

ADDIS ABABA UNIVERSITY
COLLEGE OF DEVELOPMENT STUDIES
CENTER FOR POPULATION STUDIES

**Knowledge, Attitudes, Risky Behavior and Preventive Practices on Sexually
Transmitted Diseases among High School Adolescent students in
Addis Ababa, Ethiopia**

BY
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**Thesis submitted to Addis Ababa University School of Graduate studies,
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Masters of Science in Population Studies (Reproductive Health)**

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DECLARATION

I, Fasil Alene, hereby declare that this thesis is unique and has never been presented elsewhere.

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Approval Sheet by the Board of Examiners

This thesis by Fasil Alene entitled: **“Knowledge, Attitudes, Risky Behavior and Preventive Practices on Sexually Transmitted Diseases among High School Adolescent students in Addis Ababa, Ethiopia”** is accepted in its present form by the board of Examiners as satisfying thesis requirement for the degree of Masters of Science in Population Studies (Reproductive Health).

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Abbreviations and Acronyms

AAEB	Addis Ababa Education Bureau
AIDS	Acquired Immunodeficiency Syndrome
CDS	College of Development Studies
CPS	Center of Population Studies
AOR	Adjusted Odds Ratios
COR	Crude Odds Ratio
CSA	Central Statistical Agency
EDH	Ethiopian Demographic Health Survey
EPHIA	Ethiopian Population-based HIV Impact Assessment
FDRE	Federal Democratic Republic of Ethiopia
FMOH	Federal Ministry of Health
HIV	Human Immune Virus
HPV	Human papilloma Virus
ICPD	International conference on population and development
MWCYA	Ministry of Women, Children and Youth Affair
RH	Reproductive health
SD	Standard Deviation
SRH	Sexual and reproductive health
SSA	Sub-Saharan Africa
STIs	Sexually Transmitted Infections
SPSS	Statistical Package for the Social Sciences
STDS	Sexually Transmitted Diseases
UNAID	United Nations Joint Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNDP	United Nations Development Program
UNESCO	United Nations Educational Scientific and Cultural organization
UNICEF	United Nations Children's Fund
USCDCP	United States Centers for Disease Control and Prevention
WHO	World Health Organization

Abstract

Sexually transmitted diseases are major cause of infertility, acute illness, long-term disability and death in both developed and developing country. Preventing and controlling STDs will have reducing bad pregnancy outcomes and women's risk of cervical cancer, infertility and chronic pelvic inflammatory disease and an attempt has been made to assess knowledge, attitudes, risky behavior and preventive practices on sexually transmitted diseases among high school adolescents in Addis Ababa. Ethiopia. School based cross sectional study was conducted among 419 students and stratified random sampling technique was used in proportion to number of school and finally, the respondents were selected by simple random sampling in proportion of grade and sex. Semi structured questionnaire was used to collect information from respondents and data was entered and analyzed using SPSS Version 20 software. The descriptive results were presented by table and chart, and logistic regression analyses were used to identify associated factors and to measure the association of outcome variables. From 419 randomly selected adolescent students 409 of them participated in the study which gives a response rate of 97% and majority 337 (82.4%) of students were from Government Schools and the rest 72 (17.6%) were from Private Schools. Mean (+SD) and median age for the respondents were found to be 17.03 (+1.457) and 17 years respectively. 87.3% of students had good knowledge of STDs but more than half of the participants (64.1%) never knew STDs other than HIV/ AIDS. About half (50.4%) of respondents had appropriate attitude and more than half (68.7%) of respondents had good preventive Practice towards STDs but students who practiced sexual intercourse ever had 99% less likely to have good preventive practice than who never had sex (AOR: .011, 95% CI (0.004, .030)). The odds of having risky sexual experience among Students who have appropriate knowledge on STDs were decline by 82% than those students who haven't appropriate knowledge on STDs (AOR: 0.182,95% CI(.044,.756)).

Keywords: Sexually transmitted disease, knowledge, attitude, risky behavior and preventive practice.

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Sexually transmitted diseases are infections spread primarily by sexual contact, including vaginal, anal and oral sex. Some of them can also be spread through non-sexual means such as through blood or blood products. Many STDs including syphilis, hepatitis B, HIV, chlamydia, gonorrhea, herpes, and HPV can also be transmitted from mother to child during pregnancy and childbirth. Sexually transmitted diseases are a major global cause of acute illness, infertility, long-term disability and death with serious medical and psychological consequences of millions of men, women and infants. There are over 30 bacterial, viral and parasitic pathogens that have been identified to date that can be transmitted sexually (WHO, 2008).

STDs are one of the leading causes of morbidity and mortality in both developing and developed countries, directly, through their impact on quality of life, sexual and reproductive health and child health, and indirectly as cofactors for HIV transmission. STDs are the main preventable cause of infertility; Preventing and controlling STDs will have the added benefits of reducing adverse pregnancy outcomes including low birth weight, premature delivery and of improving the health of women by reducing the risk of cervical cancer, infertility and chronic pelvic inflammatory disease (Kamb M L *et al.*, 2007).

Different Scholars and Organization define Adolescent in different ways, According to World Health Organization (WHO); Adolescents are those individuals between the age group 10 and 19 years that represents over 16 percent of the World population. It is a unique transition stage of human development that experience rapid physical, cognitive and psychosocial growth. Even though STDs affect individuals of all ages, it takes a particularly heavy injury on young people (WHO document 12, 2007).

Risky sexual behavior is the activity that leads to increase the opportunities for engaging sexual activity with another person infected by sexually transmitted diseases and from those behaviors

the most common are having multiple sexual partners, sexual intercourse with commercial sex workers, no or inconsistent use of condoms, coerced sexual intercourse and sexual intercourse for reward. Different studies have been conducted in different groups of population on risky sexual behavior as common sexual and reproductive health problems and shows that the rate of contracting STIs is at an increasing rate (Dimbuene *et al.*, 2014; WHO, 2016; Daka *et al.*, 2014). In a reason of adolescences are at high risk for risky sexual behaviors and low use of preventive mechanisms in developing nations, Adolescents and young adults catch the highest rates of curable STIs and 1 in 20 adolescents acquire new STIs each year (USCDCP WB, 2008).

To protect adolescents from sexually transmitted disease, there is a need to aware on STD prevention by providing them with relevant information and equipping them with the life skills that will enable them to put knowledge into practice (UNICEF, 202; WHO, UNAIDS, 1999). So Working on prevention is recommended to control STDs from different scholars, obviously most of high school students are categorized under the age group of adolescence. This study will assess knowledge, attitude, risky behavior, preventive practice and associated factors towards sexually transmitted diseases including HIV/AIDS among adolescent High school students in Addis Ababa.

1.2. Statement of the problem

Adolescents are at higher risk of acquiring sexually transmitted Diseases (STDs) compared to adults and they should be considered a special population in terms of STDs (USCDCP, 2017). In 2017, in the world there were 1.8 million adolescents living with HIV, which represents 5% of the total prevalence in the year. Of those adolescents, 85% resided in sub-Saharan Africa (WHO, 2018).

In 2018, Ethiopian Population-based HIV Impact Assessment (EPHIA) estimated an urban HIV prevalence of 3.0% nationally with regional variations, and in the same year 79.0% of HIV positive adults (ages 15-64 years) know their HIV status (EPHIA, 2018). According to HIV/AIDS Prevention and Control Office of Ethiopia about 90% of the people living with HIV are believed to have acquired the infection before the age of 25 (FMOH, 2006).

The study conducted in Cuba, the results suggest that the social measures introduced to curb the spread of COVID-19 influenced the sexual risk behaviors of individuals and subsequently modified the incidence of syphilis and gonorrhea (Islay *et al.*, 2020).

In 2008, 498.9 million on global and 92.6 million in Africa new sexually transmitted diseases cases were existed; 1.4 million people are infected with STDs every day on average (Rowley *et al.*, 2012).

In Ethiopia, experience ever greater confusion in the area of sex. Parents and elders are reserved and hesitate to talk about it because of the cultural taboo around sex. On the other hand peers, seem to talk about it in a very special way having their own coded terminology when discussing the issue of sex. In urban societies where parents are working full time away from home, there is a lot less supervision of young people and this allow them the freedom to experiment with sex much earlier than it used to be the case (Eshetu *et al.*, 1998).

The majority of youth students in Addis Ababa are at higher risk of acquiring unsafe sexual behavior which were found to be significantly associated to risk factors (multiple sexual partners, using condom Inconsistently, peer pressure for doing sex and poor family communication) (Azeb, 2009) It has been suggested that knowledge about STD transmission might influence sexual behavior among adolescents (Mudassir *et al.*, 2010).

Knowledge of Sexually Transmitted Infections among High school adolescents in Addis Ababa (Amsale and Yemane, 2012), Risk factors for unsafe sexual behavior among preparatory youth students of Addis Ababa (Azeb, 2009) and so on. In all cases awareness of students on sexual transmitted diseases was low.

The above mentioned problems of adolescents can be assessed by STIDs knowledge and attitude either directly or indirectly. Studies conducted in Preparatory School Students in West Gojjam Zone (2019) and Hailemariam mamo preparatory school in Debere birhan (2013) showed that the STD knowledge and attitude among adolescent students were low. There are different STDs and related studies in the study area but the previous study covered few numbers of school compared to current study which covered ten high schools and risky sexual behavior added as outcome factor and other socio demographic factors like school type were added as predictors. I considered STDs are one of the leading causes of morbidity and mortality but more preventable and controllable type of disease by increasing students' awareness.

1.3. Objectives

1.3.1 General Objectives of the study

To assess knowledge, attitudes, risky behavior and preventive practices on sexually transmitted diseases among high school adolescents in Addis Ababa, Ethiopia.

1.3.2 Specific Objectives

- To assess students' overall knowledge, attitude and preventive practice.
- To identify factors associated with knowledge and attitude of STDs.
- To identify factors associated with risky sexual behavior and preventive practice.

1.4 Research Questions

The following basic guiding research questions are formulated to attempt the above mentioned objectives.

1. What knowledge, attitude and preventive practices have students overall about sexual transmitted diseases?
2. What are factor's associated with knowledge and attitude of STDs?
3. What are factor's affecting sexual behavior and preventive practice of students?

1.5. Significance of the Study

This study is conducted on STD issues among adolescent students in Addis Ababa high schools considering the complication of STDs like infertility, long-term disability and death with serious medical and psychological consequences. The outcome of this study is believed to fill the gaps untouched by other studies about knowledge, attitude, behavior and practice of STDs among adolescent students using different independent factors that leads to touch the problem. The results of the study also help for future researchers, health care planners, government bodies and policy makers.

1.6. Scope and Limitations of the Study

1.6.1 Scope

The study was conducted in ten selected High schools (Governmental and private) students in Addis Ababa assessing level of knowledge, attitude and practice /risky behavior and preventive/ on sexually transmitted diseases.

1.6.2. Limitations

If number of sample high schools increases, the outcome might be more relevant and sound. School types such as boarding schools, foreign community schools, religious based schools, Gender and ethnic based schools, and Special student population such as prison, orphans, evening and distance students are not included.

CHAPTER 2

2. REVIEW OF RELATED LITERATURE

2.1 Conceptual Literature

2.1.1 Sexually transmitted disease

Many studies have been conducted on sexually transmitted diseases in different population groups. There is still an unacceptably high global incidence of sexually transmitted Infections (STIs) in this century, More than a million people acquire a sexually transmitted infection (STI) every day around the world, some viral STIs, like human papillomavirus (HPV) and HIV, are still incurable and can be deadly, while some bacterial STIs like chlamydia, gonorrhea, syphilis and trichomoniasis are curable if detected and treated (Newman *et al.*, 2012).

STIs have a major impact on quality of life and are a major indicator of the quality of global sexual and reproductive health care in addition to direct physical, psychological and social consequence and STIs also facilitate sexual transmission of HIV and the control of HIV and viral hepatitis, moreover all these consequence are savior in low income countries. Sexually transmitted infections share common risk associated behaviors, multiple infections can be acquired at the same time and existing infection can facilitate transmission and acquisition of other sexually transmitted infections including HIV and diagnosis of one infection is an Indicator of risk for others (WHO, 2016).

From WHO (2008) estimation, 499 million new cases of curable STIs (gonorrhoea, chlamydia, syphilis and trichomoniasis) occur every year and 536 million people were estimated to be living with incurable herpes simplex virus type 2 (HSV-2) infection, human papillomavirus (HPV) infection were approximated 291 million women at any given point in time. Consequence of HIV/AIDS in Sub-Saharan African countries (10% of the world population) is savior than in any other region of the world, from those people infected globally, 60% of HIV infected people live in this region. So, the study shows how much the issue of STD is hot spot in the region. In 2005, approximately 4.6% of females aged 15-24 years and 1.7% of males of the same age group in Sub-Saharan African countries were infected by HIV (UNAIDS website, 2007).

2.1.2. Adolescent

Adolescents (10-19) as world's largest population relative to the other age groups that cover 1.2 billion of the whole population worldwide and from those nearly 90 percent of them live in developing countries (UNICEF, 2012). From the world population 27 percent (1.8 billion) represents Young people (10-24) (Kasiye et al., 2014) and this age group estimated 33 % of the population in Eastern and Southern Africa.

According to Ethiopian Ministry of Health (2006), in history ever Adolescents and young people ages are the largest group compared to the other age groups in Ethiopian population. Programs promoting gender equity, adolescent empowerment and access to education and employment will have a major and long lasting impact on Ethiopian society as a whole. Investing in the health and wellbeing of this large cohort is vital if Ethiopia is to meet the poverty reduction goals so that social investments in education and health with a renewed focus on vulnerable groups could build a strong economic base for the country and considered as assets if they use their age properly and efficiently.

