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GENDER DIFFERENCE IN RISKY SEXUAL BEHAVIOR AND ITS DETERMINATES AMONG ETHIOPIAN YOUTH: EVIDENCE FROM ETHIOPIA DEMOGRAPHIC AND HEALTH SURVEY 2016.

BY

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A THESIS SUBMITTED TO CENTER FOR POPULATION STUDIES, COLLEGE OF DEVELOPMENT, ADDIS ABABA UNIVERSITY, THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN POPULATION STUDIES

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DECLARATIONS

I, Tibeb Tafess, hereby verify that this thesis is entirely original work of mine and has not been submitted in whole or in part to another individual for any degree from another university or institution.

Declared by

Name: Tibeb Tafess

Signature _____

Date_____

APPROVAL

This is to verified that the thesis presented by Tibeb Tafess, in title gender difference in risky sexual behavior and its determinants among Ethiopian youth evidenced by 2016 Ethiopian demographic and health survey data. Submitted in partial fulfillment of the requirement for the degree of Master of Science in population studies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by the examining board

Adviser:_____ Signature_____Date_____

Internal Examiner_____ Signature_____Date_____

External Examiner_____ Signature_____Date_____

Department Head_____ Signature_____ Date_____

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Acronyms and Abbreviation

HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
RSBs	Risky Sexual Behaviors
EDHS	Ethiopian Demography Health Survey
STIS	Sexually Transmitted Infections
CSA	Central Statistical Agency
WHO	World Health Organization
STDS	Sexual Transmitted Disease

Abstract

Risky sexual behavior is defined as multiple sexual partners in a lifetime plus sex without a condom. Gender and risky sexual behavior have an intriguing relationship. This study conducted aims to identify the gender difference and determinants of risky sexual behavior among youth. With a sample of 7490, males and females aged 15-29 drawn from the 2016 Ethiopian Demographic and Health Survey (EDHS). The study was conducted based on socio-demography characteristics, youth individual characteristics, and Knowledge of HIV/AIDS data obtained from the Ethiopian demographic health survey (EDHS) 2016 by extracting male and female data. Univariate was used to display the data using tables compared between males and females. The binary logistic regression model was developed to identify the predictors of risky sexual behavior. Study shows 964(37%) of males and 739(15%) of females were engaged in risky sexual behavior. About 22.7 %(1703) of the youth were risky at the national level. Bivariate analysis shows that males are 3.38 times more likely to engage in risky sexual practices compared to females ($p<0.001$). The multivariate result Male respondents had higher risky sexual practices compared to females (AOR=5.2, $p<0.001$). Marital status, residence, region, and alcohol intake were significant factors to risky sexual behavior among youth. Males in Afar and Gambella had 1.69 and 1.69 more likely to have risky sexual practices compared to the Oromia region respectively. The likely hood of females having risky sexual practices was significantly higher in Amhara and Gambella regions compared to the Oromia region (AOR=4.0 and 3.37, $p<=0.001$) respectively. In comparison to rural, the likelihood of risky sexual practices among males and females were significantly increase by 48.1% and 41.5% living in urban areas correspondingly ($p < 0.01$). Females aged 20-24 and 25-29 are more likely to be risky compared to those aged 15-19 ($p<0.001$). Significant gender differences in risky sexual behavior were observed with a higher risk in male respondents compared to females. The explanatory variables marital status, residence, region, and alcohol intake were a significant variation of males and females' risky sexual behaviors. Specific Strategies and approaches should develop to reduce risky sexual practices and improve reproductive health outcomes.

Keywords: Gender difference, risky sexual behaviors, determinants, youth, Ethiopia

CHAPTER ONE: INTRODUCTION

1.1. Background of the study

Risky Sexual Behaviors(RSBs) are defined as involving unprotected sexual practice, having multiple sexual partners, early sexual activity (under 18 years old), and other risky sexual activities that lead to sexually transmitted diseases, infertility, and Cervical cancer. RSBs have a negative outcome on reproductive health conditions (Glen, 2015). Reproductive health care access including prevention and treatment of sexually transmitted diseases concerned in the Cairo International Conference on Population and Development (ICPD) in 1994 (Roseman & Reichenbach, 2010). HIV remains a significant global public health concern, claiming 40.1 million lives and causing 650,000 deaths, 1.5 million contracted the virus in 2021. Africa accounts for two-thirds (25.6) million of the 38.4 million people with HIV, with adolescents aged 15-24 accounting for 25% of infections in 2020(WHO, 2022). According to WHO(2019) report, approximately 296 million people were estimated to be infected with hepatitis B, with 1.5 million new cases confirmed in 2019 due to risky sexual practice, and also risky sexual behaviors are more common among youth because unprotected sexual behavior commonly happens among youth (Gillespie et al., 2007).

The youth bulge and aging are two demographic factors that could have an impact on long-term economic growth and sustainable development (Newman et al., 2014). Adolescents and youth, aged 10 to 29, are a high portion of the population in Ethiopia. Therefore, to get the most out of the demographic dividend, it is essential to invest in adolescent and youth education, economic opportunities, and health, including family planning and sexual and reproductive health.

Gender difference appears to be significant in risky sexual behaviors. Worldwide approximately two-thirds of adolescent girls were reported as new HIV infections compared to one-third of young boys (Idele et al., 2014) while one in every four new HIV infections occurred in sub-Saharan Africa, the region also houses more than 80% of HIV infected in adolescents aged group (Sam et al., 2016).

Substance use and abuse (drugs, tobacco, and alcohol), risky sexual behavior (unprotected sex and multiple sexual partners), reckless driving, and suicide are common risky behaviors. Risky

behaviors have negative outcomes (Irwin & Millstein, 1986). Adolescents who engaged in one risky sexual practice are more likely to engage in another risky sexual practice (Ali et al., 2010)

Moreover, gender difference is observed in adolescents' sexual and reproductive health risky and protective factors, which has implications for intervention delivery (Thin et al., 2013). Unlike this, there are no gender differences in self-protection knowledge or attitudes, there were significant differences in perceptions of the parent-adolescent relationship, attitudes toward sexual acts, and perceptions of community norms about sexual behavior, all of which have intervention implications (Sun et al., 2018).

Ethiopia has implemented reproductive health strategies to reduce the burden of STIs and HIV/AIDS among youth, but the burden remains heavy. Hepatitis B Surface Antigen (HBsAg) is estimated at 9.4% among the general population aged 15 and above, with regional variations and a slightly higher prevalence in rural areas (EPHI, 2017). Poor planning, gaps in specific policy actions and gender differences at the national level contribute to the problem. Limited studies on gender differences in sexual behavior and cultural backgrounds make it difficult to summarize the risky sexual behaviors of youths across the country.

1.2. Statement of the problem

Risky sexual behaviors are one of the factors that affect the future size of demand for employment. Hence, access to SRH information and services is especially important to create economically productive citizens by reducing the consequence of RSBs, preventing and treating sexually transmitted infections including HIV, and better access to the information and services they need to stay healthy, avoid unprotected sexual practice (Gay et al., 2017). Therefore, Adolescent and youth risky sexual behavior and reproductive health is recognized as a major public health issue, and it has long been the center of intense worldwide attention (Rajapaksa et al., 2015).

Quality reproductive health services are crucial for addressing citizen's reproductive health by reducing risky sexual practices. Howevere,Ethiopia, a sub-Saharan African nation, faces high risky sexual practice ,sexuality and reproductive health issues due to risky practices that lead to sexually transmitted diseases including HIV, psychological disorders, and reproductive organ cancer these have a direct or indirect impact on sexuality and reproductive health among the reproductive age group. This negatively influences reproductive age groups, leading to morbidity,

mortality, and infertility (Muche A et al., 2017). Risky sexual practice in Ethiopia throughout the country, especially in educational settings, threatens productive segments, causing social and economic costs immediately and in the future (Mulu W et al., 2014).

Studies conducted on risky sexual behavior among university, college, and pre-college students have a limitation due to gender differences, sociocultural characteristics, economic characteristics, and beliefs. Addressing these issues is crucial for achieving reproductive health and reducing the burden of sexually transmitted diseases and HIV/AIDS among youth. However, if the burden of sexually transmitted diseases and HIV/AIDS inclined among the youth, the country deprived the future productive citizens and it might be lost the demographic dividend opportunity as well as mortality, morbidity and infertility. This study intended to contribute to giving a clue to achieve youth reproductive health.

1.3. Study questions

1. Are there a difference's in risky sexual behaviors among youth males and females in Ethiopia?

2. What are the influential factors for risky sexual behavior among male and female youths?

1.4. Objectives

1.4.1 General objectives

The study's general objectives were to identify the gender difference in risky sexual behaviors and influencing factors among youth in Ethiopia, 2023.

1.4.2. Specific objectives

The study specific objectives were to:

1. To examine the extent of gender differences in risky sexual behavior among male and female youth in Ethiopia 2023.

2. To investigate the influencing variables in sexual behavior between male and female youth in Ethiopia in 2023.

1.5. Significance of the study

This study will contribute to the strategy planning, monitoring, and implementation of preventing and reducing risky sexual behavior among Ethiopian youth. It is expected to have significance in

creating a good insight for health policymakers, planners, and other stakeholders working in areas of reproductive and sexual health, as well as youth-friendly service providers. The results are believed to better understand and describe gender differences in risky sexual behavior among the youth and identify determinants of the spread of sexually transmitted infections and HIV/AIDS among the study population in the country. Moreover, the results of this study are believed to contribute to the existing knowledge of risky sexual behavior of young persons in the country.

1.6. Operational definition

Gender; refers to the characteristics of women, men, girls, and boys that are socially constructed (WHO, 2014).

Youth; According to Ethiopian youth policy youth (2004) youth as those members of the society who are between 15 and 29 years of age.

Risky sexual behavior; is defined as sexual behavior that are multiple sexual partners plus sex without a condom.

Multiple sexual practices; having more than one sexual partner in a lifetime (having more than one sexual partner over a while (Dimbuene et al., 2014).

Consistency Condom use: The use of condoms during sexual contact to protect against sexually transmitted diseases and unplanned as well as unwanted pregnancies (Centers for disease control and Prevention, 1993).

1.7. Scope of the study

The study was conducted in Ethiopia at the national level among young males and females in the age group 15-29 based on the 2016 Ethiopian Demographic and Health Survey data. The main purpose of this study was to identify the gender difference in sexual activity for risky sexual behavior. It, therefore, focused on the identification of variables that explain the gender differences in multiple sexual partners, and condom use during sexual intercourse outside marriage. The independent variables include demographic, socio-economic, and behavioral variables that were captured in the 2016 EDHS. As the prevailing secondary data did not provide detailed information on other risky sexual behavior such as homosexual practice, masturbation, and anal and oral sexual practices, the analysis is limited to others risky sexual behavior.

1.8. Organization of the study

The study consists of five sections. The first chapter deals with the introduction part which Includes the background of the study, statement of the problem, objectives of the study, research questions, and the significance of the study, scope, and organization of the study. The second Section deals with literature review. The third section deals about the method of the research. The fourth section deals with data presentation and analysis finally the fifth section ends with, discussion, Conclusion and recommendations.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1. Definition of youth

The United Nations (UN) states that the definition of youth is affected by ongoing changes in demographic, economic, and sociocultural circumstances. This definition differs from Ethiopia's national policy (2004) stated that classifies youth as being between the ages of 15 -29, including the middle and late adolescent stages.

Young people create their identities by incorporating their sexual aspirations and feelings (Ferreira et al., 2011).Adolescent's and youth are frequently the first to engage in sexual activity, but this transition is not always accompanied by adequate sexual education or knowledge of the physiological or biological aspects of sexuality and reproductive health (Mendes et al., 2014).

2.2. Empirical evidence

Many youths engaged in sexual risk behaviors and experiences that can result in unintended health outcomes; half of the 26 million new STDs reported in 2018 were among youth (aged 15 to 24. Yet, half of all new STDs reported each year are among young people 15 to 24 (Bowen et al., 2019). According to the study results obtained by Krupsky and colleagues (2022) most of the sexually active high school students—nearly 46%—did not use condoms the last time they had sexual activity. Consequently, youth (aged 13-24 years) made up 21% of all people with updated HIV diagnoses in 2019 while 88% were young men and 12% were young women (CDC, 2019). For such reasons, sexually transmitted infections (STIs) present significant health and economic challenges in all countries and yet are rarely prioritized for coordinated strategic attention (Seale et.al., 2017).

The report by the World Health Organization also shows that youth risky sexual behaviors are more susceptible to sexually transmitted diseases and HIV as 50% of HIV transmission has occurred among those in the 15-24 age group. Risky sexual behavior caused by sexually transmitted diseases in youth may be developed in adult life that influenced the sexuality and reproductive health of the young population. As greater than 50% of adolescents not using condoms regularly (Martinez et al., 2011) adolescents' susceptibility to highly risky sexual practices due to unprotected sexual practices and multiple partners increases the negative sexual health outcomes. For instance, studies conducted at Turkish universities showed that female

students had anal, oral, and multiple sexual practice experiences more likely compared to male students (Nazik et al., 2021).

Results of a meta-analysis of male youth aged 15-19 show that nearly 90% higher risk for risky sexual behavior compared to female youth in all countries except Cambodia, and Ethiopia. Nepal, Niger, and Vietnam. According to the results of this study, male youth under 20 years are at the highest risk compared to male youth in the 20-24 age group in exposing themselves to risky sexual relations. Evidence shows that male youth under 20 were more likely to engage in risky sexual behavior than male youth between 20 and 24 across all countries. (World Health Organization and Ross et al, 2006)

The results of the study by Mekonnen Munea and his colleagues (2020) reveal that youth frequently engage in risky sexual behavior as a result of a lack of knowledge about reproductive health and family planning. The findings of these studies indicate that young people's sexual behavior is crucial for both a decrease in sexually transmitted infections and the possibility of healthy reproductive outcomes. As a result of sexual exposure and socio-cultural factors, young people's levels of risk and sexual behaviors vary across male and female youth. Studies on risky sexual behavior among youth in Debremarkos town, Ethiopia, discovered that being a man, using drugs, succumbing to peer pressure, and viewing pornography are all linked to risky sexual practices, with 78% of young people beginning sex at a young age (Dagne B, 2014).

