, Chancroids 65.4%, syphilis 41.3% and gonorrhea 40.5% were the most commonly known types of STI(37).

2.2.4 Individual characterstics

A cohort study conducted in Gonder town showed that, 35.8% had complained of one or more of the STIs symptoms. Most cases were aged between 15 and 49 years (97.9%). Females constituted the majority, 78.6% of STI cases (38), females started sexual activity earlier than males(39).

The sociocultural and economic contexts in developing countries influence the epidemiology of STIs.The sexual behaviors are heavily influenced by the sociocultural, economic, and political contexts, which in the past two decades have deteriorated at an accelerated rate in many areas(40).

Fall in the age of menarche, increasing age at first marriage, increased participation of women in the labor force, wide spread migration to urban towns, weakening of traditional norms and values and transmission of new ideas through films, music, book and mass media are believed to be contributory to this observed increase in premarital sexual activity(41).

2.2.5 Source of information about HIV/ STI

A study conducted in Filipinise showed that, participants were got information regarding STI/HIV from different sources. These were friends (57.5% by the Internet and youth magazines (27.1%)(4). A cross sectional study conducted in India sowed that, over 60% of participants stated 'doctor' as their preferred source for advice about contraception and sexual health. Approximately half of students wanted to learn from books (50.6%)(42).

A study conducted in Saudi Arabia in 2008; on awareness of adolescents on STI; showed that, the major source from where respondents received information were internet 87%, books 73%, TV/radio 62%, friends 55%, newspapers/ magazines 50% and family 37% (43).

All the students had heard about AIDS before the interview. The source of information were radio (50%), television (46.7%), News paper (33.3%), teachers (25%), parents (21.7%), health workers (13.3%) and youth club (11.7%) where more than one sources were common(45).

2.2.6 Parental background

A cohort study conducted in Taiwan showed that, specific family factors associated with a significantly lower likelihood of premarital sex were: having a more highly-educated mother for male college students; and having a lower family income for female college students(46).

Parental knowledge of out-of-home activities of young males was associated with reduced odds of sexual activity(48). A study conducted in Mombassa, Kenya; those who reported to having engaged in sexual intercourse were 3.7% from high SES, 3.2 from middle, 2.3 from skilled, 4.1 from business and 7.4 from unemployed(49).

A cross sectional study conducted in Tanzania showed that, parents were motivated to control and monitor their children's behaviour for reasons such as social respectability and protecting them from undesirable sexual health outcomes. Family structure seems an important factor affecting both the level of parental control and monitoring and the sexual decisions of young people(50).

2.2.7 Perception(perceived susceptibility, perceived severity)

A cross sectional study conducted in China showed that among FSWs found that perceived susceptibility and severity to STDs/HIV, and self-efficacy were unrelated to the behavior of consistent condom use(51).

2.3 Conceptuual framework

The conceptual frame work below has been adapted from health belief model (percievd susceptiblity, perceived severity) and from different literatures reviewed. Respondents and parental back ground, knowledge respondents about HIV/STI, respondents perception (perceived susceptibility and severity towards STI/HIV), substance use had direct influence on risky sexual behavior. Figure 1. below shows diagrammatic presentation of conceptual frame work.

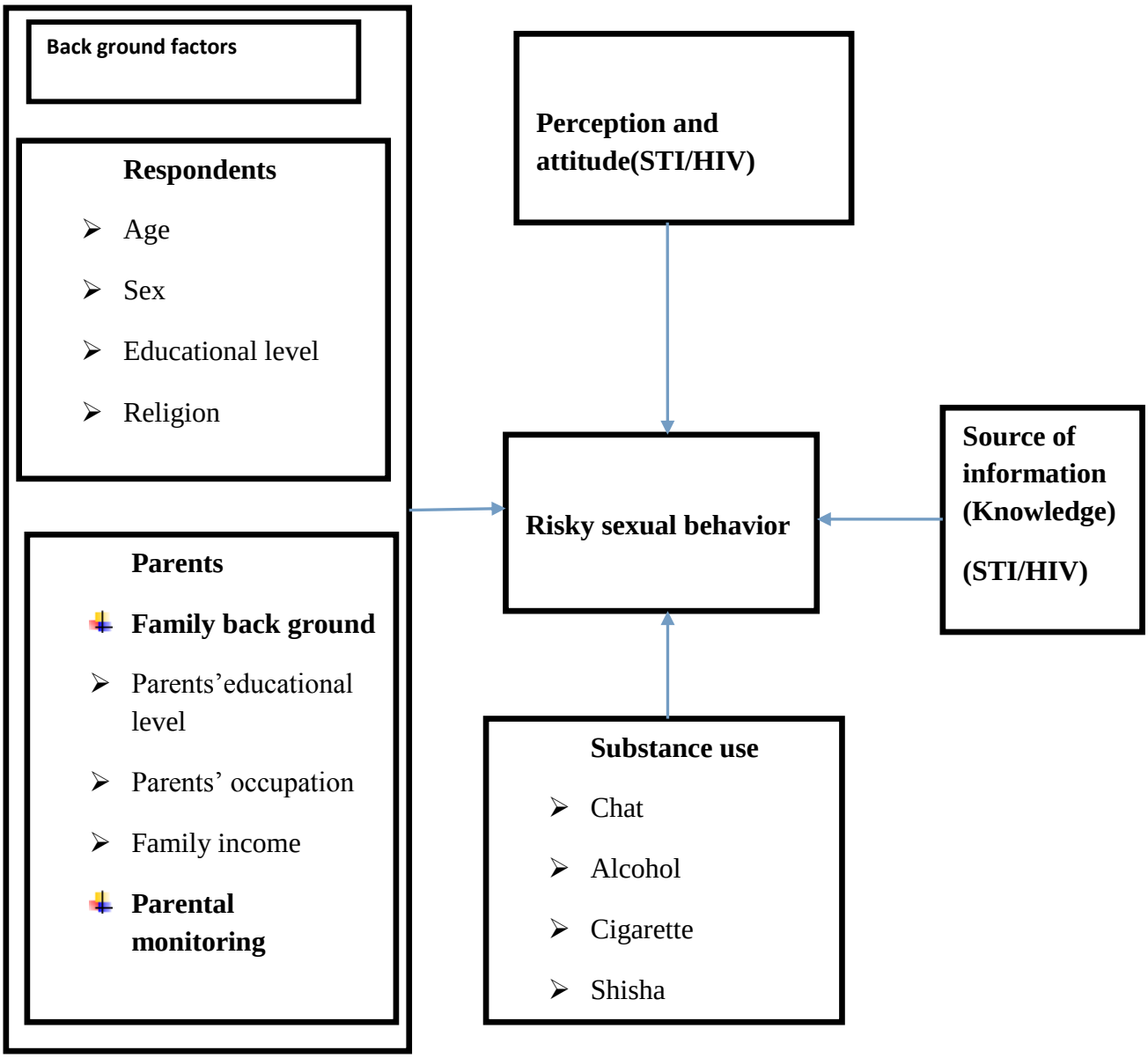

Figure 1: Conceptual frame work of risky sexual behavior and associated factors among high school students.

2.4 Significance of the study

This study tried to answer what is the prevalence of risky sexual behavior among high school students in Gambella town. So it might add an input on youth (young) sexual health. Government and Non Government Organizations(NGOs) can use this study result for planning and implementation on school health programs. And also helps to provide recommendation for respective bodies (stake holders) based on the findings. Finally this study will be used as a base line data in the study area for next researchers.

2.5 Research questions

1. What is the prevalence of risky sexual behavior among high school students in Gambella town?
2. What are the factors associated with such risky sexual activities/behaviors among high school students of Gambella town?

CHAPTER THREE: OBJECTIVE

3.1 General Objective

To assess risky sexual behavior and associated factors among high school students in Gambella Town, in 2014.

3.2 Specific Objectives

1. To assess risky sexual behavior of Gambella town high school students.
2. To identify factors associated with risky sexual behavior of students.

CHAPTER FOUR: METHODS

4.1 Study area and period

The Gambella Peoples' National Regional State has about 406,606 population. Administratively the region has three zones under which there are 14 woredas. The region is one of the lowland areas in the country with an annual temperature estimated average minimum of 18^{o}c and maximum of 38^{o}c that can reach occasionally 45^{o}c and an annual rainfall of 1400mm to 2000mm.

The study was carried out in Gambella town, the capital of Gambella Peoples National Regional State, which is 777 km away from Addis Ababa in the south western direction. The town has 5 kebeles and a total population of 51,660. There are four colleges, four high schools, five kinder Gardens, seven first and second cycle primary schools. The study period was March, 14, 2014.

4.2 Study Design

An institution based cross sectional study design was used.

4.3 Population

4.3.1 Source population

All students enrolled in grade 9-12 in the academic year of 2013/14, in Gambella town.

4.3.2 Study population

Sampled high school students in 2014 in Gambella town.

4.3.3 Inclusion Criteria

All regular students of four schools in 2013/14 academic year were eligible.

4.3.4 Exclusion criteria

Seriously ill students were not be included.

4.4 Sample size and sampling procedures

Sample size was determined by using single population proportion formula. A study conducted in Jimma zone showed that risky sexual behavior was 43%(52). So sample size was calculated by using the proportion of risky sexual behavior 43% with 95% confidence level and 5% margin of error.

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

n= Sample size

Zα/2= Standard variant (1.96) which corresponds to 95% confidence level

P= Proportion of students risky sexual behavior =43%

D= Acceptable margin of error (precision of measurement) = 5%

Sample (n) =1.96*1.96*0.43*(1-0.43)/0.05*0.05=375

Finally by adding 15% non response rate the total sample size become **432.**

4.4.1 Sampling method

There were four high schools in Gambella town (three high schools from grade 9-10 and one high and preparatory school from grade 9-12) and all of them were included in the study. First, the sample size was proportionally allocated to each school based on total number of students. Secondly, proportional to size allocation method (proportionate to size in each grade level) was employed within each school. Finally, simple random sampling method (computer generator number) was used to recruit respondents after constructing separate sampling frame for each grade. Figure 2. Shows the diagrammatic presentation of sampling procedures below.

