

**Addis Ababa University, College of Health Sciences
School of Public Health**

Acceptability and associated factors of provider initiated HIV counselling and testing among OPD clients with possible clinical sign of HIV infection in west Arsi zone, Ethiopia.

**By
Tsegaye Tesfaye (BSc)**

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment for the Degree of Master of Public Health in the School of Public Health.

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Approval by Examining Board

Chairman, School Graduate Committee

Dr. Adamu Addissie

Advisor

Examiner

Examiner

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LIST OF ACRYNOMS AND ABBREVIATIONS

AFB: Acid Fast Bacillus
AIDS: Acquired Immuno Deficiency Syndrome
ANC: Antenatal care
AOR: Adjusted Odds Ratio
ART: Anti Retro viral Therapy
BCC: Behavioral Change and Communication
CI: Confidence Interval
CSW: Commercial Sex Workers
DHS: Demographic Health Survey
FHAPCO: Federal HIV/AIDS Prevention and Control Office
FY: Fiscal year
HAART: Highly Active Anti retroviral Therapy
HCT: HIV Counseling and Testing
HIV: Human Immuno Deficiency Virus
HSU: Herpes Simplex Ulceration
ICC: Invasive Cervical Cancer
IEC: Information, Education and Communication
MSP: Multiple Sexual Partners
OPD: Outpatient Department
OR: Odds Ratio
PCP: Pneumo cysts Carnii pneumonia
PGL: Persistent Generalized Lymphadenopathy
PIHCT: Provider Initiated HIV Counseling and Testing
PLWA: People Living With HIV/AIDS
MTCT: Mother to Child Transmission of HIV
PMTCT: Prevention of Mother to Child Transmission of HIV/AIDS
SPSS: Statistical Package for Social Sciences
STI: Sexually Transmitted Infections
TB: Tuberculosis
UNAIDS: Joint United Nations Program on AIDS
VCT: Voluntary Counseling and Testing
WHO: World Health Organization

ABSTRACT

Introduction: HIV counseling and testing is a gateway to prevention, treatment, care and support services and an essential tool in the control of HIV/AIDS epidemic. Currently HIV status has been very low which cannot be achieved only through the traditional VCT alone and another alternative, routine HIV testing and counseling of patients, also called provider initiated HIV Counseling and testing is proposed.

Objective: To assess the acceptability and associated factors of provider initiated HIV counseling and testing among OPD clients with possible clinical sign of HIV infection in West Arsi zone, Ethiopia.

Methods: Facility based cross sectional study was conducted on outpatient department clients with possible clinical sign of HIV infection in 6 selected health facilities in West Arsi Zone, Ethiopia. The health facilities were selected randomly; study subjects who came to the health facilities were consecutively interviewed. Data collected by a pre-tested, structured interview questionnaire. Regression model was used to assess factors associated with acceptability of provider initiated HIV Counseling and testing.

Results: A total of 539 clients were interviewed with a response rate of 92.3%. The majorities (66.4%) were married, major age distribution was range from 25-29 (29.1%) and the main religion was Muslim (66.2%). Knowledge on importance of provider initiated HIV Counseling and testing was low. The willingness and overall acceptability rate was 86.5%, and 83.1% respectively. The major perceived barriers for acceptability were mainly thinking self as not being at risk, followed by fear of stigma and discrimination. On adjusted covariates of acceptability, acceptability of PIHCT was found to be associated with having information on PIHCT service (OR=0.36; CI=0.22-0.60), less and much support for PIHCT (OR=0.30; CI=0.11-0.85 and OR=0.31; CI=0.12-0.77) and tested for HIV before (OR=0.20; CI=0.10-0.41)

Conclusion and Recommendations: The acceptability noticed in this study is high. The major perceived barriers for acceptability was thinking self as not being at risk. Having information on PIHCT service, tested for HIV before, and extent of support for PIHCT were found to be important predictors of acceptability of PIHCT. Hence, intensive IEC/BCC and promotional activities through different means should be in place to raise level of awareness, support and routine testing to facilitate its acceptability and reduce major barriers that affect PIHCT service utilization at all level.

INTRODUCTION

1.1 Background

Although important progress has been achieved in preventing new HIV infections and in lowering the annual number of AIDS related deaths, the number of people living with HIV continues to increase and still HIV/AIDS continues to be a major global health priority. AIDS-related illnesses remain one of the leading causes of death globally and are projected to continue as a significant global cause of premature mortality in the coming decades. An estimated 33.4 million people worldwide were living with HIV, with 2.7 million new infections and 2 million deaths to AIDS in 2008 alone (1).

Among the regions, Sub-Saharan Africa remains to be the region most heavily affected by HIV accounting for 67% of HIV infections worldwide, 68% of new HIV infections among adults and 91% of new HIV infections among children. It also accounted for 72% of the world's AIDS-related deaths and represented 60 % of women with HIV and more than 14.1 million children estimated to have lost one or both parents to AIDS in 2008 (1).

As per the calibrated single point HIV prevalence estimate of federal HIV/AIDS control office (FHAPCO), it was indicated that about 2.1% of Ethiopia's adult population were living with HIV in 2005. It was also estimated that 1,037,267 people were living with the virus resulting in 58,290 HIV related deaths and 125,147 new infections, adult HIV incidence of 0.27% and national HIV prevalence of 2.2% in 2008. The epidemic is more concentrated in urban areas like Addis Ababa which has a prevalence of 7.9%, and adult HIV incidence of 1.49% in 2008 (2).

HIV counseling and testing (HCT) is a gateway to prevention, treatment, care and support services and an essential tool in the control of HIV/AIDS epidemic, which help people learn whether they are infected and understand the implication of their HIV status and make informed choice in the future (3,4). Voluntary counseling and testing (VCT) for HIV has been carried out in many places for decades and it has been used as a main stay of approach and entry point to most HIV related services including provision of antiretroviral drugs (5).

There has been a broad concern about the slow uptake of voluntary counseling and testing (VCT) in many parts of sub-Saharan Africa (5). Still, in many high-prevalence countries, fewer than one in ten HIV positive individuals are aware that they are infected with the virus (6).

As reported by some treatment programmers, there is high early mortality in patients receiving antiretroviral therapy because of late presentation. Therefore, early detection of HIV infection is not only helpful in preventing further infection but also improve treatment outcome.

Although VCT has been used for several years in many settings, still it is not enough even to identify those who need subsequent treatment and care. As a result of this, a new approach namely routine counseling and testing of patients, also called provider initiated HIV counseling and testing is introduced (PIHCT) (5).

Expanded routine, voluntary and opt-out screening in health care settings is needed to reduce the number of persons who are unaware of their HIV infected status, get newly diagnosed patients into care, and reduce transmission of HIV infection (7).

In Ethiopia HCT services have been unevenly distributed and even when available uptake has been relatively low and to date, the number of people who have been tested and know their HIV status has been very low.(3, 8)

PIHCT deals with clients that present with symptoms or signs of illness possibly attributable to HIV, hence, it is the responsibility of the health care providers to recommend HIV counseling and testing as part of the routine clinical management (3).

After PIHCT strategy adapted in the country, it has been implemented in different health facilities especially for those clients with tuberculosis and sexually transmitted infection. However, the diagnostic approach is also intended for clients with other possible clinical signs attributable to HIV infection.

Only few studies on the acceptability and factors of acceptance of this approach have been studied in few urban settings after it is being implemented.

1.2 Rationale of the study

The Ethiopian HIV/AIDS five year plan (FY 2004-2008) indicated that by 2008, approximately 50% of Ethiopian over 15 years of age will know their HIV status through the routine and/or voluntary counseling and testing (9). But according to DHS 2005 report among the adult population of age 15-49 years, only 4% of women and 6% of men have been tested for HIV at some time (10).

WHO and joint United Nations Program on AIDS (UNAIDS) identified the need for an additional approach and issued a joint statement in 2004 that introduced opt out (provider initiated) testing alongside with other strategies to increase the uptake of HIV testing. Evidence from both industrialized and resource-constrained settings suggests that many opportunities to diagnose and counsel individuals at health facilities are being missed and that PIHCT facilitates diagnosis and access to HIV related services (11, 12).

After PIHCT strategy adapted in the country, it has been implemented in different health facilities especially for those clients with tuberculosis and sexually transmitted infection. However, the diagnostic approach is also intended for clients with other possible signs attributable to HIV infection like oral thrush, repeated infections, chronic diarrhea etc.

Although, there are some studies undertaken to assess the acceptability of PIHCT in different parts of Ethiopia before the implementation of the service, only few studies on the acceptability and factors of acceptance of this approach has been studied in few urban settings after it is being implemented.

Therefore, the aim of this study is to assess the acceptability of PIHCT and its associated factors among out patient department (OPD) clients with possible clinical sign of HIV infection in rural settings that is West Arsi zone. After assessing PIHCT acceptability and factors affecting it, the result of the study might be used to design strategies to increase the acceptability of PIHCT at all levels.

2. LITERATURE REVIEW

2.1 Overview of HIV/AIDS

The number of people living with HIV worldwide continued to grow in 2008, reaching an estimated 33.4 million [31.1 million–35.8 million]. The continuing rise in the population of people living with HIV reflects the combined effects of continued high rates of new HIV infections and the beneficial impact of antiretroviral therapy (ART) (1).

Among the regions, Sub-Saharan Africa remains to be the region most heavily affected by HIV in 2008. The epidemic continues to have an enormous impact on households, communities, businesses, public services and national economies in the region (1).

In Ethiopia, communicable diseases are very rampant causing heavy death toll and burden of diseases. These health problems have been made further worse with the emergence of AIDS which has been spreading fast in the last two decades (14).

After the first cases of HIV/AIDS were reported in Ethiopia 1981, the epidemic has spread to the general population in both urban and rural areas (13). Currently the prevalence rate has been estimated to be high. This puts the country among the group with highest levels of infection in Africa. Most of those infected already are unaware of their status and so represent a pool capable of transmitting the virus to new uninfected individuals who will eventually develop AIDS and die (14).

The HIV/AIDS pandemic creates a threat to the development of Ethiopia as an estimated 1,037,267 people were living with the virus resulting in 58,290 HIV related deaths and 125,147 new infections, adult HIV incidence of 0.27% and national HIV prevalence of 2.2% in 2008 (2).

2.2 HIV Counseling and Testing (HCT)

HIV counseling and testing is a gateway to prevention, treatment, care and support services and an essential tool in the control of HIV/AIDS epidemic, where people learn whether they are infected and are helped to understand the implication of their HIV status and make informed choice in the future. The common components are pretest, posttest and ongoing counseling (3, 4).

HIV testing and counseling is a direct, personalized and person-centered intervention, tailored to prevent transmission and obtain referral to additional medical care, preventive, psychosocial and other needed services in order to remain healthy (15).

There are three types of HIV testing in the country (3):

1. Client initiated, or voluntary counseling and testing
2. Provider initiated HIV counseling and testing
3. Mandatory HIV screening.

In expanding access to HIV prevention, treatment, care and support in a timely manner, and gives people living with HIV an opportunity to receive information and tools to prevent HIV transmission to others, as endorsed by Group 8 leaders in 2005 and the United Nation General Assembly in 2006, greater knowledge of HIV status is significant (8).