This study were, therefore, compare the gender differences in sexual behavior and identify the socio-demographic variables (age, resident, region, religion), and the individual characteristics (education level, alcohol consumption, tobacco use, chewing chat, and exposure to mass media and internet) in determining the risky sexual behavior among youth using the 2016 EDHS data.

2.2.1 Sexual Practice and reproductive health challenge of Youth

Globally, infertility, sexual and STIs such as HIV/AIDS, and other reproductive health problems are more common among youth (Stella, 2004). Youth sexual practice and sexual-related problems such as sexually transmitted diseases, sexual diversity, cybersex, and HIV/AIDS are major concerns of youth risky sexual behaviors. Lack of knowledge of risky sexuality, poor communication about sexual practice and negotiating skills, and the absence of youth-friendly sexuality and reproductive health services are factors contributing to risky sexual behavior. Rising

peer pressure on premarital sex influences young people's sexual and reproductive health decisions and another factor is the issue of sex education, which continues to be regarded as a sensitive subject and thus has an impact on its implementation due to cultural and religious constraints (Low, 2009).

Adolescents and youths have physical, cognitive, and emotional immaturity when compared to adults; as a result, youth can increase the risk and intensity of reproductive and sexual negative consequences (Wells, 2013).

2.2.2. Factor contributing to risky sexual behaviors

According to the World Health Organization (1999) stated that adolescent risky sexual behavior has been associated with socioeconomic status, unemployment, sexually active friends, unstable families, single-parent households, sibling sexual activity, and each characteristic (race, gender, age, and puberty status). Substance use, such as "chat" and alcohol is significantly linked to lifetime sexual activity and predicts lifetime risky sexual behavior (Derese A et al., 2014). Alcohol consumption, marijuana use, and cigarette smoking were all significant predictors of risky sexual behavior in another study (Thepthien, 2022). Health policies and cultural values have changed over time. Gender norms are changing due to cultural shifts in various parts of the world (Pinyopornpanish et al., 2017). The extent of youth unprotected sexual activity and their level of knowledge about the spread of STIs and HIV are significantly correlated (Kwigizile et al., 2013).

Youth engaged in high-risk sexual behavior such as unprotected intercourse without condom use, unprotected mouth-to-genital contact, starting sexual activity at a young age, and having multiple sex partners due to internal and external contributing factors (Alimoradi et al., 2017)

2.2.3. Multiple partners and condom use

Multiple sexual partners are a major sexual practice risk factor for Sexual transmitted disease in adolescents and youth, particularly weather condoms are not used correctly and consistently. Existing evidence shows that most adolescents and youth do not have multiple sexual partners at the same time. However, given the short lifespan of many adolescent relationships, and the frequent change of sexual partners in succession, youths often have multiple sequential partners (Santelli, 1998). Gender is significantly associated with multiple sexual practices hence, males reported risky sexual behavior at significantly higher rates than females (Girmay et al., 2019).

Greater self-efficacy, both in general and specific to condom use, was associated with regular condom use among men and women. Self-efficacy is

consistent with the social cognitive theory that holds confidence in being able to engage in a behavior that is a critical factor in health behavior and behavioral change (Bandura, 1986). Several other studies have also found a relationship between condom use and self-efficacy (Farmer, 2006). A study conducted by Walusaga (2012) in Uganda, shows that gender difference has a significant relationship to consistent condom use as half (48.1%) of men reported always using condoms during sexual intercourse compared to 31.8% of females.

2.2.4 Gender disparity sexual behavior

Males are more likely than females to have had experiences that are more sexual and to have more accepting attitudes toward sexuality (Zuo et al., 2012).Theories showed that they specifically contend that while women prefer sex in the context of long-term partnerships, men prefer short-term relationships with casual sex and multiple partners (Xu et al., 2020). While evolutionary theories predict no change over short periods, and only change over many generations of natural or sexual selection, therefore, the most of gender differences in sexual behaviors and attitudes are small, indicating that within-gender variation is larger than between-gender variation in noted sexual behaviors and attitudes. However, cognitive social learning theory predicts changes in patterns of gender differences over a short time as media images change. While evolutionary theories predict that patterns of gender inequality will remain constant across cultures, the social structural theory focuses on variations in the size of gender differences across cultures and suggests that these variations are correlated with the extent of gender inequality in the cultures (Petersen & Hyde, 2011).

African American adolescent girls perceive their sexual self-efficacy to be higher than men’s do, due to notable differences between the genders' perceptions of this trait. Strong negotiation abilities and a sexual partner who supported condom use significantly predicted high-perceived sexual self-efficacy. Because of the dynamics that exist in male and female relationships and the mediating role, sexual self-efficacy is expected to play a significant role in engaging in safe sexual practices. Gender-specific interventions are thus recognized as one of the important strategies to curb the spread of HIV/AIDS and other STIs (Redmond & Lewis, 2014).

Significant gender differences in sexual orientation that are observed among males and females are visual salience, touch, context, personalization, emotion, partner specificity, partner response, startle response, and other internal versus external factors (Katz et al., 2016). Scientific literature such as Ellis& Symons (1990) shows that sexual fantasy is commonly reflected in the historically stable antagonism of the relationship between women's fiction and men's porn, the evolution of human sexuality, and the unintended consequences for our species. They argue that this is mainly due to the psychology of sexuality and the existence of profound gender differences in sexual desires and outcomes. However, other studies Knoth and his colleagues' (1988) showed that there is a gender similarity rather than gender difference in sexual fantasy among young men and women, and the results of these studies reveal that youth sexual fantasize is limited to engagement in diverse sexual activities that are guided by social norms and evolutionary pressures in the living environment. Women are significantly more likely than men to only be emotionally aroused by their sexual fantasies, as opposed to men who wish to test them physically.

2.3. Theoretical evidence

Cultural factors, socialization, and biological processes all play a role in sexual desire in both men and women (Marshall & Barbaree, 1990). Socio-biologists such as Baldwin & Baldwin (1997) contend that this distinction is biologically determined than socially. Unlike this, many sociologists and anthropologists argue that the difference is more cultural than biological. This implies that the debate over nature versus nurture in sexual interest has raged on for a long time with no resolution. In addition to thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships, there are many other ways to experience and express sexuality. These can be in the form of something biological, physical, emotional, social, or spiritual.

2.3.1. Biological driving

Biological differences, particularly significant testosterone differences among men and women, have clear implications for sex drive (VanAnders, 2015). Sexual orientation is primarily determined by biological factors (Byne & Parsons, 1993).

2.3.2 Social sexual driving and Suppressor

As stated in the works of McCall & Meston (2006) female sexual desire, on the other hand, is purified by a slew of social factors that suppress and discourage free sexual expression.

Consequently, sexual desire is complicated and reflects a variety of symbolic and sensorial meanings. The sexual differences between the genders necessitate the participation of the entire personality in sex, elevating it from a simple release of tension to a fulfilling and sustaining feature of a relationship (Leiblum, 2002).

The social constructionist argument that sexuality is a domain with changing meanings over time and culture, rather than a universal, biological drive, prompted several case studies on sexual populations and communities (Burr, 2015). Sexualities are socially organized in specific regions or contexts, as well as the history of sexual identity formations based on race and ethnicity, gender, class, and others (Weber, 1998).

2.3.3. Cultural sexual driving and Suppressor

The cultural presumption that women have instinctively low sexual desire may hurt women's sexual satisfaction. As a result of the cultural presumption that women have naturally low sexual desire, women's sexual satisfaction may decline (Leiblum, 2002). The internalization of gender-based scripts may offer the perspective through which women develop their desire for sex, according to a study on sexual script theory by Tolman and Diamond (2001). According to other studies, women restrict their sexual desire and give less importance to their sexual gratification to live up to social norms (McCabe et al., 2010).

2.4. Conceptual framework

The conceptual framework explains the independent and dependent variables. The dependent variable is risky sexual behaviors, and the independent variables include socio-demographics characteristic of respondents.

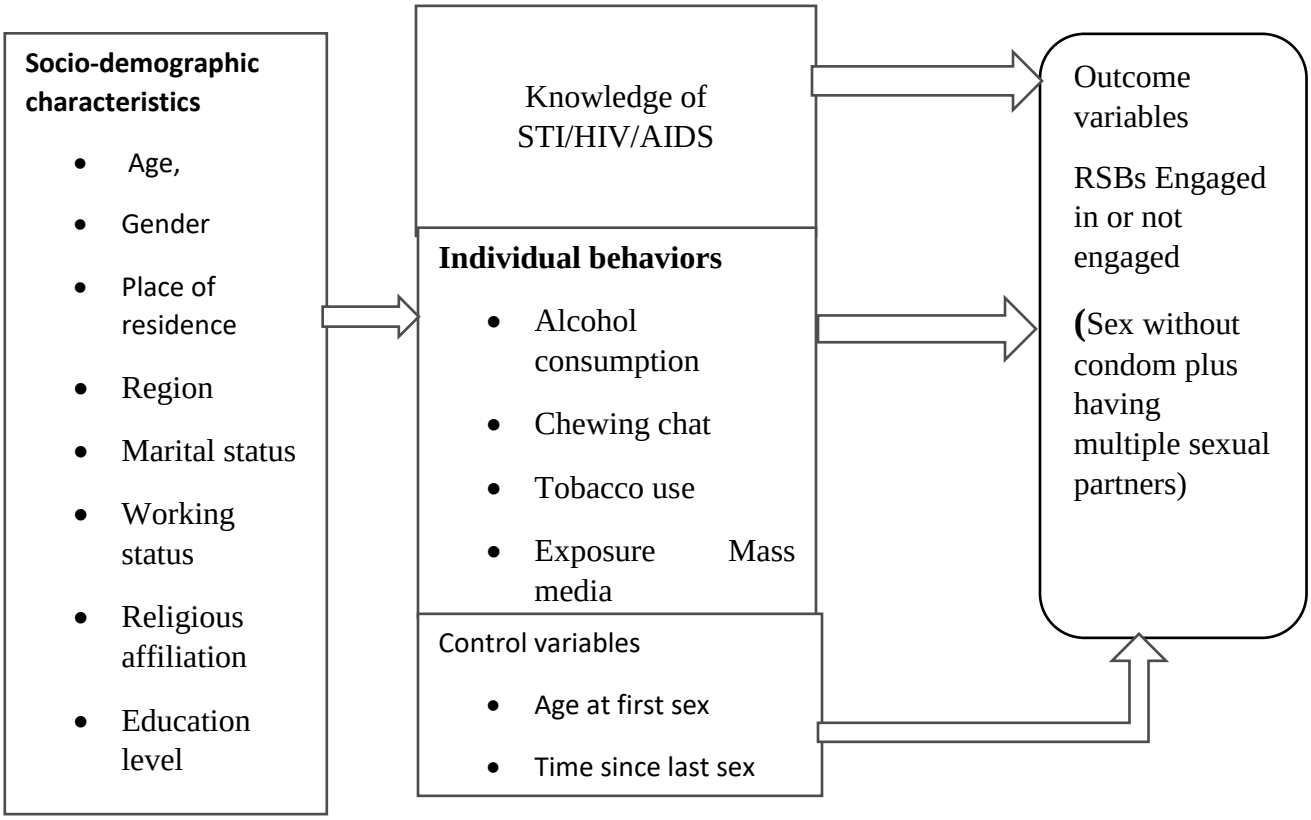

Figure 1.1: Conceptual framework for the study of risky sexual behavior among youth source based on previous studies, developed by the author 2023.

CHAPTER THREE: METHODS OF THE STUDY

3.1. Study area and period

This study was conducted in Ethiopia. Ethiopia, officially known as the Federal Democratic Republic of Ethiopia, is located in the Horn of Africa, bordered by Eritrea, Djibouti, Somalia, Sudan, and Kenya. According to United Nations Population Fund on the world population dashboard Ethiopia 2020, Ethiopia is the second largest youth in Africa, which houses 37.4 million people aged 10-24 years. In addition, the youth sex ratio in Ethiopia in 2021 is 100.13 males per 100 females showing that there are 58.9 million male and 58.9 million female youth in the country.

As stated above, Ethiopia is a federally stated country that composes nine National Regional States; namely, Tigray, Afar, Amhara, Oromia, Somali, Benishangul-Gumuz, Southern Nations, Nationalities and Peoples Region (SNNPR), Gambella and Harari – and two administrative councils – Addis Ababa and Dire Dawa City Administration. Ethiopia, according to the National Central Statistics Agency, has a total population of 103,603,462 of which children below the age of 15 account for 41.6% band those between 15-65 years of age constitute 55.1 % while 3.3% of them are elderly persons aged 65 and above (CSA, 2016). The study was conducted from May-Jun 2023.