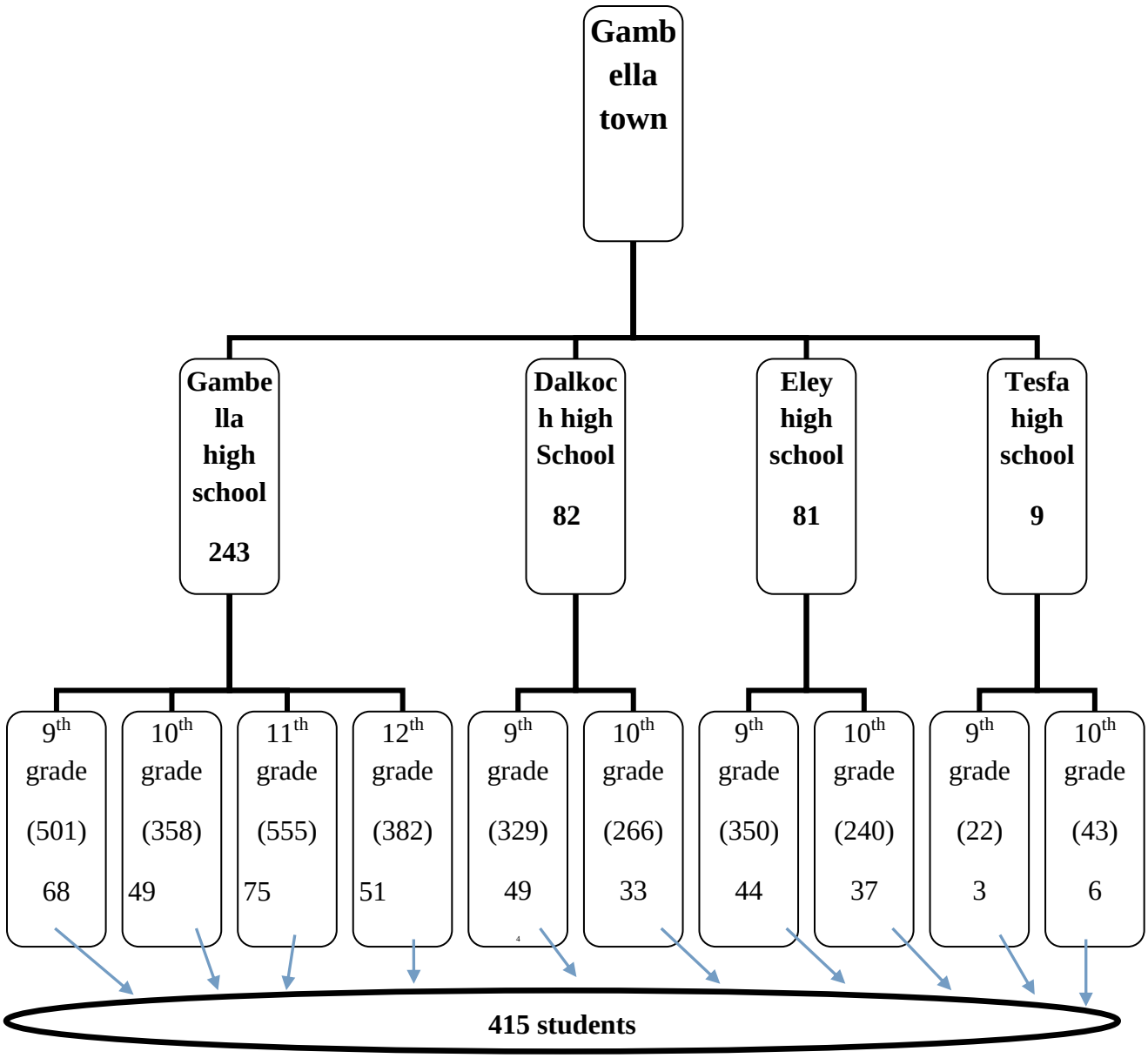

Figure 2 Schematic presentation of sampling procedures of risky sexual behavior and associated factors among high school students in Gambella town, 2014..

4.5 Measurement

4.5.1 Variables

4.5.1.1 Dependent variable

The outcome variable was risky sexual behavior.

4.5.1.2 Independent variables

The independent variables had include sociodemographic factors, knowledge/perception, attitude towards preventive behavior and substance use behaviors.

A. Respondents and parental background

- Age
- Sex
- Educational level
- Religion
- Respondents' income
- Occupation of parents
- Parents' educational level
- Parental monitoring
- Family income

B. Knowledge/Perception about HIV/AIDS/STI and attitude towards STI/HIV preventive behavior.

C. Substance use

4.5.2 Data collection instrument

Data collection instrument was pre-tested, structured self administered questionnaire. Questions were adapted for this study from published similar studies(44) the tool will assess:

Respondents' and parents' back ground: This part of the questionnaire consisted of respondents' background (age, sex, grade level) and parental background including education, residence, occupation and income.

Comprehensive knowledge about HIV/STI: Prevention and transmission of STI/HIV and misconception of HIV was considerd to talk about comprehensive knowledge of respondents.

Perceived susceptibility: This concept was measured using 6 items on five point likert scale format ranging from strongly agree(5) to strongly disagree(1).

Perceived severity: This concept was measured using 6 items on five point likert scale format ranging from strongly agree(5) to strongly disagree(1).

Attitude towards STI/HIV preventive behavior: This part was measured using 19 items on five likert scale format ranging from strongly agree(5) to strongly disagree(1).

Risky sexual behavior of study participants: This part was assessing risky sexual behavior of study participants 12 months prior to the study (March, 2013 to February, 2014).

Parental monitoring: Parents' monitoring of their children contains 5 items; on Silverberg's parental monitoring scale from always know(5) to never know(1).

Substance use: This section assessed substance use experience of respondents.

4.6 Data collection process

Respondents were asked to fill self administered quessionnaire before class begins. The participants randomly selected from each grade of the school and who were volunteer were asked to fill self administered questionnaire all school at a time to avoid information contamination. Respondents who were not present at class room during data collection time were considered as non respondent.

Two supervisors (Degree holder in health) and ten facilitators (individual who completed at least college Diploma in Health) were recruited from health office and health center respectively. Then after taking a one day training on the objective, purpose of the study they had distributed the questionnaire to the study participants. Supervisors were supervise and coordinate their respective school data collection activity. The investigator identified study participants and coordinated all over activity.

4.7 Data processing and analysis

After the data collection, data was checked manually for its completeness. It was entered, cleaned and rechecked and stored in to Epi-Data version 3.1 then it was exported to Statistical Packages for Social Sciences (SPSS) window versions 16.0 for analysis.

Attitude and parental monitoring items had been exposed to principal component analysis(factor analysis). Parental monitoring(5 items) each has been reduced in to one factor. The reliability test had done to perceived susceptibility, perceived severity and parental monitoring, chrombach's alpha values were 0.818, 0.767 and 0.891 respectively. Attitude(19 items) had reduced to 4

factors (condom is effective and suitable to prevent STI/HIV/pregnancy but embarassing to buy it and reduce pleasure; engagement in sex reduces academic performance so abstain if not befaithful and use condom; eventhough condom is available, students should not engage in sex before marriage and students of both sexes can have more than one sexual partner and sex before marriage;) were the 1st , 2nd, 3rd, and 4th factors emerged respectively. The variance explained by the 1st, 2nd, 3rd, and 4th factors were 16.6%, 15.3%, 12.6% and 12.2% of variance respectively. Jointly the variance explained in the data was 56.88%.The chrombach's alpha value of 1st, 2nd, 3rd, and 4th factors were 0.808, 0.780, 0.772 and 0.684 respectively. This factors (dimensions) were considered for logestic regression.

The frequency distribution of dependent and independent variables were worked out. Odds ratios was calculated to determine the strength of associations of selected variables. P-values less than 0.25 in bivariate logistic regression were considered for multiple logistic regression. After multiple logestic regression p-value less than 0.05 was used to declare association between factors(predictors) and the dependent variable. The result was presented by frequency tables and discussed with previous study findings.

4.8 Ethical consideration

After approval of the proposal, ethical clearance was obtained from Research and Ethics Committee of Jimma University. Formal supportive letter was obtained from Health Education and Behavioral Sciences Department. The necessary permission was obtained from Gambella Regional Health Bureau, Gambella Regional Education Bureau, Gambella Town Education Office, Gambella Town Health Office and finally from study schools. Oral informed consent was obtained from the study participants (students) after explaining the purpose of the study. If the age of study participants was less than 18 years old; written consent form was taken from their parents or care givers and assent was asked from them. Participants were assured that their name will not be stated, Data was kept confidential and anonymous and it was used only for research purpose. The participants were informed that this information can be accessed by the investgetor. They also informed that they were not be forced to answer the entire question and they can withdraw at any time if they don't want to participate.

4.9 Data quality management

4.9.1 Tool development, translation, training to facilitator

Data quality was ensured during instrument development(tool adapted from published similar studies) collection, coding, entry and analysis. The questionnaire first was translated to Amharic language (used for data collection) and retranslated back to English language before data collection and different translators were used to keep the consistencey of the questionnaire. Then 2 supervisors and 10 facilitators (since the questionnaire is self administered) were trained about the purpose of the study and how to supervise and distribute and collect self administered questionnaire respectively

4.9.2 pretest, checking completeness, coding, cleaning and entry

The Instrument was tested on 22(5%) of the respondents in Gambella, Itang special woreda high school which was not included in the study and had similar set up with study area, before the actual data collection. During data collection, questionnaire was checked for its completeness on a daily basis by facilitators, supervisors and then by investigator. If there was a problem encounter during data collection, there was discussion with supervisors and facilitators accordingly. Incorrectly filled or missed questionnaire was discarded from analysis

4.10 Operational definitions

Comprehensive knowledge of STI/HIV: Comprehensive knowledge about AIDS is defined as (1) knowing that both condom use and limiting sex partners to one uninfected partner are HIV prevention methods, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions in Ethiopia, that HIV/AIDS can be transmitted through mosquito bites and by supernatural means(9).

Inconsistent condom use: is a sexual behavior, who replied "occasionally" when asked "how frequently you use condom in the last 12 months? or no when asked whether s/he and the partner used a condom the first time they had sexual intercourse(27).

Risky Sexual behavior: Self report sexual activity; if a respondent report at least one from unprotected sexual intercourse, multiple sexual partner or inconsistent condom use in the last 12 months before the survey.

Sexually active: Refers to both boys and girls who had at least one sexual encounter in the past 12 months before the survey.

Multiple sexual partner: If a respondent reported has two or more sexual partner 12 months prior to the survey.

Perceived susceptibility: It is an individual belief of being at risk of HIV/AIDS/STI. This concept was measured using 6 items on five point likert scale format ranging from strongly agree(5) to strongly disagree(1). The items were stated in statement form and respondents' were asked to indicate their level of agreement with each statement. The items cover ones' own perceived susceptibility to STI/HIV/AIDS. The score of each item was summed up to compute composite score which was used for further analysis. The higher the score to the scale reflects the higher the perceived susceptibility among the respondents.

Perceived severity: It is an individual beliefs on seriousness of HIV/AIDS/STI. This concept was measured using 6 items on five point likert scale format ranging from strongly agree(5) to strongly disagree(1). The items are stated in statement form and respondents' were asked to indicate their level of agreement with each statement. The items cover ones' own perceived severity to STI/HIV/AIDS. The score of each item was summed up to compute composite score which was used for further analysis. The higher the score to the scale reflects the higher the perceived severity among the respondents.

Substance use: If respondents report at least one from chewing khat, shisha/cigarate smoking or alcohol consumption, in the last 12 months prior to the survey, was classified as user, unless otherwise non user. The score was measured using 4 items, coded 1(yes) and 2(no). The possible minimum and maximum score were 0 and 4 respectively. Respondents who score 0, were non user while who score 1-4 were substance users.

Attitude(STI/HIV) preventive behavior: Self report respondents attitude towards STI/HIV preventive behavior was measured using 19 items on five likert scale format ranging from strongly agree(5) to strongly disagree(1). The minimum score was 19 and the maximum was 95. The items were stated in statement form and respondents were asked to answer the level of agreement towards HIV/STI preventive behavior. Each item scores was added to give total scores,which was used for further analysis. The higher the score to the scale reflects the higher the attitude towards HIV/STI preventive behavior.

Parental monitoring: Asking the students how often they informed their parents about their whereabouts and with whom they are spending time when they are not at home or at school. In this study, a parent was referred to as either a biological parent or any other adult living with a

student, as his or her guardian. There were five scale items, coded 1 (never) to 5(always).The minimum and maximum possible score were 5 and 25 respectively. After factor analysis a single score was used for further analysis.

4.11 Dissemination plan

The findings of this study will be disseminated to college of public health and medical science and department of Health Education and Behavioral Sciences, Gambella Regional Health Bureau, Gambella Regional Education Bureau, Gambella Town Health Office and Gambella Town Education Office. The findings will be also disseminated to different stakeholders that have a contribution to improve students' health services. Finally effort will be made to present in various seminars and workshops and for publication in national or international journals.

