



ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL AND COMPUTATIONAL SCIENCES
DEPARTMENT OF ZOOLOGICAL SCIENCES

**ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS
HIV/AIDS AND
VOLUNTARY COUNSELING AND TESTING AMONG SAYINT GENERAL
SECONDARY SCHOOL STUDENTS, SOUTH WOLLO ETHIOPIA**

M.Sc. Thesis

By:

Tilahun Adugna Afrassa

June, 2024

ADDIS ABABA, ETHIOPIA



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**A Thesis Submitted to Addis Ababa University, College of Natural and Computational
Sciences, Department of Zoological Sciences in Partial Fulfillment of the requirements for
Master of Science Degree in Biology**

By: Tilahun Adugna Afrassa

Major Advisor: Asnake Desalegn(PhD)

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Addis Ababa, Ethiopia

APPROVAL SHEET

Addis Ababa University

As members of the board of examiners of the masters of Science (M.Sc.) thesis open defense examination, we have read and evaluate this thesis prepared. Tilahun Adugna entitled “Assess knowledge, attitude and practice towards HIV/AIDS and VCT among Sayint general secondary school students, South Wollo Ethiopia” we hereby certify that the thesis is accepted for fulfilling the requirements for the awards of the degree of masters of science (M.Sc.) in Biology.

Approved by Board of Examiners

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Name of Chair Person	Signature	Date
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Name of Internal Examiner	Signature	Date
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Name of External Examiner	Signature	Date

DECLARATION

This thesis prepared by Tilahun Adugna entitled “assess knowledge, attitude and practice towards HIV/AIDS and **VOLUNTARY COUNSELING AND TESTING** among Sayint general secondary school students, South Wollo, Ethiopia” we here by certify that the thesis is accepted for fulfilling the requirements for the awards of the degree of masters of science (M.Sc.) in Biology.

This is to certify that this thesis entitled “Assess knowledge, attitude and practice towards HIV/AIDS and VCT among Sayint general secondary school students, south Wollo Ethiopia” submitted in partial fulfillment of the requirements for the award of the degree of master of science in “Biology” to the graduate program of College of Natural and Computational Sciences in Addis Ababa University by Tilahun Adugna is an authentic work carried out by him under our guidance. The matter embodied in this project work has not been submitted earlier for an award of any degree or diploma to the best of our knowledge and belief.

Name of the Student Tilahun Adugna

Signature_____

Date _____

Name of the Adviser Asnake Desalegn (PhD)

Signature:_____

Date: _____

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
KAP	Knowledge Attitude Practice
HIV	Human Immunodeficiency Virus
SPSS	Statistical Package for Social Sciences
PLWHAS	People living with HIV/AIDS
HCT	HIV Counseling and Testing
VCT	Voluntary counseling and testing
VHCT	Voluntary HIV Counseling and Testing
WHO	World Health Organization

ABSTRACT

Acquired immunodeficiency syndrome (AIDS) is a chronic infections disease caused by HIV virus. AIDS is a pandemic disease that occurs worldwide. The major mode of transmission of HIV/AIDS worldwide is through sexual contacts. Other routes of transmission include transfusion of infected blood and blood products, occupational transmission, prenatal transfusion and others. The objective of this research was to assess knowledge, attitude and practice towards HIV/AIDS and VCT among Sayint general secondary school students, South Wollo Ethiopia. The study was an institutional based cross-sectional study conducted on 377 study participants recruited using stratified random sampling techniques. Pre-tested structured questionnaires were used to collect data on KAP from the study participants. Data was analyzed using SPSS version 26. Prior to data analysis data were entered into Epi info, double checked for completeness and exported to SPSS. From the binary logistic regression model fitted, residence and grade level significantly predicted the outcome variable (knowledge). Participants from urban areas had six times more knowledge than those from rural areas (AOR, 6.52; CI, 2.22 – 19.12; $p = 0.001$), and as grade level increased the knowledge about HIV/AIDS also increased (Grade 10, AOR, 2.7; CI, 1.15 – 6.36; $p = 0.023$), Grade 11 (AOR, 3.69; CI, 1.47 – 9.30; $p = 0.005$) and Grade 12 (AOR, 8.55; CI, 2.41 – 30.27; $p = 0.001$). The odds of having positive attitudes towards HIV/AIDS was significantly lower among study participants who obtained information from their parents was significantly lower than those that obtain information from other sources ($p = 0.02$). Married individuals had three times more positive attitude towards HIV/AIDS than those who were single (AOR, 3.98; CI, 1.10 – 14.56; $p = 0.037$). Study participants from urban areas had better knowledge towards VCT than those from rural areas (AOR, 8.476; CI, 2.598 – 27.658; $p = 0.0001$). As age increased by one year the odds of having positive attitude towards VCT also increased (AOR, 1.266; CI, 1.027 – 1.560; $p = 0.027$). Similarly, married individuals had positive attitude towards VCT compared to single individuals (AOR, 3.985; CI, 1.851 – 8.579; $p = 0.0001$). But, females didn't have positive attitude towards VCT compared to males (AOR, 0.407; CI, 0.240 – 0.692; $p = 0.027$). Proper practice towards VCT increased with increasing age (AOR, 1.279; CI, 1.044 – 1.568; $p = 0.018$). Proper practice towards VCT was higher for participants who obtained information through literature than those who obtained information though radio (AOR, 2.069; CI, 1.143 – 3.747; $p = 0.016$). Generally, practice towards HIV/AIDS and VCT in this study was low despite better knowledge about the diseases. Creation of awareness on practice towards HIV/AIDS and VCT is recommended.

Keywords: Voluntary testing and counseling; HIV/AIDS Attitude; Knowledge; Practice; Sayint; Ethiopia.

1. INTRODUCTION

1.1 Background of the study

Acquired immunodeficiency syndrome (AIDS) is a chronic infections disease caused by Human immunodeficiency viruses (HIV). It was 1st recognized in USA in 1981 among homo sexual males: *Pneumocystis' carnie* pneumonia was seen among 5(five) homo sexual and Kaposi sarcoma was diagnosed in 26 homosexuals with the virus. HIV virus was isolated from patients with lymphadenopathy in 1983 and on 1984. The virus was clearly demonstrated to be the causative agent for AIDS (Lissan, 2004).

In Ethiopia, the first how zero- positive cases were reported in 1984 from Addis Ababa, the capital city and the two AIDS cases were reported a couple of years later. Since then a growing number of cases from different areas of the country was reported. According to MOH, the total number of adults and children living with HIV/AIDS in 2001 was estimated to be 2.2 million of which children comprised 200,000. Both men and women were equally affected (Getachew and Taddese, 2005).

AIDS is pandemic disease that occurs worldwide. The major mode of transmission of HIV/AIDS worldwide is through sexual contacts. Other routes of transmission include transfusion of infected blood and blood products, occupational transmission, prenatal transfusion and others (Lissan, 2004; Getachew, and Taddese, 2005; Killings, 2008).

Sub-Saharan Africa remains the region most heavily affected by HIV. In 2017, about 71% of all people living with HIV resided in sub Saharan Africa. Sub-Saharan Africa also accounted for 65% of new HIV infections and 75% of the deaths from AIDS related illness (James *et al.*, 2017). Almost a quarter of people living with HIV are under the age of 25. Young people ages 15–24 represent 45% of all new HIV infections. In sub-Saharan Africa, nearly 3.3 million youth are living with HIV. Lack of information, skills, and access to services for youth is expected to fuel the epidemic (Harikrishnan *et al.*, 2017).

Young people from sub-Saharan Africa countries are more at risk of sexual and reproductive health problems than those young people from around the world (WHO, 2020). Youths from this region contribute the highest risk of sexually transmitted infections, for example, over half of all new HIV

infections are among them. In developing countries, more than half of new cases of HIV infection are found among young people aged from 15–24 years (Mamo *et al.*, 2021).

VCT is the process by which an individual undergoes counseling enabling him or her to make an informed choice about being tested for HIV. This decision must be entirely the choice of the individual and he or she must be assured that the process will be confidential (UNAIDS,2000). VCT is an effective strategy for facilitating behavioral change around both preventing HIV as well as getting early access to care and support. It is also instrumental in bringing about behavioral change, reducing unprotected sex and helping reduce the incidence of HIV (Admassu and Fitaw, 2006).

Voluntary counseling and testing (VCT) is a major component of HIV prevention and care. VCT is also perceived to be an effective strategy in risk reduction among sexually active young people HIV counseling and testing was identified as the key entry point to care, treatment and support services. It is the first gate where by people learn whether they are infected with HIV or not, and are helped to understand the implications of their HIV status and make informed choices for the future. Voluntary HIV counseling and testing (VHCT) was acknowledged as an efficacious and pivotal strategy for both HIV and AIDS prevention and care(Gatta and Thupayagale-Tshweneagae, 2012; UNAIDS, 2010). Voluntary counseling and testing means an individual seeks HIV counseling and testing where confidential services are offered. Services are rendered in confidence. The ultimate goal is mainly on preventing HIV acquisition through risk assessment, risk reduction and testing (Mamo. et al.,2021). The purpose of this research was to assess the KAP status of high school students about HIV/AIDS and to determine the association between key socio-demographic factors and the KAP about HIV/AIDS and VCT.

1.2 Statement of the problem about HIV/AIDS and VCT

The HIV/AIDS pandemic is the worst health crisis in history. It is clearly moved beyond being a health and psychosocial issue to economic and developmental crisis. HIV/AIDS has caused immense human suffering in the African continent; the most obvious effect of this crisis has been illness and death. But the impact of this epidemic has certainly not been confined to the health sector, households, schools, work places and businesses have also been badly affected. UNAIDS report at the end of 2000 about 39.5 million people were living with HIV/AIDS, out of which 2.3 million were children and 17.7 million were women. There were 4.3 million new infections out of which 530,000 were children <15 years. There were about 2.9 million deaths out of which 380,000 were children (UNAIDS 2012). In 2023, approximately

84,000 children died from AIDS related illness in Sub Saharan Africa (UNAIDS 2023). According to the report, in 2023, approximately 630,000 people worldwide died from AIDS-related illness. This includes both adults and children, reflecting the ongoing impact of the epidemic despite significant advances in treatment and prevention.

According to the 2016 Ethiopian Demographic and Health Survey report, among sexually active adolescents aged 15–19 years, adults who were tested for HIV test were only 22% and 18% respectively. Therefore, this study will assess knowledge, attitude and practice towards VCT.

Ethiopia has the 16th highest HIV/AIDS prevalence rate and the third largest population living with HIV/AIDS (PLWHA). According to UNAIDS the infection rate rises quickly from an estimate of 2.2 million Ethiopian adults and about 1,200,000 children are orphan due to AIDS and according to MOH, the prevalence rate is estimated to be 6.6% with urban HIV prevalence estimated reaching as high as 13.7% and that of rural as low as 3.7%. The highest prevalence of HIV is seen in group of 15-24 years, Ethiopians effort to decrease poverty is systematically hindered by AIDS. This pandemic is significantly affecting the Ethiopian education sector with doubled face. It affects the demand of education by reducing the number of students attending education and it affects supply of education due to increased death and sickness of teacher or instructors. A lack of information continues to be a primary stumbling, which together with several other factors limits the effectiveness of effort to counter the spread and impact of the disease. These factors include stigma, discrimination, and silence and develop about the disease, poverty, inequality, gender inequality, war, conflict and STDs (UNAIDS 2012).

Despite its strategic relevance, VCT uptake has been low in Ethiopia, as to other countries in Africa (James *et al.*, 2017). In 2005, the VCT uptake in Ethiopia was extremely low with only 4 % of women and 6% of men ever tested for HIV, which increased to 38.8 and 41.1 %, respectively in 2011 following the rapid scale up of primary health care facilities, under the rural Health Extension Program (HEP), and increased accessibility to free antiretroviral drugs (Mamo *et al.*, 2021). VCT utilization rate among students was still low. Therefore, strengthening coordinated efforts for convincing students to perceive their risk behavior and to utilize VCT service is recommended with a special attention to high school students. Focused group appropriate activities are necessary using local resources like school community conversation and HIV/AIDS clubs that will bring behavioral change regarding utilization of VCT service to sustain more utilization of VCT (Girma, 2020). To best of our knowledge there has no research

conducted to assess of knowledge, attitude and practice towards HIV/AIDS and VCT in the specific study area. Thus, this study was initiated to fill the gap and come up with recommendations, which could be used as an input for further investigation of the extent of the problem and come-up with solutions. In Ethiopia, there are 603,537 people living with HIV and AIDS in the year 2023 (Ethiopian public health institute, 2023).