2.2. Empirical Studies on sexually transmitted disease

Among African countries three of them; Ethiopia, Niger and Zimbabwe, obtained care were less than one in three adolescent women with an STI or an STI symptom. The proportion that provides a health facility was lowest in Kenya (13%), Niger (13%) and Zimbabwe (17%) and in other side Egypt (68%) was the highest level. The proportions of adolescent women in Latin America and the Caribbean that needed treatment for an STI or STI symptoms were generally higher than in Africa and Asia, ranging from 52% in Bolivia to 84% in Peru (Woog *et al.*, 2014).

In Ethiopia STDs has been a well-recognized health problem, In a reason of biological and cultural factors, Girls are at a much greater risk in STDs at early ages compared to boys in the same age. In Ethiopia young girls are more vulnerable to HIV than boys because of early age at sexual debut, early marriage, sexual abuse and violence such as abduction and rape (Betenariam, 2002). From different studies, most Ethiopian girls form sexual relationship with men who are on average ten years older. In addition, adolescent girls are at risk because they are unlikely to have had any training or experience in sexual negotiation skills, and are especially vulnerable in

situations with older men where age, wealth, physical strength and other power dynamics put them at a disadvantage (Fekadu,2001, Taffa et al.,2002).

From Ethiopian demographic and health survey (EDHS) 2016 report, Gambella region and Addis Ababa have the highest HIV prevalence rates respectively (4.8%) and (3.4%).however, Somali and Southern Nations, Nationalities and peoples (SNNP) regional states have the lowest prevalence rate of 0.1% and 0.4% respectively. In the same year, Ethiopia was 0.9% prevalence rate of HIV in Adults in general but it differs in gender, age, and other demographic and biological characteristics, across sub-regions and population groups. In sex, women (1.2%) having twice higher HIV prevalence than men; in region, the urban HIV prevalence is seven times higher than the prevalence in rural settings.

From Save the Children USA report on high school adolescents, the most frequently reported STI symptoms by the students were genital ulcers, pain during urination, genital discharge, and itching. The research shows that regardless of the recorded improvements and irrespective of their exposure to the school interventions, youths' knowledge of STI symptoms are not comprehensive, with about one third of all survey respondents unable to identify a single STI symptom. Additionally, some of the most important signs and symptoms of STIs including genital rash and swelling in the genital area were rarely identified (Save the Children USA, 2007).

The study conducted among school pupils Rural China found that school pupils had unsatisfactory knowledge about STDs; boys tended to be more knowledgeable than girls ($p < 0.05$). Regarding to attitude towards condom use, a significantly higher percentage of boys (70%) compared with girls (61%) felt confident about insisting on condom use whenever they had sex (Le Quyen, 2007).

In Thailand Sexually transmitted diseases were a major problem among adolescents, and observed that unprotected sex is a growing trend; awareness must be increased. So, studies were needed in the issue of sexually transmitted disease .The study results showed that the students had low level of knowledge on STDs. The study also showed that Thai students want to learn more about STDs and wish to receive this information from school. No major difference in gender was found. This study showed that Thai adolescents needed additional education on (STDs L. Svensson & S. Waern, 2013).

In the other study on Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe, the result showed that awareness and knowledge varied among the adolescents depending on gender in general. Specifically the studies were focused on Six STDs .regarding to awareness and knowledge, being assessed in depth mainly for HIV/AIDS and HPV, and to some extent for chlamydia. For syphilis, gonorrhoea and herpes only awareness was assessed, awareness was generally high for HIV/AIDS (above 90%) and low for HPV (range 5.4%-66%). Regardless of knowing that use of condoms helps protect against contracting an STD, some adolescents still regard condoms primarily as an interim method of contraception before using the pill.so generally, except HIV/AIDS; adolescents in the study had low level of awareness and knowledge. So, attention should be paid to infections such as chlamydia, gonorrhoea and syphilis beyond HIV/AIDS (Florence et al., 2011).

In Ethiopia, West Gojjam Zone conducted a research on Knowledge, Attitude, and Preventive Practices towards Sexually transmitted Infections among Preparatory School Students and showed that half of the student from the respondents (50.5%) had good knowledge on sexually transmitted disease and only 38.4% of students had an appropriate Attitude. employment of father and students gender matters for knowledge, Students having employed father and being a male by itself leads for good predicted knowledge And in terms of altitude families educational back ground of secondary education and above, and having a farmer father predicted appropriate attitude (Ayalnesh *et al.*,2019).

A study conducted in Addis Ababa, Ethiopia on Knowledge of Sexually Transmitted Infections and Barriers to Seeking Health Services among High School Adolescents, the result showed that 17.9% of adolescents had good knowledge of STD at least two symptoms. in terms of gender, male students have better knowledge compared to female students and mothers educational back ground, who had mother with formal educational background had also good knowledge of STD according to the data obtained by the researcher and lastly they conclude and recommended that Adolescents are not aware of the symptoms of STI and including specific information and facts about STI in the school curriculum and providing user friendly STIs services at school can reduce the risk of STIs among school adolescents (Cherie *et al.*,2012).

Regarding to risk sexual behavior study conducted in Rural China found that boys were more likely to be involved in sexual risk behaviors than girls. Eighteen percent of boys and eight percent of girls reported being sexually experienced; Boys started having sex earlier than girls.

62 percent of boys had sex with multiple partners compared with 32% of girls the mean number of lifetime sexual partners of boys and girls was 4.2 and 2.5 respectively. The percentage of people reporting non-use of condoms during last sexual encounter was significantly higher among boys (37%) than girls (29%). Differences were observed in association of knowledge and attitudes regarding STD prevention with sexual activities among both boys and girls (Le Quyen, 2007).

The study conducted on sexual behaviors of secondary and preparatory students of Metu town, from the total study participants, about 22.7% of them had previously practiced in sexual activity; of these 61.7% of respondents had more than one sexual partner. From the respondents who had practiced sex, 19.8% of them had always used condom during their sexual intercourse with their partners, while 58% of them never used condom during sexual intercourse and they recommend, the school should emphasize on promoting peer educators and peer discussion to protect adolescents and youth from risky sexual behaviors (Ayele *et al.*, 2020).

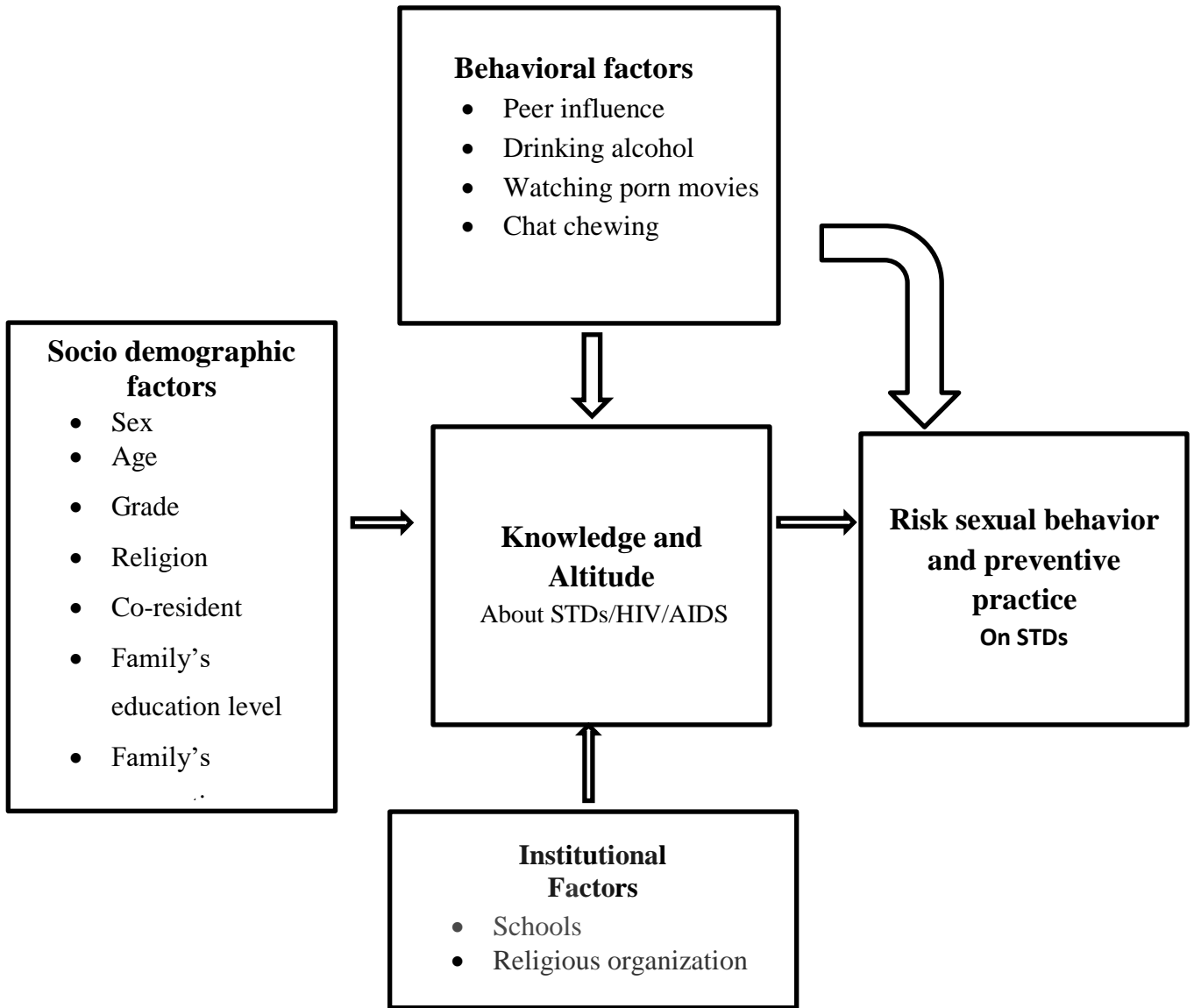
2.3. Synthesis of the reviewed literature

Many studies have been conducted about knowledge and attitude of adolescents on Sexually transmitted disease and showed insufficient knowledge and attitude about Sexually Transmitted Infections in the world was the major problem to prevent the disease successfully. Based UNAIDS 2008 report, many young people have lack of basic knowledge's about HIV prevention, only (40%) of males and (38%) of females aged 15–24 have accurate and comprehensive knowledge about HIV transmission and prevention, besides to this, more than 70% of boys and 55% of girls knew condoms can protect HIV exposure using always and properly (UNAIDS, 2008).

2.4. Conceptual Framework

The conceptual framework of this study is based on the assumption that dependent variables knowledge, attitude, risky sexual behavior and preventive practice of sexually transmitted diseases are influenced by socio demographic (sex age ,grade, religion, co-resident ,family's education level, family's occupation, family Communications and school type),behavioral (peer influence, drinking alcohol, watching porn movies and chat chewing) and Institutional factors such as school and religious institutions. So the following description provides detailed relationship towards the outcome variable about sexual transmitted disease among high school adolescent students in Addis Ababa.

Figure 1 Conceptual framework



Source: Developed by the researcher

CHAPTER 3

3. RESEARCH METHODOLOGY

3.1. Study area and period

The study was conducted from Jun 24 to Jul 7; 2021. The target study area of this research was adolescent students of private and governmental high schools in Addis Ababa City. Addis Ababa is the capital and the largest city of Ethiopia consists of eleven sub cities (kifle ketema), furthermore both headquarters of the African Union and the United Nations Economic Commission for Africa found in the city.

Based on Education Statistics Annual Abstract by City Government of Addis Ababa Education Bureau, there were 222 secondary schools in the city; from those, 181 of them were governmental (74) and private (107). The rest 41 secondary schools belong to Church, Mosque, and foreign community and so on. The total numbers of students in the academic year were 211,313, out of them 169,293 were governmental (118,302) and private (50,991) schools.

3.2. Research Approach and design

Descriptive study of school-based cross-sectional study was conducted in randomly selected adolescent high school students in Addis Ababa. It is the best way to determine the associations of independent variable and outcomes variable and they are relatively quick and inexpensive to conduct and due to time and resource limitations, a quantitative research approach was used to assess the data that had been gathered (Kiflu, 2018).

3.3. Sampling Techniques

3.3.1 Population

The source population was all secondary school adolescent students in Addis Ababa studied in the academic year.

Inclusion criteria

Voluntary adolescent regular students in age group 13-19 attending high schools in the academic year were included.

Exclusion criteria

School types and students with peculiar socio-demographic characteristic composition and inconvenient to conduct the study were excluded; considering this the following school type and students were excluded in the study.

- Boarding schools
- Foreign community schools
- Religious based schools
- Gender based schools
- Ethnic based schools
- Special student population such as prison, orphans
- Evening and distance students

3.3.2. Sample size

According to (Webster, 1985) A sample is a finite part of a statistical population whose properties are studied to gain information about the whole. When dealing with people, it can be defined as a set of respondents selected from a larger population for the purpose of a survey and a population is a group of individual's persons, objects, or items from which samples are taken for measurement. The sources of population for this study is 169,293 regular students in 181 High schools, government (74) and private (107) high schools in Addis Ababa city. Initially 10 schools were selected by giving equal chance for all high schools randomly by stratifying them as Private and government.

Determinations of sample schools number in proportion to number of schools in each stratum (private and government) are as follow:

Number of sample in private school= $(107/181)*10=6$

Number of sample in Governmental school= $(74/181)*10=4$

According to the above proportion in terms of school type, 6 private and 4 governmental high Schools were selected using simple random sampling techniques.