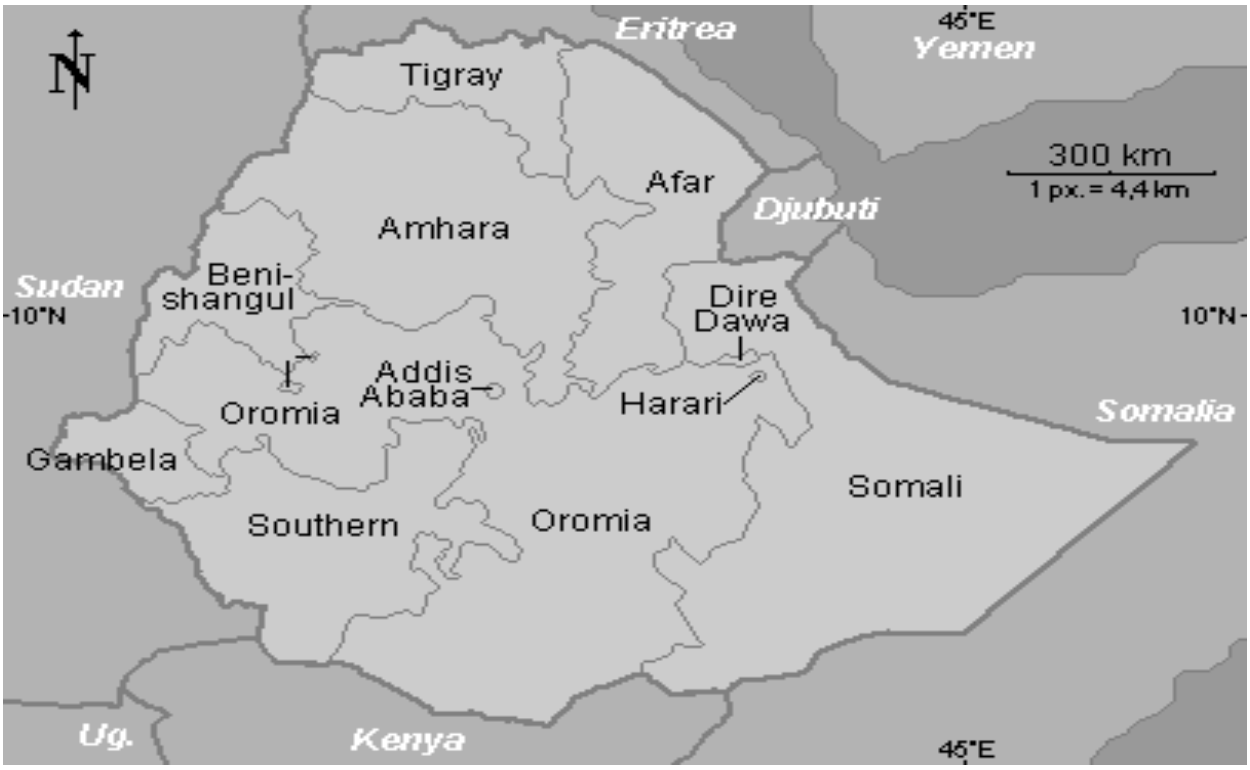

Figure 1.2: Location of region and administrative city of Ethiopia source International Development Partnerships 2012

3.2. Study sources

A quantitative study design was conducted with secondary data from the 2016 Ethiopian Demographic and health survey (EDHS). The EDHS is grounded on the DHS research process, which collects detailed information on a variety of topic areas from a representative sample of Ethiopia's population (Croft et al., 2018). The dataset is based on extensive surveys that collect, process, tabulate, and publish a report describing the country's demographics, behavior, and sexual activity of youth (15-29). The U.S. Agency funds the EDHS dataset generated from the global DHS Program for International Development (USAID) (Croft, 2018). The 2016 Ethiopia Demographic and Health Survey (2016 EDHS) was conducted by the Central Statistical Agency (CSA) from January 2016 to June 2016. These surveys, Conducted on data on women's and men's sexual activity (unprotected sexual practice, age at first sex, and other demographic characteristics (religious, region, resident, age) and particular information on tobacco, chewing chat, alcohol consumption, and access of media and internet use (Ethiopian central statistical agency-CSA & ICF, 2016).

3.3. Study population

The study populations were male and female youth who were selected by aged between 15 and 29.

3.4. Sample size and Sampling procedure

The Ethiopia Population and Housing Census (PHC), which was conducted by Ethiopia Central Statistical Agency (CSA) in 2016, served as the sampling frame for the four rounds of the EDHS. This is the fourth detailed survey that has been created national that included urban and rural, and regional level to provide population and health indicators. The Central Statistical Agency implemented the Ethiopian Demographic and Health Survey with the main goal of gathering data on fertility levels, sexual reproductive outcomes and determinants, fertility preferences, youth males and women, knowledge of HIV/AIDS, and others health, mortality and maternity as well as household characteristics. The sample was intended to provide forecasts for most of the health and demographic indicators across 11 regions. The 2016 EDHS sample is stratified and was selected in two stages. The stratification of each region into urban and rural areas produced 21 sampling strata. In each stratum, samples of enumeration areas were chosen independently in two stages (CSA-Ethiopia and ICF, 2016). For the study, only male and female respondents in the 15-29 aged groups were extracted and analyzed separately and combined. The case selected the sample size of 7490 males and females youth selected at the whole nation.

3.4.1 Sampling process

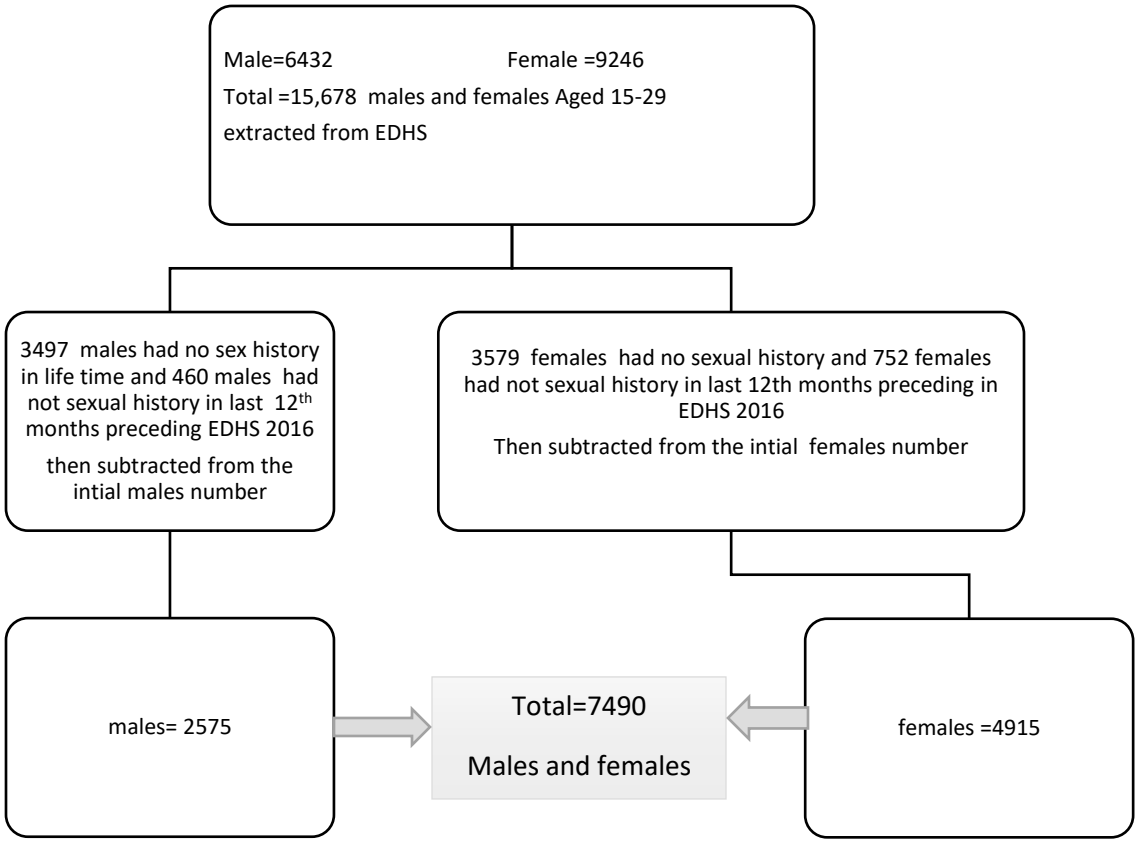

Figure 1.3 sampling process diagram source EDHS 2016

3.5. Data quality assurance

To enhance the data quality, data cleaning entails identifying and correcting errors in data inputs in a dataset. As a result, data examination and cleaning are intensive data analysis steps that allow one to proceed responsibly with accurately analyzing, interpreting, and reporting quantitative data. All DHS data surveys pass through a standardization process where the structure of the original raw data is transformed into a common format called “DHS Recode Data”. The original raw data is an exact image of the paper questionnaires. The DHS recode data, on the other hand, includes all questions collected in the original raw data converted into a common structure; plus some extra working variables to facilitate data analysis. For a comprehensive review of handling missing values and other exceptions based on the guide of DHS data editing and quality assurance, Specific rules are provided on handling missing values and other special categories of data values. For

instance, codes like “missing”, “don’t know”, “inconsistent” and “not applicable” (or “blank”) are assigned special responses (standard recoded manual DHS-7).

3.6. Description of Variable

This study was conducted based on selected questions to be extracted from the 2016 EDHS questionnaire with much focus on the characteristics of young male and female respondents; their sexual practice and HIV/AIDS Knowledge,STI as well as Socio-demographic and individual characterstics at the time of the survey. To achieve the objectives of the study, the following outcome variable and independent variables were extracted depending on the issues discovered in the literature review part. Hence, dependent variables used in the analysis of gender differences in risky sexual behavior are the existence of multiple sexual partners plus condom use at the time of sexual relations among youth (15-29) in Ethiopia. Moreover, the socio-demographic and individual characteristics are included.

3.6.1. Dependent Variable - Risky sexual behaviors

The response (Outcome) variable of this study was risky sexual behavior including the existence of Multiple sexual partners in life time plus no condom use during sexual intercourse in the preceding 12th MONTHS of EDHS.

1. Risky -If multiple sexual partners in a lifetime plus no condom use during sexual practice
2. Not risky -If a condom is used during sexual practice or by single sexual partners in a lifetime

3.6.2. Explanatory Variables

Independent variables were selected based on the literature and their availability in our data. The independent variables related to risky sexual behavior were categorized into socioeconomic, and demographic characteristics (age of respondents, location of residence, region, religious affiliation, marital status, educational level, and working status) and behaviors (alcohol consumption, chewing chat, tobacco use and exposure to mass media and also STIs, HIV/AIDS knowledge.

Table 3.1: Socio-Demographic variables

sex	**0=male** **1=female**
Age group	0=15-19 years, 1=20-24, 2=25-29
Place of residence	0=urban 1=Rural
Region	0=Oromia 3= Afar , 6=Addis Ababa 9=Dire Dewa 1=Amhara 4=Tigray 7=Somalia 10=Harari 2= SNNPR 5=Benishangul 8=Gambela
Religious affiliation	0= Muslim 1=Orthodox, 2=Protestant ,3=Others
Education level	0=No education 1=Primary 2=secondary 3=higher
Wealth index combined	0=poor 1=Medium ,2=Rich
working status	0=Not working, 1=Working
Marital status	0=Never married ,1=married 2=others/divorced/window/separate

Individual characteristics of respondents			
Exposure Media mass (reading newspapers/magazine, listing radio, watching TV frequency) at least once a week	0= Access none of all media at least once a week 1= Access one or two media at least once a week 2=Access all media at least once a week		
Alcohol consumption	0=No 1=Yes		
Chewing chat	0=No 1=Yes		
Smoking tobacco	0=No 1=Yes		
Tobacco use	,1=Do not smoke, 2=Somedays 3=Every day		
Knowledge of HIV/AIDS Questions			
		NO=0	**YES=1**
Q1. Ever heard of AIDS			
Q1 Reduce risk of getting HIV: always use condoms during sex.			
Q2. Reduce risk of getting HIV: have 1 sex partner only, who has no other partners			
Q3. Can get HIV by sharing food with person who has AIDS			
Q4. Can get HIV by witchcraft or supernatural means			
Q5. Can get HIV from mosquito bites			
Q6. A healthy-looking person can have HIV			
Have you heard about STI			
Control variables			
Age at first sex			Continuous
Time since last sex in years			Continuous

3.7. DHS Data Access and Authorization

To access the DHS data, an open online database registration via email was carried out. This includes uploading a detailed description of the purpose of the study and a research objective that was investigated. It was anticipated that based on the description of the study data was provided with approval of the study.

3.8. Data extraction procedures

In the EDHS, data was collected using the questionaries' men and women. For the study, were selected the data collected using the men and women questionnaires. EDH is a nationally representative sample survey that collected information among people of reproductive age on sociodemographic characteristics and behavior, and sexual activity of youths. The data was taken from females and males aged 15-29 years, and a national representative was selected from all nine regions and two administrative cities (CSA et al., 2016). To compare the male and female youth sexual behavior by analyzing risky sexual behaviors (multiple sexual and not using condoms during sexual practice).The binary output variable was coded "1" if risky, and"0" for non-risky.

3.9. Data processing and analysis

The EDHS SPSS datasets file was downloaded from the DHS program demographic and health survey website after registering and extracting the variables. The data was analysis descriptive and inferential analysis. The social demographic, individual characteristics of youth, and sexual behaviors were compared by gender to identify gender differences in sexual behaviors. Descriptive statistics were used analysis frequency distribution and bivariate and multivariate statistical methods were used to predict the relationship between gender and risky sexual activity. The crud odd ratio and adjusted odd ratio statistical tests were used for independent categorical variables. Binary logistic regressions were used for analyzing determinants of risky sexual behaviors. To investigate how the explanatory factor affects the dependent factors, logistic regression analysis was used. The probabilities of an event happening are estimated by the models, which means that the probabilities of an event happening are calculated as the ratio of the event's happening probabilities to its event not happening probability. Indicating how the influence of a one-unit change in the explanatory variables, the outcomes of the logistic regression model is stated as odds ratios. To describe differences in gender in risky sexual practice frequency distribution and

regressions tables were used. Analysis was performed for male and female respondents separately and merging data. To analyze, risky sexual behaviors computing new variables from the two Indicators of sexual practice.

The predictor variable responses (categorical data) were coded as 1 and 0, Risky =0 when the youth had multiple sexual partners plus not condom use during sexual intercourse, and not risky=1 when the youth had multiple sexual partners plus condom use or single sexual partners use/no condom use during sexual intercourse. Correlation-independent variables were done. Multicollinearity was checked with tolerance and variance inflation. To compare categorical variables between male and female likelihood of risks sexual behaviors were used. The variables' crude odd ratios were presented for those that met the 5% significance level (P 0.05) in bivariate and adjusted odds ratio (AOR) in multivariate analysis corresponding the p valaue along with 95% confidence interval (CI). The model's goodness of fit assesses how effectively it explains the outcome variable. The Hosmer -Lemeshow testing was employed for evaluating model fit and the explanatory variables (Fagerland & Hosmer, 2012). Hence, the Hosmer Lemeshow was 56.7% explained the model.

The equation is expressed as Y = EXP (B0 + BiXi + . . . + BkXk) where each Xi is a predictor and each Bi is the regression coefficient. For binary logistic regression, the dependent variable (multiple sexual partners, condom use, and early sexual activity) is a categorical variable, coded 0 and 1. Describe as logit instead of y.

Log (odds) =logit (P) =ln (p/ (1−p)

The socio-demographic variable such as age, residency, education level, and religious and individual characteristics of the respondents consider as explanatory variables of respondents have served explanatory variables. The odds of an event of interest occurring are defined by odds=p/ (1−p) where p is the probability of the event occurring. The model's outcomes can be stated as odds ratio, which is P(x)/(1 -p(x)), where P(x) is the chance that event X occurs and 1-P(x) is the probability that event X fails to happen.The form of table, frequency, percentage, and graph presented data was used.