1.3 Objectives

1.3.1 General objective:

To assess knowledge, attitude and practice towards HIV/AIDS and VCT among Sayint general secondary school students South Wollo, Ethiopia.

1.3.2 Specific objectives

- To assess level of knowledge, attitude and practice towards HIV/AIDS among Sayint general secondary school students
- To assess practice towards voluntary counseling and testing in HIV/AIDS among Sayint general secondary school students
- To identify the factors associated with the KAP and VCT.

1.4 Significance of the Study

Therefore, the study was helpful in providing information about knowledge, attitude and practice of HIV/AIDS which could potentially be used for intervention at the study area. This study could also be used to help Sayint preparatory and general secondary school to look thoroughly its activities regarding VCT service. Next it could also help the woreda and zonal level administration to plan and act accordingly. In additions, the result of this research work could be used as baseline information for further investigation of the case at the study area regarding KAP on HIV/AIDS and VCT.

2. LITERATURE REVIEW

In the countries of East Africa, HIV prevalence began declining about a decade ago and has remained stable in many countries. The HIV prevalence rate in Kenya fell from 14% in 1990 to 6% in 2006. However, in the year 2023, the HIV prevalence rate is declined to 3.7% (Khusoko-East African Markets). Uganda prevalence has remained between 6% and 7%. Similarly, in Ruanda, HIV prevalence has remained the same; however the HIV prevalence in Rwanda is over three times higher in urban areas than rural areas. Prevalence in Kenya, Tanzania and Uganda exceeds 5 percent (6.3 percent, 5.6 percent and 5.4 percent respectively (NISR, 2010).

The study conducted at East Africa Tanzania in 2005 show that 93.7% of students knew how HIV is transmitted and 86.6% knew faithfulness to one partners as best methods for HIV prevention. Despite of the knowledge they have, very few students reported to have use condom in their last sexual contacts (Kamala, and Abounds, 2005).

A number of studies on knowledge attitude and practice of HIV/ AIDS were done in our country. Almost all groups knew at least one prevention method. The study show that significant proportion of the population was at increased risk of HIV infections despite high level of knowledge. Similar observations were found in other studies, awareness of HIV/AIDS among worker in the informal sectors in Addis Ababa was found to be 96.3%. This study also revealed that there was a 34.1 of misconception rate on the way of transmission of HIV/AIDS (Degu, 2002).

The KAP study that was done in 1997 on high school students show that the students had good knowledge about the HIV/AIDS although found to had risky sexual behavior (MOH, 2002). The study conducted in Gondar in 2007 show that, the majority (97.5%) of the participants responded that HIV is an etiologic agent for AIDS. Unprotected sex, unsafe blood transfusion, contaminated needles and mother to child transmission were reported by 84.6%, 64.2%, 78.8% and 69% of the students respectively as the common ways of HIV transmission (Abera, 2003).

In another report, only 3.6% reported mosquito bite (2.5%), shaking hands (0.7%) and eating and drinking with infected individual (0.4%) as mode of HIV transmission. Abstinence, faithfulness to one's partner and use of condom as a means to prevent transmission of HIV was responded by 84.1%, 60.4% and 41.8% of student respectively. Avoiding social life with AIDS patients was reported by 1.8% of the respondents as way to prevent transmission of HIV infection (Gashaw *et al.*, 2007).

The study done in Gondar, Ethiopia, in 2009 shows that, all students had heard about HIV/AIDS before the interview. The sources of information were radio (50%), television (46.7%), newspaper (33.3%), teacher (25%), parents (21.7), health workers (13.3%) and youth club (11.7%). About (34%) of the students(respondents) had negative attitude towards HIV/AIDS patients and other STDs. Forty percent of sexually active respondents had multiple sexual partners including commercial sex workers (CSWS) indicating predisposition to STDs (Gashaw *et al.*, 2007). In another survey, more than 30% of the students associated AIDS with an immoral lifestyle and even recommended isolation of AIDS patients. Half of the students favored for screening of HIV/STIs. However, one third of the students were not willing to visit infection control clinic following acquisitions of STDs other than HIV/AIDS (Yitayl *et al.*, 2009).

According to the BSS (2005) report in Ethiopia, only 9.3% and 13% of the in-school youth and the out-school youth had undergone HIV test respectively. Studies undertaken in Ethiopia and other countries have shown that having stigmatizing attitude towards people living with AIDS (PLWHA) was associated with lower likelihood of HIV testing while being female or married were associated with higher odds of HIV testing. Various studies shows that having sex with multiple sexual partners, are those at risk and neighborhood knowledge of a test were associated with increased previous HIV testing (Nibiyo, 2006).

The study conducted in Awassa in 1995 showed that 93.8% of those who responded to have heard about HIV/AIDS remembered up to three mode of disease transmission. Among these, some had wrong conceptions and speculation about HIV/AIDS transmission, such as kissing and saliva 5.3%, body contact 4.8% and air droplet 1.5%. The three major risk factors perceived to expose a person for HIV infection were sexual promiscuity, taking injections, using unsterile needles and frequent sexual contact with commercial sex workers in that respective order (Nigussie , 2006).

Study done in Jimma on high school students showed that about 100% of the respondents know or heard about HIV/AIDS. Radio and television were the main source of information (97.4%) and include other sources. However, only 53% rely on radio/television only. Only 39.5 got information from religious institution. About 10.5% of the subjects had undergone HIV testing and counseling. Only 57.9% of the students would change their behavior to avoid contracting HIV/AIDS. About 21.1% of the respondents don't know if a person looks healthy is infected with HIV or not (Bazzeew and Aschenek, 2012).

A study that conducted in Jima zone Agaro town in 2001 indicated that 40% of males and 7.5% females reported to have 2-5 and more than 5 partners respectively. Among 90 students' sexual exposure 54.4% of them used condom at least once. Of those 55.7% were males and 50% were females. Among those who used condom, 46.9 % used always and 38.8% used occasionally (Belayneh *et al.*, 2005). Almost all of students in study area had heard of at least one HIV prevention method. Knowledge on some aspect of the disease is quite low in the study group. About 53% of respondents had positive attitude toward using condom. 62.1% and 67.8% of respondents had positive attitude towards abstinence and being faithful with friends respectively. About 54.1% of respondents used condom and 38.5% of them used nothing (Ahmed, *et al.*, 2015).

A study done in southern Ethiopia Areka high school showed that almost all (93%) of the respondents heard of about VCT from different sources (Mata. , *et al.*,2021). According to cross sectional study done in southern Ethiopia, majority (66%) of students agreed that everybody needs to get VCT while others (32%) responded that VCT is necessary for those who are going to marry. Similarly study from Gondar done among preparatory school students showed that 91% of respondents had a positive attitude for having VCT and they responded that they are ready to be tested whenever the test is available (Demeke and Alazbih, 2019). According to the study done in Arusha region in Tanzania, the uptake of VCT among students was reported to be 29.3% (Sanga *et al.*,2015).

VCT is recognized globally as an effective and pivotal strategy for both prevention and care of HIV/AIDS. Counseling and testing centers are places where people get to know more about HIV/AIDS and /or to check their sera status so, as to make informed decisions about their health and behavior (GHS, 2009). VCT is necessary to direct HIV infected people to antiretroviral therapy, which is becoming increasingly available and accessible. Research indicates that even though there is a high level (over 95%) of awareness of existence of HIV/AIDS, there is a lower level of in depth knowledge especially on modes of transmission (NACP/GHS, 2010). This makes VCT services an important avenue to receive important information.

In a study conducted among healthcare professional students undergoing diploma, degree and certificate courses, all the participants indicated multiple responses with respect to sources of information on VCT. These sources included radio and television, friends, schools, church, mosques, seminars and through visiting VCT centers (Charles *et al.*, 2009).

Manirankuda *et al.* (2007) explored perception, needs and barriers of Sub-Saharan African migrants with respect to HIV/VCT. Data collected through group discussion showed that participants were in favor of VCT by principle. However, participants indicated that barriers of VCT outweigh advantages. The barrier included the fear of positive test results and is related to personal and social consequences, lack of preventive health behavior, denial of HIV risks and missed opportunities.

The fear of testing positive in the test itself was a common expressed psychological barrier. (Morin *et al.*, 2006) Research indicated that people only accept VCT when planning marriage or when they want to travel abroad (Alemeyehu, 2010). Holmes *et al.*, (2008) found out more educated women were less likely to accept VCT than the less educated ones. In a study conducted in 35 districts of the 10 regions of Ghana among adults in school and out school youth and military personnel and their families revealed that there was a low uptake of VCT services (NACP/GHS, 2010). According to Charles, *et al.*, (2009), participants were aware of the benefits of VCT. However, only a few (35%) had undergone VCT. Denison *et al.*, (2006) discovered that adolescents delay in seeking VCT until they found a family member or friend who supported the idea of testing.

Conceptual Framework

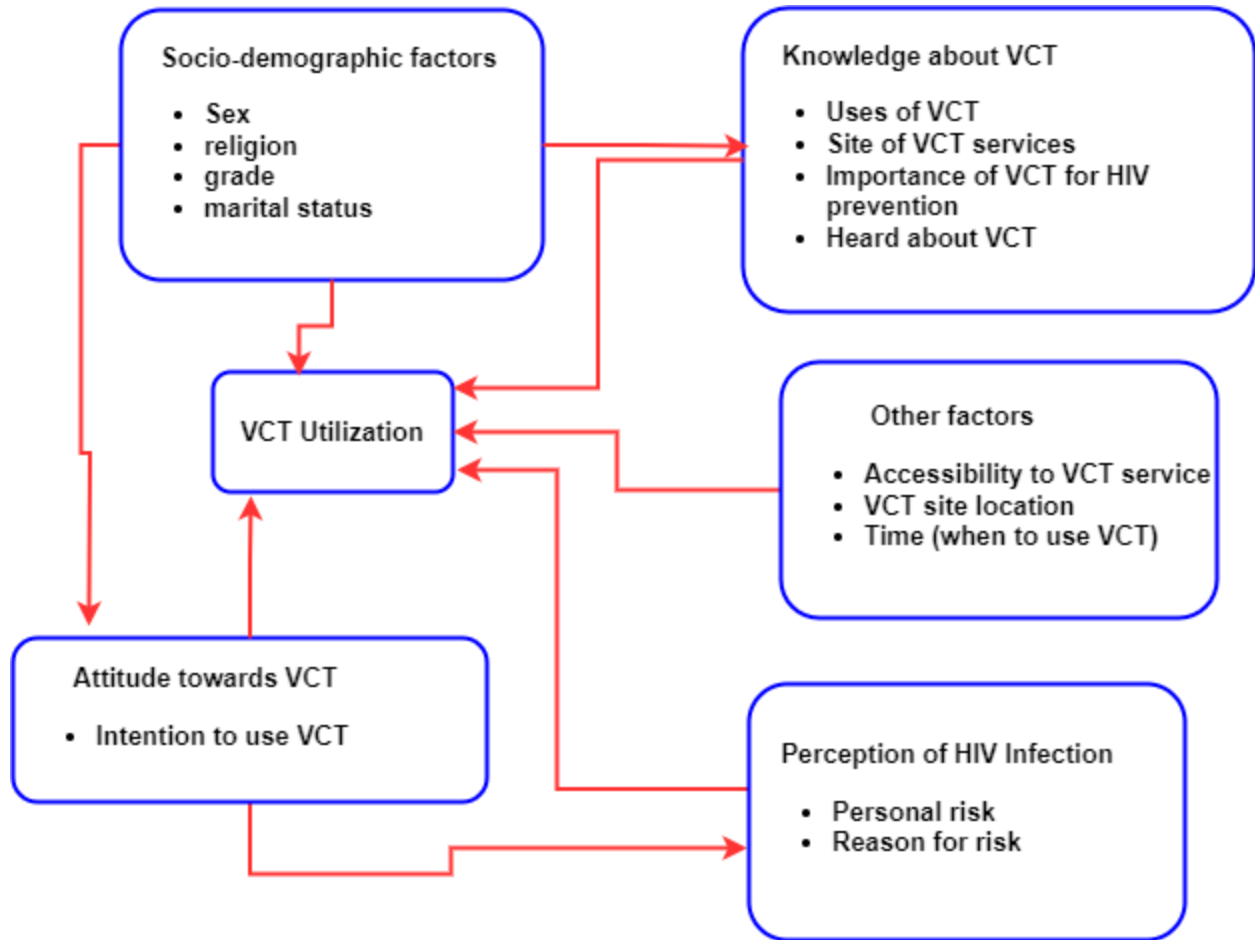


Figure 1: Conceptual framework (Gatta, 2012)

3. METHODOLOGY

3.1 Study area description

3.1.1 Location

Amhara Sayint Woreda is one of the Woredas of South Wollo Zone, Amhara Regional state, Ethiopia. Geographically, the area is bounded between $11^{\circ}40'0''$ N - $11^{\circ}.20'0''$ N latitude and $38^{\circ}30'0''$ E - $39^{\circ}.0'0''$ E longitude. Adjibar is the main town of the woreda. It is situated at about 187 km distance from Dessie city in the South West direction and at about 590 km north of Addis Ababa. Amhara Sayint Woreda has one urban *kebele* (the smallest administrative region) and 34 rural *kebeles* situated in three different agro-ecological zones, i.e. Kola, Woinadega and Dega. It shares its border with Bashilo River on the West, Mekdela wereda on the North, Legambo on the East, and Mahal Sayint on the South (Amhara Sayint Woreda Ccommunication Office, 2023).