For determining the actual sample size of students, the following assumption was considered:

Marginal error= 5% and Confidence interval= 95% obtained from previous study conducted by Yamane (1967), suggested Slovin's Formula.

$$\text{Sample size } (n) = \frac{N}{(1+Ne^2)} + 5\% \text{ non-response}$$

Where **n** is the sample size, **N** is the population size and **e** is the margin of error

In our study N=169,293 e=0.05

$$n = \frac{169,293}{(1 + 169,293(0.05^2))} + 5\% \text{ non-response} = 419$$

The sample size (419) distributed to each school (10) in proportion to number of students in the selected schools, then we determined size of students in each grade (from grade 9-grade12) proportion to size of each grade in each school, and sections were selected randomly from each grade, Finally students were selected by simple random selection in proportion of gender from selected class using students list in record office as sampling frame.

Table 3.1 Name of the sample school with total population size

			Grade-9		Grade-10		Grade-11		Grade-12		Total
			M	F	M	F	M	F	M	F	
1	Medhanialem	Government	326	428	57	56	336	328	666	829	3026
2	W/ro Kelemework	Government	98	37	162	194	185	312	474	622	2084
3	Asco	Government	658	515	627	497	452	251			3000
4	Bole	Government	346	401	102	89	305	362	431	636	2672
5	Rufaiel Holy savior	Private	41	28	60	57	75	29	18	17	325
6	Enat	Private	40	47	60	80	53	75	38	38	431
7	Ethio Parent	Private	43	62	47	24	43	36	47	47	349
8	Gibson Academy	Private	46	59	45	49	37	48	38	34	356
9	Radical	Private	14	87	95	98	80	87	96	123	680
10	Andinet International	Private	36	45	47	37	33	34	26	23	281
Total population											13,204

Table 3.2 Name of the sample school with proportional sample size

			Grade-9		Grade-9		Grade-10		Grade-11		Grade-12		Total
			M	F	M	F	M	F	M	F	M	F	
1	Medhaniale m	Government	10	16	10	16	2	2	11	10	21	26	98
2	W/ro Kelemework	Government	3	1	3	1	5	6	6	10	15	20	66
3	Asco	Government	21	16	21	16	20	16	14	8			95
4	Bole	Government	11	13	11	13	3	3	10	11	14	21	86
5	Rufaiel Holy savior	Private	1	1	1	1	2	2	2	1	1	1	11
6	Enat	Private	1	1	1	1	2	3	2	2	1	1	13
7	Ethio Parent	Private	1	2	1	2	1	1	1	1	1	1	9
8	Gibson Academy	Private	1	2	1	2	1	2	1	2	1	1	11
9	Radical	Private	1	3	1	3	3	3	2	3	3	4	22
10	Andinet International	Private	1	1	1	1	1	1	1	1	1	1	8
Total sample Population													419

3.4 Data Collection tools and approach

The primary data was collected from sample respondents by using Semi structured questionnaire. It was taken by adopting and reviewing previously done studies on STD that assess study variables from (24, Jun 2021 to 07, Jul 2021). Before duplicating the final questionnaires pre-testing arranged in Medhaniale high school for 25 students. In the pre-test, participants were asked to complete and identify question that misunderstand or misinterpret to modify format and design problems of the questions. Based on the pre- test results, some modification was done, redundant and inapplicable questions were deleted. The questionnaire was developed in English and translated in to Amharic. The translation from English to Amharic is necessary to make respondents understand and help to respond easier and all these data was collected by teachers

after obtaining two hour training. The questionnaire contained five parts: part one assess a socio demographic background, part two focused on the knowledge of students on STD, part three focused on the attitude of the students towards STD, the fourth part consist risky sexual behavior and lastly Preventive practice of the students on STD was summarized.

3.5 Variables description

3.5.1. Dependent variables

Knowledge: Each right answer was given one and wrong or non-response was scored zero. The scores were converted to percentages and graded as poor if $< 50\%$ and good if $\geq 50\%$ (Ayalnesh *et al.*, 2019).

Attitude: For attitude questions on Likert scale, the mean score was calculated. Scores below the mean were classified as inappropriate attitudes, while those above the mean were classified as appropriate attitudes (Esther *et al.*, 2020).

Risky sexual practice: Those respondents who were not married, had sex before 18 years, having multiple sexual partners, sexual intercourse with commercial sex workers, no or inconsistence use of condoms (Adegoke,2003).

Preventive practice: Each right answer scored one point, however wrong answer or non-response scored zero. The total score for each respondent was converted to percentage and graded as poor preventive practices if $< 50\%$, and good preventive practices if $> 50\%$ (Ayalnesh *et al.*, 2019).

3. 5.2.Independent variables

Age: It is a continuous variable and expected that, increase in age of students would have an influence on sexual behavior, labeled as (1) 13-17 and (2) 18-19.

Grade: It is measured as categorical and takes (1) for Grade 9 students, (2) for Grade 10 students, (3) for Grade 11 students,(4) for Grade 12 students.

School type: It is categorical data and takes (1) Government school and (2) for private school.

Co-residence: Refers to the presence of one or both parents, or nether of them in the home which measured by asking currently living with the adolescent students.

Commercial sex worker: A person who was paid money in received for having sex.

Religion It is a categorical variable and takes the value of (1) if the religion of student is orthodox, (2) Muslim, (3) protestant, (4) Catholic and (5) others.

Attend in religious place: How often the students attend holy places, belief have positive attitude on STDS.

Education level of Parents: It considered as a categorical variable which categorized parents educational background that takes a value (1) Illiterate, (2) Read and write only, (3) Primary (1–8), (4) Secondary (9–12), (5) College and above. The variable is expected to have a positive association with knowledge of students as educational level increase.

Pocket money: Is any amount of money given to students by parents for different purposes regularly. It is expected to influence the sexual behavior of students.

Watching porn movies: watching videos that depicts erotic behavior and intended to cause sexual excitement and emotional reaction so it is expected to influence the sexual behavior of students.

Drugs: Any stimulant (alcohol, chat, shisha, hashish etc.)that changes the body's physiology is considered in this study.

3.6. Data Analysis

Each questionnaire was coded separately after the data was collected. Before analyzing the data, the different variables were coded and the data was entered and analyzed using SPSS Version 20. Using Descriptive analysis, the data was organized in frequency distribution table and charts. Crude odds ratio (COR) with 95% confidence interval were calculated from a cross-tabulation to find out associations between dependent and independent variable. Adjusted odds ratios (AOR) calculated from logistic regression and statistical significance was considered at p-value less than 0.05.

3.7. Ethical Considerations

Ethical approval was obtained from the ethical review committee of Addis Ababa University. Letters of supports were written to ten randomly selected High schools. Respondents were informed their right to withdraw from the study at any point in time.

Writing their names and personal identification or anything that express their identity was not allowed to maintain confidentiality and no data collector or school community member could allow observing questionnaires. Data was collected after obtaining verbal consent from those volunteer respondents.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

Out of 419 randomly selected adolescent students from 10 high schools in Addis Ababa, 409 of them participated in the study which gives a response rate of 97%. The majority 337 (82.4%) were from Government Schools and the rest 72 (17.6%) were from Private schools.

4.1 Descriptive result

4.1.1 Socio-Demographic characteristics

Socio-Demographic characteristics: age, sex, grade, religion, residence, school type, educational level and income of family are considered as basic to assess knowledge, attitude, sexual behavior and preventive practice on sexual transmitted diseases.

From 409 participant students in the study, 206(50.4%) were females and 203 (49.6%) males. The age of adolescent ranged from 13-19; and 236(57.7%) of the participants were in the age group 13-17 years and the rest 173(42.3%) students were under the age group 18-19. Mean (+SD) and median age for the respondents were found to be 17.03 (+1.457) and 17 years respectively. Regarding their religion, Orthodox was the leading religion consisting of 296 (72.7%) from the respondents, followed by Muslims 67 (16.5%), Protestants 36 (8.8%) and the least 8(2.0%) were Catholic (Table 4.1).

As described in table 4.1 below 171(42.3%) of respondents reported their fathers have attending college level and above, followed by 139(34.4%) who can only read and write, Primary 44 (10.9%), Illiterate 28(6.9%) and secondary 22(5.4%). Regarding to mothers educational level of the respondents, 135(33.3%) of them can Read and write followed by college level and above 107(26.4%) and 62(15.3%) of them were Illiterate (Table 4.1).

Estimated monthly Income of student's family earn less than 5000 birr were 104(26.3%) and 109(27.6%), 109(27.6%), 73(18.5%) of them were earn 5000-10000 birr, 10000-20000 and greater than 20000 birr respectively.

Table 4.1 Socio-Demographic characteristics of sample students

Characteristics		Sex					
		Male (N=203)		Female (N=206)		Total (N=409)	
		Count	%	Count	%	Count	%
Age(N=409)	13-17	121	59.6	115	55.8	236	57.7
	18-19	82	40.4	91	44.2	173	42.3
Grade (N=409)	9 th	51	25	55	26.7	106	25.9
	10 th	40	19	39	18.9	79	19.3
	11 th	49	24	46	22.3	95	23.2
	12 th	63	31	66	32.0	129	31.5
School Type (N=409)	Government	170	83.7	167	81.1	337	82.4
	Private	33	16.3	39	18.9	72	17.6
Religion (N=407)	Orthodox	151	75	145	70.4	296	72.7
	Muslim	28	13	39	18.9	67	16.5
	Protestant	17	8	19	9.2	36	8.8
	Catholic	5	2.5	3	1.5	8	2.0
Attend in Religious Holy places (N=404)	Yes	151	76.6	153	75.0	304	75.8
	No	46	23.4	51	25	82	24.2
Residence (N=409)	Both parents	123	60	127	61.7	270	61.1
	Only mother	50	24	47	22.8	97	23.7
	Only father	25	12	26	12.6	51	12.5
	Neither parent	5	2.5	6	2.9	11	2.7
Education level of your father (N=404)	Illiterate	14	7.0	14	6.8	28	6.9
	Read and write only	65	32.7	74	36.1	139	34.4
	Primary (1-8)	30	15.1	14	6.8	44	10.9
	Secondary (9-12)	8	4.0	14	6.8	22	5.4
	College and above	82	41.2	89	43.4	171	42.3
Education level of your mother(N=405)	Illiterate	24	12.1	38	18.4	62	15.3
	Read and write only	77	38.7	58	28.2	135	33.3
	Primary (1-8)	19	9.5	29	14.1	48	11.9
	Secondary (9-12)	26	13.1	27	13.1	53	13.1
	College and above	53	26.6	54	26	107	26.4
monthly Income (N=395)	<5000	52	26.8	52	25.9	104	26.3
	5000-10000	54	27.8	55	27.4	109	27.6
	10000-20000	55	28.4	54	26.9	109	27.6
	>20000	33	17.0	40	19.9	73	18.5
pocket money from parent (N=405)	Yes	60	29.9	61	29.9	121	29.9
	No	141	70.1	143	70.1	284	70.1

4.1.2 Knowledge of High School Students about STDs

Different questions were asked to assess over all knowledge of students, on table 4.2 below, more than half of the participants never know STDs other than HIV/ AIDS from 409 participants 378(93.3%) of them mentioned Sexual contact as a modes of transmission of STDs, 28(6.9%) Toilet seats, 269(65.8%) Blood transfusion, 277(68.1%) Mother to child during pregnancy and childbirth, 24(5.9%) Sharing clothes and 137(34.1%) Mosquito bites. The participants were asked to respond whether STDs are Preventable or not. Accordingly,343(83.9%) of them responded “Yes” and 66 (16.1%) of them “No”. Students were also asked to specify types of preventive methods of STIs, 317(78.5%) identified not to have multiple sex partners as preventive methods, 299(74.0%) Abstinence and 278(68.3%) Correct and consistent Use Condom. Students were also asked the consequences of untreated STDs; the participants replied 338(82.6%) Infertility, 292(71.4%) Mortality, 230(56.2%) Low birth weight, 228(55.9%) Premature delivery and 197(48.2%) Cervical cancer. Overall, majority of the participants (88.3%) had a good knowledge of STDs (Figure 2).