As stated in HCT policy of Ethiopia, " Counseling and testing, as a crucial intervention component of the HIV/AIDS prevention, care and support program shall be promoted and made widely available, affordable and accessible to all individuals and communities" (3).

Although VCT Programs have been found to be successful in many countries in providing individuals with knowledge about HIV, prevention measures and HIV test results to million of individuals, still in many high prevalence countries, fewer than one in ten HIV positive individuals are aware they are infected with HIV. Reaching individuals living with the virus who do not know their serostatus must clearly be a global public health priority (6).

Eventhough efforts have been focused on VCT as the primary means of providing testing and encouraging people to become aware of their HIV status, coverage has been low, with the number being tested far fewer than that required to identify even those requiring Highly Active Anti Retro viral Therapy (HAART) (16). WHO and UNAIDS as a response have introduced opt-out testing and are advocating for an increase in provider initiated HIV counseling and testing in addition to voluntary counseling and testing (6).

2.3 Provider initiated HIV counseling and testing

Provider initiated HIV counseling and testing refers to HIV testing and counseling recommended during treatment by health care providers to enable specific clinical decisions be made and/or specific medical service to be offered that would not be possible without the knowledge of the person's HIV status. PIHCT is voluntary in which the "three Cs" informed consent, counseling and confidentiality be observed at all times. A brief counseling or pre test education /information should always accompany testing even for diagnostic purpose and patients should never be forced to undergo testing against their will (3).

UNAIDS, WHO and CDC recommend HIV testing in clinical settings where HIV is prevalent and where HIV care, treatment and support services are available. This mandate calls for PIHCT for all patients seeking care in any clinical setting, including out-patient settings such as out-patient departments or primary care clinics (8).

According to WHO, there are two discrete categories of PIHCT namely diagnostic and routine offer. Diagnostic testing is part of a clinical process of determining the diagnosis of a sick person and it refers to situations where a medical condition or medical symptoms indicate a significant possibility of underlying HIV disease. And routine offer of testing and counseling means, offering an HIV test to all sexually active patient, who present for medical care regardless of their initial reason for seeking medical attention (6).

In this approach, standard protocol used in VCT is adapted to ensure informed consent with out a full counseling session. In providing informed consent, clients need to know: 1) the clinical and prevention benefit of testing 2) the right to refuse 3) the follow up services available and 4) the importance of sharing results with a partner in case of positive results (17).

2.4 Factors influencing the acceptability of PIHCT

A cross sectional study was conducted in Botswana to assess factors of acceptability and barriers to testing recruiting 1268 people from a cross section of households for private interviews. 81% of the participant reported that they were either extremely or very much in favors of routine testing, 43% thought that routine testing would discourage people from going to the doctor and 68% of the sample felt that they could not refuse a test. Almost half of those questioned (48%) had undergone testing (a much higher proportion than seen in other African countries), and those with stigmatizing attitudes towards people with AIDS were significantly less likely to have tested. But the key barriers to testing were the same as those reported by other studies: fear of learning one's HIV status, lack of perceived HIV risk and fear of having to change one's sexual practices. In this study the facilitating factor of testing were knowledge that treatment was available (for two-thirds of those tested), as was the confidentiality of the test results, especially for men, but the national media advertising campaign was also very important in encouraging testing (69% said they were convinced by advertising messages of the need to test) (18).

A study was conducted in Bushenyi district of Uganda to understand the factors influencing acceptability of voluntary counseling and testing for HIV with a view of suggesting measures for increased uptake. Only thirty-eight (17%) of the 219 people interviewed had ever undergone HIV counseling and testing. The factors reported to influence VCT uptake for HIV were consequences of a test result, influences from a sexual partner, cost of VCT, physical accessibility of VCT, awareness, risk of HIV infection, need for linking VCT with care (especially availability of anti-retroviral) and perceived quality of care of VCT services (19).

In a program, called “think HIV”, in Massachusetts, 10,352 patients were offered HIV counseling at the four centers, accounting for approximately 10-15% of all patients entering the urgent care. Of the 10,352 patients offered HIV testing, 7,071 (68%) declined testing; 6,291(89%) of these were willing to answer inquiries about their refusal to undergo testing. The reasons given for test refusal were: not feeling at risk for HIV (47%), tested for HIV before (42%), felt too ill (11%), testing takes too long time (4%), information too personal (2%), and already known to be HIV-infected (1%). Among the 3,068 patients with completed test results, 60 were HIV infected (HIV prevalence: 2.0%); of these, 49 (82%) returned for their results (20).

In study conducted in a black township in Cape Town, South Africa, to assess HIV testing attitudes, AIDS stigma, and voluntary HIV counseling and testing among 500 participants, 47% of participants were tested for HIV. Comparisons on attitudes toward VCT showed that individuals who were not tested for HIV and those tested but who did not know their results held significantly more negative testing

attitudes than individuals who were tested, particularly people who knew their test results. Compared to people who were tested, individuals who were not tested for HIV demonstrated significantly greater AIDS related stigmas; ascribing greater shame, guilt, and social disapproval to people living with HIV(21).

A study conducted in Melbourne, Austria, to assess the uptake of HIV screening in an ANC showed that of the 364 consecutive women offered HIV infection screening during a 6 month period in 1999, 248 (68%) accepted and underwent testing and 116 (32%) refused to have HIV testing. The rate of offering screening and acceptance remained stable throughout the time period. Of the 116 who did not wish to be tested; 46 (40%) perceived themselves at low risk and therefore didn't feel that they needed testing. A further 55 women (47%) stated they had recently been tested and were negative, for 15 women (13%), the reason for their refusal was not recorded. All 248 women who had HIV screening undertaken at the hospital had negative results (22).

An exploratory cross-sectional survey was conducted in 6 PMTCT sites in rural Zimbabwe to assess acceptability of routine HIV testing ("opt-out"). Of 520 sampled women, 285 (55%) had been HIV tested during their last pregnancy. Primary education or no education, reporting receiving neither group education in the ANC clinic nor individual pretest counseling, and having attended less than 6 ANC visits were associated with not having been HIV tested. Among the 235 women not HIV tested in ANC, 79% reported that they would accept HIV testing if opt-out testing was introduced. Factors associated with accepting the opt-out approach were being younger than 20 years of age, having secondary education or more, living with a partner, and the existence of PMTCT of HIV/AIDS service where the untested women delivered. Thirty-seven women (16%) declined routine HIV testing, mainly because of their fear of knowing their HIV status and the need to have their partner's consent. Among the women already tested in ANC (n = 285), 97% accepted the opt-out approach (23).

In Kenya, a study conducted to assess acceptability of HIV testing in patients with invasive cervical cancer revealed that overall, 11% of invasive cervical cancer (ICC) patients were HIV sero positive. The acceptance rate of HIV testing was 99%; but, 5% of the patients did not want to know their HIV results. Patients younger than 35 years of age were two times more likely to refuse the result of the HIV test. Patients who did not want to know their HIV results were three times more likely to be HIV sero positive. Eighty four percent of the patients were unaware of their HIV sero positive status. The HIV -1 sero-prevalence in ICC Mpatients was comparable to the overall sero prevalence in Kenya (24).

A study conducted in Arba Minch, Ethiopia to assess acceptability of PIHCT among tuberculosis patients discovered that 73% were willing to be tested and 58% of those willing accepted the test. The

overall acceptability rate was 35%. Fourteen (20.6%) were HIV positive and women were more likely to be HIV infected. Unemployment and self perceived high risk of HIV infection were associated with initial willingness. However, only being unemployed was associated with accepting the test (5).

Another study in Addis Ababa, assessing VCT utilization, and willingness to accept provider initiated HIV counseling and testing among tuberculosis patients discovered that 86.2% of the patients were willing for PIHCT. The only adjusted correlates of willingness for PIHCT were being in older age group, and having demand for HIV testing.

Key testing barriers include self trust (41.1%), lack of risk perception for HIV infection (24.4%), fear of learning positive result (13.9%), and stigma and discrimination attached to TB and HIV. Early evidence of widespread support for PIHCT and moderate acceptance of HIV testing in this study holds significant promise for the control, prevention and treatment of HIV/AIDS and TB (25).

In addition, a study conducted in Addis Ababa to assess the uptake of provider initiated HIV testing and counseling among OPD clients with possible clinical sign of HIV infection and factors associated with it revealed 64.9 % mentioned HIV has no cure, 89.4% of healthy looking person can be HIV positive, and good knowledge on HIV transmission (5.2%) and MTCT (11.4%), HIV prevention(27.6%) ,96% has no misconception about HIV transmission, and HIV high risk perception(11.1%) and accepting attitude to be 21.4%. About 70.2% were willing to undertake PIHCT and the overall acceptability rate was 67%. The facilitating factors for PIHCT willingness were sickness 92 (34.3%), health workers recommendation 75 (28%), TV/radio messages 50(18.7%), knowing that the treatment is available 33(12.3%) and knowing that the test result will be confidential 18(6.7%).On the other hand ,the perceived barriers for PIHCT willingness were thinking self as not being at risk 20 (17.9%), not sure of confidentiality 18 (16.1%),fear of test result 17 (15.2%), tested before 11 (9.8%) and partner trust 5 (4.5%). There was relatively high HIV prevalence among the participants that is 37.6%. Factors age group 25-34 years and less support to PIHCT were found to be associated with willingness and acceptance of PIHCT (26).

In conclusion the literature reviewed showed that, there is a better rate of willingness but relatively low rate of acceptance of PIHCT; the reasons for not accepting the test were mainly lack of perceived HIV risk and stigmatizing attitude about people living with HIV/AIDS. The present study will assess the acceptability of PIHCT and associated factors of provider initiated HIV counseling and testing among OPD clients with possible clinical sign of HIV infection in selected health facilities of West Arsi zone. The findings of the study might help to design strategies to increase the acceptability of the approach which there by strengthens the prevention and control efforts and also help clients benefit from available services.