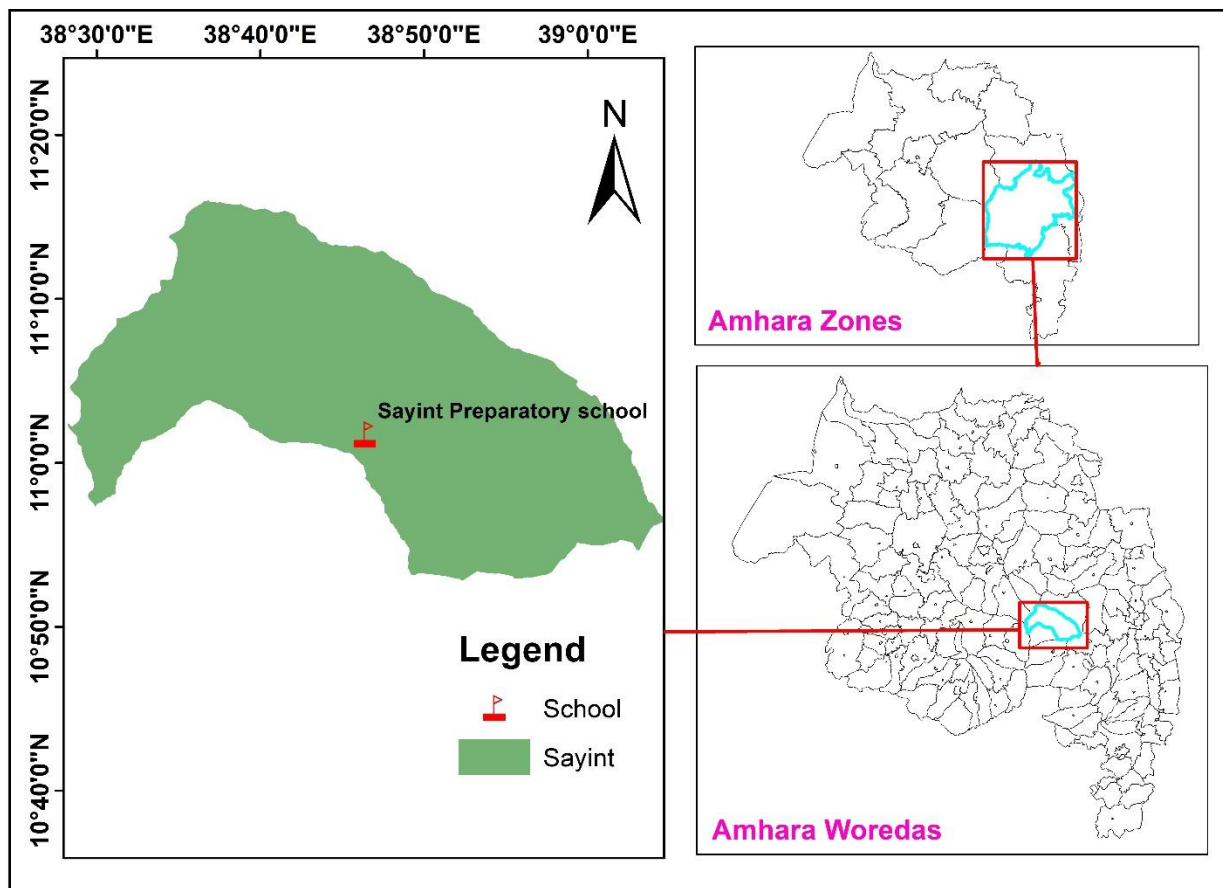


Figure.2: Location of the study Area

3.1.2 Population

According to the 2015 E.C sample survey data Amhara Sayint *Woreda* has a population of 173675; of whom 86875 are men and 86800 women. The majority of the inhabitants are followers of Orthodox Christianity (99%) and 1% were Muslim. The ethnicity of the *Woreda* population was Amhara. Amhara Sayint Adjibar general secondary school was established in 1992 G.C. Amhara Sayint Adjibar general secondary school during the year 2023 G.C had 168 teachers and 3200 students in the schools (Amhara Sayint Ccommunication Office, 2023).

3.1.3 Topography and agro-climatic condition

The altitude of Amhara Sayint *woreda* is ranges from 500 meter at the bottom of the canyon of Abay to 3,700 meter at the highest mountain of South Wollo Zone, i.e. Mount Amba Ferit. Based on these altitudinal differences, the *woreda* have three agro-climatic zones namely, Dega, Woinadega and Kolla which constitutes 40.68%, 23.58% and 35.74%, respectively. Most of the *Kebeles* are located in the highland and lowland areas with poor infrastructure and multi-dimensional interrelated households' socio-economic problems compared to the midland households.(Amhara Sayint *Woreda* Agriculture office,2023).

3.1.4 Land Use Pattern and Socio-economic feature

According to the Amhara Sayint *Woreda* Agriculture Office, (2023) the *woreda* has out of 1,437.30 square kilometers total land of the *woreda*, the main land use types were divided in to three parts; they are categorized as cultivated, grazing land and bush & forest. The livelihood of the study *Woreda*'s community mainly depends on subsistence rain fed agriculture and the agriculture sector is predominated by rain fed crop production and livestock rearing. Farmers in the study *Woreda* undertake agricultural activities with traditional farm management systems. The major crops that are grown in the area include wheat, barley, teff, pea, and sorghum; and also the farmer's are cattle, goat, sheep and poultry. The main conserved forest in Amhara Sayint *Woreda* is "Borena-Sayint national park" which lies between Mekane selam, Mehal Sayint and Amhara Sayint *Woreda* with 13,452-hectare total land coverage (Amhara Sayint *Woreda* Agriculture office, 2023).

3.2. Study design and setting

3.2.1. Study design and period

An institution based cross-sectional study was conducted to assess knowledge, attitude and practice of students towards HIV/AIDS and VCT. The study was conducted in Sayint public general secondary school located in Sayint Adjibar the capital city of Amhara Sayint *Woreda*. The capital city is located about 590 km from Addis Ababa, the capital city of Ethiopia. Sayint Adjibar has one public general secondary school. The s provides education services from grade 9 up to grade 12, and has 3200 students of which 1750 are female and 1450 are male students. the research was conducted from

August15/2023- September 10 / 2023G C.

3.3. Study population

3.3.1. Source population

All students attending their education in Sayint general secondary school in the academic year of 2022/2023 were considered as source of population.

3.3.2. Study population

The study population constitutes students selected from grades 9, 10, 11 and 12 who were attending their education in Sayint general secondary school in the academic year of 2023.

3.4. Study Variables

3.4.1. Dependent variables

- Knowledge about HIV
- Attitude toward HIV
- Practice of HIV prevention methods

3.4.2. Independent variables

The independent variables are the socio-demographic variables used in this study such as, Sex, age, marital status, religion, ethnicity, education background of the study participants family, residence and source of information about HIV/AIDS and VCT.

3.5. Sample size determination, sampling technique and sampling procedure

3.5.1. Sample size determination

Since there is no similar study in the target group in the study area the proportion of students who had good KAP about HIV/AIDS and VCT was considered. The respondents were chosen from the list of students in each section using stratified random sampling technique. The total population of Sayint general Secondary School students was 3200 and the sample size was calculated using single population proportion formula:

$$n_i = \frac{(Z\alpha/2)^2 Xp(1-p)}{d^2} = \frac{(1.96)^2 \cdot 0.5(1-0.5)}{(0.05)^2} = 384$$

Where $(Z\alpha/2)$ = level of significant is 1.96,

P= population proportion 0.5

d= margins of error 0.05,

n_i= sample size 384

Accordingly, the sample size was 384. Since our source populations were less than 10,000 sample size adjustments was made using the following formula:

$$NF = \frac{n_i}{1 + \frac{n_i}{N}} = \frac{384}{1 + \frac{384}{3200}} = 343$$

Where: NF= the sample size calculated by adjustment,

n_i= the initial sample size calculate by single proportion formula (384),

N= the total number of students (3200).

Based on this formula the sample size for this study was 343. To compute for non-response, 10% of the required sample added i.e. 34.3, and then the total sample sizes was 377.

The list of all students were obtained from the school and considering students with the same study as a homogenous group, they were stratified in to four clusters as Grad 9, Grade 10, Grade 11 and Grade 12. Then numbers of study participants for each stratum was allocated proportionally and samples were selected by simple random sampling technique using the list of students as a sample framework, these are

114 from Grade 9th, 101 from Grade 10th, 92 from Grade 11th and 70 from Grade 12th students are enrolled.

Table .1 Sample size from total population.

Name of high school	Sample size by Grade	Population size per grade	Criteria used	Sample size per grade
Sayint general secondary school	Grade-9	968	$968/3200 * 377$	114
	Grade-10	858	$858/3200 * 377$	101
	Grade-11	781	$781/3200 * 377$	92
	Grade-12	593	$593/3200 * 377$	70
	Sum	3200		377

3.5.2. Sampling techniques

The study setting is purposively selected, as the high school is the oldest and the only high school in the study area. Stratified random sampling was used to recruit study participants/students from Grade 9th, 10th, 11th and 12th 114, 101, 92 and 70 respectively.

3.5.3. Sampling procedure

The list of all students was obtain from the school and considering students with the same study as a homogenous group, the students were stratified in to four clusters as Grad 9th, Grade 10th, Grade 11th and Grade 12th. Then numbers of study participants for each stratum was allocated proportionally and samples was selected by simple random sampling technique from each strata using the list of students as a sampling frame.

3.6. Data collection tools and procedures

Data was collected using pretested self-administered questionnaire consisting of socio demographic information, knowledge, attitude and practice and some associated factors questions. The questionnaire was pretested using randomly chosen 5% of the sampled size students with a similar background. Based on the response rate some or total modifications were done on some questions those trouble respondents. The questionnaire was first prepared in English language and then translates to Amharic (local language) and again re-translated to English by language experts for consistency. The data collection instrument

(questionnaire) has three parts: Part I: was on students, socio-demographic characteristics; Part II: Students, knowledge, attitude and practice regarding HIV/AIDS; Part III: on students, attitude towards VCT and practice about VCT.

3.7. Data management and analysis

The collected questionnaires were checked manually for its completeness, data was coded, edited, cleaned manually and entered using Epi Data version 3.1 and then exported to SPSS windows version 26.0 Software for analysis. Descriptive statistics results were illustrated in the form of frequency tables, figures, graphs and charts in order to provide an overview of the findings.