Table 4.2 Knowledge on the mode of transmission, prevention methods, symptoms and complication of STDs

Characteristics		Frequency	Percent
know STDs other than HIV/ AIDS	Yes	145	35.9
	No	259	64.1
Modes of transmission of STDs students know	Sexual contact	378	93.3
	Toilet seats	28	6.9
	Blood transfusion	269	65.8
	Sharing clothes	24	5.9
	Mother to child during pregnancy and childbirth	277	68.1
	Mosquito bites	137	34.1
Students Know preventability of STDs	Yes	343	83.9
	No	66	16.1
preventive methods of STDs students know	Abstinence	248	72.9
	Correct and consistent Use Condom	218	63.9
	Not to have multiple sex partners	146	42.9
Consequences of untreated STDs	Infertility	338	82.6
	Premature deliver	151	37
	Low birth weight	230	56.2
	Cervical cancer	197	48.2
	Mortality	292	71.4

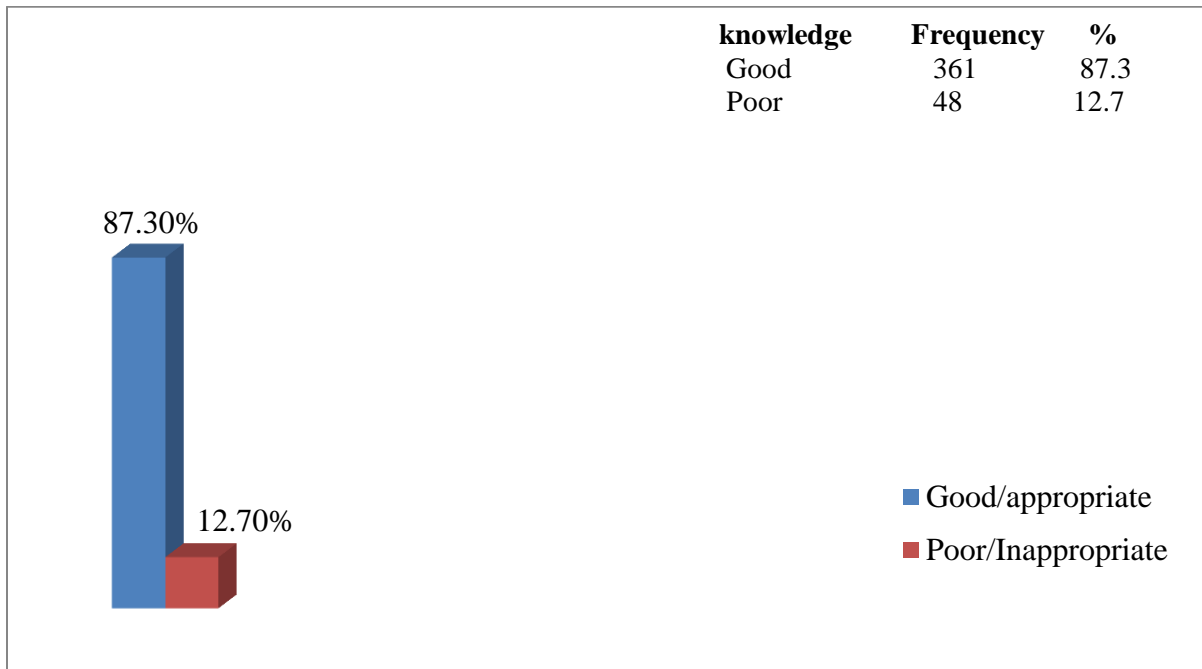


Figure 2: Over all Knowledge of students towards STDs

4.1.3 Attitudes of High school students towards STDs

As can be seen in table 4.3 below, only 149(36.5%) of participants agreed on the presence of curable and non-curable STDs and about 156 (38.2%) respondents agreed on the vulnerability of adolescents for STDs. The students were asked about their opinion toward their premarital sex and 234 (57.8%) of students agreed on virginity until married. Regarding to their feeling on importance of screening for STDs before marriage, 314(77.1%) of the respondents accepted the importance of STDs screening before marriage. On the other hand, about 209(51.4%) of students disagreed on consequences of STDs leads to death if left untreated.

Overall, half of the participants 203(49.6%) had poor/inappropriate attitude towards STDs (Figure 3).

Table 4.3 Attitudes of High school students towards STDs in Addis Ababa

Characteristics	Frequency	Percent	
There are both curable and non-curable STDs (N=407)	Strongly disagree	43	10.5
	Disagree	192	47.1
	Neutral	24	5.9
	Agree	96	23.5
	Strongly agree	53	13.0
Each student should be aware of the consequence of STD (N=406)	Strongly disagree	9	2.2
	Disagree	128	31.4
	Neutral	26	6.4
	Agree	194	47.7
	Strongly agree	50	12.3
Adolescents are more vulnerable to STDs (N=408)	Strongly disagree	12	2.9
	Disagree	204	50.0
	Neutral	36	8.8
	Agree	116	28.4
	Strongly agree	40	9.8
In my opinion school adolescent students Should remain virgins until they marry	Strongly disagree	33	8.1
	Disagree	123	14.8
	Neutral	15	3.7
	Agree	206	50.9
	Strongly agree	28	6.9
I feel screening for STDs before marriage is important.	Strongly disagree	12	2.9
	Disagree	53	13.0
	Neutral	28	6.9
	Agree	204	50.1
	Strongly agree	110	27.0
In my opinion, I feel STDs can cause death if left untreated.	Strongly disagree	45	11.1
	Disagree	150	36.9
	Neutral	14	3.4
	Agree	113	27.8
	Strongly agree	84	20.7
If I notice symptoms of STDs in me or my Partner, I think I should seek treatment immediately(N=403)	Strongly disagree	24	6.0
	Disagree	198	49.1
	Neutral	2	.5
	Agree	85	21.1
	Strongly agree	94	23.3

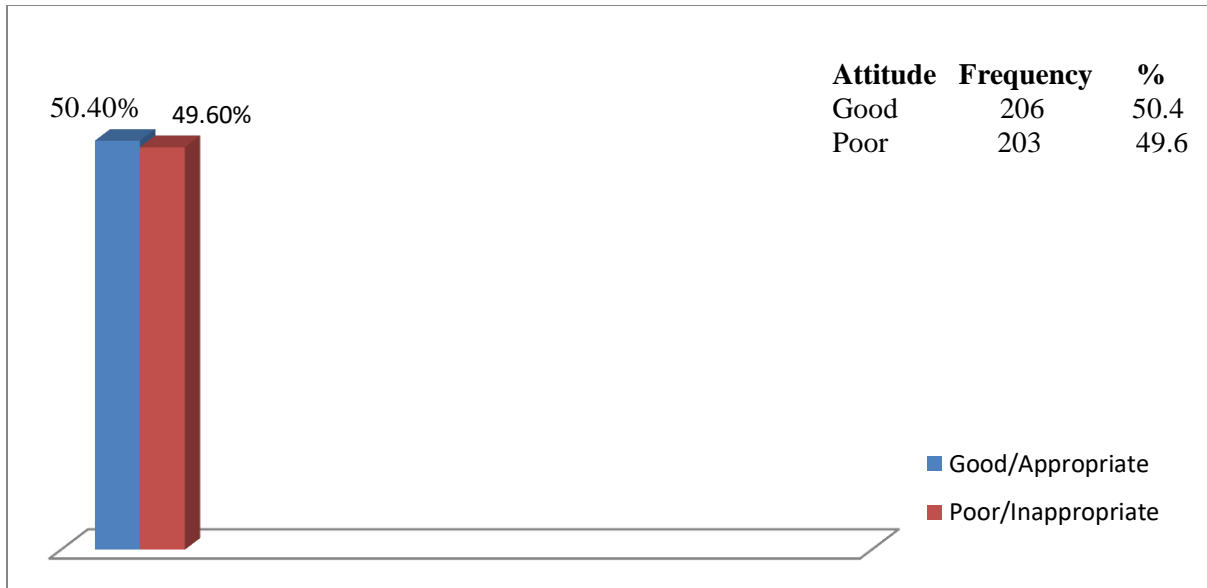


Figure 3: Over all Attitudes of students towards STDs

4.1.4 Risky sexual practice of High school students

The respondents were expected to be confident to tell the truth when asked about their experience on sexual practice. The mean age for having first sexual contact was age 16.5 (SD + 1.38.) and at the time of first sexual contact, most of the students 85(76.6%) were under age 18. The respondents were asked to respond to whether they have intimate friends who have experienced sexual intercourse or not, according to the table 4.4 below 144(36.1%) of participant students have had experienced intimate friend.

Coming to their sexual intercourse experience, 111(28.0%) of respondents were admitted in their answers that they have had sexual intercourse and the main reason for having sexual intercourse was physical pressure 55(50.5%) followed by Love affairs 21(19.3%).

Sexually active respondents also asked who their first sexual partners were, accordingly from 53 male respondents, 27(50.9%) Of them had practice sex with School friend followed by House maid 22(41.5%) and Commercial sex worker 3(5.7%) but in female respondents Sugar daddy 19(32.8%) and relative 13(22.4%) were the leading reasons for sexual engagements next to School friend 21(36.2%) from 58 sexually active females.

Table 4.4 Risky sexual practice of High school students in Addis Ababa

Characteristics		Sex				Total	
		Male		Female			
		Count	%	Count	%	Count	%
Did you have intimate friends who have experienced sexual intercourse? (N=398)	Yes	60	30.8	84	41.2	144	36.1
	No	135	69.2	120	58.8	255	63.9
Have you had sexual intercourse ever? (N=397)	Yes	53	27.3	58	28.6	111	28.0
	No	141	72.7	145	71.4	286	72.0
Who was your first sexual partner? (N=111)	School friend	27	50.9	21	36.2	48	43.2
	Spouse	0	0.0	2	3.4	2	1.8
	Relative	1	1.9	13	22.4	14	12.6
	House maid	22	41.5	0	0.0	22	19.8
	Commercial sex worker	3	5.7	0	0.0	3	2.7
	Sugar daddy/mammy	0	0.0	19	32.8	19	17
	Rape	0	0.0	3	5.2	3	2.7
What was your main reason to engage in premarital sex, if you are single? (N=109)	Physical pleasure	33	62.3	22	39.3	55	50.5
	Love affairs	11	20.8	10	17.9	21	19.3
	Peer influence	8	15.1	8	14.3	16	14.7
	Financial gain	1	1.9	12	21.4	13	11.9
	Rape	0	0.0	4	7.1	4	3.7
Have you watched porn movies ever (N=108)	Yes	42	82.4	15	26.3	57	52.8
	No	9	17.6	42	73.7	51	47.2
Have you ever tried practicing what you have seen from movies? (N=57)	Yes	38	90.5	8	53	46	79.3
	No	4	9.5	7	47	12	20.7
Did you take drugs or alcohols during first sexual contact(N=110)	Yes	29	55.8	15	25.9	44	40.0
	No	23	44.2	43	74.1	66	60

4.1.5 Preventive Practice of High School Students on STIs

As shown on table below, from 406 participants, 21(5.2%) of them used condom during first sex, 90(22.2%) of them didn't use condom and the rest 295(72.7%) never had sex before.

The major identified reasons for ignoring condom usage during first sex were: it was not available 47(56.0%); it reduces sexual pleasure 229(26.2%) and forgot to use a condom 14(16.7%).

The participants were asked whether the symptoms of sexually transmitted diseases had seen or not on themselves, only 53(13%) of them were admitted the existence of symptom and the rest 355(87%) never seen symptoms.

Overall, more than half of the participants 281(68.7%) had good/appropriate preventive Practice towards STDs (Figure 4).

Table 4.5 Preventive Practice of High School Students on STIs in Addis Ababa

Characteristics		Frequency	Percent
Did you use condom during your first sexual contact? (N=406)	Yes	21	5.2
	No	90	22.2
	Never had sex	295	72.7
If your answer is (No for the above Question); Why? (N=84)	It reduces sexual pleasure	22	26.2
	It was not available	47	56.0
	I forgot to use a condom	14	16.7
	I doubt its protection from HIV/AIDS /other STDs	1	1.2
How often do you use any protection to avoid catching HIV/ AIDS and other STDs? (N=405)	Never	23	5.7
	Sometimes	69	17
	Mostly	123	30.4
	Always	190	46.9
Have you seen any symptoms of sexually transmitted diseases on yourself? (N=408)	Yes	53	13
	No	355	87

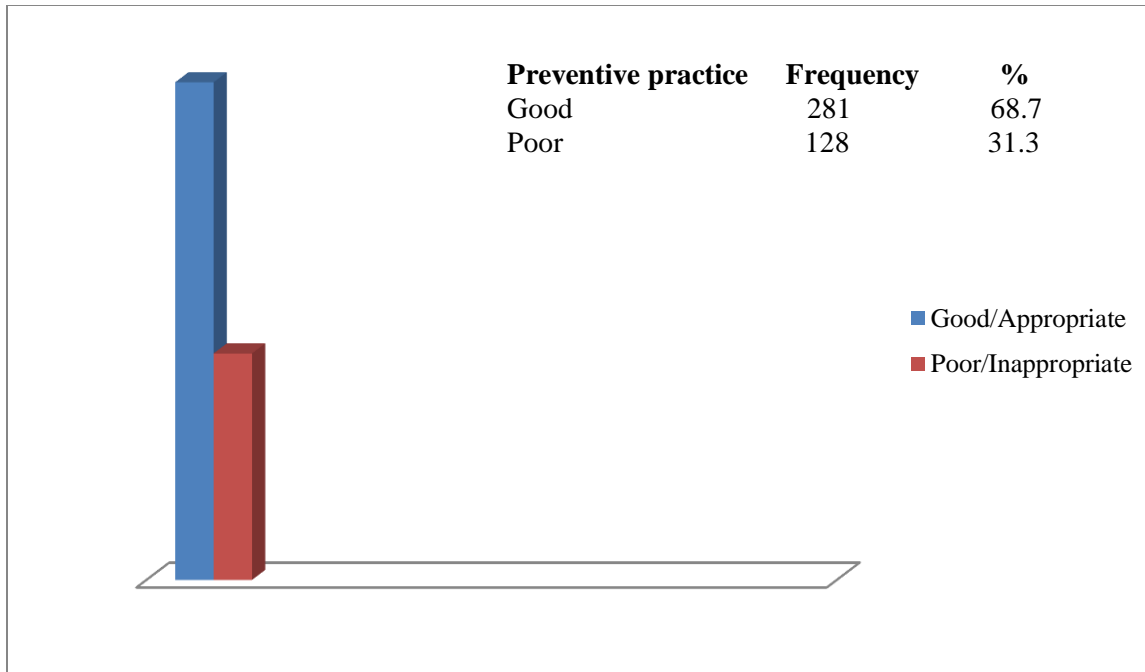


Figure 4: Over all Preventive practice of students towards STDs

4.2 Factors associated with Knowledge, Attitude, Risk sexual behavior and Preventive practice of students towards STDs

4.2.1 Factors Associated with Knowledge of STDs

The Logistic Regression Result on table below shows; age, grade level and education level of fathers found to have an association with knowledge of students on STDs. Grade 10 students, the odds ratio of having good knowledge on sexually transmitted diseases were increased by 4.7 times than grade 9 students (AOR: 4.696,95% CI (1.591, 13.863)). Education level of father was a predictor variable that significantly associated to the outcome variable. Students of fathers education level who can read and write (AOR: 11.833 (95% CI: (2.454, 57.049)) and, college and above (AOR: 6.245 (95% CI: (1.238, 31.492)) had good knowledge on STDs.