The 2016 EDHS questions that were designed to gather data on knowledge of HIV/AIDS were used in this study to create indices of adequate knowledge of HIV/AIDS. A six-question composite

index was used to gauge adequate knowledge. Each question has a "Yes" or "No" response option, and if the woman answered the question correctly, a value of "1" is given; if not, a value of "0" is given. Respondents who answered with less than 80% of questions were considered to have inadequate knowledge, while those who answered with 80% accuracy or higher were considered to have adequate knowledg(Smith et al.,2006). The Cronbach alpha reliability for knowledge of HIV/AIDS was 0.83.

3.10. Ethical consideration and dissemination of the results

The research and ethical committee of Addis Ababa University was approved. The results of the thesis were disseminated in both hard and softcopy to Addis Ababa University, Ethiopia. The results and findings of the study with recommendations were disseminated to respective health institutions' reproductive health partnerships, the Ministry of health, and policymakers.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

4.1. Result

This section presents a presentation of data analysis and interpretation of information on Demographic and socio-economic characteristics of youth, a summary of descriptive statistics, and distributions the analysis and interpretation of this study were based on the data from the Ethiopian Demographic and Health Survey 2016. The data extracted from the survey questionnaires of men and women enable us to answer the basic research questions raised at the beginning of the study based on the previous literature.7490 males and females whose ages were between 15 and 29 were selected for this study.

4.2. Demographic and socio-economic Characteristics of the Respondents

The socio-demographic characteristic consists of gender, age, region of the respondents, place of residence, educational background, religious affiliation, working status, wealth status, and education level of respondents. This aspect of the analysis deals with the EDHS data, which is briefly, described through the tables. Gender is one of the variables used to discuss the respondents' demographic characteristics. As we have shown in table 4. Below among the youth aged between 15-29 samples (7490) that were included in this study, 4915(65.6%) were females and 2575(34.4%) of males. There were more female respondents compared to male respondents because more male youth never had sex during the survey when asked age of at first sex, and males who had one-year sexual experiences are fewer than females during the survey. In addition, the male-female ratio of the sample was less in EDHS 2016. A total of 2575 males and 4915 females who had sexual intercourse in the 12 months preceding the 2016 EDHS survey in Ethiopia were included in this study.

Table 4: Sex of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	2575	34.4	34.4	34.4
Female	4915	65.6	65.6	100
Total	7490	100	100	

Source: EDHS 2016 data

The table 4.1: gives information on the composition of the respondents in terms of region of residence.

The distributions of respondents across regions nearly similar proportions (see table 4.1 below)

Table.4.1: Region of the respondent's

	Frequency	Percent	Valid Percent	Cumulative Percent
Oromia	974	13	13	13
Amhara	819	10.9	10.9	23.9
SNNPR	758	10.1	10.1	34.1
Afar	736	9.8	9.8	43.9
Tigray	710	9.5	9.5	53.4
Benishangul	663	8.9	8.9	62.2
Addis Ababa	653	8.7	8.7	70.9
Somalia	628	8.4	8.4	79.3
Gambela	588	7.9	7.9	87.2
Dire Dewa	499	6.7	6.7	93.8
Harari	462	6.2	6.2	100
Total	7490	100	100	

Source: EDHS 2016 data

4.3. Distribution of respondents by risky sexual behavior

There was a significant difference between males and females in the percentage of risky sexual behavior. As showed Table 4.2 below about 37.4% (964) males and 15.0 %(739) females had risky sexual behavior. Among the total Ethiopian youth, about 22.7 %(1703) of males and females were risky.

Although the results show disproportionately higher females who had lived in urban areas (21.0%) risky than those who lived in rural areas (12.6%), and the corresponding percentages for males risk were 39.3% and 33.6% for those who had lived in urban and rural areas, respectively. There is a significant gender disparity in risky sexual behavior in distribution by respondents' places of residence.

Regarding the age of respondents result show that only 8.8% percent of female respondent aged 15-19 were engaged in risky sexual practice, whereas 14.9% and 17.3 % were risky among females aged 20-24 and 25-29 years old respectively. There was a nearly similar percentage of risk among males across all aged groups, males were more risky sexual practices compared to females across all stages of youth in percentage (table 4.2 columns II and I).

Overall, there was a higher percentage of risky sexual behavior among male youth in comparison to female youth across all regions of the country. The study shows males more than 30% riskier reported in the five regions compared to only one region for females. Afar (53.2%), Gmabela (51.8%), Benshangule (46.2%), Amhara (43.6%), and Oromia (43.5%) were more risker males reported, yet only Amhara (33.4%) of females were engaged to risky sexual practice. The lowest percentage of risky sexual behavior is among females in Somalia (5.6%) and among males in Harari (19.10%). The highest percentage of risky sexual behavior was reported in the Amhara (36.9%) and Gambela (34.9%) regions, while the Somalia region had the lowest percentage (10.8%) across both sexes.

Even though there were differences in the proportion of males and females with risky sexual behavior, the level of risky sexual behaviors was nearly the same across the educational levels of females and males (Table 4.2 columns Ⅰ, and Ⅱ).

The result shows that one out of five (24.3%) female orthodox followers were riskier than females whose religious Muslim (9.60%), protestant (9.40%), and other religious affiliation (5.10%). The risky sexual practice was nearly similar among males across religious affiliations. However, males had a higher percentage of risky sexual practices than females across all religious affiliations (Table 4.2 column Ⅰ, and Ⅱ). About 13.30% and 18.70% of females were engaged in risky sexual behavior among those not working and working status respectively.

Concerning marital status, more than one-four (27.9%) of divorced/separate/widowed marital status of female respondents had risky status compared to 13.7% of married females. Whereas among married and never-married females, nearly the same. Moreover, the risky distribution among males (25.1%, 43.6%, and 41.7%) across never married, married, and other marital statuses respectively.

Table.4.2: Distribution of respondent's by RSB Ethiopian youth (15-29) by SEX

Variable	N		Risky sexual behavior (RSB)		
	Male	Female	Male	Female	Both sexes
Age group			I	II	III
15-19	236	763	66(28.00%)	67(8.80%)	133(13.3%)
20-24	839	1898	282(33.60%)	283(14.90%)	565(20.6%)
25-29	1500	2254	616(41.10%)	389(17.30%)	1005(26.8%)
Place of residence					
Urban	844	1422	284(33.60%)	299(21.00%)	583(25.7%)
Rural	1731	3493	680(39.30%)	440(12.60%)	1120(21.4%)
Region of residence					
Oromia	340	634	148(43.50%)	53(8.40%)	201(20.6%)
Amhara	280	539	122(43.60%)	180(33.40%)	302(36.9%)
SNNPR	233	525	67(28.80%)	38(7.20%)	105(13.9%)
Afar	220	516	117(53.20%)	49(9.50%)	166(22.6%)
Tigray	206	504	74(35.90%)	93(18.50%)	167(23.5%)
Benishangul	266	397	123(46.20%)	54(13.60%)	177(26.7%)
Addis Ababa	284	369	74(26.10%)	103(27.90%)	177(27.1%)
Somalia	162	466	42(25.90%)	26(5.60%)	68(10.8%)
Gambela	249	339	129(51.80%)	76(22.40%)	205(34.9%)
Dire Dewa	178	321	38(21.30%)	40(12.50%)	78(15.6%)
Harari	157	305	30(19.10%)	27(8.90%)	57(12.3%)
Religious affiliation					
Muslim	1017	2192	375(36.90%)	211(9.60%)	586(18.3%)
Orthodox	1081	1844	373(34.50%)	449(24.30%)	822(28.1%)
Protestant	438	800	198(45.20%)	75(9.40%)	273(22.1%)
Others	39	79	18(46.20%)	4(5.10%)	22(18.6%)
Marital status					
Never married	841	254	211(25.10%)	52(20.50%)	263(24.0%)
Married	1602	4321	698(43.60%)	592(13.70%)	1290(21.8%)
others(divorce/separate/window	132	340	55(41.70%)	95(27.90%)	150(31.8%)
Wealth status					
Poor	995	2152	420(42.20%)	254(11.80%)	674(21.4%)
Middle	298	629	108(36.20%)	99(15.70%)	207(22.3%)
Rich	1282	2134	436(34.00%)	386(18.10%)	822(24.1%)
Working status					
Not working	307	3356	109(35.50%)	448(13.30%)	557(15.2%)
Working	2268	1559	855(37.70%)	291(18.70%)	1146(29.9%)
Educational level					
No education	486	2062	202(41.60%)	300(14.50%)	502(19.7%)
Primary	1053	1830	396(37.60%)	267(14.60%)	663(23.0%)
Secondary	522	627	191(36.60%)	102(16.30%)	293(25.5%)
Higher	514	396	175(34.00%)	70(17.70%)	245(26.9%)
TOTAL	**2575**	**4915**	**964(37.40%)**	**739(15.00%)**	**1703(22.7%)**

Source: EDHS 2016 data

As shown the Table 4.3. Of the total study subjects, about 36.5% and 38.5% of males risk out of non-drunk alcohol and drunk alcohol respectively. One in five (26.3%) female respondents reported risk across ever-drink alcohol while 10.0%) of females were at risk from non-ever-drink alcohol. In both sexes, about 31.3% of youth risk from ever-drink alcohol while 17.6% of youth risk from non-ever-drink alcohol.

In males, ever-chewing Chat and never chewing chat had similarly experienced risky sexual behavior. About 14.3% and 21.8% of females had risky sexual behaviors among never chat chewing and ever-chat-chewing females respectively. Roughly, 36.7%, 48.0%, and 28 (36.4%) risky males among men who did not smoke smoked occasionally, and smoked every day accordingly. About 15.00%, 27.30%, and 16.70% were risky among females who do not smoke tobacco, every day, and some days smoke correspondingly. About 22.0%, 31.7%, and 46.8%) were risky among the youth who did not smoke every day and somedays.

Males belonging to different wealth status, working status, knowledge of HIV/AIDS/STIs and access to mass media had nearly similarly the vulnerability of risky sexual practice, Whereas, females with different knowledge of HIV/AIDS, and hearing about STIs had a significant difference in counterparts of the percentage of risky sexual behavior (Table 4.3.columns I and II).

Table 4.3: Distribution of respondent's characteristics by RSB in youth (15-29) by Gender

	N		Risky sexual behavior/RSB		
	Male	Female	Male	Female	Both sexes
VARIABLES			I	II	III
Chat chewing					
No	1619	4419	608(37.60%)	631(14.30%)	1239(20.5%)
Yes	956	496	356(37.20%)	108(21.80%)	464(32.0%)
Ever drink alcohol					
NO	1376	3390	502(36.50%)	338(10.00%)	840(17.6%)
YES	1199	1525	462(38.50%)	401(26.30%)	863(31.7%)
Smokes tobacco					
Do not smoking	2323	4880	852(36.70%)	732(15.00%)	1584(22.0%)
Every day	77	24	84(48.00%)	3(27.30%)	32(31.7%)
Some days	175	11	28(36.40%)	4(16.70%)	87(46.8%)
knowledge of HIV/AIDS					
Adequate	1771	2024	655(37.00%)	372(18.40%)	1027(27.1%)
Inadequate	746	2492	288(38.60%)	334(13.40%)	622(19.2%)
Lack of knowledge(Not ever heard of AIDS)	58	399	21(36.20%)	33(8.30%)	54(11.8%)
Ever heard of (STIs)					
NO	49	383	18(36.70%)	32(8.40%)	50(11.6%)
YES	2526	4532	946(37.50%)	707(15.60%)	1653(23.4%)
Access to media(TV, R, M)at least once a week					
Access non all media	1363	3439	542(39.8%)	459(13.3%)	1001(20.8%)
Access one or two media	1043	1396	359(34.4%)	264(18.9%)	623(25.5%)
Access all Media	169	80	63(37.3%)	16(20.0%)	79(31.7%)
Total	**2575**	**4915**	**964(37.40%)**	**739(15.00%)**	**1703(22.7%)**

Source: EDHS 2016 data

4.4. Bivariate Analysis Results

4.3.1: Determinates of Males and females engagement in risky sexual behaviors among Ethiopian Youth

Table 4.4 shows the results of crude odd ratio estimating the factors associated with males, females, and both sexes in risky sexual practice. Among male youths aged 15-29 years who had multiple sexual partners in their lifetime and no condom use durning sex beyound in a year preceding in the Ethiopian demographic and health survey.

Bivariate analysis shows that the major socio-demographic factors significantly associated with increased relative risk of males and females engaging in risky sexual practices were regions, residence, marital status, age, education, wealth status, and religious affiliation. Furthermore, working status was a significant risk factor for females who were engaged in risky sexual practices.

The bivariate result reveals that male youth were 3.38 times more likely to engage in risky sexual practices compared to female youth. There was a significant association between gender and risky sexual practices (COR=3.381, P≤0.001) (table 4.4. column Ⅲ).

Age of respondents males were whose age 25-29 had more risky sexual practices than males aged 15-19(COR= 1.795, P≤0.001), whereas females were whose age 20-24 and 25-29 engaged in more risky sexual practices compared to females aged 15-19(COR=1.82, P≤0.001and COR=2.16, P≤0.001).

Concerning geographical area/ regions shows the study that males who lived in Afar and Gamble were engaged in higher risky sexual practices compared to males who lived in Oromia. In contrast, males who lived in Addis Ababa, SNNPR, Somalia, DireDewa, and Harari were lower risky sexual practices compared to males who lived in Oromia. In females, females who lived in Amhara, Addis Ababa, and Gambela were more likely to engage in risky sexual practices compared to Oromia(COR=5.49.4.24, and 3.17 with p≤0.001)respectively .furthermore, females who lived in Tigray, Benishangul, and Dire Dewa riskier than female lived in Oromia(Table 4.4.columns Ⅰ and Ⅱ).

In comparison to rural, the likelihood of risky sexual practices among males was significantly lower by 21.6% living in urban areas ($p < 0.01$). Differently, females who had lived in urban areas were 1.84 more likely to risky sexual practices compared to those who lived in rural areas (p≤0.001).

The bivariate results indicated that having risky sexual practices reduced by 27.4% among males who had an educational level higher compared to those with no education males (p≤0.05).

However; females' unadjusted odds ratios for risky sexual practice were not significant by educational level.