3.8. Ethical considerations

Ethical clearance was obtained from the College of Natural and Computational Sciences Institutional Review Board (**CNS-IRB**) on 31/08/2023, with reference number **IRB/06/2015/2023**. The investigation was done following the National Research Ethics Review Guideline, FDRE Ministry of Science and Technology, which is in accordance with international guidelines. Support letter for conducting the research at the indicated study site were also obtained for the Department of Zoological Sciences, Addis Ababa University. Similarly, permission from Sayint general secondary school administrative office were sought, and once the permission was granted, verbal consent was obtained from each study subject prior to the data collection process, the right to participate or not was duly respected.

Definition of terms

- Knowledge: -refers to facts information understanding skills person acquired through experience or education .Possessed by community refers to their understanding of that topic (Kaliyaperumal 2004:7). It refers to the ability of students to know what is involved in a VCT process of up taking.
- Attitude:-refers to feelings towards a subject and any preconceived ideas towards it (Kaliyaperumal 2004:7). In this study, it refers to thoughts, opinion, intention, feeling and belief of students for VCT.
- Counseling:-is dialogue between attained person, health services provider, social works, psychologies, etc. VCT: -the process by which an individual undergoes counseling to enable him/her to make an informed choice to be tested for HIV.
- Practice: - refers to the ways in which knowledge and attitudes demonstrated through actions (Kaliyaperumal 2004:7).

4. RESULTS

4.1 Socio-demographic characteristics

A total of 377 students participated in the study, making the response rate 100%. Among study participants 212 (56.23%) were male and 165 (43.77%) were females. The age of the study participants ranged from 16 to 20 years with mean age of 18.04 ± 1.22 years old. Orthodox Christian accounted for 96.6% of the study participants. The ethnicity of all the study participants was Amhara. Most of them live alone (41.6%), were from urban areas (66.8%), 10th grade (26.8%), not married (78.5%) and heard about HIV/AIDS through radio (42.7) (Table 2).

Table 2: Socio-demographic characteristics.

Characteristics		Frequency	Percentage
Sex	Male	212	56.23%
	Female	165	43.77%
Age of respondents	16	46	12.2%
	17	90	23.9%
	18	87	23.1%
	19	110	29.2%
	20	44	11.7%
Religion	Orthodox	364	96.6%
	Muslim	13	3.4%
Ethnicity	Amhara	377	100%
Your residence	Rural	125	33.2%
	Urban	252	66.8%
Whom do you live with	Parents	102	27.1%
	Alone	157	41.6%
	Friends	118	31.3%
Education level	9 th	114	30.2%
	10 th	101	26.8%
	11 th	92	24.4%

	12 th	70	18.6%
Marital status	Single	296	78.5%
	Married	81	21.5%
Source of information	Radio/TV	161	42.7%
	Literature / Poster	82	21.75%
	Friend	64	16.98%
	Family member	44	11.67%
	Health Institution	26	6.90%

4.2.1 Knowledge about HIV/AIDS transmission, prevention and control

The knowledge of the study participants towards the transmission, prevention and control of HIV/AIDS was assessed using 17 questions. Most of the study participants believe that HIV/AIDS is not caused by bacteria (78.8%), HIV and AIDS are not the same (100%), consistent and correct use of condoms can prevent HIV (76.7%), AIDS has no cure (100%), mosquito bite can't transmit the virus (85.7%), HIV can't be transmitted through saliva (100%), being faithful to one sexual partner can prevent the disease (92.3%), abstinence from sex can prevent HIV (76.5%), HIV infected individuals can't be identified by physical appearance (84.6%), HIV can't be transmitted through droplet infections (78.0%), taking shower immediately after sexual intercourse can't prevent HIV transmission (100.0%), symptoms of HIV infection can't be visible within days of infection (77.7%), not all HIV infected mothers give birth to HIV infected child (54.9%), there is no vaccine for HIV (78.5%), having multiple sexual partners increase the risk of HIV (91.5%), sharing swimming pool with HIV infected individuals can't transmit the virus (100.0%) and using condoms one over the other can't reduce the chance of being infected by the virus (62.1%)(Table 3).

Table 3: Distribution of respondents' knowledge about HIV/AIDS.

Variables		Frequency	Percentage
Caused by bacteria?	Yes	26	6.9%
	No	297	78.8%
	I don't know	54	14.3%

HIV and ADIS are same	No	377	100.0%
Consistent and correct usage of condom prevents HIV?	Yes	289	76.7%
	No	88	23.3%
AIDS has no cure?	Yes	377	100.0%
Mosquito bite can transmit HIV?	Yes	54	14.3%
	No	323	85.7%
HIV spreads through saliva or sweat?	No	377	100.0%
Being faithful to a single sexual partner can prevent from HIV?	Yes	348	92.3%
	No	26	6.9%
	I don't know	3	0.8%
Abstinence from sexual intercourse can prevent from HIV?	Yes	289	76.5%
	No	88	23.3%
HIV infected person can be identified through physical appearance?	Yes	58	15.4%
	No	319	84.6%
HIV cannot transmitted through coughing and sneezing?	Yes	294	78.0%
	No	83	22.0%
Taking shower immediately after sexual intercourse prevents from being infected with HIV?	No	377	100.0%
Symptoms of HIV infection are visible within days of infection?	Yes	36	9.5%
	No	293	77.7%
	I don't know	48	12.7%
All HIV infected mothers give birth to HIV infected children?	Yes	144	38.2%
	No	207	54.9%
	I don't know	26	6.9%
There is vaccine for HIV?	Yes	81	21.5%
	No	296	78.5%
Having multiple sexual partners increase the risk of HIV infection?	Yes	345	91.5%
	No	32	8.5%
Sharing swimming pool with infected person	No	377	100.0%

can transmit the virus?			
Using condoms one over the other during sexual intercourse reduces the chance of HIV transmission?	Yes	76	20.2%
	No	234	62.1%
	I don't know	67	17.8%

4.2.2 Attitude about HIV/AIDS.

A total of 17 questions attitude about HIV/AIDS, with “agree” or “disagree” response, were included in the questionnaire response of the result computed correct answers and the score a value greater than or equal to the mean were considered positive attitude and the incorrect answers and those who score a value less than the mean were considered negative attitude. From total respondents 283(75.1%) respondent had positive attitude and 94(24.9%) negative attitude towards HIV/AIDS. Majority of them 249(66.0%) believed that people other than those that lead immoral life style could also contract the disease, 345(91.5%) AIDS patients shouldn't be isolated from others, 361(95.8%) AIDS can't be treated by traditional medicines, 351 (93.1%) problems cause by HIV is not exaggerated, 377(100%) receiving service from PLWHAS won't have problems, 377(100%) eating with and sharing latrine PLWHAs won't have problems, ,332(88.1%) receiving services from PLWHAS won't have problem , 211(56%) giving care and support for PLWHAs won't have problems, 377 (100%) checking HIV/AIDS status is important, 236(62.6%) disagreed on the question about people who are infected with HIV through sexual intercourse have got their price. Majority of the study participants agreed that they can provide care for a relative HIV positive person who gets ill 351(93.1%),357(94.7%) will continue friendship even if the person is HIV positive, 360(95.5%) can buy items from HIV positive shape keeper, 371(98.4%) an HIV positive student should continue with her/his education(Table 4).

Table 4: Attitude about HIV/AIDS.

Variable		Frequency	Percentage
Only those people who lead immoral lives will get HIV?	Agree	128	34.0%
	Disagree	249	66.0%
AIDS patient should be isolated for the safety of others?	Agree	32	8.5%
	Disagree	345	91.5%
AIDS can be treated by traditional medicines?	Agree	16	4.2%
	Disagree	361	95.8%

The problems created by HIV/AIDS is exaggerated?	Agree	26	6.9%
	Disagree	351	93.1%
Shaking hands with PLWHAs will have problems?	Disagree	377	100.0%
Working with PLWHAs victims will not have problem?	Agree	377	100.0%
sharing room with PLWHAs will have problem?	Disagree	377	100.0%
Eating with PLWHAs will have problems?	Disagree	377	100.0%
Sharing latrine with PLWHAs will have problems?	Disagree	377	100.0%
Receiving services from PLWHAS will have problems?	Agree	45	11.9%
	Disagree	332	88.1%
Giving care and support for PLWHAs will have problems?	Agree	166	44.0%
	Disagree	211	56.0%
People who are infected with HIV through sexual intercourse have got their price?	Agree	141	37.4%
	Disagree	236	62.6%
You will care for a relative who is HIV positive if she/he gets ill?	Agree	351	93.1%
	Disagree	26	6.9%
you will continue your friendship if your friend becomes have positive?	Agree	357	94.7%
	Disagree	20	5.3%
you will buy items from an HIV positive shape keeper?	Agree	360	95.5%
	Disagree	17	4.5%
If a student is HIV positive she/he should be allowed to continue with her /his education?	Agree	371	98.4%
	Disagree	6	1.6%

4.3 Knowledge and attitude about voluntary counseling and testing /VCT/

4.3.1 Attitude towards VCT

Table 5: result shows that all respondents agreed voluntary counseling and testing (VCT) is necessary, whereas 208(55.2%) disagreed that HIV test is only for the ill, All respondents agreed VCT for HIV should be available for all individual needs to know their status and couples should undergo HIV test before marriage. Out of the total study participants, 230(61%) disagreed VCT is only designed for those who are risk of acquiring HIV infection, All respondents Agreed VCT is necessary for starting new

relationship and 348(92.3%) agreed VCT is necessary for pregnant women and for those individual who have HIV like symptoms.

Table 5: Attitude about voluntary counseling testing and /VCT/.

Variable		Frequency	Percentage
VCT is necessary?	Agree	377	100.0%
VCT is only for the ill?	Agree	169	44.8%
	Disagree	208	55.2%
VCT for HIV should be available for all individual who needs to know their status?	Agree	377	100.0%
Couples should undergo HIV test before marriage?	Agree	377	100.0%
VCT is only designed for those who are risk of acquiring HIV infection?	Agree	147	39.0%
	Disagree	230	61.0%
VCT is necessary for starting new relationship?	Agree	377	100.0%
VCT is necessary for pregnant women and for those individual who have HIV like symptoms?	Agree	348	92.3%
	Disagree	29	7.7%

4.3.2 Sources of information about voluntary counseling and testing /VCT/

Majority of the respondent 268 (71.1%) had heard about voluntary counseling testing before, the remaining 109(28.9%) had never heard of VCT before the day of data collection (Figure 3).

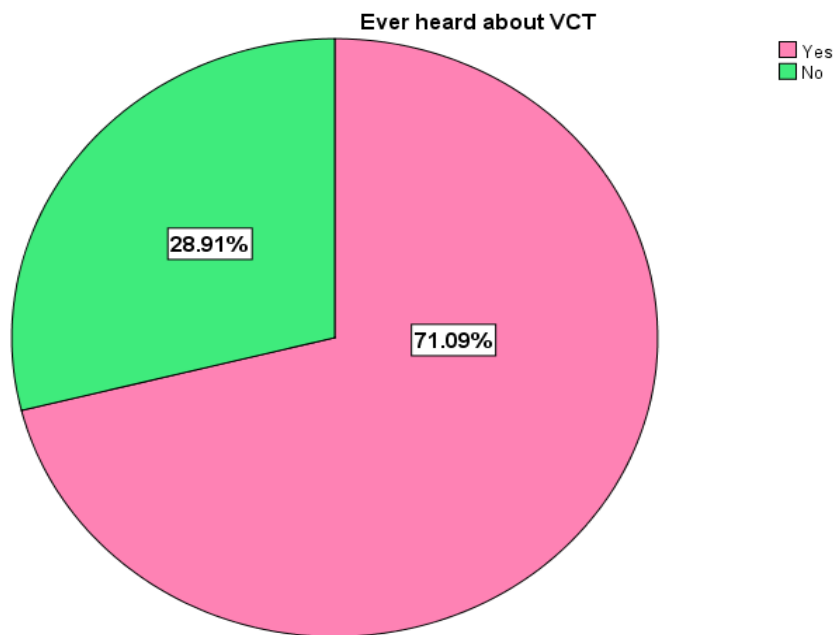


Figure 3: Proportion of the study participants who had and hadn't heard of the VCT services.