Conceptual framework for PIHCT Acceptability

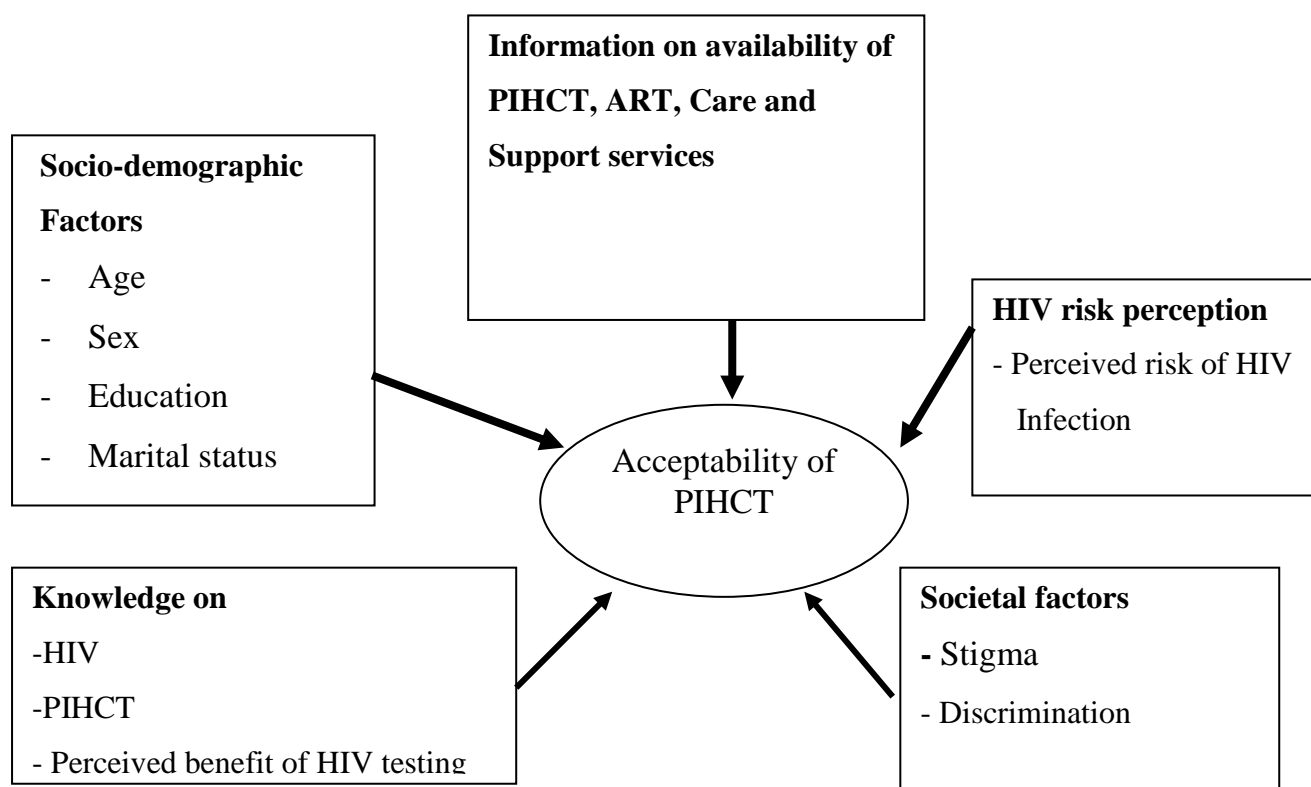


Fig. 1 Hypothesized Model for Predictors of Testing adapted from other study

The literatures reviewed showed that the main predictors for testing were found to be HIV risk perception and stigmatizing attitude towards people living with HIV. More over few socio demographic characteristics, knowledge factor and availability of information on PIHCT and ART were also important in predicating the willingness and acceptance of PIHCT. Based on this, the study uses the abovementioned variables as a predictor for the acceptability of the PIHCT.

3. OBJECTIVE

3.1 General objective

To assess the acceptability and associated factors of provider initiated HIV counseling and testing among OPD clients with possible clinical sign of HIV infection in West Arsi zone, Ethiopia.

3.2 Specific objectives

1. To determine acceptability of PIHCT among OPD clients with possible clinical sign of HIV infection
2. To assess the socio demographic factors influencing the acceptability of PIHCT among OPD clients with possible clinical sign of HIV infection
3. To assess the knowledge on importance of PIHCT and stigmatizing attitude towards PLWHA among OPD clients with possible clinical sign of HIV infection
4. To identify barriers influencing PIHCT acceptability among non-acceptors of OPD clients with possible clinical sign of HIV infection

4. METHODS AND MATERIALS

4.1 Study design

Health facility based cross sectional study was conducted among OPD clients with possible clinical signs of HIV infection to assess the acceptability and associated factors of provider initiated HIV counseling and testing in West Arsi zone. The study also included an internal comparison of PIHCT acceptors vs. non -acceptors

4.2 Study area

The study was carried out in West Arsi zone in 6 selected health facilities of the zone from November to December 2010, which is one of the zones in Oromia Regional state, Ethiopia. The zone is located 250 Km from Addis Ababa to the south with its office in Shashamene. There are 13 woredas and one city administrative council, 352 kebeles in the Zone. The projected population of West Arsi zone for the year 2009/10 was 2,238,506. Regarding the available health services in the zone, there were 10 existing health centers, 17 nucleolus health center run by the government and 2 government hospitals, 1 hospital which is run by non governmental organization. PIHCT was provided in 10 of existing and 2 of nucleus governmental health centers, and in two governments and one non- governmental hospital of the zone. The other 15 nucleolus health centers did not fully provide PIHCT services mainly due to lack of trained human power as they started to function recently and also due to lack of equipments. This study was undertaken in 6 health facilities providing PIHCT services in the zone.

4.3 Study population

4.3.1 Source population

The source populations for this study were all OPD clients with possible clinical sign of HIV infection from November to December in all health facilities of West Arsi zone, Ethiopia.

4.3.2 Study subjects

The study subjects were OPD clients with possible clinical sign of HIV infection in the 6 health facilities that fits the criteria of inclusion and none of criteria of exclusion. Participants were included in the study or excluded from the study if the following criteria are met.

Inclusion Criteria

The inclusion criteria were those OPD clients with possible sign of HIV infection (Annex III) whose age is greater than 18 years (above this age an individual can consent by his/her own to undergo PIHCT) and OPD client with possible sign of HIV infection whose HIV status is unknown or with negative HIV sero status.

Exclusion Criteria

- OPD clients with possible sign of HIV infection with known HIV positive status
- OPD clients with possible sign of HIV infection who were severely ill

4.3.3 Sample Size

The sample size was determined by using the formula for single population proportion and by taking the proportion that 67% of OPD clients might accept PIHCT (26) with 4% marginal error and 95%CI ($\alpha=0.05$) and a none response rate of 10%. Based on this, the actual sample size for the study was determined using the formula for single population proportion.

$$n = \frac{(Z_{(\alpha/2)})^2 * p (1-p)}{d^2} \qquad n = \frac{(1.96)^2 \times 0.67(1-0.67)}{(0.04)^2}$$

Where

- n - The required sample size.
- p - The proportion of OPD clients with possible clinical sign of HIV infection that accepted the test in other studies was 67% (26).
- z- A standard score corresponding to 95% confidence level.
- d- The margin of error was 4%

Using the above formula the initial sample size was 530, taking the non response rate to be 10 %, the final sample size was 584.

4.3.4 Sampling procedures

Cluster sampling was used to identify health facilities of the study. There were fifteen (15) clusters of health facilities providing PIHCT services which comprised of twelve health centers and three hospitals in the zone. From these clusters, 6 clusters of health facilities were chosen by random sampling (lottery method). The total samples were allocated to each health facility proportionally prospectively based on the number of client flow at OPD clinic of each health facilities. The study subjects were found and identified among clients visiting the OPD clinics of the selected health facilities for different clinical problems and then among these clients, clients presenting with clinical sign and symptom suggesting a diagnosis attributable to a possible sign of HIV infection in accordance with WHO clinical staging were selected consecutively and included in the study until the desired sample was obtained (stage 2).

4.4 Data collection

4.4.1 Data Collection tools

A pre-tested, structured interview administered questionnaire prepared in English was translated in to Amharic and Afaan Oroomoo and back to English was used to collect the data. The standardized questionnaires were adapted from DHS as well as from different literatures reviewed and from other similar studies. A pre-test was carried out among 10% of the study subjects by data collectors in four of the health facilities not included in the study. The questionnaire included socio demographic characteristics, knowledge about HIV, personal HIV risk perception, stigmatizing attitude towards people living with HIV/AIDS, knowledge about PIHCT and willingness/acceptability of PIHCT. Twelve (12) data collectors who were Health officers, BSc nurses and others who were working in the respective health facilities OPD clinic and with previous training on PIHCT were used to collect the data with close supervision from the supervisor and principal investigator. Two day training was given for 12 data collectors and 6 supervisors on the objective of the study, mainly focusing on the questionnaire.

4.4.3 Data collection procedure

Data collection was conducted from November to December 2010 in each health facilities during working hours. The participants of the study were obtained among the clients who presented to the OPD clinic of each health facility on daily basis to seek treatment for different medical conditions. Initially, in OPD clinics, the service provider took the clinical history and carried out physical examination and was identified a clinical sign (a Dx) of HIV infection and first treated the medical conditions of the patient. The interview (questionnaire administration) was carried out after the client was treated for his problem and before HIV testing offer was made and for some clients, who needed laboratory tests to settle the diagnosis like sputum examination for AFB, was interviewed after the result was collected and interpreted. Once study subjects who fit the criteria of inclusion were selected either written or verbal consent was secured from each participant after explaining the purpose of the study and those participants who consent to undergo the study were interviewed accordingly to obtain detailed information on socio demographic characteristics, knowledge about HIV, personal HIV risk perception, stigmatizing attitude towards people living with HIV/AIDS and knowledge about PIHCT.

Those who were willing to undergo PIHCT were provided with the pretest information and HIV testing following the national algorithm by the provider/data collector. Clients who came back for the post test session were given the test result and post test counseling. For those who turned out to be positive, referral was made to the chronic care/ART clinic

4.4.2 Study variables and Operational definitions

Independent

- Socio demographic and economic factors(Age, gender, marital status, occupation, religion, education, income)
- Perceived HIV risk
- Knowledge about HIV
- Knowledge on importance of PIHCT
- Stigmatizing attitude towards people living with HIV/AIDS
- Information on PIHCT, Care and support services

Dependent

- Acceptability of PIHCT

Operational definitions

- **Provider Initiated HIV counseling and testing:** is a process in which the individual undergoes counseling and HIV testing by initiation of health provider.
- **Risk perception for HIV/AIDS:** respondents feeling of being vulnerable for infection with HIV/AIDS.
- **Knowledgeable about HIV transmission:** Study subjects are considered knowledgeable about HIV/AIDS transmission if they have an acceptable response to six questions assessing knowledge. These questions are if HIV is transmitted through sexual intercourse, from mother to child during pregnancy, from mother to child during delivery, from mother to child during breast feeding, through blood contacts and by sharing of sharp materials with someone who is infected. Subjects are considered to have **Good Knowledge**- If Know all the 6 means, **fair Knowledge** – If Know 3-5 means, **and poor Knowledge** – If Know 0-2 means (Annex II).
- **Misconception:** Study subjects are considered to have misconceptions about HIV/ AIDS transmission and prevention if, they agreed incorrectly to any of the four misconception questions i.e. If HIV is transmitted by shaking hands of a person living with HIV, wearing of cloths of a person living with HIV, sharing meal with a person living with HIV and through mosquito bite (Annex II).
- **Knowledge about HIV prevention:** Study subjects will be considered to be knowledgeable about HIV prevention if they correctly identified the three main ways to prevent HIV transmission: abstinence, being faithful to one uninfected partner and condom use (Annex II).
- **Knowledge on importance of PIHCT:** respondents will be considered to be knowledgeable about importance of PIHCT if they correctly identified the four importance of PIHCT i.e. if it helps patients get access to ART, makes easier for clients to get tested, results in less discrimination of -

HIV positive patient, and increases number of tested people. Participants will be scored as **having good Knowledge**- If Know all the 4 importance of PIHCT, **fair Knowledge** – If Know 2-3 of the importance of PIHCT **and poor Knowledge**- If Know 0-1 of the importance of PIHCT. (Annex II).