CHAPTER FIVE: RESULT

5.1 Socio demographic Characterstics

5.1.1 Respondents socio demographic characterstics

Four hundred fifteen (97% response rate) participated in the study. Table 1 contains background characterstics of the respondents, consequently, 253 (61%) of them were males. The mean age of respondents were 18.68, (SD± 2.65). In terms of religion affilation 163(39.3%) and 157(37.8%) of respondents were respectively followers of Protestant and Orthodox Christianity respectively. Regarding ethnic composition 116(28%) respondents were Nuer followed by Amhara and Oromo ethnic groups.

Table 1. Socio demographics characterstics of the respondents' ,Gambella town, Ethiopia. Mar. 2014.

Variable	Frequency(n=415)	Percent
Respondents' Sex		
Male	253	61
Female	162	39
Respondents' Religion		
Protestant	163	39.3
Orthodox	157	37.8
Muslim	48	11.6
Catholic	41	9.9
Other*	6	1.4
Respondents' educational level		
9th Grade	166	40.0
10th Grade	143	34.5
11th Grade	56	13.5
12th Grade	50	12.0
Respondents' marital status		
Single	380	91.6
Married	20	4.8
Engaged	11	2.6

Divorced	4	1.0
Respondents Ethnicity		
Nuer	116	28.0
Amhara	87	21.0
Oromo	75	18.0
Agnua	57	13.7
Other**	80	19.3
Respondents' income		
Yes	204	49.2
No	211	50.8

*****=responded no for religion and **= were sum of (Tigre=30, Kembata=19, Kaffa=11, Gurage=11 and Wolaita=9) ethnic groups.

5.1.2 Parents' sociodemographic characterstics

Respondents' parental background characterstics is presented in Table 2. Their residence were 279(67.2%) Urban and 136(32.8%) were Rural. Majority 277(66.7%) of Parents' were married and live together. Fathers' educational level was 97(29.5%) secondary school, and 107(27.3%) mothers' were read and write. Both father and mother job was farmer 106(32.2%) and 122(31.1) respectively. Monthly income of parents' was minimum 200 and maximum 5000 Ethiopian Birr.

Table 2. Socio demographics characterstics of the parents' ,Gambella town, Ethiopia. Mar. 2014.

Variable	frequency	Percent
Parents' marital status(both father and mother)(n=415)		
Married and live together	277	66.7
Mother alive father dead	82	19.8
Father alive mother dead	21	5.1
Divorced	24	5.8
Others*	11	2.7
Fathers' educational level(n=329)		
Illiterate	60	18.2

Read and write	97	29.5
Primary school	42	12.8
Secondary school	97	29.5
University/college	33	10
Mothers' educational level(n=392)		
Illiterate	99	25.2
Read and write	107	27.3
Primary school	60	15.3
Secondary school	99	25.3
University/college	27	6.9
Fathers' job(n=329)		
Government employee	105	31.9
Merchant	81	24.6
Farmer	106	32.2
others**	37	11.3
Mothers' job(n=392)		
Farmer	122	31.2
Merchant	100	25.5
Others**	93	23.7
Government employee	77	19.6
Parents monthly income(both father and mother)(n=415)		
≤500	161	38.8
501-999	56	13.5
≥1000	198	47.7

*= Both parents dead **=Self employ, daily labourer and house wife

5.2 Knowledge and source of information (media exposure)

5.2.1 Source of information

Most 383(92.3%) of respondents had ever heared of STI/HIV, massmedia was the major source of information. The second source of information was text books, which accounts 122(29.4%). See table 3 below.

Table 3. Respondents' source of information about STI/HIV, Gambella town, Ethiopia.Mar,2014.

Variable	Frequencey	Percent
Mass media	200	52.1
Textbooks	122	29.4
School based health education	104	25.1
Friends	40	9.6
Family	32	7.7

5.2.2 Knowledge related to STI/HIV

Respondents knowledge related to transmission and prevention methods of STI/HIV is presented in Table 4. Accordingly, the majority of respondents, 348(83.9%), mentined that STI/HIV is transmitted through unprotected sexual intercourse followed by sharing contaminated sharp materials and having multiple sexual partners which accounts 131(31.6%) and 127(30.6%) respectively. However, 49(11.8%) of respondents also believed that HIV can be transmitted by mosquito bites. There were also respondents who attributed HIV to curse of God and sharing food with HIV positive people.

Regarding prevention methods, abstain was mentioned by 298(71.8%) respondents, followed by befaithful and use condom which accounts 50.1% and 35.7% respectively. Respondents were asked about signs and symptoms of STI and 312(75.2%) respondents mention sores on sexual organ. Inaddition 218(52.5%) respondents stated painful urination and 182(43.9%) itching on genital area. Eighty-nine (50%) respondents of ever sexually practiced had seen at least one of the above signs and symptoms of STI and nearly 51% of them still did not need treatment.

Comprehensive knowledge was assessed; those who replied abstain, befaithful and use condom as prevention method and unprotected sexual intercourse as way of STI/HIV transmission and rejection of misconceptions like curse of God and mosquito bites as way of transmission. So the mean score of comprehensive knowledge was 0.73 with SD±0.44. Three hundred two(73%) respondents had comprehensive knowledge(76.2% males versus 68.3% females).

Table 4. Knowledge of respondents' related to STI/HIV, Gambella town, Ethiopia, Mar.2014.

Variable	Frequency	Percent
Mode of transmission of STI/HIV		
Unprotected sexual intercourse	348	83.9
Sharing contaminated sharp materials	131	31.6
Having multiple sexual partners	127	30.6
Blood transfusion without test	93	22.4
Intavenous drug use	78	18.8
Prevention method of STI/HIV		
Abstain from sexual intercourse	298	71.8
Use condom	208	50.1
Faithful to one partner	148	35.7
Avoid sharing razor blades	135	32.5
Avoid blood transfusion with out test	121	29.2
Avoid sex with prostitutions	115	27.7
Signs and symptoms of STI		
Sources on genital organ	312	75.2
Painful urination	218	52.5
Itching on genital area	182	43.9
Discharge from genital area	181	43.6
Ever seen signs and symptoms	89	21.4

Not ever seek treatment	44	49.4
Misconception of HIV		
Healthy-looking person can have HIV virus	297	71.6
HIV can be transmitted by mosquito bites	49	11.8
People get HIV virus because of curse of God	45	10.9
People get HIV virus by sharing food with a person who had HIV	25	6.0

5.3 perception about STI/HIV/AIDS

5.3.1 Percived susceptibility and severity:- Respondents' perception of susceptibility and severity of STI was assessed and response to each item is presented in Table 5. As displayed in the table most respondents were negatively responded to perceived susceptibility items(5 items), but most respondents were positively responded to "I don't think that I am at risk of HIV infection" item. Mean susceptibility score was 16.15 and (SD±6.1), and range of possible score was between 6 and 30. For perceived severity most respondents were positively responded to all perceived severity items, mean severity score was 18.9(SD±5.48), and range of possible score was between 6 ans 30.

Table 5. Respondents' perception about STI/HIV, Gambella town, Ethiopia, Mar.2014.

Variable	Strongly disagree (1) Fr.(%)	Disagree (2) Fr.(%)	Neutral (3) Fr.(%)	Agree (4) Fr.(%)	Strongly agree(5) Fr.(%)
Perceived susceptibility					
I feel my chance of getting HIV/AIDS is high.	153(36.9)	92(22.2)	26(6.3)	110(26.5)	34(8.2)
I do not think that I am at risk of HIV infection.	78(18.8)	83(20.0)	91(21.9)	99(23.9)	64(15.4)
It is possible that I will get HIV.	112(27)	107(25.8)	66(15.9)	84(20.2)	46(11.1)
A person may get HIV in one or the	93(22.4)	103(24.8)	69(16.6)	101(24.3)	49(11.8)

other way. Thus, it is likely that I will get infection with HIV					
I am afraid of I might contract STI.	122(29.4)	92(22.2)	56(13.5)	75(18.1)	70(16.9)
I am not confident that I might have not get STI still.	130(31.3)	97(23.4)	82(12.5)	85(20.5)	51(12.3)
Percieved severity					
AIDS is probably the worst disease a person can get.	83(20)	51(12.3)	57(13.7)	135(32.5)	89(21.4)
AIDS is dangerous in high school students.	59(14.2)	74(17.8)	74(17.8)	137(33)	71(17.1)
I would rather have any other serious illness than AIDS.	72(17.3)	95(22.9)	57(13.7)	117(28.2)	74(17.8)
My life would be hard if I get HIV/AIDS.	63(15.2)	82(19.8)	63(15.2)	129(31.1)	78(18.8)
STI causes infertility.	59(14.2)	63(15.2)	103(24.8)	123(29.6)	67(16.1)
STI is less dangerous when compared with HIV.	66(15.9)	93(22.4)	82(19.8)	117(28.2)	57(13.7)

5.4 Attitude towards STI/HIV preventive behavior

Respondents attitude were assessed and result is displayed in Table 6. Majority of the respondents were positively responded to most attitude items. The mean attitude score was 59.74 with SD±13.77. After factor analysis, 4 factors had been emerged. Each mean score of 1st, 2nd, 3rd, and 4th of factors (dimensions) were 3.17(SD±1.27); 3.2(SD±1.35); 3.3(SD±1.4) and 2.74(SD±1.4) respectively.

Table 6. Respondents attitude towards STI/HIV preventive behavior, Gambella town,Ethiopia.Mar.2014.

Variable	Strongly disagree(1) Fr.(%)	Disagree(2) Fr.(%)	Neutral(3) Fr.(%)	Agree(4) Fr.(%)	Strongly Agree(5) Fr.(%)
Condoms effectively protect	64(15.4)	48(11.60	77(18.6)	174(41.9)	52(12.5)

against STIs.					
Condoms effectively protect against HIV.	48(11.6)	56(13.5)	82(19.8)	156(37.6)	73(17.6)
Condoms effectively protect against pregnancy.	44(10.6)	53(12.8)	71(17.1)	173(41.7)	74(17.8)
Condoms are suitable for steady relationships.	62(14.9)	74(17.8)	114(27.5)	117(28.2)	48(11.6)
It would be too embarrassing to buy condoms.	83(16.6)	69(16.6)	98(23.6)	110(26.5)	55(13.3)
Condoms reduce sexual pleasure.	77(18.6)	74(17.8)	105(25.3)	97(23.4)	62(14.9)
Condom is easily available if one want to buy.	57(13.7)	62(14.9)	50(12.0)	143(34.5)	103(24.8)
Young people should not engage in sex before marriage.	74(17.8)	73(17.6)	51(12.3)	109(26.3)	108(26.0)
Girls should not have sex before marriage.	70(16.9)	68(16.4)	59(14.2)	112(27)	106(25.5)
It is allowed for boys to have sex before marriage.	119(28.7)	87(21)	71(17.1)	95(22.9)	43(10.4)
It would be okay for girls to have more than one sex partners.	120(28.90	85(20.5)	72(17.3)	95(22.9)	43(10.4)
Boys can have more than one sexual partner.	98(23.6)	83(20)	62(14.9)	100(24.1)	72(17.3)
Being abstain from sex is an	63(15.2)	61(14.7)	56(13.5)	131(31.6)	104(25.1)

effective means of reducing one's own risk of HIV infection.					
High school students should not engage in sex.	71(17.1)	68(16.4)	56(13.5)	123(29.6)	97(23.4)
Having only one sexual partner is good for my partner as well as for me.	51(12.3)	49(11.8)	52(12.5)	130(31.3)	133(32)
Using condom shows that I care about my partner.	55(13.3)	59(14.2)	73(17.6)	138(33.3)	90(21.7)
The sensory aspects (smell, touch, etc.) of condoms make them unpleasant.	65(15.7)	70(16.9)	131(31.6)	100(24.1)	49(11.8)
Engagement in sex would lower ones' own academic achievement.	71(17.1)	66(15.9)	90(21.7)	110(26.5)	78(18.8)
Having sexual partner is a sign of modernity for high school students	98(23.6)	92(22.2)	69(16.6)	91(21.9)	65(15.7)

5.5 Parental monitoring

Majority of the respondents positively responded to all items of their parental monitoring as described on Table 7. Parental monitoring has exposed to factor analysis and one factor (dimension) had emerged, and this factor was used for further analysis(logistic regression).