4.3.3 Knowledge about voluntary counseling and testing /VCT/

From the table 336(89.1%) had information about VCT service and 41(10.9%) didn't know about VCT service. Most of the study participants 237(62.9%) responded that VCT involves individual being tested on their own will, all respondents answered that VCT is important to prevent HIV, most of them 315(83.6%) recognized that VCT process involves pretest and posttest counseling, 286(75.9%) involves confidentiality and 302(80.1%) knew where VCT service is provided (Table 6).

Table 6: Knowledge about voluntary counseling and testing and /VCT/.

Variables		Frequency	Percent
Do you Know about VCT service?	Yes	336	89.1%
	No	41	10.9%
VCT involves individual being tested on their own will?	Yes	237	62.9%
	No	140	37.1%
VCT is important to prevent HIV?	Yes	377	100.0%

VCT process involves pretest and posttest counseling?	Yes	315	83.6%
	No	36	9.5%
	I don't know	26	6.9%
VCT involves confidentiality?	Yes	286	75.9%
	No	51	13.5%
	I don't know	154	40.8%
Do you know where VCT service is offered?	Yes	302	80.1%
	No	3	0.8%
	I don't know	72	19.1%

4.4 Practices that exposes to HIV/AIDS and preventive measures and practices towards VCT

4.4.1 Practices that exposes to HIV/AIDS and preventive measures

From the total of 377 respondents 273 (72.4%) of them had no sexual exposure, among those who had sexual exposure, only 19 (5%) used condom during sex, 368(95%) were no intoxicated during your last sexual contact with friends, 297(78.8%) didn't were no shared sharp materials with family members or friends, only 54(14.3%) respondents tested for HIV in the last three months (Table 7).

Table 7: Practices that exposes to HIV/AIDS and preventive measures.

Variables		Frequency	Percentage
Did you have sexual exposure?	Yes	49	13.0%
	No	328	87%
Have you ever used condom during sex?	Yes	49	13%
	No	328	87%
How often have you been using condom?	Yes	12	3.2%
	No	365	96.8%
Were you intoxicated during your last sexual encounter?	Yes	9	2.4%
	No	368	97.6%
Do you share sharp materials with family members or friends?	Yes	80	21.2%
	No	297	78.8%

Have you tested for HIV in the last three months?	Yes	54	14.3%
	No	323	85.7%

4.4.2 Practice towards VCT services for HIV/AIDS

According to this study, only 106 (28.1%) of the respondents practice towards VCT for HIV/AIDS and 271(71.9%) were no practice by different reasons. The students reason not practiced VCT; 97(25.7%) were because of I am sure I don't have HIV, 24(6.4%) fear of positive result, 31(8.2%) afraid of stigmatization , 83(22%) I did no see the importance of testing and 36(9.5%) I don't know where the test is done. From the total 377 respondents the majority respondent 354 (93.9%) of the respondent were voluntary for future test to HIV/AIDS (Table 8).

Table 8: Practices towards VCT services for HIV/AIDSs.

Variable		Frequency	Percentage
Have you ever tested for HIV/AIDS?	Yes	106	28.1%
	No	271	71.9%
Have you tested for HIV in the last three months?	Yes	54	14.3%
	No	323	85.7%
Reason for not having VCT?	I am sure I don't have HIV	97	25.7%
	Fear of positive results	24	6.4%
	Afraid of stigmatization	31	8.2%
	I did no see the importance of testing	83	22%
	I don't know where the test is done	36	9.5%
Are you ready for future test?	Yes	354	93.9%
	No	23	6.1%

5. Binary logistic regression analysis

5.1. Predictors of knowledge about HIV

Variables such as sex, age, religion, residence, marital status, grade level of students, with whom the students live and source of information were used as independent variables to predict the outcome variables. Variables with $p \leq 0.2$ in the bivariate analysis were used to fit the logistic regression model. Of all the variables the education level and residence significantly predicted the knowledge of the study participants about HIV/AIDS. Participants from above grade 10th were more knowledgeable than participants from grade 9th. Participants from urban areas were more knowledgeable than those from rural areas about HIV/AIDS (AOR, 52; CI, 2.22 – 19.12, $p = 0.001$) (Table 9).

Table 9. Association of independent variables with knowledge about HIV/AIDS.

No.	Variables	Poor knowledge	Good knowledge	AOR	CI	p-value	
1	Sex	Male	28	184	1		
		Female	20	145	1.22	0.82 – 1.83	0.327
2	Residence	Rural	18	107	1		
		Urban	30	222	6.52	2.22 – 19.12	0.001*
3	Grade level	9 th	28	86	1		
		10 th	10	91	2.70	1.15 – 6.36	0.023*
		11 th	7	85	3.69	1.47 - 9.30	0.005*
		12 th	3	67	8.55	2.41 - 30.27	0.001*
4	Marital status	Single	47	246	1		
		Married	6	87	2.15	0.751 – 6.15	0.15
5	Living status	Parents	19	83	1		
		Alone	12	145	2.303	0.96 – 5.52	0.062
		Friends	17	101	1.133	0.51 - 2.54	0.762
6	Source of information	Radio	22	139	1		
		Literature / poster	10	72	1.1	.49 - 2.76	.734
		Friends	6	58	1.60	.57 – 4.48	.373

	Family members	4	37	1.24	.44 - 3.45	.686
	Health institution	3	23	1.26	.30 - 5.21	.754

*, variables significantly associated with the outcome variable

5.2. Predictors of attitude towards HIV/AIDS

Variables with $p \leq 0.2$ in the bivariate analysis were used to fit the logistic regression model. Of all the variables being married significantly ($p = 0.037$) predicted positive attitude towards HIV/AIDS. The odds of having positive attitude towards HIV/AIDS among the study participants who obtain information from their parents was significantly lower than those that obtain information from other sources (Table 6).

Table 10: Predictors of attitude of the study participants towards HIV/AIDS.

No.	Variables	Negative attitude	Positive attitude	AOR	CI	p-value	
1	Sex	Male	24	188	1		
		Female	18	147	1.10	0.55 – 2.22	0.79
2	Residence	Rural	15	110	1		
		Urban	27	225	1.20	0.57 – 2.51	0.64
3	Grade level	9 th	14	100	1		
		10 th	10	91	1	0.40 – 2.52	0.997
		11 th	11	81	0.80	0.33 – 1.96	0.66
		12 th	7	63	1.20	0.44 – 3.27	0.73
4	Marital status	Single	39	257	1		
		Married	3	78	3.98	1.10 – 14.56	0.037*
5	Living status	Parents	13	89	1		
		Alone	11	146	1.62	0.63 – 4.13	0.315
		Friends	18	100	0.84	0.37 – 2.01	0.73
6	Source of information	Radio	11	150	1		
		Literature / poster	12	70	0.47	0.19 – 1.16	0.10
		Friends	7	57	0.44	0.15 – 1.28	0.13
		Family members	10	34	0.30	0.11 – 0.80	0.02*
		Health institution	2	24	0.98	0.20 – 4.81	0.98

*, variables significantly associated with the outcome variable

5.3. Predictors of practice towards HIV/AIDS

None of the variables tested towards the practice of the study participants was statistically significant ($p > 0.05$), though, being from urban areas showed better practice than those from rural areas. Similarly, participants that live alone had better practice towards HIV/ADS compared to those that live with parents (Table 11).

Table 11: Predictors of practices towards HIV/AIDS.

No.	Variables	Poor Practice	Good Practice	AOR	CI	p-value	
1	Sex	Male	21	191	1		
		Female	22	143	0.834	0.433 – 1.605	0.586
2	Residence	Rural	18	107	1		
		Urban	25	227	1.622	0.815 – 3.228	0.169
3	Grade level	9 th	12	102	1		
		10 th	10	91	0.736	0.296 – 1.833	0.510
		11 th	12	80	0.604	0.252 – 1.448	0.259
		12 th	9	61	0.774	0.299 – 2.007	0.599
4	Marital status	Single	82	264	1		
		Married	11	70	0.961	0.415 – 2.225	0.926
5	Living status	Parents	13	89	1		
		Alone	15	142	1.252	0.511 – 2.827	0.674
		Friends	15	103	0.877	0.379 – 2.031	0.759
6	Source of information	Radio	16	145	1		
		Literature / poster	10	72	1.008	0.428 – 2.375	0.986

	Friends	9	55	0.830	0.323 – 2.128	0.698
	Family members	5	39	0.592	0.213 – 1.645	0.315
	Health institution	3	23	0.806	0.205 – 3.161	0.757

*, variables significantly associated with the outcome variable

5.4. Predictors of knowledge about VCT

From the variables tested to assess the significant predictors of knowledge about VCT only residence was statistically significant (P = 0.0001). Being from urban areas increased the odds of being knowledgeable about VCT services (AOR, 8.476; CI, 2.598 – 27.658; p = 0.0001) (Table 12).

Table 12: Predictors of knowledge about VCT.

No.	Variables	Poor Knowledge	Good knowledge	AOR	CI	p-value	
1	Sex	Male	12	200	1		
		Female	8	157	1.768	0.605 – 5.171	0.298
2	Residence	Rural	13	112	1		
		Urban	7	245	8.476	2.598 – 27.658	0.0001*
3	Grade level	9 th	8	106	1		
		10 th	3	98	2.363	0.530 – 10.530	0.259
		11 th	6	86	1.902	0.491 – 7.373	0.352
		12 th	3	67	1.774	0.412 – 7.640	0.442
4	Marital status	Single	16	280	1		
		Married	4	77	1.118	0.285 – 4.387	0.873

5	Living status	Parents	5	97	1		
		Alone	9	148	0.248	0.060 – 1.020	0.053
		Friends	6	112	0.370	0.080 – 1.703	0.202
6	Source of information	Radio	12	149	1		
		Literature / poster	4	78	2.801	0.686 – 11.443	0.151
		Friends	2	62	3.371	0.601 – 18.905	0.167
		Family members	2	42	2.125	0.375 – 12.047	0.395
		Health institution	0	26	7.228	0.508 – 16.207	0.885

*, variable significantly associated with the outcome variable

5.5. Predictors of attitude towards VCT

The odds of having positive attitude towards VCT was higher as age increased by one year (AOR, 1.266; CI, 1.027 – 1.560; p = 0.027). The odds of having positive attitude was three times more for married individuals than the single individuals (AOR, 3.985; CI, 1.851 – 8.579; p = 0.0001). However, the odds of having positive attitude towards VCT was significantly lower for females than males (AOR, 0.407; CI, 0.240 – 0.692; p = 0.027), and study participants that get information about VCT from their family and friend compared to those that get information though radio/ television (Table 13).

Table 13: Predictors of attitude towards VCT.

No.	Variables	Poor attitude	Good attitude	AOR	CI	p-value
1	Sex	Male	68	144	1	

		Female	70	94	0.407	0.240 – 0.692	0.001*
2	Age				1.266	1.027 – 1.560	0.027*
3	Residence	Rural			1		
		Urban			0.745	0.421 – 1.317	0.311
3	Grade level	9 th	57	57	1		
		10 th	28	73	1.545	0.781 – 3.055	0.211
		11 th	29	62	1.259	0.642 – 2.470	0.502
		12 th	24	46	1.750	0.832 – 3.682	0.140
4	Marital status	Single	126	170	1		
		Married	12	68	3.985	1.851 – 8.579	0.0001*
5	Living status	Parents	45	57	1		
		Alone	43	113	1.695	0.873 – 3.289	0.119
		Friends	50	68	1.370	0.706 – 2.657	0.352
6	Source of information	Radio	39	122	1		
		Literature / poster	25	56	0.846	0.435 – 1.646	0.623
		Friends	23	41	0.453	0.214 – 0.958	0.038*
		Family members	33	11	0.104	0.044 – 0.246	0.001*
		Health institution	18	8	0.149	0.056 – 0.402	0.001*

*, variables significantly associated with the outcome variable

5.6. Predictors of practice towards VCT

From the variables assessed to predict practice towards VCT, one year increase in age increased the odds of having proper practice (AOR, 1.279; CI, 1.044 – 1.568; $p = 0.018$). The odds of positive practice

towards VCT increased for the participants who obtained information through literature than those who obtained through radio (AOR, 2.069; CI, 1.143 – 3.747) (Table 14).