In wealth status, males who had rich wealth status were 0.706 times, less likely to engage in risky sexual practice compared to males who had poor wealth status ($p \leq 0.001$). Whereas females who had rich and medium were 1.65 and 1.39 more likely, to engage in risky sexual practice compared to females who had poor wealth status respectively, ($p \leq 0.01$ and $p \leq 0.001$) (table 4.2.coulum 1 and 2). Compared with those with Islamic religious affiliation, protestant religious followers males were 1.41 times more key to risk (p-value ≤ 0.01), and females were orthodox followers 3.02 times more likely to risk ($p \leq 0.001$).

Considering working status, Females with no working status were 1.49 times more likely to be risky than their counterparts ($P \leq 0.001$) in the bivariate model. The socio-demographics of the respondents included in this study is significantly associated with risky sexual practices among Ethiopian youth (15-29) (show Table 4.4column lll).

Table 4.4: Bivariate analyses of the socio demographic of youth (15-29) by RSB by Sex

	Risky Sexual Behaviors(RSBs)		
	Male	**Female**	**Both sexes**
Variables	Ⅰ	Ⅱ	Ⅲ
sex Male	---	---	**3.381 ***(0.057)**
Female	---	---	ref
Age group			
15-19	Ref	Ref	ref
20-24	1.304(0.162)	1.82*** (0.143)	1.694***(0.104)
25-29	1.795***(0.154)	2.167*** (0.14)	2.38***(0.1)
Place of residence			
Urban	.784**(.088)	1.847***((.083)	0.788*** (0.059)
Rural	Ref	Ref	ref
Marital status			
Never married	Ref	Ref	ref
Married	2.31***(.094)	0.617**(0.162)	0.881(0.077)
Others	2.133** (.194)	1.506*(0.197)	1.474*** (0.122)
Region			
Oromia	Ref	Ref	ref
Amhara	1.002(0.163)	5.496*** (0.17)	2.246*** (0.107)
SNNPR	0.524*** (0.181)	0.855(0.221)	0.618*** (0.132)
Afar	1.474* (0.174)	1.15(0.208)	1.12(0.119)
Tigray	0.727(0.182)	2.481*** (0.184)	1.183(0.119)
Benishangul	1.116(0.165)	1.726** (0.205)	1.401** (0.118)
Addis Ababa	0.457***(0.174)	4.245***(0.185)	1.43**(0.118)
Somalia	0.454*** (0.21)	0.648(0.248)	0.467*** (0.151)
Gambela	1.395* (0.167)	3.168***(0.194)	2.058***(0.117)
Dire Dewa	0.352*** (0.213)	1.56* (0.222)	0.713* (0.147)
Harari	0.306*** (0.231)	1.065(0.247)	0.541*** (0.162
Working status			
Working	1.099(0.127)	1.49***(0.082)	2.384***(0.058)
Not working	Ref	Ref	ref
Educational level			
No-education	Ref	Ref	ref
Primary education	0.847(0.112)	1.003(0.091)	1.217**(0.067)
Secondary education	0.811(0.129)	1.141(0.125)	1.395***(0.084)
higher education	0.726*(0.131)	1.261(0.146)	1.502***(0.09)
Wealth status			
Poor	Ref	Ref	ref
Medium	0.778(0.137)	1.396**(0.128)	1.055(0.09)
Rich	0.706***(0.087)	1.65***(0.087)	1.163* (0.059)
Religious affiliation			
Muslim	Ref	Ref	ref
Orthodox	0.902(0.091)	3.022***(0.09)	1.75***(0.061)
Protestant	1.412**(0.116)	0.971(0.141)	1.266**(0.082)
Others	1.467(0.328)	0.501(0.518)	1.026(0.241)

Source: EDHS 2016 data

4.2.2: Bivariate analyses on an individual characteristic of RSB Ethiopian youth (15-29) by sex

Bivariate results show that Media access, knowledge of HIV/AIDS, hearing about sexually transmitted, chewing chat, and alcohol drinking were significant associations between females' risky sexual practices. Smoking tobacco and media access was significant association with male risky sexual practices. Overall, all individual characteristics included in this study were significant associations between youth and risky sexual practices.

Males who had access to media one or two of three media at least one time a week were 0.79 less likely than those who had access to media not at all at least one time a week. In contrast, females who had access to media one or two media of three and accessed all media at least one time a week were 1.3 and 1.7 times more likely to risky sexual behavior compared to those non-access of media respectively ($P \leq 0.001$).

Considering substance use, males who do not smoke tobacco were less likely to risk paralleled to males who smoke tobacco every day ($p \leq 0.01$). females were chewing chat or alcohol drunk 1.67 and 3.22 times more likely to engage in risky sexual practice compared to their counterparts ($p \leq 0.001$) correspondingly.

Regarding HIV/AIDS knowledge, females who had adequate knowledge and inadequate knowledge about HIV/AIDS were more likely risky sexual practices compared to females who had a lack of knowledge about AIDS. HIV/AIDS knowledge was the insignificant association between male's risky sexual practices (table 4.5. columns Ⅰ and Ⅱ).

Table 4.5: Bivariate analyses individual characteristic of respondents RSB youth by Sex

	RISKY SEXUAL PRACTICE		
VARIABLES	**MALE**	**FEMALE**	**BOTH SEXES**
Knowledge of HIV/AIDS			
Adequate	1.034(0.278)	2.497***(0.191)	2.769***(0.149)
Inadequate	1.108(0.283)	1.717**(0.191)	1.774***(0.152)
lack knowledge	Ref	ref	Ref
Ever heard of (STIs)			
NO	Ref	ref	ref
YES	1.031(0.299)	2.027***(0.189)	2.337***(0.153)
Have you ever chewed Chat?			
NO	ref	ref	ref
YES	0.98(0.084)	1.67***(0.117)	1.81***(0.065)
Drink Alcohol			
NO	Ref	ref	ref
YES	1.09(0.082)	3.22***(0.082)	2.61***(0.056)
Smoking tobacco			
Do not smoke	ref	ref	ref
Somedays	0.987**(0.241)	1.1(0.548)	1.645*(0.216)
Every day	1.59**(0.157)	2.23(0.678)	3.117***(0.15)
Access media at least once a week(TV,R,N)			
Access none of all media	Ref	ref	ref
Access One or two of three	0.795**(0.086)	1.514***(0.085)	1.303***(0.058)
Access all three media	0.9(0.168)	1.623(0.284)	1.765***(0.141)
TV,Television,=R=radio,N=Newspaper/magazine			

Source: EDHS 2016 data

4.5. Multivariate analysis

The study conducted determinants of risky sexual behavior practice we conducted multivariate analysis to determine the predictors of risky sexual behavior among youth by gender. We included the explanatory variable that was significant in bivariate analysis across males, Females, and both sexes separately. Hence, we entered variables on backward selection methods. The multivariate result shows that significant association between gender and risky sexual practice. Males were 5.2 times more likely to practice risky sexual practices compared to females (AOR=5.2, p=0.000).

The explanatory variables marital status, residence, region, and alcohol intake were a significant variation of males and females risky sexual behaviors. The predicting variables of smoking tobacco had a significant relationship with males' risky sexual practices. Age category and chewing chat were significant for females' risky sexual practices. Overall, age, marital status, residence, region, alcohol consumption, and Chat chewing was significant to risky sexual behavior among Ethiopian youth.

The risky sexual practice by region significant compared with the Oromia region, males were in Afar and Gambella had 1.69 more likely to have risky sexual practices (p≤.0.01). Nevertheless, the risk level of males significantly lower living in SNNP, Addis Ababa, Somalia, Harari, and Diredewa regions compared to the Oromia region (Table 4.6, COLUMN I). Among females, the likely hood of having risky sexual practices was significantly higher in Amhara and Gambella regions compared to the Oromia region(AOR=4.0 and 3.37,p<=0.01) accordingly. The risk level increased by 76.9%, 16.1%, and 87.8% among those living in Tigray, Addis Ababa, and Benishangul-Gumuz regions, correspondingly (Table 4. 6, column II). Among Ethiopian youth, the odds of having a youth with risky sexual practice increased by 24.0%, 59.6%, 59.3%, 39.5%, 68.1%, and 45.7% if the youth in Amhara, Afar, Tigray, Benishagual, Addis Ababa and Gamebela compared to Oromia region respectively(Table 4.6.columen Ⅰ, Ⅱ, Ⅲ).

The likelihood of risky sexual practices was significantly increased by 48.1% among males living in urban (p≤0.01, similarly females who had lived in Urban increased by 41.5% in comprestion to living rural areas to risky sexual practice (P<0.01).

Regarding the age category, the likelihood of females who were aged 20-24 and 25-29 was more likely to practice risky sexual practices compared to females whose age was 15-19(OR=1.942, p=0.000 and OR=2.278, P=0.000 respectively).youth aged 20-24 and 25-29 were higher risky sexual practice than youth aged 15-19(table 4.6 column Ⅲ).

Concerning marital status, males with married and others marital were 2.76 and 2.03 times more likely to have risky sexual practices than those with never married respectively (p < 0.001). Whereas females with other marital statuses (divorced/separated/windowed) were 1.98 times more likely to risky sexual practices compared to females those ever married (p≤0.001). Among Ethiopian youth, being married reduced by 47.2% risky sexual practices compared to never-married youth p≤0.001) (table 4.6.column Ⅲ

Regarding ever-chat chewing the result shows that females who had ever chewed chat were more likely to practice never chewing chat to have risky sexual practice (AOR= 2.37,p=<0.001).but among males chat chewing is significant. Considering alcohol drunk, females with drunk alcohol were 1.69 times more likely to risky sexual practices compared to their counterparts p≤0.001). A

male who smokes tobacco every day higher risk than a nonsmoker male (AOR=1.76, P<=0.001. The level of risky sexual behavior among Ethiopian youth increased by 90.6% of youth who are drunk alcohol p value ≤ 0.001.

As shown in Table 4.6, the study has shown that among the independent variables, four variables such as region, residence, age alcohol drinking, chat chewing, and marital status had a significant relationship to risky sexual behaviors among youth at the national level (Table 4.6. column lll).

As the significance of the bivariate analysis results variables included in the multiple regression analysis separately among male, female, and both sexes, the following variable included in multivariable analysis.

Table 4.6:multivariate analyses of RSB among Ethiopian youth (15-29) by sex

	Risky		
Variables	**Male**	**Female**	**Both sexes**
Sex	I	II	III
Male	**	**	5.202***(0.091)
Female			Ref
Age category			
15-19		ref	ref
20-24	Insignificant	1.942***(0.15)	2.281***(0.126)
25-29		2.278***(0.148)	3.182***(0.127)
Marital status			
Never married	Ref	Ref	ref
Married	2.756***(.117)	1.091(0.182)	0.528***(0.119)
Others	2.035***(.206)	1.983***(0.212)	1.061(0.162)
Smokes tobacco			
Don't smoke	ref		
Sometimes	1.125(.259)	insignificant	insignificant
Every day	1.755(.175)***		
Residence			
Urban	1.481**(.126)	1.415**(0.112)	2.222***(0.09)
Rural	Ref	Ref	ref
Region Oromia	ref	REF	ref
Amhara	.947(.168)	4.082***(0.187)	2.24***(0.134)
SNNPR	.492***(.187)	1.145(0.237)	0.864(0.152)
Afar	1.696(.183)**	1.525(0.221)	1.596***(0.141)
Tigray	.775(.188)	1.769**(0.205)	1.593(0.147)**
Benishangul.G	1.173(.171)	1.878**(0.213)	1.391(0.143)*
Addis Ababa	.484***(.208)	2.161***(0.219)	1.681**(0.17)
Somalia	.313***(.220)	0.882(0.262)	0.607**(0.17)
Gambela	1.695**(.179)	3.772***(0.218)	2.457***(0.147)
Dird Dewa	.310***(.229)	1.132(0.238)	0.603**(0.179)
HARARI	.234***(.239)	0.864(0.258)	0.385***(0.192)
Alcohol drunk			
NO		ref	ref
YES	Insignificant	1.699***(0.133)	1.906***(0.083)
Chewing Chat			
NO		ref	ref
YES	Insignificant	2.372***(0.141)	2.03***(0.093)
Constant	.275***(.168)	0.028***(0.273)	2.915***(0.241
-2 Log likelihood	3127.288	3701.447	5840.785

Exp (B) sig (SE).P<0.001-***, P<0.01-** AND P<0.05.*, Insignificant=during bivariate analys

Source: EDHS 2016 data

CHAPTER FIVE: DISCUSSION, CONCLUSION, AND RECOMMENDATION

5.1. Discussion

This study's finding shows there was a significant difference in risky sexual behaviors across gender. Male youth had 5.2 times more risky sexual practices compared to female youth. The study identified various factors that influence the sexual behavior of male and female youths aged 15-29 in Ethiopia. Similarly, the result from a study conducted at Jimma University revealed that more proportion of male students who ever had sex compared to females (Tura G et al., 2012). Mainly social scientists have noted that biological variations alone cannot adequately explain risky sexual behavior (Cislaghi & Shakya, 2018). Cultural factors, socialization, and biological processes all play a role in sexual desire in both men and women (Marshall & Barbaree, 1990). Sexual practice and sexual orientations are greatly determined by culture and socialization process, and culturally determined socialization process broadens the sex-role definitions and behavioral options of males while limiting those of females (Block, 1973). The cultural setting in Ethiopia might have a higher opinion of male sexual relations and different positions of responsibility than females. Moreover, In the Ethiopian socio-cultural context males are the more influential person and decision maker. It might be males had higher risky sexual practices than females in Ethiopia.

The results of this study show that region, marital status, and residence predict the risky sexual practice among males and females in Ethiopia. This study found that there was risky sexual Variation across regions. There is no overarching pattern of sexual activity hence; regional differences in sexual behavior are substantial. The variation is mainly explained by societal, cultural, and economic factors that influence sexual behavior (Welling et.al.2006). Similarly, regional difference in sexual behavior is supported by a study conducted by Odimegwu et al., 2019) revealing that regional differences in behavior happen due to socio-cultural practices. Thus, Regions are represented by different biodiversity of the population belief, culture, and social-economics distribution in Ethiopia.