Table 7. Parental monitoring of respondents, Gambella town, Ethiopia.Mar.2014.

Variable	Never know(1)	Don't know(2)	Neutral(3)	Almost always	Always know(5)

				know(4)	
	Fre.(%)	Fre.(%)	Fre.(%)	Fre.(%)	Fre.(%)
How often does a parent know what you are doing away from home?	87(21)	56(13.5)	88(21.2)	112(27)	72(17.3)
How often does a parent know where you are after school?	66(15.9)	49(11.8)	75(18.1)	132(31.8)	93(22.4)
How often does a parent have an idea about your plans for the next day?	77(18.6)	53(12.8)	83(20)	128(30)	74(17.8)
How often does a parent know your interests, activities, and whereabouts?	73(17.6)	49(11.8)	76(18.3)	137(33)	80(19.3)
How often did a parent know where you were and what you were doing?	74(17.8)	57(13.7)	86(20.7)	91(21.9)	107(25.8)

5.6 Substance use

As indicated on table 8; 109(26.3%) respondents chew chat among them 73(67%) were males and 36(33%) females. Nintyfive(22.9%) the respondents consume alcohol among them 64(67.4%) and 31(32.6%) were males and females respectively. Concerning on cigarette and 'shisha', 15(3.6%) of the respondents smokes cigarattee, from the total respondents 19(4.6%) smoke 'shisha'. From the total respondents 133(32%) were substance users.

Table 8. Respondents distribution in substance use, Gambella town, Ethiopia. Mar. 2014.

Variable		Frequency	Percent
Had you chew Chat in the past 12 months?	Yes	109	26.3

	No	306	73.7
Had you drink alcohol in the past 12 months?	Yes	95	22.9
	No	320	77.1
Had you smoking cigarate in the past 12 months?	Yes	15	3.6
	No	400	96.4
Had you smoke shisha in the past 12 months?	Yes	19	4.6
	No	396	95.4

5.7 Risky sexual behavior of study participants

Table 9 presents sexual behavior of respondents. Accordingly 178(42.9%) of the respondents ever had sexual intercourse, where males account majority of them 119(66.9%). Majority of those (77.8%) who ever started sex reported that peers' pressure was the main reason to start sex. The minimum and maximum age of first sex was 11 and 24 years old respectively. Sixty three(35.4%) of males and 48(26.9%) of females had started sex before the age of 16. The mean age of first sex for both sexes was 14.97 with SD±2.4. There was mean and SD difference between sexes. The mean age of females at first sex was 14.51 with SD±2.2 while the mean age of males at first sex was 15.27 with SD±2.4. One hundred and thirty nine(78.1%) of those who ever started sexual intercourse were first started their sex with boy/girl friends. One hundred and one(56.7%) respondents had two or more life time sexual partner. Concerning recent sexual practice 136(76.4) of respondents were sexually active(had sex in the last 12 months prior to the survey), of them 94(69.1%) respondents had two or more recent multiple sexual partners and 110(80.9%) were inconsistent condom user. The main reason not using condom were uncomfortable and partner objection. From the total respondents 130(31.3%) were at risk sexual behavior. So the prevalence of risky sexual behavior was 31.3%, (35.6% male versus 24.7% female)

Table 9. Respondents distribution in their risky sexual behavior,Gambella town, Ethiopia. Mar. 2014.

Variable	Yes Fre.(%)	No Fre(%)
Ever had sexual intercourse	178(42.9)	237(57.1)
To start sexual intercourse(who influenced)		
Peers' pressure	137(77)	41(23)
Parents/guardian	29(16.3)	149(83.7)
Mass media	24(13.5)	154(85.5)
Religious leaders	18(10.1)	160(89.9)
First sex(with whom)		
Boyfriend/girlfriend	139(78.1)	39(21.9)
Teacher	20(11.2)	158(88.8)
Commercial sex worker	8(4.5)	170(95.5)
Life time sexual partners		
Only one person	77(43.3)	101(56.7)
Two or more persons	101(56.7)	77(43.3)
Reasons to start sexual intercourse		
Peers' pressure	74(41.6)	104(58.4)
True sexual desire	54(30.3)	124(69.7)
Boyfriend or girlfriend pressure	53(29.8)	125(70.2)

To get economic benefit	26(14.6)	152(85.4)
I don’t remember	22(12.4)	156(87.6)
Due to the effect of alcohol or other substance use	19(10.7)	159(89.3)
Curiosity	18(10.1)	160(89.9)
Raped/forced	3(1.7)	175(98.3)
Recent sexual practice/sexually active/	136(76.4)	42(23.6)
Recent sexual partner(n=136)		
Only one	42(30.9)	94(69.1)
Two or more persons	94(69.1)	42(30.9)
Ever used condom	95(53.4)	83(46.6)
Used condom at 1st sexual intercourse	52(29.2)	126(70.8)
Used condom at last sexual intercourse	45(33.1%)	91(66.9%)
Reasons of not ever use condom		
Not comfortable	18(21.7)	65(78.3)
Partner objected	14(16.9)	69(84.3)
Not easily accessible	13(15.7)	70(84.3)
Embarrassed to buy or ask for	10(12.1)	73(87.9)
It reduces sexual pleasure	10(12.1)	73(87.9)
Don’t trust condoms as they transmit HIV	8(9.6)	75(90.4)

Frequency of condom use		
occassionally	110(80.9)	26(19.1)
Always	26(19.1)	110(80.9)
Reasons not to start sexual intercourse		
Religious reason	105(44.3)	132(55.7)
Lack of desire	92(38.8)	145(61.2)
Fear of sexually transmitted infection including HIV	55(23.2)	182(76.8)
Economic reasons	18(7.6)	219(92.4)

5.8 Results of Bivariate analysis

Results of bivariate analysis, dependent variable risky sexual behavior with respondents sex, educational level, income, fathers' educational level and parent(mother/father) income, perception towards STI/HIV and parental monitoring. Table 10, 11 and 12 below describes results of binary logistic regression.

Table 10. Bivariate analysis of risky sexual behavior by students' socio demographic characterstics, Gambella town, Ethiopia.Mar. 2014.

Variable	**Risky sexual behavior**		**Total(%)**	**Crude OR**	**p-value**
	At risk	**Not at risk**		**(95%CI)**	
	n=130	**n=285**			
	No(%)	**No(%)**			
Respondents' Sex(n=415)					
Male	90(35.6%)	163(64.4%)	253(100)	0	
Female	40(24.7%)	114(75.3%)	162(100)	0.59(0.38-0.92)	0.02*

Respondents' educational level(n=415)					
9th	46(27.7%)	120(72.3%)	166(100)	0	0.16
10th	42(29.4%)	101(70.6%)	143(100)	1.08(0.66-1.78)	0.74
11th	24(42.9)	32(57.1%)	56(100)	1.95(1.04-3.67)	0.03*
12th	18(36%)	32(64%)	50(100)	1.46(0.75-2.86)	0.26
Respondents religion(n=415)					
Protestant	56(34.4%)	107(65.6%)	163(100)	0	0.06
Orthodox	47(29.9%)	110(70.1%)	157(100)	0.81(0.51-1.30)	0.39
Muslim	8(16.7%)	40(83.3%)	48(100)	0.38(0.16-0.87)	0.02*
Catholic	15(36.6%)	26(63.4%)	41(100)	1.10(0.54-2.24)	0.78
Others**	4(66.7%)	2(33.3%)	6(100)	3.82(0.67-21.51)	0.12*

*=P-value less than 0.25 is considered as significant for further analysis. **=no religion

Table 11 Bivariate analysis of risky sexual behavior by parents' socio demographic characterstics, Gambella town, Ethiopia.Mar. 2014.

Variable	Risky sexual behavior		Total(%)	COR	P-value
	At risk n(%)	Not at risk n(%)			
Parents' residence(n=415)					
Urban	77(27.6)	202(72.4)	279(100)	0	0.001
Rural	53(39)	83(61)	136(100)	1.67(1.08-2.58)	0.02*
Fathers' education(n=329)					
Secondary	38(39.2)	59(60.8)	97(100)	0	0.12
Illiterate	15(25)	45(75)	60(100)	0.51(0.25-1.05)	0.07*
Read and write	54(70.1)	23(29.9)	77(100)	0.58(0.30-1.11)	0.10*
Primary	8(19)	34(81)	42(100)	0.36(0.15-0.87)	0.02*
University/college	15(28.3)	38(71.7)	53(100)	0.61(0.29-1.26)	0.18*
Mothers' education(n=392)					

Read and write	38(35.5)	69(64.5)	107(100)	0	0.28
Illiterate	29(29.3)	70(70.7)	99(100)	0.88(0.49-1.61)	0.14*
Primary	17(28.3)	43(71.7)	60(100)	0.84(0.42-1.69)	0.64
Secondary	40(40.4)	59(59.6)	99(100)	1.45(0.82-2.57)	0.19*
University/college	6(22.2)	21(77.8)	27(100)	0.61(0.22-1.65)	0.33
Fathers' job(n=329)					
Farmer	54(51)	52(49)	106(100)	0	0.04
Government employee	42(51.9)	39(48.1)	81(100)	1.25(0.70-2.20)	0.43
Merchant	25(30.9)	63(69.1)	81(100)	0.52(0.26-1.03)	0.06*
others**	9(24.3)	28(75.7)	61(100)	0.58(0.24-1.41)	0.23*
Mothers' job(n=392)					
Farmer	50(41)	72(59)	122(100)	0	0.26
Government employee	27(35.1)	50(64.9)	77(100)	0.89(0.49-1.61)	0.70
Merchant	28(28)	72(72)	100(100)	0.64(0.36-1.13)	0.12*
Others **	25(26.9)	68(73.1)	93(100)	0.60(0.33-1.09)	0.09*
Parents' (mother/father) income (n=407)					
≥1000	73(38.2)	117(61.8)	190(100)	0	
501-999	15(26.8)	41(73.2)	56(100)	1.10(0.55-2.20)	0.77
≤500	42(26.1)	119(73.9)	161(100)	1.88(1.18-2.99)	0.007*

*=p- value less than .25 was considered for multivariate analysis.

**=self employed and housewifes

Table 12. Bivariate alalysis, shows perception, attitude, parental monitoring and substance use, Gambella town, Ethiopia, Mar. 2014.

Variable	Risky sexual behavor		Total (%)	COR	P-value
	At risk n=130	Not at risk n=285			
Perceived susceptiblity	130(31.3)	285(68.7)	415(100)	0.56(0.45-0.70)	0.001*
Attitue(STI/HIV preventive behavior)	130(31.3)	285(68.7)	415(100)	0.66(0.53-0.82)	0.001*

Parental monitoring	130(31.3)	285(68.7)	415(100)	0.38(0.29-0.48)	0.001*
Substance use	130(31.3)	285(68.7)	415(100)	2.66(2.07-3.42)	0.001*

*p. value less than 0.25 had considerd for multivariate analysis.