Table 14: Predictor of practice towards VCT.

No.	Variables	Poor practice	Good practice	AOR	CI	p-value	
1	Sex	Male	157	53	1		
		Female	112	53	0.773	0.471 – 1.269	0.309
2	Age			1.279	1.044 – 1.568	0.018*	
3	Residence	Rural	91	34	1		
		Urban	180	72	1.315	0.756 – 2.262	0.321
4	Grade level	9 th	80	34	1		
		10 th	67	34	0.886	0.468 – 1.678	0.771
		11 th	69	23	0.675	0.347 – 1.312	0.246
		12 th	55	15	0.571	0.271 – 1.203	0.141
5	Marital status	Single	40	86	1		
		Married	61	20	0.681	0.355 – 1.304	0.246
6	Living status	Parents	70	32	1		
		Alone	119	38	0.745	0.397 – 1.399	0.361
		Friends	82	36	1.081	0.574 – 2.036	0.808
7	Source of information	Radio	119	42	1		
		Literature / poster	48	34	2.069	1.143 – 3.747	0.016*
		Friends	45	19	1.253	0.623 – 2.519	0.527
		Family members	38	6	0.414	0.157 – 1.093	0.075
		Health institution	21	5	0.658	0.226 – 1.912	0.442

*, variables significantly associated with the outcome variable

6. DISCUSSION

This study assessed the determinants of knowledge, attitude and practices (KAP) towards HIV/AIDS of high school school students. Most of the study participants had good knowledge (87.3%), positive attitude (88.9%) and good practice (88.6%) towards HIV/AIDS. The level of knowledge was higher than reports from other parts of the country (Getta *et al.*, 2012; Zemenu *et al.*, 2015; Tariku, 2015), as well as reports from other countries (Sephiwe *et al.*, 2014; Dzah *et al.*, 2019; Youssef *et al.*, 2021) . The majority of the respondents knew the causative agents, mode of transmission, prevention and control of HIV/AIDS which is in agreement with other reports in Ethiopia (Yitayal *et al.*, 2009; Ahmed *et al.*, 2015; Gashaw *et al.*, 2007; Alemu *et al.*, 2004; Shiferaw *et al.*, 2011; Semunigus *et al.*, 2016;), Ghana (Dzah *et al.*, 2019), South Africa (Sephiwe *et al.*, 2014), Tanzania (Jeckniah *et al.*, 2013) and Kuwait (Alhasawi *et al.*, 2019).

The respondents from higher education levels had significantly higher knowledge than those from lower education levels. Similar associations were also reported from other part of the country previously (Feyasa *et al.*, 2022; Terefe *et al.*, 2023; Yimer *et al.*, 2024) and from Lebanon (Youssef *et al.*, 2021). However, different from studies in Ghana (Dzah *et al.*, 2019) and Kuwait (Alhasawi *et al.*, 2019). The differences might be due to different cultural backgrounds of the respondents, the instrument used for data collection, types of questions used as well as the level of prior information about the diseases.

Respondents from urban areas had higher level of knowledge compared to those from rural areas was in agreement with a report from other parts of the country (Terefe *et al.*, 2023; Yimer *et al.* 2024). This

could be because respondent from rural areas had better access to media devices, health centers, and better school setting where they could get better information about the disease.

The respondents in our study were well informed about HIV/AIDS and the main source of information was Radio/TV (Table 1). This result is in agreement with researches done elsewhere in the country (Gashaw *et al.*, 2007; Shiferaw *et al.*, 2011; Semunigus *et al.*, 2016), but different from a report by Nubed and Akoachere, (2016) from Cameroon where sex education in school took the largest part.

Though the majorities were well informed, there were misconceptions among fewer respondents regarding the causative agent of the disease, transmission, prevention and control (Table 3). Misconceptions regarding the causative agent, transmission, prevention and control is in agreement with previous reports; transmission of the virus through mosquito bite (Gashaw *et al.*, 2007; Nubed and Akoachere, 2016; Dzah *et al.*, 2019; Shiferaw *et al.*, 2011; Kumar *et al.*, 2012; Terefe *et al.*, 2024), shaking hands (Dzah *et al.*, 2019; Gashaw *et al.*, 2007; Semunigus *et al.*, 2016; Alhasawi *et al.*, 2019), sharing food or water (Nubed and Akoachere, 2016; Semunigus *et al.*, 2016; Terefe *et al.*, 2024), coughing and sneezing (Gashaw, 2007; Shiferaw *et al.*, 2011; Ahmed *et al.*, 2015; Semunigus *et al.*, 2016), and sharing the same bathroom (Dzah *et al.*, 2019; Shiferaw *et al.*, 2011; Semunigus *et al.*, 2016). AIDS is caused by bacteria or other causative agents, has cure and vaccine is similar to reports in different parts of Africa (Semunigus *et al.* 2016; Tadesse and Menasbo, 2013; Jeckoniah *et al.*, 2013; Alemu *et al.*, 2004; Nubed and Akoachere, 2016; Dzah *et al.*, 2019; Shiferaw *et al.*, 2011). Similar to our report, respondents in a study by Nubed and Akoachere, (2016) thought that healthy looking individuals can't have HIV/AIDS (Nubed and Akoachere, 2016; Terefe *et al.*, 2024). The overlap in the misconception among respondents from the same country as well as different areas of the world depicts the importance of providing trainings on HIV/AIDS.

The majority of the study participants had positive attitude towards people living with HIV/AIDS though smaller proportion of the respondents had negative attitudes (Table 3). The proportion of individuals with negative attitude (34%) reported by Shiferaw *et al.*, (2011) is much higher than the value (11.1%) in our report. Some of the negative attitudes similar to our report include; association of the disease with immoral life style (Shiferaw *et al.*, 2011; Yitayal *et al.*, 2009), isolation of people living with HIV/AIDS (Shiferaw *et al.*, 2011; Dzah *et al.*, 2019), HIV positive student should not continue his/her education (Semunigus *et al.*, 2016; Dzah *et al.*, 2019), social life with HIV positive individuals should be avoided (Gashaw *et al.*, 2007; Semunigus *et al.*, 2016; Dzah *et al.*, 2019), can't care for HIV positive individuals during illness (Nubed and Akoachere, 2016; Semunigus *et al.*, 2016; Dzah *et al.*, 2019), quit friendship after knowing HIV positive status (Nubed and Akoachere, 2016; Semunigus *et al.*, 2016; Dzah *et al.*, 2019)), can't purchase item from HIV positive individuals (Nubed and Akoachere, 2016; Semunigus *et al.*, 2016; Alhasawi *et al.*, 2019; Dzah *et al.*, 2019).

From the multivariate analysis, married respondents had about four times positive attitude towards HIV/AIDS positive individuals than those who were single. But, respondents who obtained information from their family had negative attitude (Table 3). Like our study, higher level of positive attitude was reported for married individuals (Kamranpour *et al.*, 2020). However, investigators from Ghana (Dzah *et al.*, 19), reported more positive attitude among single individuals than the married ones. The differences in the attitudes of respondents could be attributed to differences in their cultural characteristics and the level of prior awareness about the disease prior to collecting the data.

The overall good practice of the respondents in the current study was rated good (88.6%) (Fig. 3). But, none of the independent variable significantly associated with practice towards HIV/AIDS (Table 3). The overall good practice is higher than previous reports by other investigators (Mengistu *et al.*, 2013; Getta *et*

al., 2012; Tariku, 2015; Zemenu *et al.*, 2015; Dzah *et al.*, 2019). Compared to our study, lower level of condom uses was reported by different parts of the country (Belayneh *et al.*, 2005; Mengistu *et al.*, 2013; Keto *et al.*, 2020) and other countries (Maswanya *et al.*, 1999; Ochieng and Abok, 2011; Youssef *et al.*, 2021). Having sex while being intoxicated was also reported by investigators from Ethiopia (Shiferaw *et al.*, 2011; Mengistu *et al.*, 2013); Tanzania (Maswanya *et al.*, 1999), Kenya (Ochieng and Abok, 2011), Cameroon (Nubed and Akoachere, 2016) and Ghana (Dzah *et al.*, 2019). Having sex with multiple sexual partners was also reported by other investigators (Gashaw *et al.*, 2007; Mengistu *et al.*, 2013). In accordance with our report, a study by Nubed and Akoachere, (2016), reported that healthy looking person can't have HIV infection, abstaining from sex can't reduce the risk of HIV, having sex with only one faithful uninfected partner can't reduce HIV transmission were among the misconceptions in sexual practices that could lead to contracting HIV/AIDS. Significant associations were not observed between the knowledge and attitude level with practice of the respondents towards HIV/AIDS (Table 4). Similarly, Semunigus *et al.* (2016), reported that there was no significant association between the level of knowledge about HIV/AIDS and practices towards HIV/AIDS. In other investigations, knowledge of HIV/AIDS was not significantly associated with attitude towards HIV/AIDS (Shiferaw *et al.*, 2011; Youssef *et al.*, 2021). In a country like Ethiopia where there are more than 80 different ethnic groups, the reasons for differences in the practices could be attributed to differences in the cultural and religious backgrounds. In addition, factors such as peer pressure, sex education and access to different information outlets like internet could affect the level of practices.

7. CONCLUSION AND RECOMMENDATION

7.1 Conclusion

The current study sought to explore the knowledge, attitude and practice towards HIV/AIDS and VCT among Sayint general secondary school students. These studies showed that majority of respondent 86.5% were knowledgeable about HIV/AIDS. The finding of this study, only 106 (28.1%) of the respondents practice towards VCT for HIV/AIDS. The students reason not practiced VCT because misconception of don't have HIV, fear of positive result, afraid of stigmatization, didn't see the importance of testing and don't know where the test is done. Majority 93.9% of the respondent was voluntary for future test to HIV/AIDS. From this study it can be concluded that there is a need to work on awareness creation on practice of voluntary counseling and test of HIV was very low among students of school. From the binary logistic regression model fitted, residence and grade level significantly predicted the outcome variable (knowledge). Participants from urban areas had six times more knowledge than those from rural areas and as grade level increased the knowledge about HIV/AIDS also increased. The odds of having positive attitudes towards HIV/AIDS was significantly lower among study participants who obtained information from their parents was significantly lower than those that obtain information from other sources . Married individuals had three times more positive attitude towards HIV/AIDS than those who were single. Study participants from urban areas had better knowledge towards VCT than those from rural areas. As age increased by one year the odds of having positive attitude towards VCT also increased. Similarly, married individuals had positive attitude towards VCT compared to single individuals. But, females didn't have positive attitude towards VCT compared to males. Proper practice towards VCT increased with increasing age. Proper practice towards VCT was higher for participants who obtained information through literature than those who obtained information through radio.

7.2 Recommendations

This study show that most of the students have a good level of knowledge regarding HIV/AIDS and VCT but there is Poor practice towards VCT for HIV/AIDS.

- ❖ The following points should be undertaken by responsible bodies.
- ✓ There is a need to work on awareness creation on uptake of VCT in school.

- ✓ Sex education in schools, should be reinforced to correct the misconceptions observed in this study and encourage safe practices and positive attitudes towards HIV/AIDS
- ✓ My investigation call for continued and strengthened health education to bring change in knowledge in regard to misconceptions of HIV/AIDS transmission ways & Promoting condoms as one of the strategies of HIV/AIDS prevention process.
- ✓ The local and school community should be thought about the importance of discussing about knowledge, attitude and practice with their children and students.
- ✓ Health Office School adolescents should be provided with a VHCT service at their schools, with trained medical personnel or peer educators to increase access to the same service for the school age population.
- ✓ Behavioral change in order to act on perception of personal risk as most students considered themselves as they were at low risk of HIV infection school
- ✓ More information on HIV/AIDS transmission and prevention ways and VHCT service.

Generally, practice towards HIV/AIDS and VCT in this study was low despite better knowledge towards the diseases. Creation of awareness on practice towards HIV/AIDS and VCT is recommended.

7.3 Limitation of the study

The result of this study was questioner based; only one division school and all respondents only day time students. This might leads to misunderstanding for generalization the findings of this study.