Table 4.6 Factors Associated with Knowledge of STDs

Variables	Characteristics	Knowledge		COR(LL,UL)	AOR(LL,UL)
		Good (Count, %)	Bad (Count, %)	95% CI	95% CI
sex	Male(Reference)	186(91.6)	17(8.4)	1.938(1.036,3.626)	1.899(.901,3.999)
	Female	175(85.0)	31(15)		
Age	13-17(Reference)	216(91.5)	20(8.5)	2.086(1.132,3.843)	2.543(1.124,5.756) *
	18-19	145(83.8)	28(16.2)		
Grade	9(Reference)	88(83.8)	17(16.2)	1.00	1.00
	10	72(91.1)	7(8.9)	1.900(.863,4.181)	4.696(1.591,13.863) *
	11	83(83.4)	12(12.6)	.956(.360,2.540)	1.663(.513,5.389)
	12	118(90.8)	12(9.2)	.416(1.422,.609)	1.937(.704,5.333)
Education level of father	Illiterate(Reference)	14(50.5)	14(50.5)	1.00	1.00
	Read and write only	118(84.9)	21(15.1)	33.2(10.432,105.660)	11.833(2.454,57.049) *
	Primary (1–8)	41(93.2)	3(6.8)	5.908(2.166,16.116)	3.169(.888,11.309)
	Secondary(9–12)	18(81.8)	4(18.2)	2.429(.558,10.582)	3.303(.692,15.773)
	College and above	166(97.1)	5(2.9)	7.378(1.816,29.974)	6.245(1.238,31.492) *
Education level of Mother	Illiterate(Reference)	41(61.2)	26(38.8)	1.00	1.00
	Read and write only	126(90)	14(10)	15.695(5.153,47.807)	3.925(.891,17.285)
	Primary (1–8)	44(95.7)	2(4.3)	2.750(.878,8.615)	1.426(.362,5.625)
	Secondary (9–12)	48(96)	2(4.0)	1.125(.199,6.372)	.524(.081,3.388)
	College and above	99(96.1)	4(3.9)	1.031(.182,5.829)	.572(.087,3.768)

Note: *P<0.050

4.2.2 Factors Associated with Attitude of STDs

From the variables below only attend in Religious places, education level of father and mother had a significant association with attitude of students on STDs. Students who attend religious places had 13.4 times more appropriate attitude than those respondents who didn't attend religious places (AOR: 13.359 (95% CI: (5.535, 32.242))). Education level of father who attended Secondary (9–12) school were 12.4 times have appropriate attitude than illiterate fathers (AOR: 12.429 (95% CI: (4.068, 37.968))).

Table 4.7 Factors Associated with Attitude of STDs

Variables	Characteristics	Attitude		COR(LL,UL)	AOR(LL,UL)
		Appropriate (Count, %)	Inappropriate (Count, %)	95% CI	95% CI
Sex	Male	105(51.7)	98(48.3)	1.114(.756,1.642)	1.410(.828,2.401)
	Female	101(49.0)	105(51.0)		
School Type	Governmental	163(48.4)	174(51.6)	.632(.377,1.060)	14.156(5.986,33.49)
	Private	43(59.7)	29(40.3)		
Do you attend in Religious// Holy places?	Yes	194(63.8)	110(36.2)	12.49(6.534,23.884)	13.36(5.535,32.24) *
	No	12(12.4)	85(87.6)		
Co-residence	Both parents	156(62.4)	94(37.6)	1.00	1.00
	Only mother	30(30.9)	67(69.1)	.226(.058,.873)	1.811(.283,11.597)
	Only father	17(33.3)	34(66.7)	.838(.208,3.379)	1.675(.261,10.752)
	Neither parent	3(27.3)	8(72.7)	.750(.176,3.194)	.616(.091,4.187)
Education level of father	Illiterate(Reference)	0	28(100.0)	1.00	1.00
	Read and write only	59(42.4)	80(57.6)	2.15(1.7,4.041)	.53(.316,1.3)
	Primary (1–8)	9(20.5)	35(79.5)	3.163(1.985,5.041)	.610(.276,1.352)
	Secondary(9–12)	16(72.7)	6(27.3)	9.150(4.101,20.414)	12.43(4.068,37.97)*
	College and above	120(70.2)	51(29.8)	.882(.327,2.384)	.553(.166,1.840)
Education level of Mother	Illiterate(Reference)	15(22.4)	52(77.6)	1.00	1.00
	Read and write only	57(40.7)	83(59.3)	12.058(5.763,25.23)	7.0(2.362,20.751)*
	Primary (1–8)	14(30.4)	32(69.6)	5.065(2.855,8.986)	6.015(2.691,13.45)*
	Secondary (9–12)	38(76.0)	12(24.0)	7.950(3.642,17.355)	7.057(2.872,17.34)*
	College and above	80(77.7)	23(22.3)	1.098(.495,2.439)	1.012(.389,2.634)

Note: *P<0.050

4.2.3 Factors associated with risk sexual behavior

Logistic regression analysis was done to determine association of risk sexual behavior with predictor variables such as sex, age, school type, grade, religion, attend in religious places, education level of father and mother, co-residence, pocket money from parent, business activities to earn an income and other factors. Among the above factors age, grade, school type, attend in Religious places, education level of father and mother, pocket money from parent, business

activities to earn an income and knowledge of STDs were statistically significant association with sexual experience of students.

the odds ratio of having sexual experience among age group (13-17) years declines to 75% than age group of students (18-19) years (AOR: 0.245, 95% CI (0.095, .627)). School Type was one of the predictor variable that significantly associated to the outcome variable, The odds of having sexual experience among government school students is lower by 85.5% as compared to private school students (AOR: 0.150, 95% CI (0.050, 0.449)).

Grade level of students were independent variable that associated to the outcome variable, Grade 10 students have 5 times more likely to engaged in sexual experience than Grade 9 students (AOR: 5.041, 95% CI (1.389, 18.296)) and Grade 11 students were 5 times more likely to be engaged in sexual activity than grade 9 students (AOR: 5.000, 95% CI (1.432, 17.453)).

Religion by itself did not add significantly to the model but attending in religious place is significantly associated to sexual activates, attending at holy places decrease 96% risky sexual behavior compared to not attending at religious places (AOR: 0.040, 95% CI (.014, 0.114)). Pocket money from parent were predictor variables that was found to be Significant, the effects of earning pocket money from parents on the odds ratio of their sexual involvement increased by 7.2 times than for those adolescent students who couldn't earn pocket money (AOR: 7.172, 95% CI (2.349, 21.896)).

Business activities to earn an income were another predictor variable that affects the outcome variable. The adolescent high school students were involved in business activity, the odds ratio of their risky sexual activity were increased by 5.29 times than students who didn't do any business activities to earn an income (AOR: 5.287, 95% CI (1.754, 15.931)).

The odds of having sexual experience among Students who have appropriate knowledge on STDs declined by 82% than those students who haven't appropriate knowledge on STDs. (AOR: 0.182, 95% CI (.044, .756)).

Table 4.8 Factors Associated with sexual experience with Independent Variables

Variables	Characteristics	had sexual intercourse ever		COR(LL,UL) 95% CI	AOR(LL,UL) 95% CI
		Yes (Count, %)	No (Count, %)		
sex	Male	53(27.3)	141(72.7)	.940(.606,1.457)	.637(.273,1.486)
	Female	58(28.6)	145(71.4)		
Age	13-17	42(18.6)	184(81.4)	.337(.214,.531)*	.245(.095,.627)*
	18-19	69(40.4)	102(59.6)		
Grade (N=409)	9 th (Reference)	16(16.7)	80(83.3)	1.00	1.00
	10 th	16(20.3)	63(79.7)	2.963(1.555,5.645)*	5.041(1.389,18.296)*
	11 th	31(33.3)	62(66.7)	2.333(1.212,4.490)*	5.0(1.432,17.453)*
	12 th	48(37.2)	81(62.8)	1.185(.677,2.074)	.564(.193,1.647)
School Type	Governmental	84(25.8)	242(74.2)	.566(.330,.970)*	.150(.050,.449)*
	Private	27(38.0)	44(62.0)		
Religion	Orthodox (Reference)	80(27.9)	207(72.1)	1.00	1.00
	Muslim	19(29.2)	46(70.8)	.370(.045,3.052)	.609(.023,16.107)
	Protestant	9(25.7)	26(74.3)	.346(.040,3.006)	1.078(.036,31.854)
	Catholic	1(12.5)	7(87.5)	.413(.044,3.831)	2.139(.067,68.521)
Do you attend in Religious places?	Yes	39(13.3)	254(86.7)	.073(.042,.126)*	.040(.014,0.114)*
	No	65(67.7)	31(32.3)		
Co-residence	Both parents (Reference)	35(14.5)	207(85.5)	1.00	1.00
	Only mother	52(55.9)	41(44.1)	2.218(.561,8.767)	.467(.039,5.621)
	Only father	21(41.2)	30(58.8)	.296(.074,1.185)	.127(.011,1.441)
	Neither parent	3(27.3)	8(72.7)	.536(.127,2.26)	1.212(.102,14.339)
Education level of father	Illiterate(Reference)	36.6(21)	4(14.3)	1.00	1.00
	Read and write only	49(36.6)	85(63.4)	.013(.004,.043)*	.091(.011,.732)*
	Primary (1–8)	21(47.7)	23(52.3)	.133(.067,.265)*	.476(.124,1.821)
	Secondary(9–12)	4(18.2)	18(81.8)	.084(.037,.194)*	.084(.017,.401)*
	College and above	12(7.1)	156(92.9)	.346(.101,1.187)	.134(.015,1.167)
Education level of Mother	Illiterate(Reference)	37(55.2)	30(44.8)	1.00	1.00
	Read and write only	45(33.6)	89(66.4)	.172(.085,.351)*	1.667(.302,9.191)
	Primary (1–8)	8(17.4)	38(82.6)	.420(.223,.793)*	2.434(.6249,495)
	Secondary (9–12)	3(6.0)	47(94.0)	1.009(.400,2.545)	3.163(.639,15.663)
	College and above	17(17.5)	80(82.5)	3.329(.926,11.964)	9.733(1.154,82.114)*
Pocket money from parent	Yes	53(42.4)	72(57.6)	2.787(1.757,4.419)*	7.172(2.349,21.896)*
	No	56(20.9)	212(79.1)		
Business activities to earn an income	Yes	72(36.2)	127(63.8)	2.035(1.288,3.217)*	5.287(1.754,15.931)*
	No	39(21.8)	140(78.2)		
Knowledge	Good	76(21.5)	277(78.5)	.071(.032,.153)*	.182(.044,.756)*
	Poor	35(79.5)	9(20.5)		

Note: *P<0.050

4.2.4 Factors Associated with Preventive Practice of Students towards STDs.

Grade, school type, educational level of father and sexual experience of students had a significant association with preventive practice of students towards STDs. Grade was one of the independent variables that have association with preventive practice of Students towards STDs, grade 10 students had 2.9 times good preventive practice than grade 9 students (AOR: 2.942, 95% CI (1.101,7.860)). Students who attend in governmental schools had 70% less likely to have good preventive practice than private schools (AOR: 0.300, 95% CI (0.113, 0.798)). Education level of father was an independent variable that affects the dependent variable. When education level of father was college and above 87% less likely to have good preventive practice than students who have illiterate fathers (AOR: .132, 95% CI (.019, .916)). Those students who practiced sexual intercourse ever had 99% less likely to have good preventive practice than who never had sex (AOR: .011, 95% CI (0.004, .030)).

Table 4.9 Factors Associated with Preventive Practice of Students towards STDs.

Variables	Characteristics	Preventive Practice		COR(LL,UL) 95% CI	AOR(LL,UL) 95% CI
		Appropriate (Count, %)	Inappropriate (Count, %)		
sex	Male	142(70.0)	61(30.0)	1.122(.738,1.705)	1.216(.634,2.335)
	Female	139(67.5)	67(32.5)		
Age	13-17	178(75.4)	58(24.6)	2.086(1.365,3.188)*	.947(.456,1.965)
	18-19	103(59.5)	70(40.5)		
Grade (N=409)	9 th	76(72.4)	29(27.6)	1.00	1.00
	10 th	62(78.5)	17(21.5)	.721(.412,1.262)	2.942(1.101,7.860)*
	11 th	58(61.1)	37(38.9)	.518(.271,.989)	1.383(.501,3.823)
	12 th	85(65.4)	34.6(128)	1.205(.696,2.085)	2.193(.917,5.247)
School Type	Governmental	230(68.2)	107(31.8)	.885(.507,1.546)	.300(.113,.798)*
	Private	51(70.8)	21(29.2)		1.00
Co- residence	Both parents	198(79.2)	52(20.8)	1.00	1.00
	Only mother	46(47.4)	51(52.6)	.460(.130,1.630)	.364(.040,3.339)
	Only father	30(58.8)	21(41.2)	1.940(.533,7.059)	.439(.049,3.926)
	Neither parent	7(63.6)	4(36.4)	1.225(.318,4.721)	.449(.048,4.220)
Education level of father	Illiterate(Reference)	5(17.9)	23(82.1)	1.00	1.00
	Read &write only	90(62.9)	53(37.1)	20.77(7.325,58.92)*	.732(.092,5.852)
	Primary (1–8)	27(61.4)	17(38.6)	2.659(1.587,4.457)*	.514(.175,1.507)
	Secondary(9–12)	19(86.4)	3(13.6)	2.843(1.383,5.847)*	.261(.066,1.028)
	College and above	140(81.9)	31(18.1)	.713(.199,2.560)	.132(.019,.916)*
Education level of Mother	Illiterate(Reference)	28(41.8)	39(58.2)		1.00
	Read & write only	93(66.4)	47(33.6)	4.585(2.354,8.930)*	1.907(.497,7.323)
	Primary (1–8)	35(76.1)	11(23.9)	1.664(.935,2.959)	1.383(.501,3.823)
	Secondary (9–12)	44(88.0)	6(12.0)	1.035(.457,2.342)	1.383(.501,3.823)
	College and above	79(76.7)	24(23.3)	.449(.171,1.181)	2.193(.917,5.247)
Sexual intercourse	Yes	17(15.3)	94(84.7)	.023(.012,.043)*	.011(.004,.030)*
	No	254(88.8)	32(11.2)		

Note: *P<0.050

4.3 Discussion

The present study has tried to assess knowledge, attitude, risky sexual behavior and Preventive practice of sexual transmitted disease among high school students in Addis Ababa.