- **Accepting Attitude:** The desirable non stigmatizing behaviour (response) to six of the indicators.
- **Possible clinical sign of HIV infection:** The clinical signs that fit the WHO clinical criteria (Annex III).
- **Willing:** An individual agreeing to accept the PIHCT recommendation.
- **Pre-test counseling acceptability rate:** Proportion of clients counseled and tested out of total willing.
- **Post-test counseling acceptability rate:** Proportion of clients who received the results from those who were counseled and tested.
- **Overall acceptability rate:** The total number of patients who received the results out of the total interviewed for willingness.
- **Acceptors:** OPD clients with possible clinical sign of HIV infection who accepted PIHCT.
- **Non-acceptors:** OPD clients with possible clinical sign of HIV infection who refused PIHCT.

4.4.4 Data quality control

To ensure the quality of data, the standard questionnaire which was prepared in English was translated into Amharic and Afaan Oromoo and then back into English. Training of data collectors and supervisors were undertaken and administration of pre-test among 10% of the total sample size was done. The questionnaire was assessed for its clarity, length, completeness and consistency where some of skip patterns were corrected; questions difficult to ask were rephrased.

In addition, the principal investigator and supervisors supervised the data collection procedure closely; also checked all the data from each health center for completeness, clarity and consistency immediately after the data collection. Before analysis the data were cleaned thoroughly to check for errors during entry.

4.4.5 Data processing and Analysis

The collected data were entered, and analyzed using SPSS 15 windows software. Descriptive statistics were used to determine the frequency of different variables. To describe the characteristics of the study population proportions were calculated. Results were presented using texts, tables and graphs. Comparison was made between individuals who were accepting PIHCT and those who were not accepting; and individuals who accepted PIHCT (overall acceptability). Regression model was used to examine the relationship between the dependent and the independent variables.

Odds ratios were generated with 95% confidence intervals for the interpretation. Variables that were found statistically significantly associated ($p < 0.05$) were entered and analyzed by multiple logistic regression analysis.

4.5 Ethical Consideration

The thesis proposal was approved by the faculty institutional reviewing board (IRB) and ethical clearance letter was secured. Letters of support was written to health centers and hospital administration and other concerned bodies to obtain permission and cooperation for data collection. Prior to data collection study participants were briefed individually about the purpose of the study and the procedure involved in it and then either written or verbal consent was obtained. To assure confidentiality, the information obtained from the respondents was kept confidential; not disclosed to third party with out their will and identified by their code number and finally were burnt. Finally based on HIV test result referral was made for further treatment, care and support. The data were collected in the OPD keeping the privacy for 15 to 30 minutes.

4.6 Dissemination of Results

After the data was analyzed, based on the findings obtained, conclusions and recommendations were made. Then the results of the study will be submitted to the school of public health (AAU), West Arsi zonal health department and other responsible bodies. The result will be presented during thesis defense in the school of public health, as a partial fulfillment of MPH and in different seminars, meeting, conferences and workshops. Moreover, the findings of the study might be published and disseminated.

5. RESULTS

5.1 Socio- demographic characteristics of the study participants

In this study, out of 584 participants anticipated, a total of 539 study participants were participated with a response rate of 92.3%. However, 45 participants were not participated with a non response rate of 7.7% of which all of of them were refusal and the reasons cited for refusal were not at risk for HIV 20(44.4%), tested before 18(40%) , and felt too ill 3(6.6%), two did not want to tell and for two not recorded.

As depicted in Table1, among the study participants 278 (51.6 %) and 261 (48.4%) were males and females respectively. According to age distribution, the highest distribution 157 (29.1%) was in the age range of 25-29, followed by 141(27.1%) age range of 19-24. The main religion 357(66.2%) was Muslim; followed by Orthodox 138 (25.6%) and the rest were Protestants and catholics. By ethnicity, the majorities 415(77%) were Oromos; followed by Amhara 89(16.9%). As to the marital status, the majorities 358(66.4%) were married, followed by Single 151 (28%) and the remaining were divorced, widowed and living together. As to the literacy status, 23.9%, 23.4%, 22.3%, 21.3% and 9% were illiterate, primary, read and write,secondary and tertiary respectively. By occupation, the majorities 157 (29.1%) were house wives, farmers 129 (23.9%), and students 96 (17.8%). Most of respondents 263 (48.8%) have no income followed by having income of more than 495.00 Eth. Birr/month 188 (34.9%).

Table 1:-Socio demographic characteristics of OPD clients with possible sign of HIV infection in West Arsi zone, 2010

Variables	Number	Percent
Age group (n=539)		
19-24	146	27.1
25-29	157	29.1
30-34	75	13.9
35-39	81	15.0
40-44	23	4.3
45+	57	10.6
Sex (n=539)		
Male	278	51.6
Female	261	48.4
Religion (n=539)		
Orthodox	138	25.6
Muslim	357	66.2
protestant	32	5.9
catholic	10	.9
Others	2	.4
Ethnicity(n=539)		
Amhara	89	16.9
Oromo	415	77
Gurage	17	3.2
Tigray	5	.9
Other	13	2.4
Marital status (n=539)		
Married	358	66.4
Single	151	28
Divorced	15	2.8
Widowed	5	.9
Living together	10	1.9
Education (n=539)		
Illiterate	129	23.9
Read/write	120	22.3
Primary	126	23.4
Secondary	115	21.3
Tertiary	49	9.1
Occupation(n=539)		
Farmer	129	23.9
Merchant	63	11.7
House wife	157	29.1
Student	96	17.8
GO employee	67	12.4
NGO employee	4	.7
Unemployed	17	3.2
Others	6	1.1
Income(n=539)		
≤ 495	88	16.3
>495	188	34.9
No income	263	48.8

Poverty line- Income less than one dollar per day and the exchange with regard to the purchasing power in Ethiopian currency for one dollar is 16.5 birr which is 495 birr monthly. (Human development report 2007/8)

NB. By religion other 2 were seventh day Adventist believers, others by ethnicity were Wolaita 7, and 6 kanbata, by occupation other 6 were daily laborers.

5.2 Knowledge and personal risk perception about HIV/AIDS

As presented in Table 2, among 539 participants of the study, the majorities 533(98.9%) heard the disease called HIV/AIDS. Most of the participants 477(88.5%) mentioned that HIV has no cure, but some 62 (11.5%) said that it has cure.

The majorities 519 (96.3%) identified unprotected sexual intercourse as the main mode of HIV transmission. Others 449 (83.2%), 213 (39.5%), 145 (26.9%), 144 (26.7%),111 (20.6%) and 73 (13.5%) cited sharing of sharps with some one, transfusion of infected blood, mothers to child during pregnancy, mothers to child during delivery, mothers to child during breast feeding, and blood contact as means of HIV transmission respectively.

Only seventy one (13.2%) mentioned all the three ways of mother to child transmission of HIV.

Almost half of the study subjects 261 (48.4%) have poor knowledge, 196 (36.4%) have fair knowledge, and only few 84(15.4%) have good knowledge of ways of HIV transmission.

About 98.5% of the participants mentioned that HIV is not transmitted by wearing clothes, shaking hands of a person, and sharing a meal with a person living with HIV/AIDS, so that the majorities have no any misconceptions about ways of HIV transmission. Very few 8 (1.5%) , 7 (1.3%), 3 (.6%)and 2 (.2%) have the misconception that HIV is transmitted by wearing of clothes, sharing a meal, shaking hands of a person living with HIV/AIDS, and by mosquito bite.

Almost three fourth 387 (71.8%) mentioned avoiding sex as a main methods of HIV prevention. Three hundred seventy one (68.8%), and 259 (48.1%) mentioned staying with only one uninfected partner faithfully and using condom every time during sex as a method of HIV prevention respectively.

Generally, only about a third of the participants 265 (30.6%) have good knowledge in identifying the three methods of HIV prevention. About 60% Of the respondents knew any one who is infected with HIV/died with AIDS and about 75% of the respondents mentioned that a healthy looking person can be positive for HIV and a fourth of the respondents mentioned that a healthy looking person can not be positive for HIV. Around 60% of the participants thought that they can not get the virus HIV, that cause AIDS and only 40% thought that they can get the virus HIV, that cause AIDS.

With regard to the chance (risk) of getting infected with HIV, the majorities 416 (77.2%) cited low, 93 (17.3%) and 30 (5.6%) cited medium, and high risk of getting respectively.

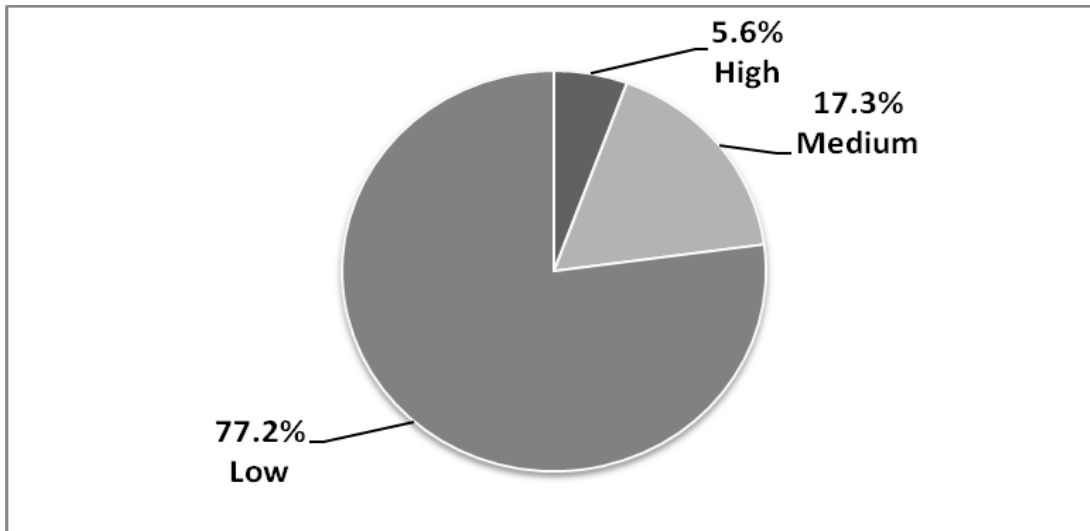


Figure: 1 Risk of getting the virus that cause AIDS among OPD clients with clinical sign, West Arsi zone, Decem. 2010

For those who mentioned their risk of getting the virus, HIV, to be medium and high, the reasons cited were having multiple sexual partners 44(35.8%), sexual contact with out condom 42(34.1%), injection with unsterile needle 23(18.7%), sexual contact with HIV positive 5(4.1%), and others 9(7.3%).