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Addis Ababa University
College of Natural and computational Science
Department of Zoological Science
General Biology MSc program
Appendix

Appendix I. Checklist English version

Hello I am `data collector of the research assessment of knowledge, attitude and practice towards voluntary counseling and testing and among Sayint general secondary school students, 2023, which is being done by Tilahun Adugna. The conversation proceeds only if you are interested.

Topic: Assessment of knowledge, attitude and practice towards HIV/AIDS and voluntary testing and counseling among Sayint general secondary school students, 2023.

Objective: to Assess level of knowledge, attitude and practice towards HIV/AIDS and Voluntary Counseling and Testing in Sayint general secondary school.

Period: the research was conducted from August15-10 September 2023.

Advantage: there is no payment for your participation on the research. It only relies on your willingness to participate and this research helps to awareness of students towards VCT so that it could help for district planners to act accordingly.

Confidentiality: 1st your name will not be mentioned and also your response kept confidential.

Appendix II: Consent form (English version)

I here with declare that:

- ✓ The objectives of this study are explained to me and are clear.
- ✓ The contents of the consent are verified to me to participate in the study.

I understand that participation in this study is completely voluntary and that I may withdraw at any time without supplying reasons. I agree to participate in this study to be interviewed, provided my privacy is guaranteed. When signing this consent form to participate in the study, I promise to answer honestly to all reasonable questions and not provide any false information or in any other way purposely mislead the researcher.

A. Questions related to Socio-demographic

1. Sex? A. male B female
2. How old are you? -----
3. What is your Religion? A. Orthodox B. Muslim C. Protestant D. others
4. What is your Ethnicity? A. Amhara B. Oromo C. Tigray D. Others
5. What is the type of your residence? A. Rural B. Urban
6. Marital status? A. single B. married C. widowed D. Divorced
7. Which grade are you from? A. 9th B. 10th C. 11th D. 12th
8. Father's educational status? A. Unable to read B. Only read and write C. 1-8th grade D. 9-10th grade E.11-12th grade F. Certificate and above
9. Mother's educational status? A. Unable to read B. Only read and write
C. 1-8th grade D. 9-10th grade E.11-12th grade F. Certificate and above
10. What is your father's occupation? A. Employed B. Farmer C. Merchant D. Daily laborer E. Others
11. What is your mother's occupation? A. Employed B. Farmer C. Merchant D. Daily laborer E. Other
12. What is your family income in ETB? A. <500 ETB B. 500 – 1000 ETB C. 1001 – 1500 D. 1501 – 2000 E. > 2000 F. Has no income
13. With whom do you live? A. Parents B. Alone C. Friends D. Other

B. Questions related to knowledge about HIV/ AIDS

1. HIV is caused by Bacteria? A. Yes B. No C. I don't know
2. HIV and AIDS are the same? A. Yes B. No C. I don't know
3. Consistent and correct usage of condom prevents HIV? A. yes B. No C. I don't know
4. AIDS has no cure? A. Yes B. No C. I don't know
5. Mosquito bite can transmit HIV? A. Yes B. No C. I don't know
6. HIV spreads through saliva or sweat? A. Yes B. No C. I don't know
7. Being faithful to a single sexual partner can prevent from HIV? A. Yes B. No
C. I don't know
8. Abstinence from sexual intercourse can prevent from HIV? A. Yes B. No C. I don't know

9. HIV infected person can be identified through physical appearance? A. Yes B. No
C. I don't know
10. HIV cannot be transmitted through coughing & sneezing? A. Yes B. No
C. I don't know
11. Taking shower immediately after sexual intercourse prevents from being infected with HIV? A. Yes
B. No C. I don't know
12. Symptoms of HIV infection are visible within days of infection? A. Yes B. No
C. I don't know
13. All HIV infected mothers give birth to HIV infected children. A. Yes B. No C. I
don't know
14. There is Vaccine for HIV? A. Yes B. No C. I don't know
15. Multiple sexual partners increase the risk of HIV infection?
A. Yes B. No C. I don't know
16. Sharing swimming pool with HIV infected person can transmit the virus? A. Yes B. No
C. I don't know
17. Using two condoms one over the other during sexual intercourse reduces the chance of HIV
transmission? A. Yes B. No C. I don't know

C. Questions related to attitude about HIV/ AIDS.

1. Only those people who lead immoral lives will get HIV. A. Agree B. Disagree C. Neutral
2. AIDS patients should be isolated for the safety of others. A. Agree B. Disagree C. Neutral
3. AIDS can be treated by traditional medicines Disagree. A. Agree B. Disagree C. Neutral
4. The problems created by HIV/AIDS are exaggerated. A. Agree B. Disagree C. Neutral
5. Shaking hands with PLWHAs will have problems. A. Agree B. Disagree C. Neutral
6. Working with PLWHAs victims will not have problem. A. Agree B. Disagree C. Neutral
7. Sharing room with PLWHAs will have problems. A. Agree B. Disagree C. Neutral
8. Eating with PLWHAs will have problems. A. Agree B. Disagree C. Neutral
9. Sharing latrine with PLWHAs will have problems. A. Agree B. Disagree C. Neutral
10. Receiving services from PLWHAs will have problems. A. Agree B. Disagree C. Neutral
11. Giving care and support for PLWHAs will not have problems. A. Agree B. Disagree C. Neutral
12. Checking one's status of HIV is not as such important. A. Agree B. Disagree C. Neutral

13. People who are infected with HIV through sexual intercourse have got their price.
A. Agree B. Disagree C. Neutral
14. You will care for a relative who is HIV positive if he/ she get ill.
A. Agree B. Disagree C. Neutral
15. You will continue your friendship if your friend becomes HIV positive.
A. Agree B. Disagree C. Neutral
16. You will buy items from an HIV positive shape keeper.
A. Agree B. Disagree C. Neutral
17. If a student is HIV positive she/he should be allowed to continue with her / his education.
A. Agree B. Disagree C. Neutral

D. Questions related to Attitude towards VCT

- 1) VCT is necessary. A. Agree B. Disagree
- 2) VCT is only for the ill. A. Agree B. Disagree
- 3) VCT for HIV should be available for all individual who needs to know their status.
A. Agree B. Disagree
- 4) Couples should undergo HIV test before marriage A. Agree B. Disagree
- 5) VCT is only designed for those who are risk of acquiring HIV infection.
A. Agree B. Disagree
- 6) Do you think VCT is necessary for starting new relationship? A. Agree B. Disagree
- 7) VCT is necessary for pregnant women and for those individual who have HIV like symptoms.
A. Agree B. Disagree

E. Questions related to Knowledge about voluntary counseling testing and /VCT/

1. Ever heard about VCT? A. Yes B. No C. I don't know
2. If yes, what is your source of information?
A. Radio/TV B. Literature/poster C. Friends D. Family members E. Health institution
3. Do you know about VCT service? A. Yes B. No
4. VCT involves individual being tested on their own will?
A. Yes B. No C. I don't know
5. VCT is important to prevent HIV. A. Yes B. No C. I don't know

- 6. VCT process involves pre-test and post-test counseling.
A. Yes B. No C. I don't know
- 7. VCT involves confidentiality. A. Yes B. No C. I don't know
- 8. Do you know where VTC service is offered?
A. Yes B. No C. I don't know

F. Questions related to practices that exposes to HIV/ AIDS & preventive Measures

- 1. Did you have sexual exposure? A. Yes B. No C. I Don't know
- 2. Have you ever used condom during sex? A. Yes B. No C. I Don't know
- 3. How often have you been using condom? A. Always B. occasionally C. I Don't know
- 4. Were you intoxicated during your last sexual encounter? A. yes B. No C. I Don't know
- 5. Do you share sharp materials with family members or friends? A. Yes B. No C. I Don't know
- 6. Are you tested for HIV in the last three months? A. Yes B. No C. I Don't know

G. Questions related to Practice towards VCT

- 1. Have you ever tested for HIV? A. Yes B. No
- 2. If your answer is 'yes' what was the reason for HIV testing? -----
- 3. What your reason for not having VCT?
 - A. I am sure I don't have HIV
 - B. Fear of positive results
 - C. Afraid of stigmatization
 - D. I did no see the importance of testing.
 - E. I don't know where the test is done
- 4. Are you ready for future test? A. Yes B. No

አዲስ አበባ ዩኒቨርሲቲ

የተፈጥሮ እና ስሌት ሳይንስ ኮሌጅ

የእንስሳት ሳይንስ ክፍል

አጠቃላይ ባዮሎጂ MSc ፕሮግራም

አባሪ

አባሪ-1 ጤና ይስጥልኝ

እኔ ጥላሁን አዲሻ በ2022/23 የሳይንስ አጠቃላይ 2ኛ ደረጃ ትምህርት ቤት ተማሪዎች በየኤች አይ ቪ/ኤድስ ላይ ያላቸውን የእውቀት፣ የአመለካከት ፣ የክህሎት እና የተግባር የምርምር ግንዛቤ ዙሪያ ለማጥናት መረጃ በመሰብሰብ ላይነኝ። መረጃውን የምትሞሉት ፍላጎት ካሎት ብቻ ነው።

ርዕስ: በሳይንስ አጠቃላይ 2ኛ ደረጃ ትምህርት ቤት ተማሪዎች በኤችአይቪ/ኤድስ ላይ የእውቀት፣ አመለካከት ፣ ክህሎት እና ተግባር መገምገም።

ዓላማ:- በሳይንስ አጠቃላይ 2ኛ ደረጃ ትምህርት ቤት ተማሪዎች ዙሪያ የእውቀት፣ የአመለካከት ክህሎት እና የተግባር ደረጃን መገምገም እ በፈቃደኝነት ላይ የተመሰረተ የኤች አይ ቪ/ኤድስ ምክር እና የምርመራ አገልግሎት እንድያገኙ ማድረግ ።

ጊዜ: ጥናቱ የሚካሄደው ከመስከረም እስከ ግንቦት 2023 ነው።

ጥቅማ ጥቅሞች:- በምርመራው ላይ ለሚያደርጉት ተሳትፎ ምንም ክፍያ የለውም። ለመሳተፍ ባላችሁ ፍላጎት ላይ ብቻ የተመሰረተ ነው እና ይህ ጥናት ተማሪዎች ስለ ቪሲቲ ግንዛቤ እንዲኖራቸው ይረዳል በተጨማሪም ለዲስትሪክት እቅድ አውጪዎች በዚህ መሰረት እንዲሰሩ ይረዳቸዋል።

ሚስጥራዊነት: 1ኛ ሰም እና ማንነት አያሰፈልጉም የመረጃው ሚስጥር ይጠበቃል።

አባሪ II: የስምምነት ቅጽ (የእንግሊዘኛ ቅጂ)

የጥናቱ ሁኔታ

- የዚህ ጥናት ዓላማዎች ለኔ ተብራርተውልኛል ግልጽ ነው።

- በጥናቱ ላይ እንደሰተፍ የስምምነቱ ይዘት ተረጋግጧል።
- በዚህ ጥናት ውስጥ መሰተፍ ሙሉ በሙሉ በፈቃደኝነት እንደሆነ እና በማንኛውም ጊዜ በማንኛውም ምክንያቶችን ሳለቀርብ ማቋረጥ እንደምችል አረጋግጥላችኋለሁ። በዚህ ጥናት ለመሰተፍ ተዘጋጅቻለሁ (ተስማምቻለሁ)።

ቃለ መጠይቁ በሚደረግለወት ወቅት ወይም በጥናቱ ላይ ለመሰተፍ ፍላጎት ካለወት ለሁሉም ምክንያታዊ ጥያቄዎች በሐቀኝነት ለመመለስ ቃልእንድትገብልኝ እና ምንም አይነት የውሸት መረጃ ላለመስጠት ወይም በሌላ መንገድ ጥናቱ እንደሰተፍ ትብብር ታደርጉልኝ ዘንድ እጠይቃለሁ።