This study revealed that 87.3% of students had good knowledge of STDs but more than half of the participants (64.1%) were never know STDs other than HIV/ AIDS. This finding was In line with the study conducted at Shone Town, Southern Ethiopia high school adolescents (91.75%) and Turkish Cypriot school adolescents (91.25%) stated that majority of the participants had good knowledge about STDs including HIV/ AIDS (Kejela, 2015, Kaptanoglu, 2013) and in other hand the result was higher than the study conducted in west gojjam Zone (50.5%), Gondar (45.4%), Arsi Negelle (50.8%) (Ayalnesh et al., 2020, Megersa et al., 2017, Yitayal, 2011). This difference might be due to exposure of information in main stream and social media about STDs in Addis Ababa is higher than towns beyond Addis Ababa in reason of better urbanization infrastructure and relative modernization in the city of Addis Ababa and the time gap from the previous Study might be the other reason of difference, since obtaining of knowledge increases through time. Education level of father was significantly associated to knowledge of students in this study, those students whose fathers had attended college and above level of education had 6.2 times more likely odds of having good knowledge than students who had have illiterate educational background father. Compared to the study conducted in Arsi Negelle, fathers of student's college and above educational level had also significant association with knowledge of students and 3.71 times more likely odds of having good knowledge than those students father who didn't attend formal education, (Ayalnesh et al., 2020). In other study, parental education initiates to improve adolescent parent communication about sexual transmitted disease (ZemenuYowhanes, Hailemariam Berhe & Desta Hailu,2016).The previous study conducted at Arsi Negelle and west gojjam Zone preparatory schools showed males have good knowledge than females unlike this study, sex had no significantly associated to knowledge. In urban both males and females have a time to spend their time in the same places without discrimination but as the urbanization decreases, mostly female adolescents were limited to their house.

In this study half (50.4%) of respondents had appropriate attitude towards STDs, similarly the study conducted at Arsi Negelle preparatory school were 54.5%. compared to the study conducted at West Gojjam zone preparatory schools, only 38.4% of the students had appropriate attitude. Students who attend in Religious places had significant association with appropriate

attitude towards STDs compared to students who didn't attend at least occasionally. In other study conducted at Nigerian students, there was an association between religiosity and adolescent sexual attitudes and behaviors, engagement of religious duty was important to influence adolescent sexual attitudes and behaviors (Clifford, 2005). So, students who follow rules and practice lay down by religious places were expected high attitude towards STDs since every religion has its own set of rules and good practices that followed by their members. In the current study, student's father and mother educational level had significant association to student's attitude towards STDs. the study conducted at west gojjam Zone preparatory schools; increment of educational level of fathers had significant association in student's appropriate attitude (Ayalnesh et al., 2020).

Business activities to earn an income were found to be significant association to sexual activity of adolescents. Students who tried to do any business activity, the odds ratio of their sexual activity were increased by 5.3 times than for those students not involved in any business activity. This finding was In line with the study conducted at Addis Ababa governmental schools previously, the odds ratio of risky sexual practice were increased by 4.7 times than those students not involved in any business activity (Wossen,2005). This paper revealed that still involvement of adolescent in any business activity is directly associated to sexual activity of adolescents. Pocket money from parent was also another variable that affects sexual behavior of students, the odds ratio of sexual activity were increased by 7.2 times than for those students who didn't earn pocket money from parents.

Knowledge, sexual activity and preventive practice of students had a relationship; the odds of having sexual experience among Students' who have good knowledge on STDs were decline by 82% than those students who haven't good knowledge on STDs and students who practiced sexual intercourse ever had 99% less likely to have good preventive practice than who never had sex. so this paper revealed that students who have good knowledge towards STDs were likely to have good preventive practice. ,this study is in line with the finding from Preparatory School Students in Shone Town, Southern Ethiopia, students who had good knowledge of STDs were more likely to good preventive practice than those who had poor STD knowledge (Kejela, 2015).

In current study more than half (68.7 %) of respondents had good preventive Practice towards STDs. This result was higher than the study conducted at West gojjam, 46% of respondent had

good preventive Practice this difference might be due to knowledge difference and urbanization. In this study 111(28%) participants had history of sexual intercourse, from this 81% of them did not use condom whereas the study conducted at Arsi Negelle about 38.6% of the participant students had history of sexual intercourse and 29% of them never had used condom. Previously study showed in Addis Ababa High schools 42.0% of them had history of sexual intercourse and 67.4% of them didn't use condom (Wossen, 2005). In Current study, even though numbers of sexually active students were minimum compared to the above studies, most of these sexually active students (81%) didn't use condom as preventive method of STDs. The reason might be currently students have exposed to pornography moves and addicted to drugs and alcohols .from sexually active students 52.8% and 40% of them watched porn movies and had taken drugs or alcohols during first sexual practice respectively. Whether school type was governmental or private had significant association with preventive practice of STDs. Students who attend in governmental schools had 70% less likely to have good preventive practice than private schools. Relative to government schools, private school Students expected to have access to modern technologies and facilities. So, technology has its own advantages as it so have disadvantages.

CHAPTER FIVE

5. Conclusion and Recommendations

5.1. Conclusion

Most of respondents had good knowledge about STDs but more than half of respondent didn't know STDs other than HIV/AIDS so in general most of students' knowledge other than HIV/AIDS was not satisfactory and there was association between Education level of father and good knowledge of respondents towards STDs. Regarding to attitude of students towards STDs, only half of respondents had appropriate attitude towards STDs and religiosity has an association in students attitude of STDs.

Less than half of participant students had history of sexual intercourse but from those sexually active respondents most of them didn't use condom as preventive method and increment of students' knowledge had significant association in preventing STDs by avoiding risky sexual behavior.

5.2. Recommendations

- Religious leaders in any religious institution should be informed or trained how to aware their followers about moral value in general, since moral value needs to identify what is right and what is wrong to strengthen appropriate attitude and better practice for adolescents'.
- Adolescent's education about sexually transmitted diseases other than HIV/AIDS is important for risky sexual behavior.
- The government should design a strategy to control or limit pornography websites that affects adolescents' sexual behavior.

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Appendices

Annex I Consent Form

Questionnaire code _____

My name is Fasil Alene from Addis Ababa University, College of development studies, department of population studies/Reproductive health, graduate studies program; currently I will be conducting research on a topic entitled as “Knowledge, Attitudes, Risky Behavior and Preventive Practices on sexually transmitted diseases among high School adolescent students in Addis Ababa, Ethiopia”

You have been chosen in this study from the entire class room randomly, so before providing your consent of participation you need to know the following necessary information.

1. Objectives: The objective of this study is to assess knowledge, attitudes, risk behaviors and preventive practice of adolescent high school students.

2. Participants: Adolescent students from selected government and private High Schools in Addis Ababa currently.

3. Procedure and guidelines:

3.1 The study will be executed by asking Semi structured questionnaires

3.2 The questionnaire will take (45 to 60) minutes

4 Confidentiality: Your name will not be written on this questionnaire sheet. The data collected from this questionnaire will be kept confidential and won't be accessible to any third party. I hereby request you to be open and honest while responding so that the research could succeed.

5. Consent: Your participation in the study is totally based on your willingness; you can withdraw at any time or refuse to answer any question without any consequences.

I understand the above terms and I decided to agree/ or disagree to participate in this study.

Please underline any of your respective response agree or disagree.

Agree: I voluntarily agree to participate in this research study

Disagree I needn't be part of this research

Questionnaire

Instruction: For each of the following questions, please tick (✓) on the box from the alternatives that fit for your response or write your response in the space provided accordingly.

Part I Socio-demographic characteristics

No.	Questions	Alternative Response
1.1	Sex	<input type="checkbox"/> Male .....1 <input type="checkbox"/> Female .....2
1.2	Age	.....years
1.3	Grade	<input type="checkbox"/> G-9 .....1 <input type="checkbox"/> G-10 .....2 <input type="checkbox"/> G-11 .....3 <input type="checkbox"/> G-12 .....4
1.4	School Type	<input type="checkbox"/> Governmental.....1 <input type="checkbox"/> Private.....2
1.5	Religion	<input type="checkbox"/> Orthodox....1 <input type="checkbox"/> Muslim.....2 <input type="checkbox"/> Protestant...3 <input type="checkbox"/> Catholic .....4 Other (specify) .....9
1.6	Do you attend in Religious//Holy places?	<input type="checkbox"/> Yes .....1 <input type="checkbox"/> No .....2
1.7	If your answer is (Yes for Q1.6); How often?	<input type="checkbox"/> Regularly .....1 <input type="checkbox"/> Once in a week.....2 <input type="checkbox"/> Occasionally.....3
1.8	Co-residence with	<input type="checkbox"/> Both parents.....1 <input type="checkbox"/> Only mother.....2 <input type="checkbox"/> Only father.....3 <input type="checkbox"/> Neither parent....4
1.9	Education level of your father	<input type="checkbox"/> Illiterate.....1 <input type="checkbox"/> Read and write only.....2 <input type="checkbox"/> Primary (1–8) .....3 <input type="checkbox"/> Secondary (9–12).....4 <input type="checkbox"/> College and above.....5
1.10	Education level of your mother	<input type="checkbox"/> Illiterate.....1 <input type="checkbox"/> Read and write only.....2 <input type="checkbox"/> Primary (1–8) .....3 <input type="checkbox"/> Secondary (9–12).....4 <input type="checkbox"/> College and above.....5
1.11	Parents Estimated monthly income	.....
1.12	Do you earn pocket money from your parent?	<input type="checkbox"/> Yes .....1 <input type="checkbox"/> No .....2
1.13	If your answer is (Yes for Q1.12); Estimated monthly pocket money	.....
1.14	Have you attend any business activities to earn an income?	<input type="checkbox"/> Yes .....1 <input type="checkbox"/> No .....2
1.15	If your answer is (Yes for Q1.14); what would you spend your money on?	<input type="checkbox"/> Enjoyment of personal affair.....1 <input type="checkbox"/> For family purpose.....2 Others(specify).....3

Part II STDs Knowledge

No.	Questions	Alternative Response
2.1	Do you know STDs other than HIV/ AIDS?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No.....2
2.2	If your answer is (Yes for Q2.1); Specify commonly known STDs other than HIV/ AIDS?	.....
2.3	What are Modes of transmission of SDs you know (multiple responses are possible)	<input type="checkbox"/> Sexual contact.....1 <input type="checkbox"/> Toilet seats.....2 <input type="checkbox"/> Blood transfusion.....3 <input type="checkbox"/> Sharing clothes.....4 <input type="checkbox"/> Mother to child during pregnancy and childbirth 5 <input type="checkbox"/> Mosquito bites.....6
2.4	Are STDs Preventable?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No..... 2
2.5	If your answer is (Yes for Q2.4); what types of preventive methods of STIs do you know?	<input type="checkbox"/> Abstinence.....1 <input type="checkbox"/> Correct and consistent Use Condom.....2 <input type="checkbox"/> Not to have multiple sex partners.....3 <input type="checkbox"/> Others(specify).....4
2.6	Can it protect from getting HIV/AIDS, if partner takes Contraceptive pills whenever they have sex?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No.....2
2.7	What symptoms would lead you think that has such sexually transmitted diseases?	<input type="checkbox"/> Lower Abdominal Pain.....1 <input type="checkbox"/> Genital discharge.....2 <input type="checkbox"/> Swelling genital area.....3 <input type="checkbox"/> Pain during intercourse.....4 <input type="checkbox"/> Blood in Urine.....5 <input type="checkbox"/> Pain while passing out urine.....6 <input type="checkbox"/> Others(specify).....7
2.8	What are the consequences of untreated STDs? (multiple responses are possible)	<input type="checkbox"/> Infertility.....1 <input type="checkbox"/> Premature delivery .....2. <input type="checkbox"/> Low birth weight.....3 <input type="checkbox"/> Cervical cancer .....4 <input type="checkbox"/> Mortality.....5 <input type="checkbox"/> Others(specify).....6

Part III STDs Attitude

Please decide the extent to which you agree/disagree with the following statements