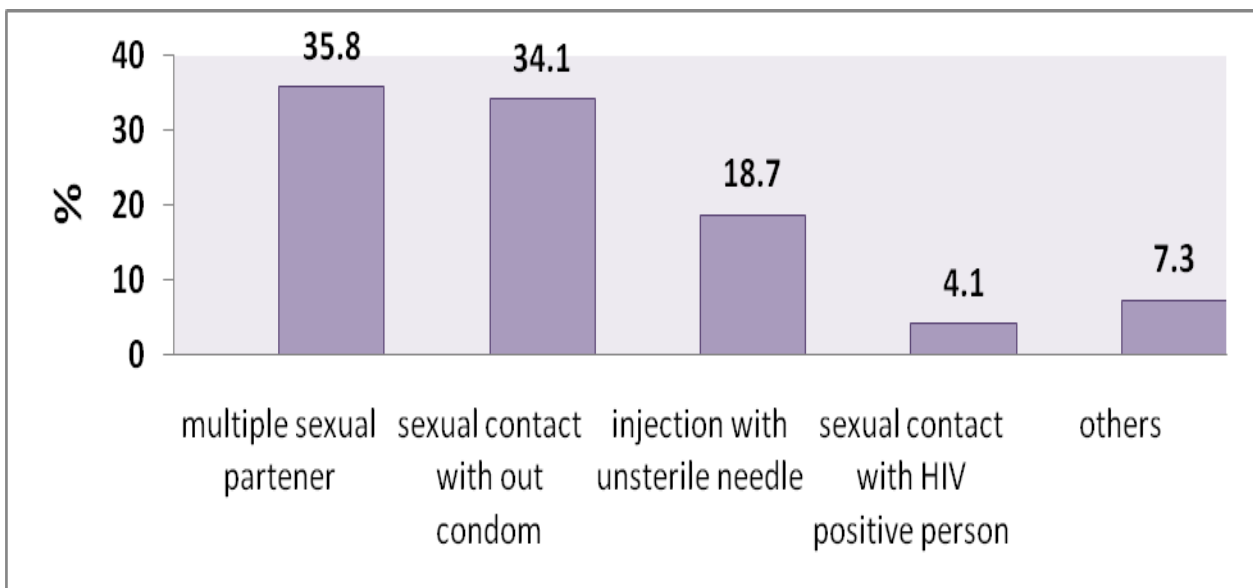


Figure 2. Reasons mentioned for having medium and high risk of HIV infection among OPD clients with possible sign, West Arsi zone, December, 2010

For those who mentioned their perceived risk of getting the virus, HIV, to be low, the reasons mentioned were sexual partner trust 226 (54.3%), no injection with unsterile needles 89 (21.4%), abstinence 61 (14.7%) and others 5 (.9%).

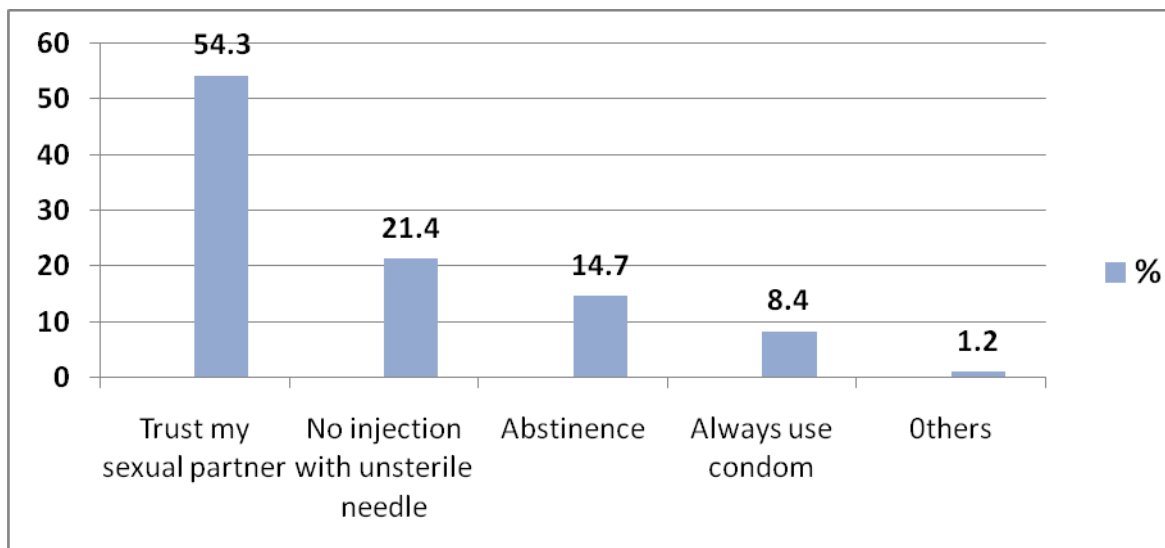


Figure 3. Reasons mentioned for having low risk of HIV infection among OPD clients with possible sign, West Arsi zone, December, 2010

Table 2: Knowledge and personal risk perception about HIV/AIDS among OPD clients with possible sign of HIV infection, West Arsi zone, December, 2010

Variables	Number	percent
Can HIV be cured? (n=539)		
Yes	62	11.5
No	477	88.5
Means of HIV transmission (n=539)		
Sexual intercourse	519	96.3
Mother to Child during pregnancy	145	26.9
Mother to Child during delivery	144	26.7
Mother to Child during BF	111	20.6
Transfusion of infected blood	213	39.5
Sharing of Sharps with infected (Needles..)	449	83.3
MTCT	71	13.2
Knowledge of ways of HIV transmission(n=539)		
Good knowledge	82	15.2
Fair Knowledge	196	36.4
Poor Knowledge	261	48.4
Misconception on ways HIV transmission(n=539)		
Have one of the misconception	20	3.7
No any misconception	519	96.3
Methods of HIV prevention (n=539)		
Avoiding Sex	387	71.8
Using condom every time	259	48.1
Staying with one partner faithfully	371	68.8
Others (specify)	8	1.5
Knowledge of methods of HIV prevention (n=539)		
Identified three main ways of prevention	265	30.6
Not identified three main ways of prevention	374	69.4
Healthy looking person be Positive for HIV(n=539)		
Yes	390	72.4
No	149	27.6
Do you think you can get the virus? (n=539)		
Yes	214	39.7
No	313	58.1
No response	12	2.2

NB: For some variables, percent might be above hundred as more than one response is possible

5.3 Attitude towards people living with HIV/AIDS

According to the attitudes of the respondents towards people living with HIV/AIDS shown in Table 3 below, 436 (80.9%), 473(87.8%), and 405 (75.5%) of the respondents were willing to share a meal with a person known have HIV/AIDS , willing to care for HIV positive family member , and willing to purchase from shop of HIV positive person / respectively. Almost half 290 (53.8%) of the respondents mentioned that they will not keep secret if a family member is HIVpositive, and 471(87.4%) cited a HIV positive teacher sould be allowed to continue teaching. Almost three fourth 398 (73.8%) of respondents disagreed that the name of PLWHA should be made public so that others avoid them. About a third of the respondents 188 (34.9 %) mentioned correctly the anticipated (desired) attitude to six of the indicators and hence showed accepting attitude towards people living with HIV/AIDS.

Table 3: Accepting attitude toward those living with HIV among OPD clients with possible sign of HIV infection, West Arsi zone, 2010

Variables	Number	percentage
Willing to share a meal with HIV/AIDS person (n=539)		
Yes	436	80.9
No	103	19.1
Willing to care for HIV positive family member (n=539)		
Yes	473	87.8
No	66	12.2
Willing to purchase from shop of HIV positive person /AIDS (n=539)		
Yes	405	75.1
No	134	24.9
Keep secret if somebody is HIV Positive in the family (n=539)		
Yes	249	46.2
No	290	53.8
An HIV positive teacher should be allowed to continue teaching (n=539)		
Yes	471	87.4
No	68	12.6
Names of PLWHA should be made public so that others avoid them (n=539)		
Agree	117	21.7
Indifferent	24	4.5
Disagree	398	73.8
Accepting attitude to six of the indicators(n=539)	188	34.9

5.4 Provider-initiated HIV counseling and testing

As shown in table 4 below, the majority 429 (79.6%) of the respondents have heard of provider initiated HIV counseling and testing and the major source of their information was health workers 248(57.8%), and mass media 73(17%), and family members 57(13.3%), and friends 51(11.9%). The majorities (52%) are very much in favour and 36.4% are extremely in favour of PIHCT.

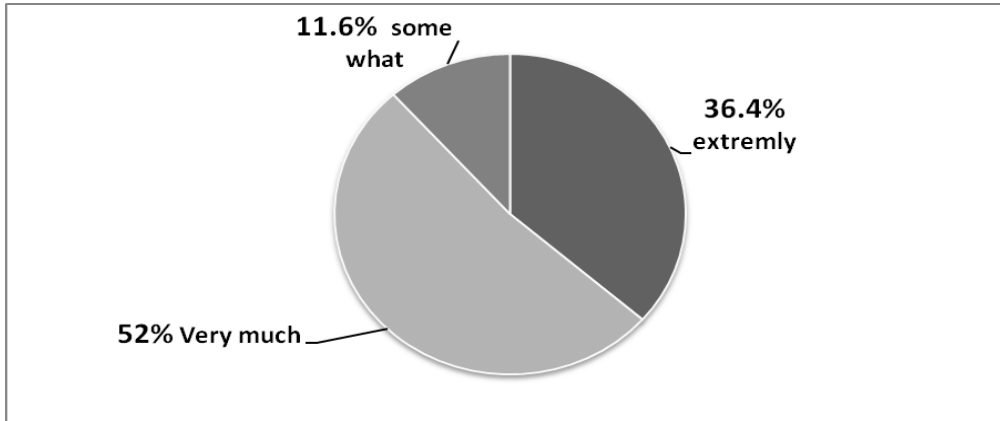


Figure 4. Extent of support for PIHCT among OPD patients with clinical signs, West Arsi Zone, December, 2010

The majority 411(95.8%) of the participants felt that PIHCT is important and the reasons pointed out were that about 75% mentioned it helps patients get access to ART, 187(43.6%), 55(12.8%), 60 (13.9%) mentioned that it makes easier for clients to be tested, results in less discrimination of HIV positive patients and increases number of tested people respectively. The majorities 268(62.5%) have poor knowledge, 135(31.5%) have fair knowledge, and only 26(6.1%) have good knowledge of the importance of PIHCT. The majorities 398(92.8%) felt that PIHCT has no influence. However, few 38(7.2%) mentioned that PIHCT has an influence and the reason mainly pointed out was that it avoids patients visiting health facilities for fear of testing for HIV. The majorities 501(92.9%) of the respondents pointed out that any one should check for serostatus, and about half 315(58.4%) cited that one can be tested for HIV at any time, and 210(39%), 227(42.1%), and 60(11.1%), can be tested when sick, before marriage, and if one has multiple sexual partners respectively.

About 361(67%) of respondents were tested for HIV before and the reasons for testing were self interest 112(42.1%), initiated by health workers 155(42.9%), during antenatal care 46(12.7%) and for blood donation 8(2.2%) and the place of testing were government health centers 224(62%) followed by government hospital/clinic 98(27.1%), stand alone VCT 32(8.9%) and private clinic/hospital 7(1.9%).