Our study reveals in comparison with females youth with age less than 19 years older were less likely to risky sexual behavior than females whose aged 20-24 and 25-29 years old. This finding is supported by the study conducted in Addis Ababa, Ethiopia (Fetene& Mekonnen, 2018, Cherie&

Berhane, 2012) Restricting parental norms towards sex was protective against risky sexual behavior. In contrast, Igra & Irwin (1996) theory revealed that adolescents aged 15-19 have risk-taking behaviors as those behaviors, undertaken risky sexual practice, whose outcomes remain uncertain with the possibility of an identifiable negative health outcome. However, the study showed that parenting practices, especially family communication and parental monitoring, prevented drug initiation and delayed alcohol initiation and sexual debut in adolescents (Ryan et al., 2015). Hence, in Family norms and values in Ethiopia, females restrict from outside for enjoyment and being under control until they leave their families for education, marriage, and others reason. Most females aged under 20 years in Ethiopia are living with their parents. It might be an impact on the result of this study.

On the residence of the youth, the study noted that males and females who had lived in urban were significantly more likely to have engaged in risky sexual practices compared with those who had lived in rural areas. Similarly, Folayan and colleagues (2015) observed that urbanization is the fundamental primary agent of sexual activity that has a direct influence on the sexual behaviors of youths, especially those who lived in higher cities, support this finding. This could be explained by the fact that with living in urban areas comes increased enjoyment of risky behaviors, which eventually leads youth to change their sexual behavior toward unprotected and multiple sexual activities.

By marital status, the study revealed that male married and separate/divorced youths and those of other ever married were generally associated with having a greater number of risky sexual behaviors compared with never-married youths. Related studies have found that never-ever married youths were less likely to engage in risky sexual behaviors compared with married youths (Coleman and Testa, 2008). In contrast, in the study conducted in Kenya (Akwara et al., 2003) young and unmarried men were more likely than older and married ones to report risky sexual behavior. However, findings revealed that men's multiple wives or polygamy in some parts of Ethiopia was practiced from religious and cultural perspectives. In addition, after marriage, both sexes' spouses are expected to be faithful to each other, and Sexual extramarital affairs are not socially acceptable, but there is a little pressure on males. This might increase risky sexual practices among married males.

Females with separate/divorced/window partners are more likely to risk being compared to risky sexual compared to never-married females. In a similar study revealed by Liddon and his colleagues (2010) divorced/separated women were more likely to report 5 or more lifetime sex partners and 2 or more sex partners in the past year than never-married women. The result of this study might be religious, belief, and traditional practices perspective in Ethiopia as well as conservative outlooks the divorced/separate/window females in Ethiopia most of the time not acceptable or has little chance to marry another person. It Might as the reason females other than married and single be engaged in risky sexual practices.

Ever using substances predicted the risky sexual behavior of youth. Smoking tobacco increases the youths' risk of committing risky sexual behavior among males (Thepthien et al., 2022). It may be the small number of smokes among female respondents compared to the total sample and very unusual in Ethiopian females. Substance uses were detected to predict risky sexual behavior. For example, the use of alcohol was significantly associated with risky sexual activities among females and males. However, the chewing chat was significant among females. These findings were consistent with findings of similar studies in other areas (Thepthien & Celyn, 2022, Derese A et al., 2014).

5.2. Conclusion

Risky sexual behavior can hurt one's sexual and reproductive health. Although studies showed that in other nations, gender is a risk factor for Risky sexual practice, there is limited evidence at the national level of Ethiopia. Gender is a key risk factor for risky sexual practices that are heavily influenced by the sociocultural norms of youth. In the Ethiopian sociocultural context, men have greater decision-making authority and influence, which limits that of women. Males and females in Ethiopia have different sexual outlooks. This difference in societal power dynamics can lead to gender-based disparities in sexual practices. Hence, males tend to be more likely to engage in unprotected sexual intercourse than females. Therefore, it is important to consider gender when discussing sexual health, as gender-based disparities and individual characteristics can profoundly affect sexual behavior, leading to negative consequences for one's sexual and reproductive health. Moreover, the individual characteristics of males and females have risk factors for sexual practices like taking substances. Regional and residential differences in behavior happen due to socio-cultural practices. Regions represented by different biodiversity of the population belief, culture,

and social-economics distribution in Ethiopia. The likelihood of engaging in risky sexual practices being male or female was determined by their sexual desire, attitude, perception, and biological factors that engaged in negative outcomes. Males had more enjoyment in risky practices and more risky take behaviors than females. The result shows without other possible influential variables being Ethiopian male youth is risky compared to females in bivariate analysis.

Using data from the 2016 Ethiopian Demographic and Health Survey, this study identified the gender difference and determinants of risky sexual behavior among Ethiopian youth. The study found that there was a significant gender difference in risky sexual practices among youth

A bivariate analysis was conducted to determine the association between gender and risky sexual behavior, and the results of the study revealed some interesting findings. The findings of the bivariate analysis suggest that males are more likely to engage in risky sexual behavior than females. Furthermore, various socio-demographic factors, such as region, residence, marital status, age, education, wealth status, and religious affiliations, all have a significant impact on an individual's likelihood of engaging in risky sexual behavior. The multivariate analysis observed that males had a higher risk of sexual behavior compared to females. Regardless of determinates of risky sexual practices gender, marital status, residence, and region were significant relations between both sexes risky sexual behaviors.

5.3. Recommendation

Although the EDHS data does not describe the current risky sexual practice and the rest risk factors not included among youth, this study gives a clue about the risky sexual burden and the gender difference in risky sexual behavior. As a result of the fact that male youth are more engaged in risky sexual practices, there is a need for a governmental and non-governed organization that works on reproductive health to promote campaigns that will help prevent male risky sexual practices. The study also advocates for the promotion of sexual and reproductive health education among youth through a diversity of avenues, including religion, sex difference, marital status, and residence-based police need to achieve reproductive health goals. Overall, Specific Strategies and approaches should develop to reduce risky sexual practices and improve reproductive health outcomes. Finally, we recommended to the researcher develop the social norm and cultural value model to study and investigate the risky sexual practice.

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Annex

Study questions extracted from the 2016 EDHS**.**

Sociodemographic questions		
1	SEX	1=MALE 2=FEMALE
106	How old were you at your last birthday?	AGE IN COMPLETED YEARS ----------
103	Just before you moved here, did you live in an urban or in a rural area?	URBAN AREA . . . ……1 RURAL AREA . . . …….2
104	Before you moved here, which region and zone did you live in?	REGION CODE;
108	What is the highest level of school you attended: Primary, secondary, technical/vocational or higher?	PRIMARY. .. ……1 SECONDARY . . . . . ……2 TECHNICAL/VOCATIONAL.3 HIGHER . . . . . …….. 4
122	WHAT IS YOUR RELIGION?	ORTHODOX……. 1 CATHOLIC. ……...2 PROTESTANT …. ……3 MUSLIM . . .. ……4 TRADITIONAL . . . . ……. 5 OTHER …….96
123	What is your ethnicity? RECORD THE MAJOR ETHNIC GROUP	ETHNICITY . . . .
403	WHAT IS YOUR MARITAL STATUS NOW?	NEVER MARRIED MARRIED SEPARATE/WINDOW/
105	WORKING STATUS	Not working ……1

		working ……2
MASS MEDIA EXPOSURE QUESTIONARIES'		
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK.1 LESS THAN ONCE A WEEK. 2 NOT AT ALL 3
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK..1 LESS THAN ONCE A WEE. 2 NOT AT ALL 3
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEE. 2 NOT AT ALL 3
SEXUALLY ACTIVITY PRACTICE QUESTIONNAIRE		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . . AGE IN YEARS . . . . .
415	Now I would like to ask you about your recent sexual Activity. When was the last time you had sexual Intercourse?	DAYS AGO . . . . 1 WEEKS AGO . . . . …2 MONTHS AGO . . . .3 YEARS AGO . . . . . ….4
418	Was a condom used every time you had sexual intercourse with this person in the last 13 monhts	YES . . . . . .……1 NO . . . . . .……2
433	In total, with how many different people have you had sexual intercourse in your lifetime?	NUMBER OF PARTNERS IN LIFETIME . . . . .

HIV/AIDS QUESTIONNAIRE		
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS	YES . . . . . .1 NO 2
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . .1 NO 2
703	Can people get HIV from mosquito bites?	YES . . . . . … 1 NO 2
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . .1 NO 2
705	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . .1 NO 2
706	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . .1 NO 2
707	Is it possible for a healthy-looking person to have HIV?	YES . . . .1 NO 2
729	HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?	YES . . . . . 1 NO 2
INDIVIDUAL CHARACTERISTICS QUESTIONNAIRE		
813	Do you currently smokes tobacco every day, some days, or not at all?	EVERY DAY . …….. 1 SOME DAYS . . . ……2 NOT AT ALL . . .. ……..3
815A	Have you ever chewed Chat?	YES . . . . . 1 NO 2
815C	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine,etc…)?	YES . . . .1 NO 2

Risky sexual practice * sex of the respondant's Crosstabulation

		sex of the respondant's		
		male	female	Total
	Count	1611	4176	5787
	% within sex of the respondant's	62.6%	85.0%	77.3%
	Count	964	739	1703
	% within sex of the respondant's	37.4%	15.0%	22.7%
	Count	2575	4915	7490
	% within sex of the respondant's	100.0%	100.0%	100.0%

Risky sexual practice * Accesses three media at least once a week Crosstabulation

		Accesses three media at least once a week			
		Accesses non of the three media at least once a week	Accesses one or two of the three media at least once a week	Accesses all of the three media at least once a week	
	Count	3801	1816	170	5787
	% within Accesses three media at least once a week	79.2%	74.5%	68.3%	77.3%
	Count	1001	623	79	1703
	% within Accesses three media at least once a week	20.8%	25.5%	31.7%	22.7%
	Count	4802	2439	249	7490
	% within Accesses three media at least once a week	100.0%	100.0%	100.0%	100.0%

Risky sexual practice * assesemnt of knowdllge Crosstabulation

		assesemnt of knowdllge			
		adqaute	inadquate	lack of knowledge	
	Count	2768	2616	403	5787
	% within assesemnt of knowdllge	72.9%	80.8%	88.2%	77.3%
	Count	1027	622	54	1703
	% within assesemnt of knowdllge	27.1%	19.2%	11.8%	22.7%
	Count	3795	3238	457	7490
	% within assesemnt of knowdllge	100.0%	100.0%	100.0%	100.0%

Risky sexual practice * Type of place of residence of the resspondant Crosstabulation

		Type of place of residence of the resspondant		
		Urban	Rural	Total
	Count	1683	4104	5787
	% within Type of place of residence of the resspondant	74.3%	78.6%	77.3%
	Count	583	1120	1703
	% within Type of place of residence of the resspondant	25.7%	21.4%	22.7%
	Count	2266	5224	7490
	% within Type of place of residence of the resspondant	100.0%	100.0%	100.0%

Variables in the Equation

							95% C.I.for EXP(B)	
							Lower	Upper
Age of the respondant's	.153	.077	3.960	1	.047	1.166	1.002	1.355
Accesses three media at least once a week			4.154	2	.125			
Accesses three media at least once a week(1)	-.118	.106	1.238	1	.266	.889	.723	1.094
Accesses three media at least once a week(2)	.235	.202	1.353	1	.245	1.265	.851	1.881
Educational level of the respondant's			.076	3	.995			
Educational level of the respondant's(1)	-.019	.125	.023	1	.879	.981	.768	1.253
Educational level of the respondant's(2)	.006	.154	.002	1	.967	1.006	.744	1.361
Educational level of the respondant's(3)	-.025	.169	.022	1	.881	.975	.700	1.358
Marital status of the respondants			67.215	2	.000			
Marital status of the respondants (1)	.980	.120	67.204	1	.000	2.664	2.108	3.367
Marital status of the respondants (2)	.702	.208	11.353	1	.001	2.018	1.341	3.036

Wealth status of the respondant's			1.142	2	.565			
Wealth status of the respondant's(1)	-.153	.148	1.076	1	.300	.858	.642	1.146
Wealth status of the respondant's(2)	-.077	.131	.343	1	.558	.926	.716	1.198
Frequency currently smokes tobacco			9.474	2	.009			
Frequency currently smokes tobacco(1)	.111	.260	.184	1	.668	1.118	.672	1.860
Frequency currently smokes tobacco(2)	.544	.177	9.418	1	.002	1.723	1.217	2.439
Type of place of residence of the resspondant(1)	.433	.151	8.190	1	.004	1.541	1.146	2.073
Religious affilation of the respondants			5.259	3	.154			
Religious affilation of the respondants(1)	-.080	.127	.396	1	.529	.923	.719	1.185
Religious affilation of the respondants(2)	.256	.155	2.734	1	.098	1.292	.954	1.751
Religious affilation of the respondants(3)	.233	.367	.402	1	.526	1.262	.615	2.589
Region of the respondant's			155.351	10	.000			
Region of the respondant's(1)	.053	.183	.084	1	.772	1.055	.736	1.510
Region of the respondant's(2)	-.818	.200	16.747	1	.000	.441	.298	.653
Region of the respondant's(3)	.526	.194	7.369	1	.007	1.693	1.158	2.476
Region of the respondant's(4)	-.162	.206	.620	1	.431	.850	.568	1.274
Region of the respondant's(5)	.165	.175	.884	1	.347	1.179	.836	1.662
Region of the respondant's(6)	-.684	.213	10.354	1	.001	.504	.333	.765
Region of the respondant's(7)	-1.146	.230	24.869	1	.000	.318	.203	.499

	Region of the respondant's(8)	.416	.194	4.604	1	.032	1.515	1.037	2.215
	Region of the respondant's(9)	-1.140	.233	24.010	1	.000	.320	.203	.505
	Region of the respondant's(10)	-1.405	.243	33.511	1	.000	.245	.152	.395
	Constant	-1.257	.208	36.616	1	.000	.285		
	Age of the respondant's	.153	.076	4.089	1	.043	1.165	1.005	1.351
	Accesses three media at least once a week			4.232	2	.120			
	Accesses three media at least once a week(1)	-.120	.104	1.314	1	.252	.887	.723	1.089
	Accesses three media at least once a week(2)	.235	.199	1.399	1	.237	1.265	.857	1.867
	Marital status of the respondants			68.368	2	.000			
	Marital status of the respondants (1)	.980	.118	68.367	1	.000	2.664	2.112	3.360
	Marital status of the respondants (2)	.705	.207	11.588	1	.001	2.023	1.348	3.035
	Wealth status of the respondant's			1.166	2	.558			
	Wealth status of the respondant's(1)	-.154	.147	1.088	1	.297	.857	.642	1.145
	Wealth status of the respondant's(2)	-.078	.129	.365	1	.546	.925	.718	1.191
	Frequency currently smokes tobacco			9.492	2	.009			
	Frequency currently smokes tobacco(1)	.112	.260	.186	1	.666	1.119	.672	1.861
	Frequency currently smokes tobacco(2)	.544	.177	9.436	1	.002	1.723	1.218	2.439
	Type of place of residence of the resspondant(1)	.432	.148	8.508	1	.004	1.540	1.152	2.058
	Religious affilation of the respondants			5.303	3	.151			
	Religious affilation of the respondants(1)	-.080	.127	.396	1	.529	.923	.719	1.185