5.9 Results of Multivariate analysis

Those variables(in bivariate logistic regression analysis) whose p.value was less than 0.25 were included in the multivariate analysis. Parents' income, parental monitoring and substance use reveals significant association with the outcome variable risky sexual behavior.

Parents monthly income, shows statistically significant with students' risky sexual behavior. Students whose parents gain ≥1000 Ethiopian Birr monthly income were 0.33 times less likely at risk sexual behavior when compared to those whose parents gain ≤500 Ethiopian Birr per month, (AOR:0.33, 95% CI:0.14-0.79; p=0.013).

Parental monitoring was significantly associated with outcome variable, risky sexual behavior. Students who had parental monitoring were 0.4 times less likely at risk sexual behavior, when compared to their counter parts, (AOR: 0.4, 95% CI:0.27-0.60; p=0.0001). Substance use was significantly associated with students risky sexual behavior. Students who use substances(chew chat, smoke cigaratee or shisha or drink alcohol) were 1.82 times more likely at risk sexual behavior when compared to non users. Perception and attitude were not statistically significant. See multiple logistic regression table 13 below.

Table 13. Multivariate analysis of risky sexual behavior by students' and parental socio demographic characterstics, Gambella town, Ethiopia.Mar. 2014.

Variable	**Risky sexual behavior**		**Crude OR**	**AOR**
	At risk	**Not at risk**	**(95%CI)**	
	n=130	**n=285**		
	No(%)	**No(%)**		
Respondents' Sex(n=415)				
Male	90(35.6%)	163(64.4%)	0	0
Female	40(24.7%)	114(75.3%)	0.59(0.38-0.92)	0.97(0.48-1.97)

Respondents' educational level(n=415)				
9th	46(27.7%)	120(72.3%)	0	0
10th	42(29.4%)	101(70.6%)	1.08(0.66-1.78)	0.86(0.28-2.65)
11th	24(42.9)	32(57.1%)	1.95(1.04-3.67)	1.05(0.34-3.23)
12th	18(36%)	32(64%)	1.46(0.75-2.86)	2.98(0.79-11.2)
Respondents religion(n=415)				
Protestant	56(34.4%)	107(65.6%)	0	0
Orthodox	47(29.9%)	110(70.1%)	0.81(0.51-1.30)	0.28(0.02-3.09)
Muslim	8(16.7%)	40(83.3%)	0.38(0.16-0.87)	0.21(0.01-2.48)
Catholic	15(36.6%)	26(63.4%)	1.10(0.54-2.24)	0.11(0.01-1.76)
Others**	4(66.7%)	2(33.3%)	3.82(0.67-21.51)	0.34(0.02-4.4)
Parents' residence(n=415)				
Urban	77(27.6)	202(72.4)	0	0
Rural	53(39)	83(61)	1.67(1.08-2.58)	0.68(0.31-1.49)
Fathers education(n=329)				
Secondary	38(39.2)	59(60.8)	0	0
Illiterate	15(25)	45(75)	0.51(0.25-1.05)	1.42(0.50-4.04)
Read and write	54(70.1)	23(29.9)	0.58(0.30-1.11)	2.08(0.34-12.41)
Primary	8(19)	34(81)	0.36(0.15-0.87)	0.60(0.13-2.74)
University	15(28.3)	38(71.7)	0.61(0.29-1.26)	0.82(0.20-3.34)
Mothers' education(n=392)				
Read and write	38(35.5)	69(64.5)	0	0
Illiterate	29(29.3)	70(70.7)	0.88(0.49-1.61)	3.31(0.59-18.49)
Primary	17(28.3)	43(71.7)	0.84(0.42-1.69)	0.53(0.07-3.63)
Secondary	40(40.4)	59(59.6)	1.45(0.82-2.57)	0.85(0.17-4.17)

University/college	6(22.2)	21(77.8)	0.61(0.22-1.65)	1.78(0.41-7.67)
Fathers' job(n=329)				
Farmer	54(51)	52(49)	0	0
Government employee	42(51.9)	39(48.1)	1.25(0.70-2.20)	1.78(0.38-8.19)
Merchant	25(30.9)	63(69.1)	0.52(0.26-1.03)	3.24(0.87-11.94)
others***	9(24.3)	28(75.7)	0.58(0.24-1.41)	0.58(0.13-2.49)
Mothers' job(n=329)				
Farmer	50(41)	72(59)	0	0
Government employee	27(35.1)	50(64.9)	0.89(0.49-1.61)	1.02(0.30-3.43)
Merchant	28(28)	72(72)	0.64(0.36-1.13)	0.37(0.12-1.12)
Others***	25(26.9)	68(73.1)	0.60(0.33-1.09)	1.97(0.67-5.77)
Parents (mother/father income n=407)				
≥1000	73(38.2)	117(61.8)	0	0
501-999	15(26.8)	41(73.2)	1.10(0.55-2.20)	0.33(0.14-0.79)*
≤500	42(26.1)	119(73.9)	1.88(1.18-2.99)	0.74(0.26-2.1)
Perceived suscep.(n=415)	130(31.3)	285(68.7)	0.56(0.45-0.70)	0.94(0.65-1.36)
Attitude(n=415)	130(31.3)	285(68.7)	0.66(0.53-0.82)	0.76(0.54-1.08)
Parental monitoring(n=415)	130(31.3)	285(68.7)	0.38(0.29-0.48)	0.40(0.27-0.60)*
Substance use(n=415)	130(31.3)	285(68.7)	2.66(2.07-3.42)	1.82(1.23-2.67)*

*=p-value less than 0.05 shows significant association. **=no religion ***=Daily labourors, domestic house wife and self employed fathers' and mothers'of respondents.

CHAPTER SIX : DISCUSSION

This study attempted to provide some insights on risky sexual behaviors and associated factors among high school students in Gambella town. So this study found that 178(42.9%) of respondents have ever had sexual intercourse. Simillar study conducted in Ethiopia, in-line with this result, how ever a community based study conducted in Gonder shows that 61.7% of respondents were ever had sex, the possible difference may be due to the community based study. Students who are sexually active were 136(32.8%), a study conducted in Tanzania was consistent with this finding, which was 30.3%, but lower a study conducted in Bullen, Ethiopia which shows 13% of the respondents were sexually active(3). This difference might be as a result of sample size difference, availability of risk factors.

From those sexually active students, 94(69.1%) had two or more sexual partners, higher when compared to 37.1%, of a study conducted in western Ethiopia, but lower of a study conducted in Gonder, Ethiopia, street youth(91.7%), this difference might be due to living arrangements (living street vs home)(31). Sexually activeness of males and females were almost similar(76.5% males versus 76.3% females). Nearly 81% of sexually active respondents practiced inconsistent condom use behavior, which is relatively higher with a study conducted in Gonder(31). The reason of inconsistent condom use was they perceive that condom was uncomfortable and partner objection but other study reason out that perceived reduction of sexual pleasure.

From ever had sex 63(35.4%) of males and 48(26.9%) of females had started sex before the age of 16; this shows that majority of males start sex earlier; supported by a study conducted in Rwanda in 2012; revealed that males were more likely to start earlier than females (50.4% versus 26.7%)(30), Male respondents were more than two times to ever have sexual intercourse as compared to female respondents(33), but a study conducted in southern part of Ethiopia was different, majority of females started sexual activity earlier than males(39), the possible explanation for these difference may be due to study population or elder males prefer adolsscent females.

Ninty-four(69.1%) of both sexes had recent multiple sexual partner(in the last 12 months), among whom 68(74.7%) were males and 26(56.5%) were females, this result in-line with a study conducted in Jimma, Ethiopia(33), but higher compared with similar study in Jimma,Ethiopia, revealed that 22(25.9%) of male and 25(21.6%) of female students had two or more sexual

partners in their recent sexual practice(52), the possible explanation for these differences can be due to the different study populations, settings and sample size differences.

Regarding respondents source of information, about STI/HIV (48.2%) was TV/Radio. A study conducted in Nekemte Town high school students, was consistent by saying majority of the respondents have ever heard about sexually transmitted diseases through massmedia(37). Simillar study conducted in northern part of Ethiopia supports this finding but other study conducted in Saudi Arabia and Filipinese major source of information was Internet, this might be due to limited access of Internet in Ethiopia than Saudi Arabia and Filipinse(4,43).

In our study the mean score of comprehensive knowledge was 0.73 with SD±0.44, a study conducted in Sweden shows a less mean score of knowledge, the possible reason migh be due to difference in sample size(35). The EDHS, 2011 reports showed that 19% females and 35% males, which had lesser value from our finding, the possible reason might be that our study participants were grade 9-12 in their educational level, EDHS sample was community based which might include illiterate. Knowledge and source of information was not statistically significant with risky sexual behavior.

There were different factors that affect risky sexual behavior of high school students in Gambella town; one of it was parents monthly income, shows statistically significant with students' risky sexual behavior. Students whose parents gain ≥1000 Ethiopian Birr monthly income were 0.33 times less likely at risky sexual behavior when compared to those whose parents gain ≤500 Ethiopian Birr per month, (AOR:0.33, 95% CI:0.14-0.79; p=0.013), a study conducted in Kenya; in-line with this finding, students with better income families were less likely practicing risky sexual behaviors when compared to their counter parts(49).

This study found that parental monitoring was significantly associated with outcome variable, risky sexual behavior. Students who had parental monitoring were 0.4 times less likely at risky sexual behavior, when compared to those loose parental monitoring, (AOR: 0.4, 95% CI:0.27-0.60; p=0.0001), a comparative cross sectional study conducted in Nekemte, Ethiopia, revealed that, youths who reported that their parents always knows (had parental monitoring) what they are doing when they are away from home were less likely to had premarital sex when compared to their counter parts(1), consistent with simillar cross sectional study conducted in Tanzania, revealed that close parental monitoring has a positive influence on preventive sexual

behavior(35), other study conducted in India, was not in agreement to this finding(27), the possible reason migh be a socio cultural difference.

This study found that substance use was significantly associated with students risky sexual behavior. Students who use substances(chew chat, smoke cigaratee or shisha or drink alcohol users) were 1.82 times more likely at risky sexual behavior when compared to non users.The cohort study conducted in Taiwan was consistent to this finding.The study conducted by Tura G, *et al* in Jimma also in-line with this finding(33). A study in Uganda revealed that those who cosumed alcohol were more likely at risk in practicing unsafe sex when compared to their counter parts(26). A cross sectional study conducted in Ethiopia showed that, initiation of Khat use before 18 years of age may increase a potential exposure to HIV/AIDS by causing loss of inhibition and involvement in risky sexual behaviors such as early sexual initiation, unprotected sex, multiple sexual partners, prolonged and traumatic sex(47).

Limitation of the study

Since this study touches a very sensitive and very personal issues and the behavioral out comes are based on self-reported information the possibility of reporting errors and biases cannot be ruled out. Recall bias from respondents may be introduced since data was asked back one year (from March 2013 to February 2014 preceding the survey) on their sexual behavior. Income data of families was collected by students, so under or over reporting might be introduced.

CHAPTER SEVEN:CONCLUSION AND RECOMMENDATION

7.1 Conclusion

Many students were sexually active, and reported that they use substances (chewing chat, drinking alcohol, smoking cigaratte or shisha). These students also report that they had an exposure of risk sex(inconsistent condom use, multiple sexual partner or never condom use).