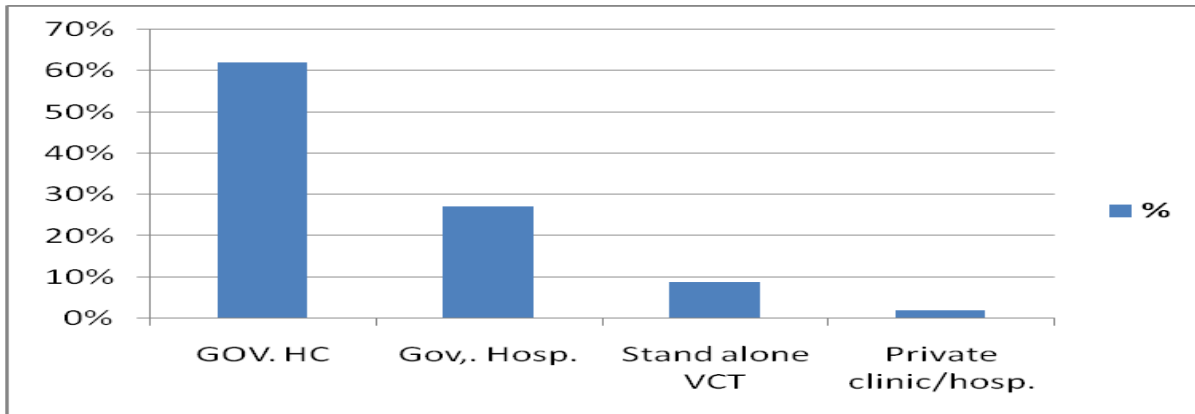


Figure 5. Place of testing for HIV before among OPD clients with possible sign, West Arsi zone, December, 2010 (n=361)

The others 178(33%) were not tested before for HIV and the reasons mentioned for not tested before were not a risky person for HIV 56 (10.4%), fear of stigma and discrimination 33(6.1%), partner trust 23(4%), unable to cope with positive result 12(2.2%), don't want to know the result 6(1.1%), not sure of confidentiality 6(1.1%), fear of partner reaction 9(1.7%), not sure of confidentiality 6(1.1%) belief that testing not useful 5(.9%) and not heard of testing for HIV 3(.6%)

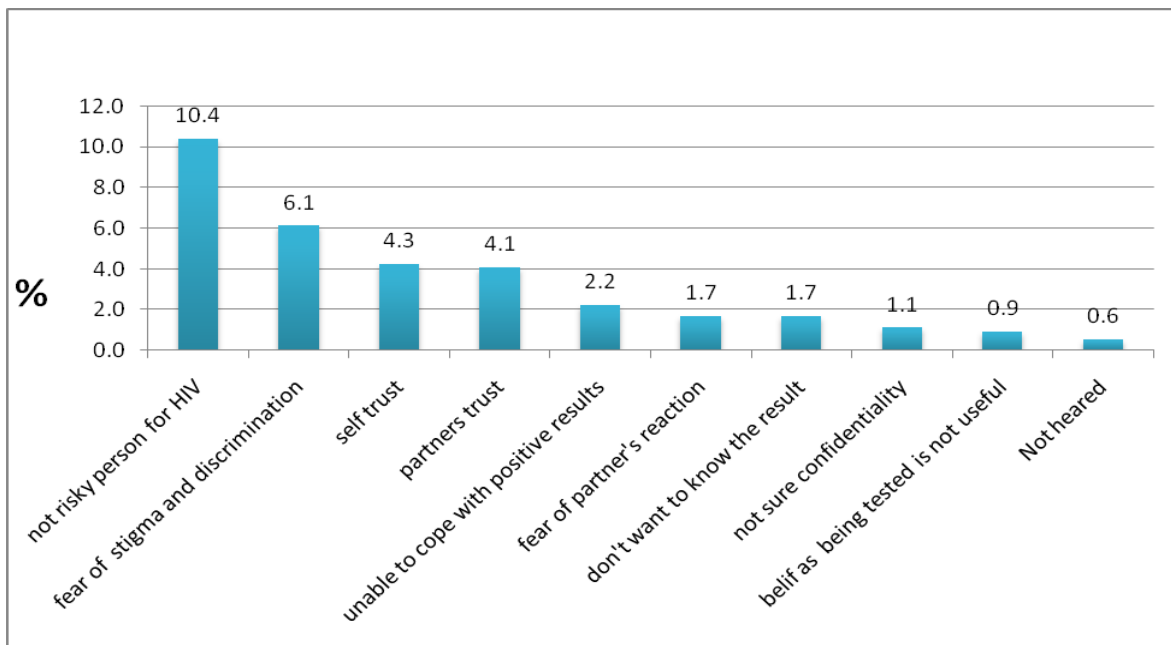


Figure 6. Reasons cited for not tested for HIV before among OPD clients with possible sign, West Arsi zone, December, 2010 (n=178)

As per the attitude of the respondents, people in need of HIV testing were female commercial sex workers 259(48.1%), people with history of unprotected sexual intercourse 190(35.3%), any one at risk 180(33.4%), drivers 151(28%), those who are sick 145(26.9%), those with multiple sexual partners 130(24.1%), any one sexually active 103(19.1%), TB patients 82(15.2%), and others14 (2.6%) like people with history of contact with blood, penetration with sharps and sharings of needles for injections.

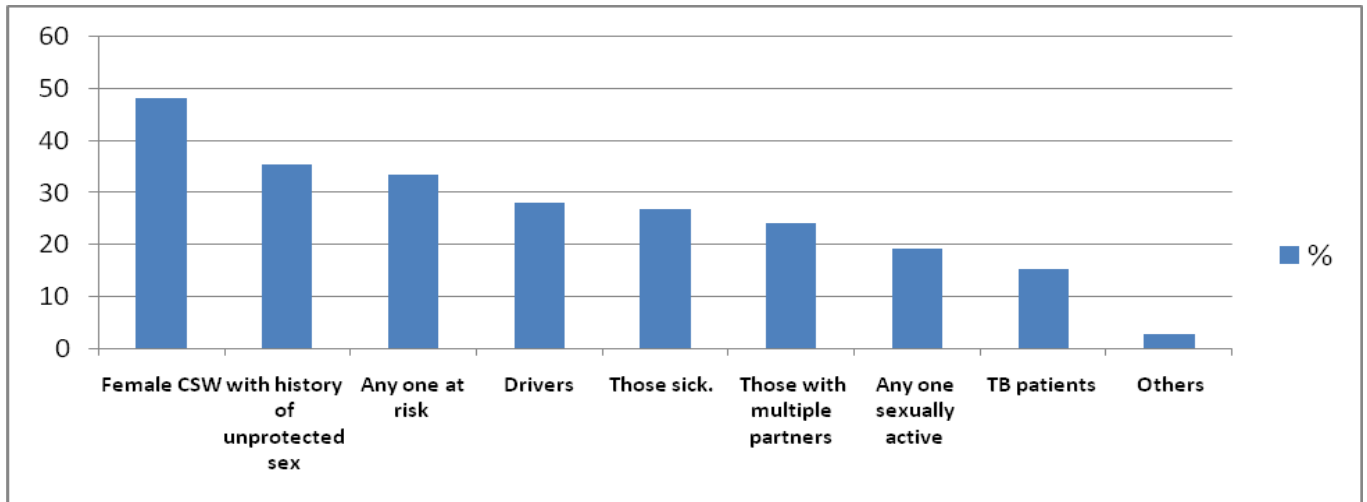


Figure 7 .Respondents' attitude of people in need of HIV testing among OPD clients with clinical sign, West Arsi zone, December, 2010

Table 4: PIHCT Importance and Knowledge among OPD clients with possible sign of HIV infection in West Arsi zone, December, 2010

Variables	Number	Percentage
Have you ever heard of PIHCT (n=539)		
Yes		
No	429	79.6
	110	20.4
Source of PIHCT information(n=429)		
Health worker	248	57.8
Mass media	73	17.0
Freiends	57	13.3
Family member	51	11.9
Did you feel that PIHCT is important? (n=429)		
Yes	411	95.8
No	18	4.2
Importance of PIHCT(n=429)		
Help patients get access to ART	329	76.7
Makes easier for clients to be tested	187	43.6
Results in less discrimination of HIV positive patients	55	12.8
Increase number of tested people	60	13.9
Knowledge on Importance of PIHCT(n=429)		
Good knowledge	26	6.1
Fair knowledge	135	31.5
Poor knowledge	268	62.4
Did you feel that PIHCT has influence? (n= 429)		
Yes	38	7.2
No	398	92.8
Any one should check for sero status(n= 539)		
Yes	501	92.9
No	38	7.1
At which time should one be tested for HIV(n=539)		
When one is sick	210	39.0
Before marriage	227	42.1
If one has MSP	60	11.1
At any time	315	58.4
Have you ever been tested for HIV? (n= 539)		
Yes	361	67.0
No	178	33.0
What was the reason of having HIV test?(n=361)		
Self interest	152	42.1
Initiated by health worker	155	42.9
During ANC	46	12.8
For blood donation	8	2.2

NB: For some variables, percent might be above hundred as more than one response is possible

As depicted in Table 5 below, for willingness to accept PIHCT, the majority 466(86.5%) were willing to accept it as per the new guideline of HCT recommendation of Ethiopia and the main factors for willingness to accept PIHCT were health workers recommendations 124(26.6%), TV/radio messages 105(22.5%), knowing treatment is available 89(19.1%), knowing test result is confidential 39(8.4%), sick 34 (7.3%), encouraged by someone tested 22(4.1%), friends /family advised 14 (2.6%) and worried about previous sexual contact 8(1.5%).

The major perceived barriers for not willing to accept PIHCT were mainly thinking self as not being at risk 32(43.8%), fear of stigma and discrimination 17(23.3%), fear of partner reaction 7(9.6%). Others were tested before 5(6.8%), unable to cope with positive result 3(4.1%), no access to good quality clinic 3(4.1%), belief that testing is not useful 2(2.7%), don't want to know the result 2 (2.7%), and partners trust 2(2.7%).

The PIHCT willingness, pre-test, post-test counseling acceptability and overall acceptability rate were 86.5%, 98.9%, 98.7% and 83.1% respectively.