Religious affilation of the respondants(2)	.256	.155	2.748	1	.097	1.292	.954	1.750
Religious affilation of the respondants(3)	.234	.366	.410	1	.522	1.264	.617	2.592
Region of the respondant's			156.161	10	.000			
Region of the respondant's(1)	.055	.183	.091	1	.763	1.056	.739	1.511
Region of the respondant's(2)	-.820	.199	16.923	1	.000	.440	.298	.651
Region of the respondant's(3)	.530	.193	7.551	1	.006	1.699	1.164	2.480
Region of the respondant's(4)	-.162	.206	.617	1	.432	.850	.568	1.274
Region of the respondant's(5)	.163	.174	.874	1	.350	1.177	.836	1.656
Region of the respondant's(6)	-.686	.213	10.407	1	.001	.504	.332	.764
Region of the respondant's(7)	-1.144	.228	25.091	1	.000	.319	.204	.499
Region of the respondant's(8)	.414	.192	4.635	1	.031	1.514	1.038	2.207
Region of the respondant's(9)	-1.140	.232	24.075	1	.000	.320	.203	.504
Region of the respondant's(10)	-1.408	.242	33.977	1	.000	.245	.152	.393
Constant	-1.266	.186	46.566	1	.000	.282		
Age of the respondant's	.154	.075	4.161	1	.041	1.166	1.006	1.352
Accesses three media at least once a week			4.559	2	.102			
Accesses three media at least once a week(1)	-.137	.101	1.823	1	.177	.872	.715	1.064
Accesses three media at least once a week(2)	.216	.197	1.203	1	.273	1.241	.844	1.825
Marital status of the respondants			69.314	2	.000			
Marital status of the respondants (1)	.983	.118	69.314	1	.000	2.673	2.120	3.368

Marital status of the respondants (2)	.711	.207	11.820	1	.001	2.037	1.358	3.055
Frequency currently smokes tobacco			9.859	2	.007			
Frequency currently smokes tobacco(1)	.121	.259	.219	1	.640	1.129	.679	1.878
Frequency currently smokes tobacco(2)	.553	.177	9.782	1	.002	1.738	1.229	2.457
Type of place of residence of the resspondant(1)	.407	.127	10.207	1	.001	1.503	1.171	1.929
Religious affilation of the respondants			5.389	3	.145			
Religious affilation of the respondants(1)	-.082	.127	.418	1	.518	.921	.718	1.182
Religious affilation of the respondants(2)	.256	.155	2.734	1	.098	1.291	.954	1.748
Religious affilation of the respondants(3)	.250	.366	.469	1	.493	1.285	.627	2.630
Region of the respondant's			159.215	10	.000			
Region of the respondant's(1)	.055	.182	.091	1	.763	1.056	.739	1.509
Region of the respondant's(2)	-.814	.199	16.718	1	.000	.443	.300	.654
Region of the respondant's(3)	.572	.188	9.278	1	.002	1.772	1.226	2.560
Region of the respondant's(4)	-.140	.204	.466	1	.495	.870	.583	1.298
Region of the respondant's(5)	.177	.173	1.038	1	.308	1.193	.849	1.676
Region of the respondant's(6)	-.667	.211	9.956	1	.002	.513	.339	.777
Region of the respondant's(7)	-1.111	.226	24.255	1	.000	.329	.211	.512
Region of the respondant's(8)	.436	.191	5.215	1	.022	1.546	1.064	2.247
Region of the respondant's(9)	-1.122	.231	23.519	1	.000	.326	.207	.513

Region of the respondant's(10)	-1.410	.241	34.117	1	.000	.244	.152	.392
Constant	-1.325	.175	57.058	1	.000	.266		
Age of the respondant's	.145	.075	3.741	1	.053	1.156	.998	1.340
Accesses three media at least once a week			4.694	2	.096			
Accesses three media at least once a week(1)	-.139	.101	1.878	1	.171	.870	.714	1.061
Accesses three media at least once a week(2)	.219	.196	1.248	1	.264	1.245	.848	1.829
Marital status of the respondants			75.236	2	.000			
Marital status of the respondants (1)	1.014	.117	75.206	1	.000	2.756	2.192	3.466
Marital status of the respondants (2)	.711	.206	11.855	1	.001	2.035	1.358	3.050
Frequency currently smokes tobacco			10.355	2	.006			
Frequency currently smokes tobacco(1)	.118	.259	.207	1	.649	1.125	.678	1.868
Frequency currently smokes tobacco(2)	.563	.175	10.283	1	.001	1.755	1.245	2.476
Type of place of residence of the resspondant(1)	.393	.126	9.743	1	.002	1.481	1.157	1.896
Region of the respondant's			165.667	10	.000			
Region of the respondant's(1)	-.055	.168	.107	1	.743	.947	.681	1.315
Region of the respondant's(2)	-.708	.187	14.374	1	.000	.492	.341	.710
Region of the respondant's(3)	.528	.183	8.314	1	.004	1.696	1.184	2.428
Region of the respondant's(4)	-.255	.188	1.846	1	.174	.775	.536	1.120
Region of the respondant's(5)	.159	.171	.863	1	.353	1.173	.838	1.641
Region of the respondant's(6)	-.726	.208	12.224	1	.000	.484	.322	.727

	Region of the respondant's(7)	-1.161	.220	27.763	1	.000	.313	.203	.482
	Region of the respondant's(8)	.528	.179	8.668	1	.003	1.695	1.193	2.409
	Region of the respondant's(9)	-1.171	.229	26.066	1	.000	.310	.198	.486
	Region of the respondant's(10)	-1.454	.239	37.052	1	.000	.234	.146	.373
	Constant	-1.290	.168	58.805	1	.000	.275		

a. Variable(s) entered on step 1: Age of the respondant's, Accesses three media at least once a week, Educational level of the respondant's, Marital status of the respondants , Wealth status of the respondant's, Frequency currently smokes tobacco, Type of place of residence of the resspondant, Religious affilation of the respondants, Region of the respondant's.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
sex of the respondant's(1)	1.094	.084	170.589	1	.000	2.987
Accesses three media at least once a week			.130	2	.937	
Accesses three media at least once a week(1)	-.023	.079	.083	1	.773	.977
Accesses three media at least once a week(2)	.018	.176	.011	1	.917	1.019
Age of the respondant's			18.837	2	.000	
Age of the respondant's(1)	.334	.112	8.859	1	.003	1.396
Age of the respondant's(2)	.481	.113	18.093	1	.000	1.618
assesemnt of knowdllge			.278	2	.870	
assesemnt of knowdllge(1)	-.017	.072	.054	1	.816	.983
assesemnt of knowdllge(2)	-.284	.581	.239	1	.625	.753
Currently working(1)	.089	.077	1.327	1	.249	1.093
Educational level of the respondant's			4.033	3	.258	
Educational level of the respondant's(1)	-.038	.082	.215	1	.643	.963
Educational level of the respondant's(2)	-.121	.110	1.206	1	.272	.886
Educational level of the respondant's(3)	-.237	.125	3.581	1	.058	.789

Ever heard of a Sexually Transmitted Infection (STI)(1)	-.050	.599	.007	1	.934	.951
Have you ever chewed Chat?(1)	.475	.090	27.906	1	.000	1.609
Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.413	.096	18.377	1	.000	1.512
Marital status of the respondants			61.911	2	.000	
Marital status of the respondants (1)	.673	.108	38.633	1	.000	1.960
Marital status of the respondants (2)	1.071	.144	55.576	1	.000	2.919
Region of the respondant's			219.238	10	.000	
Region of the respondant's(1)	1.007	.134	56.726	1	.000	2.738
Region of the respondant's(2)	-.156	.153	1.045	1	.307	.855
Region of the respondant's(3)	.664	.144	21.234	1	.000	1.943
Region of the respondant's(4)	.374	.149	6.336	1	.012	1.454
Region of the respondant's(5)	.560	.137	16.803	1	.000	1.751
Region of the respondant's(6)	.271	.157	3.008	1	.083	1.312
Region of the respondant's(7)	-.394	.174	5.113	1	.024	.675
Region of the respondant's(8)	1.046	.145	52.329	1	.000	2.848
Region of the respondant's(9)	-.286	.169	2.879	1	.090	.751
Region of the respondant's(10)	-.496	.180	7.604	1	.006	.609
Religious affilation of the respondants			2.949	3	.400	
Religious affilation of the respondants(1)	.061	.117	.277	1	.599	1.063
Religious affilation of the respondants(2)	.135	.122	1.227	1	.268	1.144
Religious affilation of the respondants(3)	-.276	.283	.951	1	.329	.759
Type of place of residence of the resspondant(1)	-.444	.106	17.518	1	.000	.641
Wealth status of the respondant's			1.348	2	.510	
Wealth status of the respondant's(1)	-.007	.102	.004	1	.948	.993
Wealth status of the respondant's(2)	-.107	.096	1.249	1	.264	.898
Frequency currently smokes tobacco			5.507	2	.064	
Frequency currently smokes tobacco(1)	-.140	.242	.334	1	.563	.869

	Frequency currently smokes tobacco(2)	.382	.172	4.931	1	.026	1.466
	O-Time since last sex	-.001	.000	12.629	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	91.275	1	.000	1.037
	Constant	-2.746	.645	18.123	1	.000	.064
	sex of the respondant's(1)	1.094	.083	171.911	1	.000	2.987
	Age of the respondant's			18.836	2	.000	
	Age of the respondant's(1)	.334	.112	8.857	1	.003	1.396
	Age of the respondant's(2)	.481	.113	18.091	1	.000	1.618
	assesemnt of knowdllge			.270	2	.874	
	assesemnt of knowdllge(1)	-.015	.071	.045	1	.832	.985
	assesemnt of knowdllge(2)	-.284	.581	.238	1	.626	.753
	Currently working(1)	.088	.077	1.294	1	.255	1.092
	Educational level of the respondant's			4.247	3	.236	
	Educational level of the respondant's(1)	-.040	.082	.244	1	.622	.961
	Educational level of the respondant's(2)	-.123	.109	1.275	1	.259	.884
	Educational level of the respondant's(3)	-.239	.123	3.783	1	.052	.787
	Ever heard of a Sexually Transmitted Infection (STI)(1)	-.051	.599	.007	1	.932	.950
	Have you ever chewed Chat?(1)	.475	.090	27.860	1	.000	1.608
	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.412	.096	18.319	1	.000	1.510
	Marital status of the respondants			61.974	2	.000	
	Marital status of the respondants (1)	.673	.108	38.625	1	.000	1.960
	Marital status of the respondants (2)	1.072	.144	55.653	1	.000	2.920
	Region of the respondant's			219.659	10	.000	
	Region of the respondant's(1)	1.007	.133	56.908	1	.000	2.738
	Region of the respondant's(2)	-.156	.153	1.035	1	.309	.856
	Region of the respondant's(3)	.663	.144	21.148	1	.000	1.940
	Region of the respondant's(4)	.372	.149	6.289	1	.012	1.451
	Region of the respondant's(5)	.560	.136	16.814	1	.000	1.750

	Region of the respondant's(6)	.271	.156	3.018	1	.082	1.311
	Region of the respondant's(7)	-.394	.174	5.111	1	.024	.675
	Region of the respondant's(8)	1.045	.145	52.256	1	.000	2.844
	Region of the respondant's(9)	-.289	.168	2.943	1	.086	.749
	Region of the respondant's(10)	-.494	.180	7.562	1	.006	.610
	Religious affilation of the respondants			2.970	3	.396	
	Religious affilation of the respondants(1)	.062	.117	.286	1	.593	1.064
	Religious affilation of the respondants(2)	.135	.121	1.241	1	.265	1.145
	Religious affilation of the respondants(3)	-.276	.283	.951	1	.329	.759
	Type of place of residence of the resspondant(1)	-.441	.105	17.592	1	.000	.643
	Wealth status of the respondant's			1.520	2	.468	
	Wealth status of the respondant's(1)	-.008	.102	.007	1	.934	.992
	Wealth status of the respondant's(2)	-.112	.094	1.422	1	.233	.894
	Frequency currently smokes tobacco			5.508	2	.064	
	Frequency currently smokes tobacco(1)	-.139	.242	.331	1	.565	.870
	Frequency currently smokes tobacco(2)	.382	.172	4.932	1	.026	1.465
	O-Time since last sex	-.001	.000	12.653	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	91.722	1	.000	1.038
	Constant	-2.750	.645	18.182	1	.000	.064
	sex of the respondant's(1)	1.094	.083	172.041	1	.000	2.987
	Age of the respondant's			18.846	2	.000	
	Age of the respondant's(1)	.334	.112	8.871	1	.003	1.396
	Age of the respondant's(2)	.481	.113	18.105	1	.000	1.618
	assesemnt of knowdllge			2.009	2	.366	
	assesemnt of knowdllge(1)	-.015	.071	.046	1	.831	.985
	assesemnt of knowdllge(2)	-.236	.169	1.964	1	.161	.789
	Currently working(1)	.088	.077	1.294	1	.255	1.092
	Educational level of the respondant's			4.248	3	.236	