Parental monitoring (where abouts of their children) and family income were protective predictors towards risky sexual behavior. Those students with parental monitoring and ≥1000 Ethiopian birr family income were less likely at risky sexual behavior. In general substance use, parental monitoring and parents income were predictors of risky sexual behaviors of students.

. 7.2 Recommendation

Schools, GTEO,GTHO, GREB,GRHB and NGOs should be involved in the reduction of substance use and risky sexual behavior.

Schools and GTEO

Should have to discuss with parents, students and school teachers and come up with solutions how students can be prevented from substance use and from risky sexual behavior in the town.

Have to call parents for discussion to strengthen parental monitoring towards their children, because parental monitoring has a preventive effect on risky sexual behavior of students.

GTHO

Have to focus on schools on a theme of substance use(strengthening the existing Urban Health Extension Program).

GREB, GRHB and NGOs

Should plan and intervene on a theme of substance use. Since parental monitoring was a preventive predictor of risky sexual behavior, working with parents is vital to strengthen parental monitoring. Parents' income increment is a preventive predictor for risky sexual behavior, it is possible to work on initiating income generating activites at house hold level.

In general, government institutions, private sectors and NGOs should have target at substance use and parental monitoring as an intervention area. Since this study only focus on in-school students, further comparative study between in-school and out-school young is important to get better information on risky sexual behavior of the young in Gambella town.

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Annex I: Oral Informed consent form

Jimma University, College of Public Health and Medical Sciences. Department of health Education and Behavioral Sciences

Title of Project: Sexual behavior and associated factors among high school students in Gambella town.

You have been invited to take part in a research project described below. The facilitator will explain the project to you in detail. You should feel free to ask questions. If you have more questions later, Ademe Mekonnen, (cell phone 0911800905) will discuss with you.

Description of the project:

This study helps to assess sexual behaviors and associated factors among high school students. Understanding of the existing health problems and related behaviors of the students is essential. This study will be used as in put for healh planners and implementers.

What will be done?

If you decide to take part in this study, you will take your time(may be 30-40 minutes) to fill the questionnaire.

Risk or discomfort:

This study asks your personal sexual behavior which may discomort you.But doesnot has risk.

Benefits of the study:

This study helps to assess sexual behaviors and associated factors among high school students in Gambella town. understanding of the existing health problems and related behaviors of the students is beneficial for you and others.

Confidentiality:

Moreover, I assure you that your responses are completely confidential & non-of your responses will be reported to any body. There fore, there is no need to write your names on these survey papers.

Decision to quit at any time:

It is your full right to refuse or to participate in this study. If you do not want to participate, you can leave the question papers on the table up side down, & you are kindly requested to remain on your sit until others finish filling the questions.

You have read the Consent Form. Your questions have been answered. Your agreement on this form means that you understand the information and you agree to participate in this study.
Are volunteer to participate→Yes→Continue

→No→Quit

Annex II: Quessionnaire; English Version

The questionnaire has 7 parts. Part 1: comprises questions on Respondents and parents background. Part 2: focused on knowledge about STI/HIV. Part 3: focused on respondent's perception. Part 4: focused on attitudes towards preventive sexual behavior of respondents. Part 5: contains sexual behavior. Part 6: focused on parental monitoring and part 7: focused on substance use. Please select and circle from the listed alternatives of the following questions.

Part I. Respondents and parents background:

S .no	**Questions**	**Response**
101	School name	_____
102	What is your grade in this year? (your category if you are grade 11 and 12)	1. 9^{th} 2. 10^{th} 3. 11^{th} 1) Social 2) Natural 4. 12^{th} 1) Social 2) Natural
103	What is your age?	_____years
104	What is your Sex?	1. Male 2. Female
105	What is your Religion?	1. Orthodox 2. Muslim 3. Catholic 4. Protestant 5. Others, specify_____
106	What is your Marital status?	1. Single 2. Engaged 3. Married

		4. Divorced 5. Widowed
107	What is your Ethnicity?	1. Agnua 2. Nuer 3. Amhara 4. Oromo 5. Others,specify_____
108	Where is your family Residence?	1. Urban 2. Rural
109	How much money do you get per month from either your family or others?	per month _____Birr
110	How do you define the marital status of your parents?	1. Married and live together 2. Mother alive, father dead 3. Father alive, mother dead 4. 5.Divorced 5. 6.Other(specify)_____

Please write the age of your mother and father (if they are alive), and circle their education and job in the table below.

		Mother	**Father**
111	Age	_____years	_____years
112	Education	1. Illiterate 2. Read and write 3. Primary school (1-8) 4. Secondary school (9-12) 5. University/College	1. Illiterate 2. Read and write 3. Primary school (1-8) **4.** Secondary school (9-12)

			5. University/College
113	Job	Government Employ Merchants Farmer Unpaid domestic worker Other (specify).....	1. Government Employ 2. Merchants 3. Farmer 4. Unpaid domestic worker 5. Other (specify).....
114	What is your parent/s **monthly income**?	Per month _____Birr	

Part II. Knowledge about STI/HIV

S .no	**Questions**	**Response**
201	Have you ever heard of STI/HIV/ AIDS?	1. Yes 2. No →Q.203
202	If Yes for Q.201, what was/were your source (s) of information?	1. Mass media (TV,Radio) 2. Text book 3. Friends 4. Family 5. School based health education 6. other(specify)_____
203	What condition(s) can increase the chance of transmission of HIV/STI from infected person to healthy one? (circle all that apply)	1. Unprotected sexual intercourse 2. Contaminated sharp materials 3. Blood transfusion without test

		4. Intravenous drug using 5. Having multiple sexual partners 6. other(specify)_____
204	Can people get the HIV virus from mosquito bites?	1. Yes 2. No
205	Can people get the HIV virus by sharing food with a person who has HIV Virus?	1. Yes 2. No
206	Can people get the HIV virus because of the curse of God or other supernatural means?	1. Yes 2. No
207	What can a person do to reduce his/her chance of getting HIV virus? (Multiple answers are possible)	1. Abstain from sex 2. Use condoms 3. Faithful to one partner 4. Avoid sex with prostitutes 5. Avoid blood transfusions without test 6. Avoid sharing razors/blades 7. Others(specify) _____
208	Is it possible for a healthy-looking person to have HIV virus?	1. Yes 2. No

209	What are the signs and symptoms of STI? (Multiple answers are possible)	1. Sores on sexual organ 2. Painful urination 3. Discharge from genital area 4. Itching on genital area 5. Others,specify_____
210	Have you ever seen these signs and symptoms of STI?	1. Yes 2. No→Q.301
211	If yes for Q.210 Have you seek treatment for any symptoms of STI?	1. Yes 2. No

Part III. Perceptions

3. 1 Perceived susceptibility						
S.no	**Questions**	**Strongly disagree(1)**	**Disagree(2)**	**Neutral(3)**	**Agree(4)**	**Strongly agree(5)**
301	I feel my chance of getting HIV/AIDS is high.					
302	I do not think that I am at risk of HIV infection.					
303	It is possible that I will get HIV.					
304	A person may get HIV in one or the other way. Thus, it is likely that I will get infected with HIV.					
305	I am afraid of I might contract STI.					

306	I am not confident that I might have not get STI still.					
3.2 perceived severity						
S.no	**Questions**	**Strongly disagree(1)**	**Disagree(2)**	**Neutral(3)**	**Agree(4)**	**Strongly agree(5)**
307	AIDS is probably the worst disease a person can get.					
308	AIDS is dangerous in high school students.					
309	I would rather have any other serious illness than AIDS.					
310	My life would be hard if I get HIV/AIDS.					
311	STI causes infertility.					
312	STI is less dangerous when compared with HIV.					
3.3 Cues to action						

313	Do you know someone who is living with HIV?	1. Yes 2. No	
314	Do you know people who died of AIDS?	1. Yes 2. No	
315	You receive any message about HIV/AIDS during the past 12 month?	1. Yes 2. No→Q.401	
316	If yes, for Q.315 from where did you hear?	1. Radio 2. TV 3. News paper 4. Friends 5. Family 6. Teachers 7. Others, specify ___	

Part IV Attitudes towards preventive behaviors

S.no	**Questions**	**Strongly disagree(1)**	**Disagree(2)**	**Neutral(3)**	**Agree(4)**	**Strongly agree(5)**
401	Condoms effectively protect against STIs					
402	Condoms effectively protect against HIV					
403	Condoms effectively protect against pregnancy					
404	Condoms are suitable for steady relationships					
405	It would be too embarrassing to buy condoms					

406	Condoms reduce sexual pleasure					
407	Condom is easily available if one want to buy					
408	Young people should not engage in sex before marriage					
409	Girls should not have sex before marriage					
410	It is allowed for boys to have sex before marriage					
411	It would be okay for girls to have more than one sex partners					
412	Boys can have more than one sexual partner					
413	Being abstain from sex is an effective means of reducing one's own risk of HIV infection					
414	High school students should not engage in sex					
415	Having only one sexual partner is good for my partner as well as for me.					
416	Using condom shows that I care about my partner.					
417	The sensory aspects (smell, touch, etc.) of condoms make them unpleasant.					

418	Engagement in sex would lower ones' own academic achievement					
419	Having sexual partner is a sign of modernity for high school students.					

Part V. Sexual behavior:

S .no	**Questions**	**Response**
501	Have you ever had sexual intercourse in your life time?	1. Yes 2. No →Q.515
502	If yes for Q.501 who/what influenced or induced you to start sexual intercourse? (Circle all possible answers)	1. Parents/guardian 2. Friends 3. Religious leaders 4. Mass media 5. Other (specify)_____
503	If yes, for Q.501 at what age did you first have sex?	Age at 1st sexual intercourse _____years
504	If yes, for Q.501 with who did you first have sex?	1. Boyfriend/girlfriend 2. Teacher 3. Commercial sex worker 4. Other (specify_____
505	If yes, for Q.501 with how many persons you had sexual experience so far?	1. One only 2. Two or more
506	If yes, for Q.501 what was your major reason <u>to start</u> sexual intercourse? (circle all possible reasons).	1. Curiosity 2. True sexual desire (increased libido) 3. Peers' pressure

		4. Boyfriend or girlfriend pressure 5. Due to the effect of alcohol or other substance use 6. To get economic benefit 7. Raped/forced 8. I don't remember 9. Other (specify)_____
507	Have you had sex in the last 12 months?	1. Yes 2. No→ Q509
508	If yes, for Q.507 with how many people have you had sex in the last 12 months?	1. One only 2. Two or more
509	Have you ever used condom?	1. Yes 2. No →Q.514
510	If yes for Q.509 did you use condom when you had sex for the first time?	1. Yes 2. No
511	If yes for Q.509 have you used condom during your recent sexual intercourse?	1. Yes→Q.513 2. No
512	If No for Q. 511, why you didn't use condom?	1. Not easily accessible 2. Not comfortable 3. Partner objected 4. Embarrassed to buy or ask for 5. Don't trust condoms as they transmit HIV 6. It reduces my sexual pleasure
513	How frequently do you use condom?	1. Occasionally 2. Always

514	If you never use condom, what was your reason? (Circle all possible answers)	1. Not easily accessible 2. Partner objected 3. Embarrassed to buy or ask for 4. I trust my partner 5. It reduces my sexual pleasure 6. Other (specify_____
515	If NO to Q.501, what is/are your reason(s) not to start sexual intercourse? (Circle all possible reasons)	1. Religious reason 2. Economic 3. Lack of desire 4. Fear of sexually transmitted infection including HIV 5. Other (specify_____

VI. Parental monitoring

S.no	**Questions**	**Never know(1)**	**Don't know(2)**	**Neutral(3)**	**Almost always know(4)**	**Always know(5)**
601	How often does a parent know what you are doing away from home?					
602	How often does a parent know where you are after school?					
603	How often does a parent have an idea about your plans for the next day?					
604	How often does a parent know your interests, activities, and whereabouts?					