Table 5: PIHCT Willingness and Acceptability among OPD clients with possible sign of HIV infection in West Arsi zone, December, 2010

Variables	Number	Percentage
Willing to accept PIHCT (n=539)		
Yes	466	86.5
No	73	13.5
Perceived reasons for willing to accept PIHCT(n=466)		
TV/radio message	105	22.5
Knowing treatment is available	89	19.1
Knowing test result is confidential	39	8.4
Heard test & get result on the same day	31	6.7
Encouraged by some one tested	22	4.7
Worried about the previous sexual contact	8	1.7
Parents/family/friends advised to have test	14	3.0
Sick	34	7.3
Health worker recommendation	124	26.7
Perceived barriers for PIHCT (n=73)		
Fear of stigma and discrimination	17	23.3
Fear of partner's reaction	7	9.6
Unable to cope with the positive result	3	4.1
Thinking self as not being at risk	32	43.8
No access to good quality clinic	3	4.1
Belief that testing is not useful	2	2.7
Don't want to know the result	2	2.7
Partners trust	2	2.7
Tested before	5	6.8
Pretest acceptability(n=466)		
Accepted	461	98.9
Not accepted	5	1.1
Test result(n=454)		
Positive	53	11.7
Negative	401	88.3
Post test acceptability (n=454)		
Accepted	448	98.7
Not Accepted	6	1.3
Over all acceptability (n=539)		
Accepted	448	83.1
Not accepted	91	16.9

As presented in Table 6 below, Majority of the study subjects were STI patients 111 (20.6%) followed by TB 100 (18.6%), pneumonia 86 (16%), diarrhoea 52 (9.6%), skin conditions 46(8.5%), weight loss>10% 30(5.6%) , oral thrush 20(3.7%), Herpes zoaster 19(3.5%), prolonged fever 18(3.3%), repeated infection 17(3.2%) and un explained fever 17(3.2%).

Among those willing to accept PIHCT, the majority accepted the pretest session except five cases (one case of TB and diarrhea, two weight loss >10%, and one case of oral thrush). Among those who accepted the pre-test session, except thirteen cases (two cases of STI, three cases of TB, two cases of pneumonia, two cases of diarrhea, and each one case of prolonged fever, repeated infections, vaginal caandidiasis and un explained fever), all accepted the post test counseling session. There fore in both the pre-test and post test sessions, there are considerably larger proportion of acceptors than non acceptors for PIHCT.

All study subjects with skin conditions, herpes zoaster, herpes simplex ulceration, a spouse with high risk occupation, oesophageal thrush, a spouse known to be HIV and PGL were willing & received both the pre and post test session. Thirteen study subjects mentioned above who received the pre test session did not come and receive the post test counseling session

Table 6: Comparison of willingness, pre-test and post test acceptance among OPD clients with possible sign of HIV infection in West Arsi zone, December, 2010

Possible clinical sign	Total willingness		Pre-test acceptor		Post test acceptor		Total study subjects	
	N ₀	%	N ₀	%	N ₀	%	N ₀	%
STI	95	20.4	95	20.6	93	20.8	111	20.6
TB (PTB or EP)	92	19.7	91	19.7	88	19.6	100	18.6
Severe and recurrent bacterial infection	71	15.2	71	15.4	69	15.4	86	16.0
Diarrhoea (unexplained)	45	9.7	44	9.5	42	9.4	52	9.6
Skin conditions	40	8.6	40	8.7	40	8.9	46	8.5
Weight loss > 10%	27	5.8	25	5.4	25	5.6	30	5.6
Oral thrush/hairy leukoplakia	15	3.2	14	3.0	14	3.1	20	3.7
Herpes zoster	16	3.4	16	3.5	16	3.6	19	3.5
prolonged fever	16	3.4	16	3.5	15	3.3	18	3.3
Repeated infections	15	3.2	15	3.3	14	3.1	17	3.2
Un explained fever	13	2.8	13	2.8	12	2.7	17	3.2
Vaginal candidiasis	10	2.1	10	2.2	9	2.0	11	2.0
Herpes simplex ulcerations(genital or oral)	6	1.3	6	1.3	6	1.3	6	1.1
PGL	2	0.4	2	0.4	2	0.4	2	0.4
A spouse/partner with high risk occupation	1	0.2	1	0.2	1	0.2	2	0.4
Oesophageal thrush	1	0.2	1	0.2	1	0.2	1	0.2
Spouse/partner known to be HIV positive	1	0.2	1	0.2	1	0.2	1	0.2
Total	466	100.0	461	100.0	448	100.0	539	100.0

5.5 Factors influencing the acceptability of PIHCT

For this study, factors related with acceptability of PIHCT were analyzed. A logistic regression model was used to examine factors associated with acceptability of PIHCT as independent variable. Variables that were found statistically significant at ($p < 0.05$) by bivariate logistic regression analysis were entered and analyzed by multiple logistic regression analysis.

In the bivariate analysis, acceptability for PIHCT was not significantly associated with age, sex, religion, literacy status, ethnicity, marital status and occupation at ($P < 0.05$) and Knowledge variables about PIHCT were not significantly associated with PIHCT acceptability at ($P < 0.05$).

As depicted in Table 7 below, in bivariate logistic regression analysis, those whose income was above 495 were 0.56 times less likely to accept PIHCT than those with no income (OR= 0.56, CI=0.29-0.85), those who have good knowledge on ways of HIV transmission was 0.41 times less likely to accept than those with poor knowledge on means of HIV transmission (OR=0.41; CI= 0.18-0.96). Study subjects who had not identified the three methods of HIV prevention were 0.6 times less likely to accept PIHCT than those who identified the three methods (OR=0.60; CI=0.33-0.99). Study subjects who were not willing to share a meal with known HIV/AIDS patients were 0.33 times less likely to accept PIHCT than those willing to share a meal with HIV/AIDS patients (OR=0.33; CI=0.19-0.54) and those who were not willing to care for a family or a relative ill with HIV/AIDS were 0.35 times less likely to accept PIHCT than those willing to care for a family with HIV/AIDS (OR=0.35; CI=0.19-0.63). Study subjects who were not willing to buy food from a seller/shopper who had HIV were 0.43 times less likely to accept PIHCT than those willing to buy food from a seller who had HIV (OR=0.43; CI=0.28-0.68), those who said HIV positive teacher be allowed to continue teaching were 3 times more likely to accept than those who said HIV positive teacher should not be allowed to continue teaching (OR=3.01, CI=1.70-5.30). Study subjects who have no information of PIHCT service were 0.36 times less likely to accept PIHCT than those ever informed (heard) of PIHCT (OR=0.36; CI=0.22-0.60) and study subjects who rated the extent in favour of PIHCT to be somewhat/less and very much in favour of it were 0.30, and 0.31 times less likely to accept than those mentioned extremely in favour (OR=0.31, CI=0.12-0.77, OR=0.30; CI=0.11-0.85) respectively. Study subjects who felt that PIHCT is important were 3.6 times more likely to accept PIHCT than those who did not feel that PIHCT is important (OR=3.6; CI= 1.3-10.0) and subjects who were not tested for HIV before were 0.35 times less likely to accept PIHCT than those who were tested before (OR=0.35; CI=0.22-0.55).

After adjusting independent variables which are found to be statistically significant in bivariate logistic regression analysis, study subjects with no information of PIHCT service were 0.47 times less likely to accept PIHCT than those who heard information of PIHCT service (OR=0.47; CI=0.28-0.80) and study subjects with very much and less support for PIHCT were 0.30 and 0.31 times less likely to accept PIHCT than those extremely supporting PIHCT (OR=0.30; CI=0.11-0.85 and OR=0.31; CI=0.12-0.77) respectively.

In addition, study subjects not tested for HIV before were 0.20 times less likely to accept PIHCT than those tested before (OR=0.20; CI=0.10-0.41).

Table 7: Adjusted OR of variables associated with acceptability of PIHCT among OPD clients with possible sign of HIV infection in West Arsi zone, 2010

Variables	Acceptors		Non acceptors		OR (95% CI)	Adjusted OR (95% CI)
	No	%	No	(%)		
Age						
*19-24	118	80.8	28	19.2	1.0	1.0
25-29	126	80.3	31	19.7	0.56 (0.26-1.2)	0.55 (0.15-1.9)
30-34	64	85.3	11	14.7	0.74 (0.35-1.6)	0.66 (0.21-2.02)
35-39	62	76.5	19	29.5	0.52 (0.21-1.3)	0.3 (0.07-1.16)
40-44	21	91.3	2	8.7	0.89 (.039-2.01)	0.78 (0.25-2.47)
45+	43	75.4	14	24.6	0.32 (0.067-1.6)	0.42 (0.06-2.87)
Sex						
*Male	237	85.3	41	14.7	1.0	1.0
Female	211	80.8	50	19.2	1.37 (0.87-2.15)	0.92 0.92-1.80
Education						
*Illiterate	29	22.5	100	77.5	0.98 (0.44-2.22)	1.0
Read and write	23	19.2	97	80.8	0.87 (0.38-2.02)	1.05 (0.53-2.10)
Primary	25	19.8	101	80.2	0.78 (0.33-1.8)	1.13 (0.55-2.33)
Secondary	15	13	100	87	0.45 (0.18-1.12)	0.7 (0.29-1.73)
Tertiary	13	23.5	16	73.5	1.0	2.69 (0.91-8.00)
Marritat status						
*Married	298	83.2	60	16.8	0.81 (0.17-3.9)	1.0
Single	129	85.4	22	14.6	0.68 (0.14-3.4)	0.26 (0.03-2.3)
Divorced	11	73.3	4	26.7	1.45 (0.21-9.9)	0.37 (0.04-3.5)
Widowed	2	40	3	60	6 (0.56- 63.9)	2.0 (0.13-30.7)
Living together	8	80	2	20	1.0	0.55 (0.02-16.4)
Income						
*≤495	76	86.4	12	13.6	0.71 (0.38-1.36)	1.0
>495	169	89.9	19	10.1	0.56 (0.29-0.85)	0.66 (0.30-1.44)
No income	216	82.1	47	17.9	1.0	1.52 (0.76-3.04)
Extent in favour of PIHCT						
*Extremly	141	90.4	15	9.6	1.0	1.0
Very much	195	87.4	28	12.6	0.25 (0.11--0.56)	0.3 (0.11-0.85)
Some what	35	19.7	15	80.3	0.34 (0.16--0.69)	0.31 (0.12-0.77)
HIV Risk perception						
High	1	3.3	29	96.7	1.0	1.0
Medium	21	22.6	72	77.4	1.2 (0.02-1.03)	0.14 (0.016-1.3)
Low	83	20	333	80	0.25 (0.68-2.0)	1.29 (0.58-2.8)
Knowledge of HIV transimission						
Good knowledge	20	24.4	62	75.6	0.41 (0.18-0.96)	*1.0
Fair Knowledge	34	11.3	162	82.7	0.99 (0.62-1.6)	0.3 (0.08-1.2)
*Poor Knowledge	51	19.5	210	80.5	1.0	1.11 (0.52-2.4)

Knowledge of HIV prevention								
*Identified three ways	146	88.5	19	11.5	1.0		1.0	
Not identified three ways	305	81.6	69	18.4	0.6	(0.33-0.99)	0.69	(0.29-1.7)
Willing to share a meal with known HIV/AIDS patient								
*Yes	380	87.2	56	12.8	1.0		1.0	
No	71	68.9	32	31.1	0.33	(0.19-0.54)	0.49	(0.64-1.5)
Willing to care for family or relative ill with HIV								
*Yes	406	85.2	67	14.8	1.0		1.0	
No	45	68.2	21	31.8	0.35	(0.19-0.63)	1.21	(0.31-4.8)
Willing to buy food from a shop keeper or seller had HIV								
*Yes	352	86.9	53	13.1	1.0		1.0	
No	99	73.9	35	26.1	0.43	(0.26-0.68)	0.67	(0.24-1.81)
Keep secret if somebody is HIV Positive in the family								
Yes	209	83.9	40	16.1	0.89	0.57-1.40	1.0	
No	239	82.4	51	17.6	1.0		0.78	(0.39-1.58)
HIV positive teacher be allowed to continue teaching								
* Yes	403	85.6	63	14.4	3.02	1.7-5.3	1.0	
No	45	66.2	23	38.8	1.0		0.99	(0.29-3.46)
Information on PIHCT(N=539)								
*Yes	373	86.9	56	13.1	1.0		1.0	
No	78	70.9	32	29.1	0.36	(0.22--0.6)	0.47	(0.28-0.80)
knowledge on importance of PIHCT								
Good knowledge	3	11.5	23	88.5	1.0		1.0	
Fair knowledge	18	13.3	117	86.7	0.68	(0.19-2.4)	0.19	(0.019-1.96)
Poor knowledge	43	16	225	84	0.80	(0.45-1.5)	0.86	(0.39-1.82)
Felt PIHCT is important								
*Yes	366	88.7	50	12.3	1.0		1.0	
No	12	66.7	12	33.7	3.6	(1.3-10.0)	0.88	(0.11-3.7)
Tested for HIV before								
*Yes	327	90.6	34	9.4	1.0		1.0	
No	134	75.3	44	24.7	0.35	(0.22-0.55)	0.20	(0.10-0.41)

* Referent groups, Categories with statistical significance labelled in bold.