No	Questions	Alternative Answers / Scale/				
		1 Strongly disagree	2 disagree	3 Neutral	4. Agree	5 Strongly Agree
3.1	Each student should be aware of the consequence of STD	1	2	3	4	5
3.2	Use of RH service is likely to reduce STD?	1	2	3	4	5
3.3	STIs can cause social stigma, Psychological problems and discrimination from the community?	1	2	3	4	5
3.4	Chat, cigarette, alcohol and drugs can expose to risky sexual behavior.	1	2	3	4	5
3.5	There are both curable and non-curable STDs.	1	2	3	4	5
3.6	It is possible to communicate apparently with parents on sexual issue.	1	2	3	4	5
3.7	Adolescents are more vulnerable to STDs.	1	2	3	4	5
3.8	Can a girl of your age refuse to have sex with a boy/man who has given her a gift and asks her for sex?	1	2	3	4	5
3.9	Peer pressure influences adolescents to undergo un protected sex and leads to STDs.	1	2	3	4	5
3.10	In my opinion school adolescent students Should remain virgins until they marry.	1	2	3	4	5
3.11	In my opinion my mother feels school adolescent students Should remain virgins until they marry	1	2	3	4	5
3.12	In my opinion my father feels school adolescent students Should remain virgins until they marry.	1	2	3	4	5
3.13	I feel screening for STDs before marriage is important.	1	2	3	4	5
3.14	In my opinion, I feel STDs can cause death if left untreated.	1	2	3	4	5
3.15	If I notice symptoms of STDs in me or my Partner, I think I should seek treatment immediately.	1	2	3	4	5

Part IV Sexual Behaviors

Instruction: For each of the following questions, please circle the alternative that fit for your response or write your response in the space provided accordingly

No.	Questions	Alternative Response
4.1	Did you have intimate friends who have experienced sexual intercourse?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
4.2	Have you had sexual intercourse ever?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2 If your answer is “No” please skip to Q1.15
4.3	Age at first sexual contact	.....
4.4	Age of your first sexual intercourse partner?	.....
4.5	Who was your first sexual partner?	<input type="checkbox"/> Fiancé 1 <input type="checkbox"/> School friend 2 <input type="checkbox"/> Spouse 3 <input type="checkbox"/> Relative 4 <input type="checkbox"/> House maid 5 <input type="checkbox"/> Commercial sex worker.....6 <input type="checkbox"/> Sugar daddy/mammy 7 <input type="checkbox"/> Rape .....8 <input type="checkbox"/> Others (specify) 9
4.6	What was your main reason to engage in premarital sex, if you are single?	<input type="checkbox"/> Physical pleasure.....1 <input type="checkbox"/> Love affairs.....2 <input type="checkbox"/> Peer influence .....3 <input type="checkbox"/> Financial gain.....4 <input type="checkbox"/> Rape .....5 <input type="checkbox"/> Others (specify) 6
4.7	Have you watched porn movies ever	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
4.8	If your answer is (Yes for Q4.7); how frequently did you watch?	<input type="checkbox"/> Always .....1 <input type="checkbox"/> Usually.....2 <input type="checkbox"/> Sometimes .....3 <input type="checkbox"/> Rarely .....4
4.9	Have you ever tried practicing what you have seen from movies?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
4.10	Did you ever face risky sexual practices after day/night party?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2

4.11	Did you take drugs or alcohols during your first sexual contact	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
4.12	How many sexual partners have you had so far?	<input type="checkbox"/> Three and more 1 <input type="checkbox"/> Two 2 <input type="checkbox"/> One 3
4.13	Total people you ever had sexual Intercourse during the last 12 months	<input type="checkbox"/> Three and more .....1 <input type="checkbox"/> Two 2 <input type="checkbox"/> One .....3 <input type="checkbox"/> With no one .....4
4.14	Do you have sex with commercial sex workers?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
4.15	Why did you not have sexual intercourse ever?	<input type="checkbox"/> Fear of STD/AIDS.....1 <input type="checkbox"/> Fear of parents .....2 <input type="checkbox"/> Want to wait until married.....3 <input type="checkbox"/> Religious reason.....4 <input type="checkbox"/> No desire.....5 <input type="checkbox"/> No money.....6 <input type="checkbox"/> Fear of pregnancy .....7 <input type="checkbox"/> Others (specify) 8

Part V Preventive Practice

No.	Questions	Alternative Response
5.1	Did you use condom during your first sexual contact?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2 <input type="checkbox"/> Never had sex.....3
5.2	If your answer is (No for Q5.1); Why?	<input type="checkbox"/> It reduces sexual pleasure.....1 <input type="checkbox"/> It was not available .....2 <input type="checkbox"/> I forgot to use a condom.....3 <input type="checkbox"/> I doubt its protection from HIV/AIDS /other STDs..4 Others (specify) 5
5.3	How often do you use any protection to avoid catching HIV/ AIDS and other STDs?	<input type="checkbox"/> Never.....1 <input type="checkbox"/> Sometimes.....2 <input type="checkbox"/> Mostly.....3 <input type="checkbox"/> Always.....4
5.4	Have you seen any symptoms of sexually transmitted diseases on yourself?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2
5.5	If your answer is (Yes for Q5.4); Did you get treatment?	<input type="checkbox"/> Yes.....1 <input type="checkbox"/> No .....2 If not, specify the reasons

Annex II

መረጃ ለመስጠት ያላቸውን ፍቃደኝነት ማረጋገጫ ቅጽ

መለያ ቁጥር _____

እኔ ተማሪ ፋሲል አለን በአዲስ አበባ ዩኒቨርሲቲ በሃገር ልማት ጥናት ኮሌጅ በስነ-ህዝብ ትምህርት ክፍል/ስነ-ተዋልዶ ጤና ተመራቂ ተማሪ ስሆን በአሁኑ ሰዓት የመመረቂያ ጽሁፌን “አዲስ አበባ ውስጥ የሚማሩ የሁለተኛ ደረጃ ት/ቤት ጎረቤት/ኮረዳ ተማሪዎች መካከል በግብረ ሥጋ ግንኙነት የሚተላለፉ በሽታዎች ላይ ያላቸው ዕውቀት ፣ አመለካከቶች ፣ አደገኛ ባህሪ እና የመከላከያ ልምዶች” በሚል ርዕስ ነው።

አንተ/አንች በዚህ ጥናት ውስጥ የተመረጡ/ሽ ስለሆነ ፈቃደኝነትህን/ሽን ከመግለጽህ/ሽ በፊት የሚከተሉትን አስፈላጊ መረጃዎች ማወቅ ይኖርብሃል/ሻል።

1. የጥናቱ ዓላማ፡- የዚህ ጥናት ዓላማ በጉርምስና እና በኮረዳነት ዕድሜ ላይ የሚገኙ የሁለተኛ ደረጃ ትምህርት ቤት ተማሪዎች በግብረ ሥጋ ግንኙነት በሚተላለፉ በሽታዎች ላይ ያላቸውን ዕውቀት ፣ አመለካከቶች ፣ ለአደጋ ተጋላጭ ባህሪያትን እና የመከላከል ልምድን መዳሰስ ነው።

2. በጥናቱ ላይ ተሳታፊዎች፡- አዲስ አበባ ላይ በተመረጡ የመንግስት እና የግል ሁለተኛ ደረጃ ትምህርት ቤቶች ላይ የሚማሩ ተማሪዎች ናቸው።

3. መመሪያ እና ቅደም ተከተል

3.1 ጥናቱ የሚከናወነው ቀድመው የተዘጋጁ መጠይቆችን በመጠየቅ ነው።

3.2 መጠይቁ ከ 45 እስከ 60 ደቂቃዎች ይወስዳል።

4 የጥናቱ ሚስጥራዊነት፡- ስምህ/ሽ በዚህ መጠይቅ ወረቀት ላይ አይጻፍም በተጨማሪም የተሰበሰበው መረጃ በሚስጥር የተጠበቀ ሆኖ ለማንም ሰስተኛ ወገን ተደራሽ አይሆንም።

ምርምሩ እንዲሳካ ምላሽ በምትሰጡበት/ሽበት ጊዜ ግልጽ እና ታማኝ እንድትሆን/ሻ እጠይቃለሁ።

5. ስምምነት፡- በጥናቱ ውስጥ ያለህ/ሽ ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሠረተ ነው ፤ በማንኛውም ጊዜ ማቋረጥ እንዲሁም በመጠይቁ ላይ ያልተረዳሽውን/ሽውን ጥያቄ አለመመለስ ይቻላል። ከላይ የተጠቀሱትን ውሎች ከተረዳህ/ሽ በኋላ በዚህ ጥናት ውስጥ ለመሳተፍ ወይም ላለመሳተፍ ወሰነህ/ሽ አስምር/ሪ።

እስማማለሁ- በዚህ የምርምር ጥናት ውስጥ ለመሳተፍ በፈቃደኝነት እስማማለሁ

አልስማማም- የዚህ ምርምር አካል መሆን አያስፈልገኝም

መመሪያ :- ለሚከተሉት ጥያቄዎች ከተሰጡት አማራጮች ውስጥ ለንተ/ኛ መልስ ተስማሚ የሆነውን ምርጫ ሳጥኑ ላይ ምልክት አድርግ/ኒ (✓) ወይም ምላሹን በተሰጠው ክፍት ቦታ ላይ ጻፍ/ፈ ::

ክፍል-1 ማህበራዊ እና ስነ-ህዝብ መረጃዎች

ተ	ጥያቄዎች	አማራጭ መልሶች
1.1	ጾታ	<input type="checkbox"/> ወንድ .....1 <input type="checkbox"/> ሴት .....2
1.2	እድሜ	..... ዓመት
1.3	ክፍል	<input type="checkbox"/> 9ኛ .....1 <input type="checkbox"/> 10ኛ .....2 <input type="checkbox"/> 11ኛ .....3 <input type="checkbox"/> 12ኛ .....4
1.4	የትምህርት ቤት ዓይነት	<input type="checkbox"/> የመንግስት .....1 <input type="checkbox"/> የግል .....2
1.5	ሀይማኖት	<input type="checkbox"/> ኦርቶዶክስ .....1 <input type="checkbox"/> ሙስሊም .....2 <input type="checkbox"/> ፕሮቴስታንት .....3 <input type="checkbox"/> ካቶሊክ .....4 ሌላ ካለ ጥቀስ/ሽ .....9
1.6	ሃይማኖታዊ ስርዓቶች ላይ ትሳተፋለህ/ሽ?	<input type="checkbox"/> አወን .....1 <input type="checkbox"/> አይደለም .....2
1.7	ለጥያቄ 1.6 መልስህ/ሽ አወን ከሆነ ምን ያህል?	<input type="checkbox"/> ሁልጊዜ .....1 <input type="checkbox"/> በሳምንት አንድ ቀን .....2 <input type="checkbox"/> አልፎ አልፎ .....3
1.8	ከማን ጋር ትኖራለህ/ሽ?	<input type="checkbox"/> ከእናትና አባት .....1 <input type="checkbox"/> ከእናት ብቻ .....2 <input type="checkbox"/> ከአባት ብቻ .....3 <input type="checkbox"/> ከእናትና አባት ዉጭ .....4
1.9	የአባትህ/ሽ ወይም የወንድ አሳዳጊህ/ሽ የትምህርት ደረጃ?	<input type="checkbox"/> ማንበብ እና መጻፍ አይችልም .....1 <input type="checkbox"/> ማንበብ እና መጻፍ ብቻ ይችላል .....2 <input type="checkbox"/> ከ1ኛ እስከ 8ኛ .....3 <input type="checkbox"/> ከ9ኛ እስከ 12ኛ .....4 <input type="checkbox"/> ኮሌጅና ከዛ በላይ .....5
1.10	የእናትህ/ሽ ወይም የሴት አሳዳጊህ/ሽ የትምህርት ደረጃ?	<input type="checkbox"/> ማንበብ እና መጻፍ አትችልም .....1 <input type="checkbox"/> ማንበብ እና መጻፍ ብቻ ትችላለች .....2 <input type="checkbox"/> ከ1ኛ እስከ 8ኛ .....3 <input type="checkbox"/> ከ9ኛ እስከ 12ኛ .....4 <input type="checkbox"/> ኮሌጅና ከዛ በላይ .....5
1.11	የቤተሰብህ/ሽ አማካኝ የወር ገቢ በግምት ስንት ነው?	.....
1.12	ከቤተሰቦችህ/ሽ የኪስ ገንዘብ ትቀበላለህ/ሽ?	<input type="checkbox"/> አወን .....1 <input type="checkbox"/> አይደለም .....2

1.13	ለጥያቄ 1.12 መልስህ/ሽ አወን ከሆነ ግምታዊ የኪስ ገንዘብ ምን ያክል ይሆናል	.....
1.14	ተጨማሪ ገንዘብ ለማግኘት ስራ ሰርተህ/ሽ ታወቃለህ?	<input type="checkbox"/> አወን .....1 <input type="checkbox"/> አይደለም .....2
1.15	ለጥያቄ 1.14 መልስህ/ሽ አወን ከሆነ ያገኘኸውን/ሽውን ገንዘብ ለምን ታወለዋለህ/ይዋለሽ?	<input type="checkbox"/> ለመዝናኛ 1 <input type="checkbox"/> ለቤተሰብ ዓላማ.....2 ሌሎች ካሉ(ጥቀስ/ሽ).....3