605	In the last 2 days, how often did a parent know where you were and what you were doing?					

Part VII. Substance use questions:

S.no	Questions	Response
701	Had you chew Chat in the past 12 months?	1. Yes 2. No
702	Had you drink alcohol in the past 12 months?	1. Yes 2. No
703	Had you smoking cigarate in the past 12 months?	1. Yes 2. No
704	Had you smoke shisha in the past 12 months?	1. Yes 2. No

Anything more to add please: _____

_____

Thank you for participation in deed!!!

The END!!!

❖ The next can be filled by facilitator:

- Questionnaire code _____
- Name of facilitator _____
- Sign_____

  Date of data collection_____

Annex III Questionnaire Amharic version

መጠይቁ 7 ክፍሎች አሉት፡፡ክፍል 1፡ የመላሾችንን እና የወላጆችን የግል መረጃ ይዳስሳል፡፡ክፍል 2፡ ስለ አባላዘር በሽታዎችና ኤች አይ ቪ የመላሾችን ዕውቀት በተመለከተ ይዳስሳል፡፡ ክፍል 3፡መላሾች ስለ አባላዘር በሽታዎች ያላቸውን ግንዛቤ ይጠይቃል፡፡ክፍል 4፡ ስለ መላሾች በነ ጾታዊ ስነ-ባህሪ ይጠይቃል፡፡ክፍል 5፡ ስለ ጾታዊ ስነ-ባህሪ ይጠይቃል፡፡ክፍል 6፡ ስለ ወላጆች ክትትል ይጠይቃል፡፡እና ክፍል 7፡ ስለ ዕጽ አጠቃቀም ይጠይቃል፡፡እባክህ/ሽ መልስ ነው የምትለውን/ይውን ምረጥ/ጪ፡፡

ክፍል አንድ፡ የመላሾችና የወላጆች የግል መረጃ ጥያቄዎች፡፡

ተ.ቁ	**ጥያቄዎች**	**ምላሾች**
101	የትምህርት ቤትህ/ሽ ስም	_____
102	የስንተኛ ክፍል ተማሪ ነህ/ሽ? (11 እና 12 ክፍል ከሆነ ምድብ ይገለጽ)	1. 9ኛ 2. 10ኛ 3. 11ኛ 1) ሶሻል 2) ናቹራል 4. 12ኛ 1) ሶሻል 2) ናቹራል
103	ዕድሜህ/ሽ ስንት ነው?	_____ዓመት
104	ጾታህ/ሽ ምንድን ነው?	1. ወንድ 2. ሴት
105	ኃይማኖትህ/ሽ የቱ ነው?	1. ኦርቶዶክስ 2. ሙስሊም 3. ካቶሊክ 4. ፕሮቴስታንት 5. ሌላ ከሆነ ይገለጽ_____
106	የጋብቻ ሁኔታህ/ሽ የቱ ነው?	1. ያላገባ/ች 2. የታጨ/ች 3. ያገባ/ች 4. የፈታ/ች

		5. የሞተበት/ባት
107	ብሄርህ/ሽ የቱ ነው?	1. አኙዋ 2. ኑየር 3. አማራ 4. ኦሮሞ 5. ሌላ ከሆነ ይገለጽ_____
108	ቤተሰቦችህ/ሽ የሚኖሩት የት ነው?	ከተማ ገጠር
109	ከቤተሰቦችህ/ሽ ወይም ከሌላ በወር ስንት ብር ታገኛለህ/ሽ?	በወር_____ብር
110	የወላጆችህ/ሽ የጋብቻ ሁኔታ የቱ ነው?	1. ተጋብተው በጋራ ይኖራሉ 2. እናት በህይወት አለች አባቴ ግን ሞቷል 3. አባት በህይወት አለ እናቴ ግን ሞታለች 4. ተፋተዋል 5. ሌላ ካለ ይገለጽ_____
እባክህ/ሽ የአባትህን/ሽን እና እናትህን/ሽን ዕድሜ ጻፍ/ፊ(በህይወት ካሉ) እና የትምህርት እና የስራ ሁኔታን ጻፍ/ፊ		

		እናት	**አባት**
111	ዕድሜ	_____ዓመታት	_____ዓመታት
112	የትምህርት ደረጃ	1. ማንበብና መጻፍ የማትችል 2. ማንበብና መጻፍ የምትችል 3. 1ኛ ደረጃ (1-8) 4. 2ኛ ደጃ (9-12) 5. ዩኒቨርስቲ/ኮሌጅ	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ የሚችል 3. 1ኛ ደረጃ (1-8) 4. 2ኛ ደጃ (9-12) 5. ዩኒቨርስቲ/ኮሌጅ

113	ሥራ	የመንግስት ሰራተኛ ነጋዴ አርሶ አደር ሌላ ካለ ይገለጽ.....	1. የመንግስት ሰራተኛ 2. ነጋዴ 3. አርሶ አደር 4. ሌላ ካለ ይገለጽ.....
114	የወላጅ/ጆች የወር ገቢ?	በወር_____ብር	

ክፍል ሁለት፡ ስለ አባላዘር በሽታዎችና ኤች አይ ቪ የዕውቀት ጥያቄ፡፡

ተ.ቁ	ጥያቄዎች	መልስ
201	ስለ አባላዘር በሽታዎች/ኤች አይ ቪ ሰምተህ/ሽ ታውቂያለሽ?	አዎን አይደለም→ወደ ይያቄ 203 እለፍ/ፊ
202	ለ 201 ጥያቄ መልሱ አዎን ከሆነ ከየት ሰማህ/ሽ?	1. ከብዙኃን መገናኛ(ቲቪ፡ራዲዮ) 2. ከመጽሀፍት 3. ከጓደኞች 4. ከቤተሰብ 5. ትምህርት ቤት ከሚሰጥ ጤና አጠባበቅ ትምህርት 6. ሌላ ካለ ይገለጽ_____
203	በአባላዘር በሽታዎች/ኤች አይ ቪ የመያዝ እድልን የሚጨምሩ ነገሮች የትኞቹ ናቸው(ብዙ መልሶች ሊኖሩት ይችላሉ)	1. ልቅ የግብረ ስጋ ግንኙነት 2. ስለታም ነገሮችን በጋራ መጠቀም 3. ያልተጣራ ደም መስጠት 4. ብዙ ጾታዊ ጓደኛ መኖር 5. ሌላ ካለ ይገለጽ_____
204	ሰው በወባ ትንኝ ቢነደፍ ኤች አይ ቪ ቫይረስ ሊይዘው ይችላል?	1. አዎን 2. አይደለም

205	ኤች አይ ቪ ቫይረስ ከያዘው ሰው ጋር አብሮ መመገብ ቫይረሱ እንዲተላለፍ ያደርጋል?	1. አዎን 2. አይደለም
206	ኤች አይ ቪ ቫይረስ በእርግማን/በእግዚአብሄር ቁጣ የሚመጣ ነው?	1. አዎን 2. አይደለም
207	አንድ ሰው በኤች አይ ቪ ላለመያዝ ምን ማድረግ አለበት? (ብዙ መልሶች ሊኖሩ ይችላሉ)	1. መታቀብ 2. ኮንዶም መጠቀም 3. መተማመን 4. ከሴተኛ አዳሪዎች ጋር የግብለ ስጋ ግንኙነት አለማድረግ 5. ያልተመረመረን ደም ለሌላ ሰው አለመስጠት 6. ስለታም ነገሮችን በጋራአለመጠቀም 7. ሌላ ካለ ይገለጽ _____
208	ጤናማ መስሎ የሚታይ ሰው ኤች አይ ቪ ሊኖርበት ይችላል?	1. አዎን 2.አይደለም
209	የአባላዘር በሽታ ስሜችና ምልክቶች የትኞቹ ናቸው? (ከአንድ በላይ መልስ ይኖራል)	1.በብልት ላይ ቁስለት 2.ሽንት ሲሸኑ ማቃጠል 3.ከብልት ፈሳሽ መውጣት 4.ብልት አካባቢን ማሳከክ 5.ሌላ ካለ ይገለጽ_____
210	እነዚህ ስሜቶችና ምልክቶችን አይተህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም

211	ለ 210ኛው ጥያቄ አዎን ከሆነ የህክምና ክትትል አድርገሃል/ሻል?	1. አዎን 2. አይደለም

ክፍል 3፡ የግንዛቤ ጥያቄዎች፡፡

3. 1 ልያዝ እችላለሁ የሚል ግንዛቤ						
ተ.ቁ	**ጥያቄዎች**	**ከፍተኛ አለመስማማት (1)**	**አለመስማማት (2)**	**ገለልተኛ (3)**	**መስማማት (4)**	**ከፍተኛ መስማማት (5)**
301	በኤች አይ ቪ/ኤድስ የመያዝ ዕድሌ ከፍተኛ እነደሆነ ይሰማኛል፡፡					
302	በኤች አይ ቪ የመያዝ አደጋ ላይ ነኝ ብዬ አላስብም፡፡					
303	ወደፊት ኤች አይ ቪ ሊይዘኝ ይችላል፡፡					
304	አንድ ሰው በአንድም ይሁን በሌላ መንገድ ኤች አይ ቪ ሊይዘው ይችላል፡፡ስለዚህም በኤች አይ ቪ የመያዝ ዕድል አለኝ፡፡					
305	የአባላዘር በሽታ ይዞኛል ብዬ እፈራለሁ፡፡					
306	የአባላዘር በሽታ እስካሁን እንዳልያዘኝ እርግጠኛ መሆን አልችልም፡፡					

3.2 የኤድስና የአባላዘር በሽታዎች የአደገኛነት ግንዛቤ						
ተ.ቁ	**ጥያቄዎች**	**ከፍተኛ አለመስማማት (1)**	**አለመስማማት (2)**	**ሀሳብ አልሰጥም (3)**	**መስማማት (4)**	**ከፍተኛ መስማማት**
307	ኤድስ ምናልባትንም ከሁሉ የከፋ በሽታ ነው፡፡					

308	ኤድስ ለሁለተኛ ደረጃ ት/ቤት ተማሪዎች አደገኛ ነው፡፡					
309	ከኤድስ የሚበልጥ አሳሳቢ በሽታ የለም፡፡					
310	ኤች አይ ቪ/ኤድስ ከያዘኝ ህይዎቴ ከባድ ይሆናል፡፡					
311	የአባላዘር በሽታ መካንነትን ያስከትላል፡፡					
312	የአባላዘር በሽታ ከኤች አይ ቪ ጋር ሲነጻጸር አደገኛነቱ አነስተኛ ነው፡፡					

3.3 ለተግባር የሚገፋፉ		
313	ከኤች አይ ቪ ጋር የሚኖር ሰው ታውቃለህ/ሽ?	1. አዎን 2. አይደለም
314	በኤድስ የሞተ ሰው ታውቃለህ/ሽ?	1. አዎን 2. አይደለም
315	ባለፉት 12 ወራት ወስጥ ስለ ኤች አይ ቪ/ኤድስ መልዕክት ሰምተሃል/ሻል?	1. አዎን 2. አይደለም
316	ለጥያቄ ቁጥር 315 አዎን ከሆነ ከየት ሰማህ/ሽ?	1. ከራዲዮ 2. ከቴሌቪዥን 3. ከጋዜጣ 4. ከጓደኛ 5. ከቤተሰብ