Educational level of the respondant's(1)	-.040	.082	.245	1	.621	.960
Educational level of the respondant's(2)	-.123	.109	1.276	1	.259	.884
Educational level of the respondant's(3)	-.239	.123	3.785	1	.052	.787
Have you ever chewed Chat?(1)	.475	.090	27.853	1	.000	1.608
Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.412	.096	18.324	1	.000	1.510
Marital status of the respondants			61.967	2	.000	
Marital status of the respondants (1)	.673	.108	38.618	1	.000	1.960
Marital status of the respondants (2)	1.072	.144	55.646	1	.000	2.920
Region of the respondant's			219.686	10	.000	
Region of the respondant's(1)	1.007	.133	56.911	1	.000	2.738
Region of the respondant's(2)	-.156	.153	1.035	1	.309	.856
Region of the respondant's(3)	.662	.144	21.140	1	.000	1.939
Region of the respondant's(4)	.372	.149	6.287	1	.012	1.451
Region of the respondant's(5)	.560	.136	16.828	1	.000	1.750
Region of the respondant's(6)	.271	.156	3.016	1	.082	1.311
Region of the respondant's(7)	-.394	.174	5.112	1	.024	.675
Region of the respondant's(8)	1.045	.145	52.249	1	.000	2.843
Region of the respondant's(9)	-.289	.168	2.939	1	.086	.749
Region of the respondant's(10)	-.494	.180	7.558	1	.006	.610
Religious affilation of the respondants			2.966	3	.397	
Religious affilation of the respondants(1)	.062	.117	.285	1	.593	1.064
Religious affilation of the respondants(2)	.135	.121	1.241	1	.265	1.145
Religious affilation of the respondants(3)	-.276	.283	.949	1	.330	.759
Type of place of residence of the resspondant(1)	-.441	.105	17.587	1	.000	.644
Wealth status of the respondant's			1.521	2	.468	
Wealth status of the respondant's(1)	-.008	.102	.007	1	.935	.992
Wealth status of the respondant's(2)	-.112	.094	1.422	1	.233	.894

	Frequency currently smokes tobacco			5.517	2	.063	
	Frequency currently smokes tobacco(1)	-.139	.242	.331	1	.565	.870
	Frequency currently smokes tobacco(2)	.382	.172	4.942	1	.026	1.466
	O-Time since last sex	-.001	.000	12.647	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	91.729	1	.000	1.038
	Constant	-2.801	.238	137.887	1	.000	.061
	sex of the respondant's(1)	1.102	.083	175.389	1	.000	3.009
	Age of the respondant's			18.456	2	.000	
	Age of the respondant's(1)	.332	.112	8.752	1	.003	1.393
	Age of the respondant's(2)	.476	.113	17.754	1	.000	1.610
	assesemnt of knowdllge			1.762	2	.414	
	assesemnt of knowdllge(1)	-.007	.071	.010	1	.922	.993
	assesemnt of knowdllge(2)	-.217	.168	1.679	1	.195	.805
	Currently working(1)	.084	.077	1.174	1	.279	1.087
	Educational level of the respondant's			5.136	3	.162	
	Educational level of the respondant's(1)	-.053	.081	.430	1	.512	.948
	Educational level of the respondant's(2)	-.145	.107	1.813	1	.178	.865
	Educational level of the respondant's(3)	-.262	.121	4.659	1	.031	.770
	Have you ever chewed Chat?(1)	.476	.090	28.027	1	.000	1.610
	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.413	.096	18.454	1	.000	1.512
	Marital status of the respondants			62.534	2	.000	
	Marital status of the respondants (1)	.680	.108	39.545	1	.000	1.974
	Marital status of the respondants (2)	1.073	.144	55.800	1	.000	2.925
	Region of the respondant's			224.044	10	.000	
	Region of the respondant's(1)	1.014	.133	57.918	1	.000	2.757
	Region of the respondant's(2)	-.151	.153	.981	1	.322	.860
	Region of the respondant's(3)	.686	.141	23.586	1	.000	1.985

	Region of the respondant's(4)	.385	.148	6.791	1	.009	1.470
	Region of the respondant's(5)	.573	.136	17.767	1	.000	1.773
	Region of the respondant's(6)	.281	.155	3.275	1	.070	1.325
	Region of the respondant's(7)	-.376	.173	4.726	1	.030	.687
	Region of the respondant's(8)	1.060	.144	54.542	1	.000	2.888
	Region of the respondant's(9)	-.278	.168	2.738	1	.098	.757
	Region of the respondant's(10)	-.499	.180	7.699	1	.006	.607
	Religious affilation of the respondants			3.032	3	.387	
	Religious affilation of the respondants(1)	.058	.117	.251	1	.616	1.060
	Religious affilation of the respondants(2)	.140	.121	1.341	1	.247	1.151
	Religious affilation of the respondants(3)	-.271	.283	.919	1	.338	.763
	Type of place of residence of the resspondant(1)	-.374	.090	17.362	1	.000	.688
	Frequency currently smokes tobacco			5.712	2	.057	
	Frequency currently smokes tobacco(1)	-.136	.242	.317	1	.573	.873
	Frequency currently smokes tobacco(2)	.390	.172	5.151	1	.023	1.477
	O-Time since last sex	-.001	.000	12.696	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	91.282	1	.000	1.037
	Constant	-2.905	.221	172.879	1	.000	.055
	sex of the respondant's(1)	1.106	.082	179.982	1	.000	3.023
	Age of the respondant's			18.655	2	.000	
	Age of the respondant's(1)	.334	.112	8.893	1	.003	1.396
	Age of the respondant's(2)	.479	.113	17.967	1	.000	1.614
	Currently working(1)	.088	.077	1.307	1	.253	1.092
	Educational level of the respondant's			4.907	3	.179	
	Educational level of the respondant's(1)	-.041	.079	.261	1	.610	.960
	Educational level of the respondant's(2)	-.129	.105	1.514	1	.218	.879

Educational level of the respondant's(3)	-.248	.119	4.372	1	.037	.780
Have you ever chewed Chat?(1)	.480	.090	28.487	1	.000	1.615
Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.416	.096	18.701	1	.000	1.515
Marital status of the respondants			62.424	2	.000	
Marital status of the respondants (1)	.681	.108	39.648	1	.000	1.975
Marital status of the respondants (2)	1.071	.144	55.612	1	.000	2.919
Region of the respondant's			227.119	10	.000	
Region of the respondant's(1)	1.022	.133	59.098	1	.000	2.779
Region of the respondant's(2)	-.144	.152	.899	1	.343	.866
Region of the respondant's(3)	.689	.141	23.816	1	.000	1.991
Region of the respondant's(4)	.393	.147	7.107	1	.008	1.481
Region of the respondant's(5)	.570	.136	17.587	1	.000	1.768
Region of the respondant's(6)	.281	.155	3.265	1	.071	1.324
Region of the respondant's(7)	-.398	.172	5.356	1	.021	.672
Region of the respondant's(8)	1.059	.144	54.389	1	.000	2.882
Region of the respondant's(9)	-.285	.168	2.886	1	.089	.752
Region of the respondant's(10)	-.498	.180	7.688	1	.006	.608
Religious affilation of the respondants			3.241	3	.356	
Religious affilation of the respondants(1)	.061	.117	.270	1	.604	1.062
Religious affilation of the respondants(2)	.142	.121	1.370	1	.242	1.153
Religious affilation of the respondants(3)	-.287	.282	1.034	1	.309	.751
Type of place of residence of the resspondant(1)	-.382	.089	18.456	1	.000	.682
Frequency currently smokes tobacco			5.670	2	.059	
Frequency currently smokes tobacco(1)	-.133	.242	.303	1	.582	.875
Frequency currently smokes tobacco(2)	.389	.172	5.133	1	.023	1.475
O-Time since last sex	-.001	.000	12.913	1	.000	.999

	O-Total lifetime number of sex partners	.037	.004	91.490	1	.000	1.037
	Constant	-2.930	.215	186.033	1	.000	.053
	sex of the respondant's(1)	1.109	.082	181.778	1	.000	3.031
	Age of the respondant's			18.788	2	.000	
	Age of the respondant's(1)	.335	.112	8.931	1	.003	1.397
	Age of the respondant's(2)	.480	.113	18.086	1	.000	1.616
	Currently working(1)	.090	.077	1.386	1	.239	1.095
	Educational level of the respondant's			4.575	3	.206	
	Educational level of the respondant's(1)	-.031	.079	.152	1	.696	.970
	Educational level of the respondant's(2)	-.116	.104	1.244	1	.265	.890
	Educational level of the respondant's(3)	-.236	.118	3.986	1	.046	.789
	Have you ever chewed Chat?(1)	.451	.084	28.727	1	.000	1.570
	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.423	.076	30.677	1	.000	1.527
	Marital status of the respondants			62.448	2	.000	
	Marital status of the respondants (1)	.680	.108	39.641	1	.000	1.973
	Marital status of the respondants (2)	1.071	.144	55.627	1	.000	2.918
	Region of the respondant's			233.038	10	.000	
	Region of the respondant's(1)	1.027	.130	61.929	1	.000	2.791
	Region of the respondant's(2)	-.103	.146	.496	1	.481	.902
	Region of the respondant's(3)	.657	.137	23.175	1	.000	1.930
	Region of the respondant's(4)	.401	.144	7.755	1	.005	1.493
	Region of the respondant's(5)	.573	.136	17.880	1	.000	1.774
	Region of the respondant's(6)	.287	.155	3.421	1	.064	1.332
	Region of the respondant's(7)	-.425	.168	6.374	1	.012	.654
	Region of the respondant's(8)	1.096	.138	63.198	1	.000	2.992
	Region of the respondant's(9)	-.295	.167	3.129	1	.077	.744
	Region of the respondant's(10)	-.512	.179	8.184	1	.004	.599
	Type of place of residence of the resspondant(1)	-.387	.088	19.407	1	.000	.679

	Frequency currently smokes tobacco			5.394	2	.067	
	Frequency currently smokes tobacco(1)	-.132	.242	.299	1	.584	.876
	Frequency currently smokes tobacco(2)	.378	.171	4.874	1	.027	1.459
	O-Time since last sex	-.001	.000	12.934	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	91.909	1	.000	1.038
	Constant	-2.891	.209	191.934	1	.000	.056
	sex of the respondant's(1)	1.155	.072	255.022	1	.000	3.176
	Age of the respondant's			20.075	2	.000	
	Age of the respondant's(1)	.341	.112	9.334	1	.002	1.407
	Age of the respondant's(2)	.493	.112	19.246	1	.000	1.636
	Educational level of the respondant's			4.281	3	.233	
	Educational level of the respondant's(1)	-.025	.079	.103	1	.748	.975
	Educational level of the respondant's(2)	-.111	.104	1.137	1	.286	.895
	Educational level of the respondant's(3)	-.226	.118	3.654	1	.056	.798
	Have you ever chewed Chat?(1)	.455	.084	29.230	1	.000	1.576
	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.428	.076	31.389	1	.000	1.534
	Marital status of the respondants			64.885	2	.000	
	Marital status of the respondants (1)	.685	.108	40.160	1	.000	1.983
	Marital status of the respondants (2)	1.091	.143	58.475	1	.000	2.979
	Region of the respondant's			232.682	10	.000	
	Region of the respondant's(1)	1.022	.130	61.543	1	.000	2.780
	Region of the respondant's(2)	-.100	.146	.474	1	.491	.904
	Region of the respondant's(3)	.647	.136	22.559	1	.000	1.910
	Region of the respondant's(4)	.396	.144	7.549	1	.006	1.485
	Region of the respondant's(5)	.582	.135	18.487	1	.000	1.790
	Region of the respondant's(6)	.285	.155	3.375	1	.066	1.330
	Region of the respondant's(7)	-.431	.168	6.572	1	.010	.650

	Region of the respondant's(8)	1.094	.138	62.980	1	.000	2.987
	Region of the respondant's(9)	-.298	.167	3.185	1	.074	.742
	Region of the respondant's(10)	-.513	.179	8.230	1	.004	.598
	Type of place of residence of the resspondant(1)	-.394	.088	20.109	1	.000	.675
	Frequency currently smokes tobacco			5.340	2	.069	
	Frequency currently smokes tobacco(1)	-.141	.241	.339	1	.560	.869
	Frequency currently smokes tobacco(2)	.374	.171	4.772	1	.029	1.454
	O-Time since last sex	-.001	.000	13.455	1	.000	.999
	O-Total lifetime number of sex partners	.037	.004	92.593	1	.000	1.038
	Constant	-2.870	.208	190.640	1	.000	.057
	sex of the respondant's(1)	1.131	.070	259.402	1	.000	3.098
	Age of the respondant's			19.756	2	.000	
	Age of the respondant's(1)	.329	.111	8.758	1	.003	1.389
	Age of the respondant's(2)	.477	.110	18.749	1	.000	1.611
	Have you ever chewed Chat?(1)	.456	.084	29.375	1	.000	1.578
	Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?(1)	.423	.076	30.724	1	.000	1.526
	Marital status of the respondants			69.840	2	.000	
	Marital status of the respondants (1)	.708	.107	43.650	1	.000	2.031
	Marital status of the respondants (2)	1.120	.142	62.435	1	.000	3.066
	Region of the respondant's			231.481	10	.000	
	Region of the respondant's(1)	1.022	.130	61.668	1	.000	2.780
	Region of the respondant's(2)	-.106	.145	.528	1	.467	.900
	Region of the respondant's(3)	.662	.135	24.090	1	.000	1.939
	Region of the respondant's(4)	.395	.144	7.536	1	.006	1.484
	Region of the respondant's(5)	.574	.135	18.023	1	.000	1.776
	Region of the respondant's(6)	.272	.155	3.082	1	.079	1.312
	Region of the respondant's(7)	-.418	.167	6.289	1	.012	.659
	Region of the respondant's(8)	1.070	.137	60.781	1	.000	2.916
	Region of the respondant's(9)	-.301	.167	3.255	1	.071	.740
	Region of the respondant's(10)	-.531	.179	8.822	1	.003	.588

Type of place of residence of the resspondant(1)	-.326	.081	16.295	1	.000	.721
Frequency currently smokes tobacco			5.337	2	.069	
Frequency currently smokes tobacco(1)	-.137	.242	.322	1	.570	.872
Frequency currently smokes tobacco(2)	.375	.171	4.792	1	.029	1.455
O-Time since last sex	-.001	.000	13.931	1	.000	.999
O-Total lifetime number of sex partners	.037	.004	93.706	1	.000	1.038
Constant	-2.961	.195	229.742	1	.000	.052

a. Variable(s) entered on step 1: sex of the respondant's, Accesses three media at least once a week, Age of the respondant's, assesemnt of knowdllge, Currently working, Educational level of the respondant's, Ever heard of a Sexually Transmitted Infection (STI), Have you ever chewed Chat?, Have you ever taken a drink that contains alcohol (Tella/Tegi/Areke/Beer/Wine, etc...)?, Marital status of the respondants , Region of the respondant's, Religious affilation of the respondants, Type of place of residence of the resspondant, Wealth status of the respondant's, Frequency currently smokes tobacco, O-Time since last sex, O-Total lifetime number of sex partners.