ክፍል-2 ተማሪዎች በግብረ ስጋ ግንኙነት በሚተላለፉ በሽታዎች ያላቸው እዉቀት

ተቁ.	ጥያቄዎች	አማራጭ መልሶች
2.1	ከ ኤች.አይ.ቪ ሌላ በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎች ታወቃለህ/ሽ?	<input type="checkbox"/> አወን .....1 <input type="checkbox"/> አላዉቅም.....2
2.2	ለጥያቄ 2.1 መልስህ/ሽ አወን ከሆነ የምታዉቀውን/ቂውን ግለጽ/ጭ?	.....
2.3	በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎች መታላለፊያ መንገዶች ምንድን ናቸው? (ከአንድ በላይ መልስ ይቻላል)	<input type="checkbox"/> በግብረ ስጋ ግንኙነት 1 <input type="checkbox"/> በመጸዳጃ ቤት መቀመጫ.....2 <input type="checkbox"/> ደም በመዉሰድ.....3 <input type="checkbox"/> ልብስ በመጋራት.....4 <input type="checkbox"/> ከእናት ወደ ልጅ በእርግዝናና በወሊድ ጊዜ.....5 <input type="checkbox"/> በወባ ትንኝ አማካኝነት.....6
2.4	በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎችን መከላከል ይቻላል?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አይቻልም.....2
2.5	ለጥያቄ 2.4 መልስህ/ሽ አወን ከሆነ ምን ዓይነት የመከላከያ መንገዶችን ታወቃለህ/ሽ?	<input type="checkbox"/> መታቀብ .....1 <input type="checkbox"/> ኮንዶምን በትክክልና ሁልጊዜ መጠቀም .....2 <input type="checkbox"/> ከአንድ በላይ የወሲብ አጋር አለመኖር .....3 ሌላ ካለ ጥቀስ/ሽ).....4
2.6	የግብረ ስጋ ግንኙነት በሚፈጸምበት ጊዜ ሁሉ የወሊድ መከላከያ ክኒን በመዉሰድ ኤች.አይ.ቪ / ኤድስን መከላከል ይቻላል?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አይቻልም.....2
2.7	በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎች አሉት ብለህ/ሽ የምታስበው/ቢዉ ምልክቶች የትኞቹ ናቸው?(ከአንድ በላይ መልስ ይቻላል)	<input type="checkbox"/> በታችኛው የሆድ ክፍል ህመም 1 <input type="checkbox"/> በብልት ላይ ፈሳሽ .....2 <input type="checkbox"/> እብጠት ብልት አካባቢ .....3 <input type="checkbox"/> በወሲብ ወቅት ህመም .....4 <input type="checkbox"/> ደም በሽንት ውስጥ .....5 <input type="checkbox"/> ሽንት በሚወጣበት ጊዜ ህመም .. .....6 ሌሎች ካሉ (ጥቀስ/ሽ) .....7

2.8	ያልታዘመ በግብረ ሥጋ ግንኙነት የሚተላለፉ በሽታዎች ምን መዘዝ ይኖራቸዋል?(ከአንድ በላይ መልስ ይቻላል)	<input type="checkbox"/> መካኒካል.....1 <input type="checkbox"/> ያለጊዜው መውለድ.....2 <input type="checkbox"/> ዝቅተኛ ክብደት ያለው/ላት ልጅ መውለድ...3 <input type="checkbox"/> የማህፀን በር ካንሰር4 <input type="checkbox"/> ሞት.....5 <input type="checkbox"/> ሌሎች ካሉ (ጥቀስ/ሽ).....8
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ክፍል-3 ተማሪዎች በግብረ ስጋ ግንኙነት በሚተላለፉ በሽታዎች ያላቸው ዝንባሌ

ለሚከተሉት ጥያቄዎች የተስማማህበትን/ሽበትን እና ያልተስማማህበትን/ሽበትን በመወሰን ምረጥ/ጭ

ተቂ	ጥያቄዎች	አማራጭ/መለኪያ/				
		1 በጣም አልስማ ማም	2 አልስማ ማም	3 መካከለ ኛ	4. እስማ ማለሁ	5 በጣም እስማማ ለሁ
3.1	እያንዳንዱ ተማሪ ስለ አባላዘር በሽታ መረዳት አለበት	1	2	3	4	5
3.2	የስነ-ተዋልዶ ጤና አገልግሎቶችን መጠቀም የአባላዘር በሽታን ሊቀንስ ይችላል	1	2	3	4	5
3.3	የአባላዘር በሽታዎች ማህበራዊ መገለልን ፣ የስነልቦና ችግሮችን እና ከህብረተሰብ መገለልን ሊያስከትሉ ይችላሉ	1	2	3	4	5
3.4	ጫት ፣ ሲጋራ ፣ አልኮሆል እና አደንዛዥ እጾች ለአደጋ ተጋላጭ ለሆኑ የወሲብ ድርጊቶች ሊያጋልጡ ይችላሉ	1	2	3	4	5
3.5	ሊድኑ እና ሊድኑ የማይችሉ የአባላዘር በሽታ ዓይነቶች አሉ	1	2	3	4	5
3.6	በወሲባዊ ጉዳዮች ላይ ከወላጆች ጋር በግልጽ መነጋገር ይቻላል ።	1	2	3	4	5
3.7	በጉርምስና/ኮረድና ዕድሜ ላይ የሚገኙ ወጣቶች ለአባላዘር በሽታ ተጋላጭ ናቸው	1	2	3	4	5
3.8	በዕድሜህ/ሽ እኩያ የሆነች ልጅ ስጦታ ከሰጣት እና ወሲብ ከጠየቃት ወንድ ጋር ወሲብ ለመፈፀም አለመስማማት ትችላለች?	1	2	3	4	5

3.9	በጉርምስና/በኮረዳ ዕድሜ ላይ የእኩዮች ተጽዕኖ ጥንቃቄ ለጎደለው ወሲብ እንዲጋለጡና እና ለአባላዘር በሽታ ተጠቂ ያደርጋቸዋል	1	2	3	4	5
3.10	በእኔ አመለካከት በጉርምስና/ኮረዳ ዕድሜ ላይ ያሉ ተማሪዎች እስከሚጋቡ ድረስ ደናግል ሆነው መቆየት አለባቸው ::	1	2	3	4	5
3.11	በእኔ አመለካከት እናቴ በትምህርት ቤት ውስጥ ያሉ ጎረምሳዎች/ኮረዳዎች እስከሚያገቡ ድረስ ድንግል መሆን እንዳለባቸው ይሰማታል::	1	2	3	4	5
3.12	በእኔ አመለካከት አባቴ በትምህርት ቤት ውስጥ ያሉ ጎረምሳዎች/ኮረዳዎች እስከሚያገቡ ድረስ ድንግል መሆን እንዳለባቸው ይሰማዋል	1	2	3	4	5
3.13	ከጋብቻ በፊት የአባላዘር በሽታዎች ምርመራ አስፈላጊ እንደሆነ ይሰማኛል	1	2	3	4	5
3.14	በእኔ አመለካከት የአባላዘር በሽታዎች ካልታከሙ ሞት ሊያስከትሉ ይችላሉ	1	2	3	4	5
3.15	በእኔ ወይም በወሲብ አጋሬ የአባላዘር በሽታ ምልክቶች ካሉ ወዲያውኑ ሕክምና ማግኘት ይኖርብናል::	1	2	3	4	5

ክፍል-4 ወሲባዊ ባህሪዎች

ተቁ	ጥያቄዎች	አማራጭ መልሶች
4.1	የግብረ ስጋ ግንኙነት የማድረግ ልምድ ያለው የቅርብ ጓደኛ አለህ/ሽ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> የለም.....2
4.2	የግብረ ስጋ ግንኙነት አድርገህ/ሽ ታወቃለህ/ለሽ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አላወቅም .....2 መለስህ/ሽ አላወቅም ከሆነ ወደ ጥያቄ ቁጥር 4.15 ሂድ/ጅ
4.3	በመጀመሪያ የግብረ ስጋ ግንኙነት የፈጸምክበት/ሽበት እድሜ	.....
4.4	በመጀመሪያ የግብረ ስጋ ግንኙነት ወቅት የወሲብ አጋርህ/ሽ እድሜ?	.....
4.5	የመጀመሪያ የ ወሲብ ጓደኛህ/ሽ ማን ነበር?	<input type="checkbox"/> እጮኛ .....1 <input type="checkbox"/> የትምህርት ቤት ጓደኛ 2 <input type="checkbox"/> የትዳር አጋር .....3

		<input type="checkbox"/> ዘመድ..... 4 <input type="checkbox"/> የቤት ሰራተኛ.....5 <input type="checkbox"/> ሴተኛ አዳሪ.....6 <input type="checkbox"/> በእድሜ የገፉ/ች.....7 <input type="checkbox"/> አስገድዶ መድፈር .....8 ሌሎች ካሉ (ጥቀስ/ሽ)..... 9
4.6	ያላገባህ/ሽ ከሆነ ከጋብቻ በፊት ወሲብ ለመፈፀም ዋና ምክንያትህ/ሽ ምንድነው?	<input type="checkbox"/> አካላዊ ደስታ .....1 <input type="checkbox"/> በፍቅር .....2 <input type="checkbox"/> የዳደኛ ተጽዕኖ .....3 <input type="checkbox"/> ገንዘብ ለማግኘት.....4 <input type="checkbox"/> አስገድዶ መድፈር .....5 ሌሎች ካሉ (ጥቀስ/ሽ) .....6
4.7	የወሲብ ፊልሞችን ተመልክተህ/ሽ ታዉቃለህ/ቂያለሽ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አላዉቅም.....2
4.8	ለጥያቄ 4.7 መልስህ/ሽ አወን ከሆነ ምን ያህል ተመለከትክ/ሽ?	<input type="checkbox"/> ሁልጊዜ .....1 <input type="checkbox"/> አብዛኛውን ጊዜ.....2 <input type="checkbox"/> አልፎ አልፎ .....3 <input type="checkbox"/> ከረጅም ጊዜ በኋላ .....4
4.9	ከፊልሞች ያየሽውን/ሽውን በተግባር ሞክረህ/ሽ ታዉቃለህ/ቂያለሽ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አላዉቅም .....2
4.10	ከቀን / ማታ መዝናኛ ቤቶች ቆይታ በኋላ አደገኛ የወሲብ ልምዶች አጋጥመውህ/ሽ ያውቃሉ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አላዉቅም .....2
4.11	በመጀመሪያው የግብረ ሥጋ ግንኙነት ጊዜ አደንዛዥ ዕፅ ወይም አልኮሆል ወስደሃል/ሻል?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አልወሰድኩም .....2
4.12	እስካሁን ምን ያህል ወሲባዊ አጋሮች ነበሩህ/ሽ?	<input type="checkbox"/> ሶስትና ከዛ በላይ .....1 <input type="checkbox"/> ሁለት 2 <input type="checkbox"/> አንድ 3
4.13	በአስራ ሁለት ወር ውስጥ ከምን ያክል ሰዉ ጋር ወሲብ ፈጽመሃል/ሻል?	<input type="checkbox"/> ሶስትና ከዛ በላይ .....1 <input type="checkbox"/> ሁለት 2 <input type="checkbox"/> አንድ .....3 <input type="checkbox"/> አልፈጸምኩም .....4
4.14	ከንግድ የወሲብ ሠራተኞች ጋር ወሲብ ፈጽመሃል/ሻል?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አልፈጸምኩም.....2

4.15	አስከ አሁን ወሲብ ያልፈጸምክበት/ሽበት ምክንያት ምንድን ነው ?	<input type="checkbox"/> ኤች አይ ቪን ስለምፈራ.....1 <input type="checkbox"/> ቤተሰብን ስለምፈራ.....2 <input type="checkbox"/> አስከ ጋብቻ ድረስ መታቀብ ስለምፈልግ.....3 <input type="checkbox"/> ሀይማኖቱ ስለማይፈቅድ.....4 <input type="checkbox"/> ፍላጎት ስለሌለኝ.....5 <input type="checkbox"/> ገንዘብ ስለሌለኝ.....6 <input type="checkbox"/> እርግዝናን ስለምፈራ.....7 <input type="checkbox"/> ሌሎች ካሉ (ጥቀስ/ሽ)8
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ክፍል-5 በግብረ ስጋ ግንኙነት የሚተላለፉ በሽታዎችን የመከላከል ልምድ

ተቋ	ጥያቄዎች	ምርጫ
5.1	በመጀመሪያ ግብረ ስጋ ግንኙነትህ/ሽ ከንደም ተጠቅመሃል/ሻል?"	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አልተጠቀምኩም2 <input type="checkbox"/> ግብረ ስጋ ግንኙነት አድርጌ አላዉቅም....3
5.2	ለጥያቄ 5.1 መልስህ/ሽ አወን ከሆነ ለምን?	<input type="checkbox"/> የወሲብ እርካታን ይቀንሳል.....1 <input type="checkbox"/> ማግኘት አልቻልኩም.....2 <input type="checkbox"/> እረሳሁት.....3 <input type="checkbox"/> ኤች አይ ቪን ሌሎች በሽታዎችን መከላከልን እጠራጠራለሁ..4 <input type="checkbox"/> ሌሎች ካሉ (ጥቀስ/ሽ) 5
5.3	በኤች.አይ.ቪ / ኤድስ እና በሌሎች የአባላዘር በሽታዎች ላለመያዝ ምን ያህል መከላከያ ትጠቀማለህ/ለሽ?	<input type="checkbox"/> ምንም አልጠቀምም.....1 <input type="checkbox"/> አልፎ አልፎ.....2 <input type="checkbox"/> ብዙ ጊዜ.....3 <input type="checkbox"/> ሁልጊዜ.....4
5.4	በግብረ ሥጋ ግንኙነት የሚተላለፉ በሽታዎች ምልክቶች በራስህ/ሽ ላይ አይተህ/ሽ ታዉቃለህ/ሽ?	<input type="checkbox"/> አወን.....1 <input type="checkbox"/> አላየሁም .....2
5.5	ለጥያቄ 5.4 መልስህ/ሽ አወን ከሆነ ህክምና አግኝተሃል/ሻል?	<input type="checkbox"/> አዎ.....1 <input type="checkbox"/> አላገኘዉም .....2 <input type="checkbox"/> ካላገኘህ/ሽ ምክንያቱን ጥቀስ/ሽ