		6. ከመምህራን 7. ሌላ ካለ ይገለጽ___

ክፍል 4፡ አመለካከት ስለ አዎንታዊ ስነ-ባህሪ ፡፡

ተ.ቁ	ጥያቄዎች	በጣም አልስማማም(1)	አልስማማም(2)	ሀሳብ የለኝም(3)	እስማማለሁ(4)	በጣም እስማማለሁ(5)
401	ኮንዶም በሚገባ የአባላዘር በሽታዎችን ይከላከላል፡፡					
402	ኮንዶም በሚገባ ኤች አይ ቪን ይከላከላል፡፡					
403	ኮንዶም እርግዝናን በሚገባ ይከላከላል፡፡					
404	ኮንዶም ግንኙነትን ለማሳደግ ያስችላል፡፡					
405	ኮንዶምን ለመግዛት በጣም አፍራለሁ፡፡					
406	ኮንዶም መጠቀም በግብረ ስጋ ግንኙነት የሚገኘውን ደስታ ይቀንሳል፡፡					
407	ኮንዶም መግዛት ከተፈለገ በቀላሉ ይገኛል፡፡					
408	ወጣቶች ከማግባታቸው በፊት የግብረ ስጋ ግንኙነት ማድረግ የለባቸውም፡፡					
409	ልጃገረዶች ከማግባታቸው በፊት የግብረ ስጋ ግንኙነት ማድረግ የለባቸውም፡፡					
410	ወንዶች ከማግባታቸው በፊት የግብረ ስጋ ግንኙነት ማድረግ ተፈቅዶላቸዋል፡፡					

411	ልጃገረዶች ከአንድ በላይ ፍቅረኛ መያዝ ይችላሉ፡፡					
412	ወንዶች ከአንድ በላይ ፍቅረኛ ሊኖራቸው ይችላል፡፡					
413	ከግብረ ስጋ ግንኙነት መታቀብ በኤች አይ ቪ ላለመያዝ ሁነኛ መፍትሔ ነው፡፡					
414	የሁለተኛ ደረጃ ት/ቤት ተማሪዎች የግብረ ስጋ ግንኙነት ማድረግ የለባቸውም፡፡					
415	አንድ ብቻ የፍቅር ጓደኛ መያዜ ለእኔም ለጓደኛየም ጥሩ ነው፡፡					
416	ኮንዶም መጠቀሜ ለጓደኛዬ መጠንቀቄን ያሳያል፡፡					
417	የኮንዶም ሽታው፤ ሸካራነቱ ወዘተ አስደሳች አያደርገውም፡፡					
418	የግብረ ስጋ ግንኙነት ማድረግ የትምህርት ውጤት እንዲቀንስ ያደርጋል፡፡					
419	የፍቅር ጓደኛ መያዝ ለሁለተኛ ደረጃ ት/ቤት ተማሪዎች የዘመናዊነት መገለጫ ነው፡፡					

ክፍል 5፡ ስነ ጾታዊ ባህሪ፡፡

ተ.ቁ	**ጥያቄዎች**	**ምላሽ**
501	በሕይወት ዘመንህ/ሽ የግብረ ስጋ ግንኙነት አድርገህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም →ወደ ጥያቄ 515 እለፍ/ፊ
502	ለጥያቄ 501ኛ አዎን ከሆነ የገፋፋህ/ሽ ነገር ምንድን ነው? (ከአንድ በላይ መልስ ሊኖር ይችላል)	1. ወላጆች/አሳዳጊዎች 2. ጓደኞች 3. የኃይማኖት መሪዎቼ 4. ብዙሃን መገናኛ

		5. ሌላ ካለ ይገለጥ_____
503	ለ501ኛ ጥያቄ አዎን ከሆነ የመጀመሪያውን የግብረ ስጋ ግንኙነት ስታደርግ/ጊ ዕድሜህ/ሽ ስንት ነበረ?	ዕድሜዬ የመጀመሪያውን የግብረ ስጋ ግንኙነት ስፈጽም_____ዓመት ነበርሁ
504	ለ501ኛ ጥያቄ አዎን ከሆነ የመጀመሪያውን የግብረ ስጋ ግንኙነት የፈጸምኸው/ሽው ከማን ጋር ነበረ?	1. ከወንድ/ሴት ጓደኛዬ ጋር 2. ከአስተማሪዬ ጋር 3. ከሴተኛ አዳሪዎች ጋር 4. ሌላ ካለ ይገለጽ_____
505	ለ501ኛ ጥያቄ አዎን ከሆነ ከስንት ሰዎች የግብረ ስጋ ግንኙነት አድርገሃል/ሻል?	1. ከአንድ ሰው ጋር ብቻ 2. ሁለትና ከዚያ በላይ ሰዎች ጋር
506	ለ501ኛ ጥያቄ አዎን ከሆነ የግብረ ስጋ ግንኙነት ለመጀመር ምክንያቱ ምንድን ነበረ? (ከአንድ በላይ መልስ ሊኖር ይችላል)	1. ፍላጎቴ በመጨመሩ 2. በጓደኛ ግፊት 3. በወንድ/ሴት ጓደኛ ግፊት 4. አልኮል ወይም ጫት በመጠቀሜ ምክንያት 5. ገንዘብ/ጥቅማጥቅም ለማግኘት 6. ተገድጀ 7. አላስታውስም 8. ሌላ ካለ ይገለጽ_____
507	ባለፉት 12 ወራት ውስጥ የግብረ ስጋ ግንኙነት አድርገሃል/ሻል?	1.አዎን 2.አይደለም→ወደ ጥያቄ 509 እለፍ/ፊ
508	ለ507 አዎን ከሆነ ባለፉት 12 ወራት ከስንት ሰዎች ጋር የግብረ ስጋ ግንኙነት አድርገሃል/ሻል?	1. ከአንድ ሰው ጋር ብቻ 2. ሁለትና ከዚ በላይ ሰዎች ጋር
509	ኮንዶም ተጠቅመህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም →ወደ ጥያቄ 514 እለፍ/ፊ

510	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት ስታደርግ/ጊ ኮንዶም ተጠቅመሃል/ሻል?	1. አዎን 2. አይደለም
511	በቅርብ ባደረግሽው/ሽው የግብረ ስጋ ግንኙነት ኮንዶም ተጠቅመሃል/ሻል?	1. አዎን 2. አይደለም
512	ለጥያቄ 510 አይደለም ከሆነ ለምን ኮንዶም አልተጠቀምህም/ሽም?	1. በቀላሉ ስለማይገኝ 2. ምቾት ስለሚቀንስ 3. የኢጋር ተቃውሞ 4. ለመግዛት/ለመጠየቅ አፍራለሁ 5. ኮንዶም ኤች አይ ቪን ሊያስተላልፍ ይችላል 6. በግብረ ስጋ ግንኙነት የሚገኝ ደስታን ስለሚቀንስ
513	ኮንዶምን የምትጠቀመው/ሚው እንዴት ነው?	1. አልፎ አልፎ 2. ሁልጊዜ
514	ኮንዶም ፈጽሞ ተጠቅመህ/ሽ የማታውቅ/ቂ ከሆነ ምክንያትህ/ሽ ምንድን ነው? (ከአንድ በላይ መልስ ሊኖር ይችላል)	1. በቀላሉ ስለማይገኝ 2. የኢጋር ተቃውሞ 3. ለመግዛት/ለመጠየቅ በማፈር 4. ጓደናዬን አምናለሁ 5. ደስታን ስለሚቀንስ 6. ሌላ ካለ ይገለጽ_____
515	ለጥያቄ 501 አይደለም ከሆነ የግብረ ስጋ ግንኙነት ያልጀመርህበት/ሽበት ምክንያት ምንድን ነው?(ከአንድ በላይ መልስ ሊኖር ይችላል)	1. በኃይማኖታዊ ምክንያት 2. በኢኮኖሚ ምክንያት 3. ፍላጎት ስለሌለኝ 4. የአባላዘር በሽታዎችን ኤች ኤይ ቪን ጨምሮ በመፍራት 5. ሌላ ካለ ይገለጽ_____

ክፍል 6፡ የወላጆችን ቁጥጥር በተመለከተ፡፡

ተ.ቁ	ጥያቄዎች	ፈጽሞ አይታወቅም(1)	አይታወቅም(2)	መልስ የለም(3)	በአብዛኛው ይታወቃል(4)	ሁልጊዜ ይታወቃል(5)
601	ወላጆች ከቤት ራቅ ያለ እንቅስቃሴህን/ሽን የሚቆጣጠሩት እንዴት ነው?					
602	ወላጆች ከትምህርት በኋላ የት እንዳለህ/ሽ እንዴት ይቆጣጠራሉ?					
603	መላጆች በነገው እንቅስቃሴህ/ሽ ላይ ምን ዕውቀት አላቸው?					
604	ወላጆች ያንተን/ቺን ፍላጎት፡እንቅስቃሴ የት እንዳለህ/ሽ እንዴት ይቆጣጠራሉ?					
605	ባለፉት 2 ቀናት ወላጆች የት እንደነበርህ/ሽ እና ምን እንደምትሰራ/ሪ ያውቁ ነበር?					

ክፍል 7፡ የዕጽ አጠቃቀምን የሚመለከቱ ጥያቄዎች፡፡

ተ.ቁ	ጥያቄዎች	መልስ
701	ባለፉት 12 ወራት ጫት ቅመህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም
702	ባለፉት 12 ወራት አልኮል ጠጥተህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎን 2. አይደለም
703	ባለፉት 12 ወራት ሲጋራ አጭሰህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም
704	ባለፉት 12 ወራት ሽሻ አጭሰህ/ሽ ታውቃለህ/ሽ?	1. አዎን 2. አይደለም

የምትጨምረው/ሪው ነገር ካለ_____

_____

ስለ ተሳተፎው ከልብ አመሰግናለሁ!!!

አለቀ/አበቃ!!!

❖ **የሚቀጥለው በአስተባባሪ የሚሞላ ነው፡፡**

- የጥያቄው ኮድ _____
- የአስተባባሪ ስም _____
- ፊርማ_____
- መረጃ የተሰበሰበበት ቀን_____

Annex IV: Written consent form

Dear parents/caregivers

You are invited to permit your less than 18 years old boy/daughter to participate in a research study that will attempt to assess risky sexual behavior and associated factors among high school students. The following information is provided in order to help you make an informed decision whether or not to allow your boy/daughter to participate. If you have any questions please do not hesitate to ask.

The main objective of this study is to assess risky sexual behavior and factors. The student will be asked to participate in the study, that will take approximately 30-40 minutes. There are no risks associated with this research. The information gathered from this study will be kept as confidential as possible and is only for academic purpose. If you permit your boy/daughter to participate in this study, the student will be asked to fill out self administered questionnaire at school.

You are voluntary making a decision whether or not to allow your boy/daughter to participate in this research study. Your signature certifies that you have decided to allow them to participate having read and understood the information presented. You will be given a copy of this conscent form to keep.

Name of parent/care giver_____

Signature of parent/care giver_____

Date_____

In my judgment the parent/caregiver is voluntary and knowingly giving assent and

Possesses the legal capacity to give assent for a student to participate in this research study.

Signature of Investigator_____ Date _____

cell phone (+251 911 800 905) E-mail: mekonnenademe@yahoo.com