ሀ. ከሶሻሎ-ስነ-ሕዝብ ጋር የተያያዙ ጥያቄዎች

1. ጾታ? ሀ. ወንድ ለ. ሴት?
2. ሃይማኖት/ሽ ምንድን ነው? ሀ.ኦርቶዶክስ ለ.ሙስሊም ሐ.ፕሮቴስታንት መ.ሌሎች
3. ብሄር/ሽ ምንድን ነው? ሀ.አማራ ለ. አሮሞ ሐ.ትግራይ መ.ሌሎች
4. የመኖሪያዎ አይነት ምንድን ነው? ሀ. ገጠር ለ. ከተማ
5. የጋብቻ ሁኔታ? ሀ. ያላገባ/ች ለ. ያገባ/ች ሐ. የሞተበት/ባት መ. የተፋታ/ች
6. ከየትኛው ክፍል ነህ? ሀ.9ኛ ለ.10ኛ ሐ.11ኛ መ.12ኛ
7. የአባት የትምህርት ደረጃ? ሀ. ማንበብ አና መጻፍ የማይችል ለ. ማንበብ እና መጻፍ የሚችል ሐ. 1-8ኛ ክፍል መ.9-10 ኛ ክፍል ሠ.11-12 ኛ ክፍል ረ. ሰርተፍኬት እና ከዚያ በላይ
8. የእናት የትምህርት ደረጃ? ሀ. ማንበብ ማንበብ እና መጻፍ የማትችል ለ. ማንበብ እና መጻፍ ብቻ ሐ. 1-8ኛ ክፍል መ. 9-10 ኛ ክፍል ሠ.11-12 ኛ ክፍል ረ. የምስክር ወረቀት እና ከዚያ በላይ
9. አባትህ ሥራ ምንድን ነው? ሀ. የመንግስት ሰራተኛ ለ. ገበሬ ሐ.ነጋዴ መ. የቀን ሰራተኛ ሠ. ሌሎች
10. የእናትህ ስራ ምንድን ነው? ሀ. የመንግስት ሰራተኛ ለ ለ.ገበሬ ሐ.ነጋዴ መ.የቀን ሰራተኛ ሠ. ሌላ
11. የቤተሰብ ገቢዎ ምን ያህል ነው? ሀ. <500 ብር ለ. 500 – 1000 ሐ. 1001 – 1500 መ. 1501– 2000 ሠ. > 2000 ረ. ገቢ የለው።
12. ከማን ጋር ነው የሚኖሩት? ሀ.ከወላጆች ለ. ብቻወን ሐ. ከጓደኞች መ.ከሌላ

ለ. ስለ ኤችአይቪ/ኤድስ እውቀት ጋር የተያያዙ ጥያቄዎች

1. ኤች አይ ቪ በባክቴሪያ ይከሰታል? U. አዎ ለ. አይደለም ሐ. አላውቅም
2. ኤች አይ ቪ እና ኤድስ አንድ ናቸው? U. አዎ ለ. አይደለም ሐ. አላውቅም
3. በቋሚነት እና በትክክለኛ የኮንዶም አጠቃቀም ኤችአይቪን ይከላከላል? U. አዎ ለ. አይደለም ሐ. አላውቅም
4. ኤድስ መድኃኒት የለውም? U. አዎ ለ. አይደለም ሰሐ. አላውቅም
5. የወባ ትንኝ ንክሻ ኤችአይቪን ያስተላልፋል? U. አዎ ለ. አይደለም ሐ. አላውቅም
6. ኤች አይ ቪ በምራቅ ወይም በላብ ይተላለፋል? U. አዎ ለ. አይደለም ሐ. አላውቅም
7. ለአንድ የወሲብ ጓደኛ ታማኝ መሆን ከኤችአይቪ መከላከል ይቻላል? U. አዎ ለ. አይደለም ሐ. አላውቅም
8. ከግብረ ሥጋ ግንኙነትን በመከላከል ኤችአይቪ መከላከል ይቻላል? U. አዎ ለ. አይደለም ሐ. አላውቅም
9. በኤች አይ ቪ የተያዘ ሰው በአይን በማየት ሊታወቅ ይችላል? U. አዎ ለ. አይደለም ሐ. አላውቅም
10. ኤች አይ ቪ በማሳል እና በማስነጠስ ሊተላለፍ አይችልም? U. አዎ ለ. አይደለም ሐ. አላውቅም
11. የግብረ ሥጋ ግንኙነት ከተፈጸመ በኋላ ወዲያውኑ ሻወር መውሰድ በኤች አይ ቪ ከመያዝ ይከላከላል? U. አዎ ለ. አይደለም ሐ. አላውቅም
12. የኤችአይቪ ኢንፌክሽን ምልክቶች በበሽታው በተያዙ በጥቂት ቀናት ውስጥ ይታያሉ? U. አዎ ለ. አይደለም ሐ. አላውቅም
13. ሁሉም በኤች አይ ቪ የተያዙ እናቶች በኤች አይቪ የተያዙ ልጆችን ይወልዳሉ። U. አዎ ለ. አይደለም ሐ. አላውቅም
14. ለኤችአይቪ ክትባት አለ? U. አዎ ለ. አይደለም ሐ. አላውቅም
15. ብዙ የወሲብ አጋሮች የኤችአይቪ ኢንፌክሽን አደጋን ይጨምራሉ? U. አዎ ለ. አይደለም ሐ. አላውቅም
16. በኤች አይ ቪ ከተያዘ ሰው ጋር የመዋኛ ገንዳ መጋራት ሻይረሱን ያስተላልፋል? U. አዎ ለ. አይደለም ሐ. አላውቅም
17. በግብረ ሥጋ ግንኙነት ጊዜ ሁለት ኮንዶም አንዱን ከሌላው ጋር መጠቀም የኤችአይቪን የመተላለፍ እድል ይቀንሳል? U. አዎ ለ. አይደለም ሐ. አላውቅም

ሐ. ስለ ኤችአይቪ/ኤድስ ከአመለካከት ጋር የተያያዙ ጥያቄዎች

1. ኤችአይቪ የሚይዘው ሥነ ምግባር የጎደለው ሕይወት የሚመሩ ሰዎች ብቻ ናቸው። U. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ

2. የኤድስ ታማሚዎች ለሌሎች ደህንነት ሲባል ተለይተው መቀመጥ አለባቸው። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
3. ኤድስን በባህላዊ መድሃኒቶች ሊታከም ይችላል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
4. በኤች አይ ቪ ኤድስ የተፈጠሩ ችግሮች የተጋነኑ ናቸው። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
5. ከኤችአይቪ ታማሚዎች ጋር መጨባበጥ ችግር ይኖረዋል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
6. ከኤችአይቪ ተጎጂዎች ጋር መስራት ችግር አይኖረውም። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
7. ከኤችአይቪ ታማሚዎች ጋር መጋራት ችግር ይኖረዋል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
8. መጻዳጃ ቤት ከ ኤችአይቪ ታማሚዎች ጋር መጋራት ችግር ይኖረዋል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
9. ከኤችአይቪ ታማሚዎች አገልግሎቶችን መቀበል ችግር ይኖረዋል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
10. ለኤችአይቪ ታማሚዎች እንክብካቤ እና ድጋፍ መስጠት ችግር አይኖርባቸውም። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
11. የኤችአይቪን ሁኔታ መመርመር ደህን ያህል አስፈላጊ አይደለም. ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
12. በግብረ ሥጋ ግንኙነት በኤች አይ ቪ የተያዙ ሰዎች ዋጋቸውን አግኝተዋል። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
13. ኤችአይቪ ፖዘቲቭ የሆነ ዘመድ ከታመመ ይንከባከባሉ። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
14. ጓደኛዎ ኤችአይቪ ፖዘቲቭ ከሆነ ጓደኝነታችሁን ትቀጥላላችሁ። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
15. እቃዎችን ከኤችአይቪ ፖዘቲቭ ከሆነ ሰው ይገዛሉ. ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ
16. ተማሪው/ዋ ኤችአይቪ/ኤድስ ካለበት/ባት ትምህርታቸውን እንዲቀጥሉ መፍቀድ አለባት። ሀ. እስማማለሁ ለ. አልስማማም ሐ. ገለልተኛ

መ. በፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት እውቀት ጋር የተያያዙ ጥያቄዎች

1. ስለ ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ሰምተው ያውቃሉ? U. አዎ ለ. አይደለም ሐ. አላውቅም
2. አዎ ከሆነ፣ የመረጃ ምንጭህ ምንድን ነው? U. ከጓደኛ ለ. አይደለም ሐ. አላውቅም-----

3. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት በራሳቸው ፈቃድ መመርመርን ያካትታል? U. አዎ ለ. አይደለም ሐ. አላውቅም
4. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ኤችአይቪን ለመከላከል አስፈላጊ ነው። U. አዎ ለ. አይደለም ሐ. አላውቅም
5. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ሂደት የቅድመ ምርመራ እና ድህረ ምርመራ ምክርን ያካትታል። U. አዎ ለ. አይደለም ሐ. አላውቅም
6. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ስጦራዊነትን ያካትታል። U. አዎ ለ. አይደለም ሐ. አላውቅም
7. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት የት እንደሚቀርብ ያውቃሉ? U. አዎ ለ. አይደለም ሐ. አላውቅም

ሠ. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት አመለካከት ጋር የተያያዙ ጥያቄዎች

1. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት አስፈላጊ ነው። U. እስማማለሁ ለ. አልስማማም።
2. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ለታመሙ ብቻ ነው። U. እስማማለሁ ለ. አልስማማም።
3. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ ለኤችአይቪ ያለበትን ሁኔታ ማወቅ ለሚያስፈልጋቸው ግለሰቦች ሁሉ መገኘት አለበት። U. እስማማለሁ ለ. አልስማማም።
4. ጥንዶች ከጋብቻ በፊት የኤችአይቪ ምርመራ ማድረግ አለባቸው U. እስማማለሁ ለ. አልስማማም።
5. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት የተነደፈው ለኤችአይቪ ኢንፎክሽን ተጋላጭ ለሆኑ ሰዎች ብቻ ነው። U. እስማማለሁ ለ. አልስማማም።

- 6. አዲስ ግንኙነት ለመጀመር ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት አስፈላጊ ነው። ሀ. እስማማለሁ ለ. አልስማማም።
- 7. ፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ ለነፍሰ ጡር እናቶች እና እንደ ኤችአይቪ አይነት ምልክት ላለባቸው ግለሰቦች አስፈላጊ ነው። ሀ. እስማማለሁ ለ. አልስማማም።

ረ. ለኤችአይቪ/ኤድስ ከሚያጋልጡ ተግባራት እና ከመከላከል ጋር የተያያዙ ጥያቄ መለኪያዎች

- 1. ለወሲብ ተጋላጭ ነበራችሁ? ሀ. አዎ ለ. አይደለም
- 2. በግብረ ሥጋ ግንኙነት ወቅት ኮንዶም ተጠቅመህ ታውቃለህ? ሀ. አዎ ለ. አይደለም
- 3. ምን ያህል ጊዜ ኮንዶም እየተጠቀሙ ነበር? ሀ. ሁልጊዜ ለ. አልፎ አልፎ
- 4. በመጨረሻው የግብረ ሥጋ ግንኙነት ሰክረህ ነበር? ሀ. አዎ ለ. አይደለም
- 5. ስለታም ቁሳቁሶችን ከቤተሰብ አባላት ወይም ጓደኞች ጋር ይጋራሉ? ሀ. አዎ ለ. አይደለም
- 6. ባለፉት ሶስት ወራት ውስጥ ለኤችአይቪ ምርመራ አድርገዋል? ሀ. አዎ ለ. አይደለም

ሰ. በፈቃደኝነት ላይ የተመሰረተ የኤችአይቪ ምርመራ እና ምክር አገልግሎት ከተግባር ጋር የተያያዙ ጥያቄዎች

- 1. የኤችአይቪ ምርመራ አድርገው ያውቃሉ? ሀ. አዎ ለ. አይደለም
- 2. መልስዎ 'አዎ' ከሆነ ለኤችአይቪ ምርመራ ምክንያቱ ምን ነበር? እባክዎን ምክንያቱን ይጻፉ -----

- 3. ለጥያቄ '1' መልስዎ አይደለም ከሆነ፣ እባክዎን ምክንያቱን ይጻፉ ሀ. መገለልን በመፍራት ለ. ፖዘቲቭ ከመፈራት ሐ. ጓደኛ መ. ቤተሰብ
- 4. ወደፊት ለመመርመር ዝግጁ ነዎት? ሀ. አዎ ለ. አይደለም