6. Discussion

HIV/AIDS continues to be a major global health priority. AIDS-related illnesses remain one of the leading causes of death globally and are projected to continue as a significant global cause of premature mortality in the coming decades. HIV counseling and testing is a gateway to prevention, treatment, care and support services and an essential tool in the control of HIV/AIDS epidemic (1, 5) and this study assessed the acceptability of PIHCT among OPD clients with possible sign of HIV infection and its factors.

Four hundred seventy seven (88.5%) of the study subjects thought that there is no cure for HIV/AIDS which is higher than other similar study done in Addis Ababa (26) which reported 64.9% which might be because the participants of this study obtained better information on HIV from different sources coupled with expansion of VCT, PIHCT and ART services.

Five hundred nineteen (96.3%) of the respondents cited sexual intercourse as a means of HIV transmission which is comparable with a study in Addis Ababa (25 and 26). Only few (13.2%) participants pointed out mother to child transmission as a ways of HIV transmission which is consistent with other studies in Addis Ababa and DHS report (10, 25, 26) and only twenty study subjects (3.7%) had misconception about means of HIV transmission which is comparable with a study in Addis Ababa reported as 4.3% and 4.0% respectively (25, 26).

Only few 84(15.4%) have good knowledge of ways of HIV transmission which is comparable with that of Addis Ababa (26) and only seventy one (13.2%) mentioned all the three ways of mother to child transmission of HIV which is also comparable with that of Addis Ababa (26).

Three hundred eighty seven (71.8%) subjects mentioned abstinence as a method of prevention followed by faithfulness (68.8%) and condom (48.1%) which is comparable with other studies in Ethiopia (10, 25, 26). Generally almost about a third (30.6%) of the study subjects is knowledgeable about means of HIV prevention which is almost comparable with the study of Addis Ababa (26).

Three hundred ninty (72.4%) subjects believed that a healthy looking person could be positive for HIV which is lower as compared to similar study of Addis Ababa which was 89.4%(26) and higher than DHS report (10) which is 51% for women and 69% for men which might be because of the majority of settings of this study which is rural compared to the study in Addis Ababa and to the compressive nature of DHS report (both urban and rural) as well as by the time factor as DHS was conducted before five years where HCT was not well expanded and utilized.

In this study, only few (5.6%) of the participants reported they had high chance of getting infected with HIV which is lower by half compared to similar study undertaken in Addis Ababa (26) and almost three fourth (77.2%) of the participants have low chance of getting infected with HIV.

In addition, the major perceived barrier cited for PIHCT acceptability among the study participants was thinking self as not being at risk (43.5%) which is almost more than twice of the result of study conducted in Addis Ababa (26) and comparable to Austria which was 40% (22). This behavior, not being at risk, might be a threat for HCT acceptability which might adversely create a challenge for subsequent prevention, control and care services.

As far as societal factors are concerned, higher proportion of participants reported that they are willing to share a meal with a person who had HIV/AIDS (80.9%) which is comparable with the study conducted in Addis Ababa(26) and are also willing to purchase from shops of HIV positive persons (75.1%) and believed that HIV positive teachers without symptom should be allowed to continue teaching (87.4%) which is comparable to the study conducted in Addis Ababa(26) but higher than of DHS report (10). And almost below half (46.2%) of participants mentioned that if somebody is HIV positive in the family they would keep it a secret which is almost comparable with DHS report (10) but lower than that of Addis Ababa which is 65.7% (26). Accepting attitudes to all of the indicators was 34.9 % which is higher compared to the study of Addis Ababa which was 21.4% (26) and that of DHS 11% among women and 17 % among men (10).

The self reported prevalence of prior HIV testing was (67 %) which is higher as compared with a study in Uganda, Botswana and Addis Ababa (18, 19, 25, and 26), and in this study about three fourth of the participants (79.6%) have heard about PIHCT which is higher compared to the study of Addis Ababa (26) which is about 45.7% and these might be due to the fact that health workers are providing awareness on the service and HCT services has been expanding and becoming routine coupled with improved HIV prevention efforts and care services ever than before. The majorities (88.4%) of the subjects supported PIHCT extremely /very much, which is comparable with a study in Botswana and Addis Ababa (22, 26) which plays a crucial role in integrating the PIHCT approach across the country. Majority (95.8%) of participants feel that PIHCT is important and the reasons cited were that it helps the clients get access to ART, makes it easier for clients to get tested, and increase number of tested people which are consistent with a study in Botswana and Addis Ababa(18, 26).

Almost few (7.2%) reported that PIHCT has influence and the reason cited is that it might lead to people avoiding using health care facilities because of fear of testing which is consistent with that of Addis Ababa (26), and far lower to Botswana(18).

High proportion of participants (86.5%) were willing to accept PIHCT which is comparable with a study in Addis Ababa (25), but higher than a study conducted in Arba minch 73% (5), and Addis Ababa 70.2% (26) which might be due to the fact that PIHCT service for all clients with possible clinical sign of HIV infection has been expanding together with ART service together with awareness creation via different meanses.

Among those who were willing to undergo PIHCT, 98.9 % accepted the pretest information of testing which is consistent with a study of Addis Ababa (26). Among 454 study subjects who were tested, 448 accepted the post test session which makes the posttest acceptability 98.7% and it is comparable with a study in Arba Minch and Addis Ababa (5, 26).

The overall acceptability rate of PIHCT in this study is 83.1% which is higher than a study done in Arba Minch, South Africa, Melbourne and Addis Ababa (5, 21, 17, 26) that is 35%, 47%, 68% and 67% respectively but lower than few African countries (23, 24), which might be due to the late introduction of the program in Ethiopia compared to these countries.

Eventhough there is low knowledge about ways of HIV transmission (15.4%); mother to child transmission (13.2%), HIV prevention (30.6%), and also low knowlegde of PIHCT benefits or importance (6.1%), which could cause a challenge for HIV/AIDS prevention and care services, the PIHCT willingness (86.5%) and acceptability (83.1%) observed in this study is high which is highly encouraging for continued integration of the PIHCT approach in all settings which consequently will contribute its part for prevention and control of HIV transmission.

As an access to antiretroviral treatment is improved in low and middle income countries, it creates a critical opportunity to simultaneously expand access to HIV prevention, and control which continue to be the mainstay of the response to the HIV epidemic. Without effective HIV prevention, there will be an ever increasing number of people requiring ART and the interventions, HCT, play a crucial role for prevention and treatment (12). PIHCT is essentially intended to supplement VCT service, so the existing VCT coupled with expanded routine voluntary and opt out screening, PIHCT, is believed to play an important role for the prevention and control of HIV/AIDS transmission in the country.

Subjects with low knowledge on the three methods of HIV prevention were less likely to accept PIHCT than those who identified all the three methods of HIV prevention (OR=0.6; CI=.33-.99) though not found to be significant predictor of acceptability of PIHCT in the multiple logistic regression analysis.

In bivariate logistic regression analysis, study subjects who were not willing to share a meal with known HIV/AIDS patients were less likely to accept PIHCT than those willing to share a meal with known HIV/AIDS patients (OR=0.33; CI=0.19-0.54) and those who were not willing to care for a family or a relative ill with HIV/AIDS were less likely to accept PIHCT than those willing to care for a family or a relative ill with HIV/AIDS (OR=0.35; CI=0.19-0.63) and those who were not willing to buy food from a seller/ keeper who had HIV were also less likely to accept PIHCT than those willing to buy food from a seller/ keeper who had HIV (OR=0.43; CI=0.28-0.68). All these stigmatizing attitudes were not found to be significant predictor of acceptability of PIHCT in the multiple logistic regression analysis but it atleast indicates that there are still stigmatizing attitudes and consistent with the study of Botswana (18).

On the adjusted covariates of acceptability of PIHCT, study subjects not having information on PIHCT service was 0.47 times less likely to accept PIHCT than those having information on PIHCT service (OR=0.47; CI=0.28-0.80), those with less and much support for PIHCT were less likely associated with acceptability than support extremely (OR=0.30; CI=0.11-0.85 and OR=0.31; CI=0.12-0.77) where less support was consistent with that of Addis Ababa(26) and not tested for HIV before was 0.20 times less likely associated with acceptability than tested before (OR=0.20; CI=0.10-0.41) which might indicate the positive response PIHCT information, support and previous HIV test have on the acceptability of PIHCT.

The main perceived reasons for PIHCT acceptability were health workers recommendation, TV/radio messages, knowing treatment is available, knowing test result is confidential, and sickness and this is consistent with a study in Botswana and Addis Ababa (18, 26).

The major perceived barriers for PIHCT acceptability were mainly thinking self as not being at risk, followed by fear of stigma and discrimination, and unable to cope with positive result, and again followed by fear of partner reaction, tested before, and partners trust of which the first three barriers were highly consistent with a study conducted in Botswana, Uganda, Austria, Massachusetts, and Addis Ababa (18, 19, 20, 22, 25, and 26).

7. Strengths and Limitations

Strengths of the study:

1. It tried to collect information on different variables which can determine acceptability of PIHCT.
2. It tried to maintain the routine procedure of consent, privacy and confidentiality.
3. It was conducted with high response rate and pre-test also carried out.

Limitations of the study:

1. As the study is cross sectional, there is difficulty in determining temporal relation ship.
2. The study didn't use qualitative method.
3. The study might be prone to selection and social desirability bias.

8. Conclusions

In this study:-

1. The knowledge on importance/benefits of PIHCT was low.
2. There is high over all PIHCT acceptability.
3. Three factors hearing of PIHCT service, extent of support for PIHCT and prior HIV testing were found to be significantly associated with PIHCT acceptability.
4. The major perceived barriers for PIHCT acceptability were mainly thinking self as not being at risk, followed by fear of stigma and discrimination, and unable to cope with positive result.

9. Recommendation

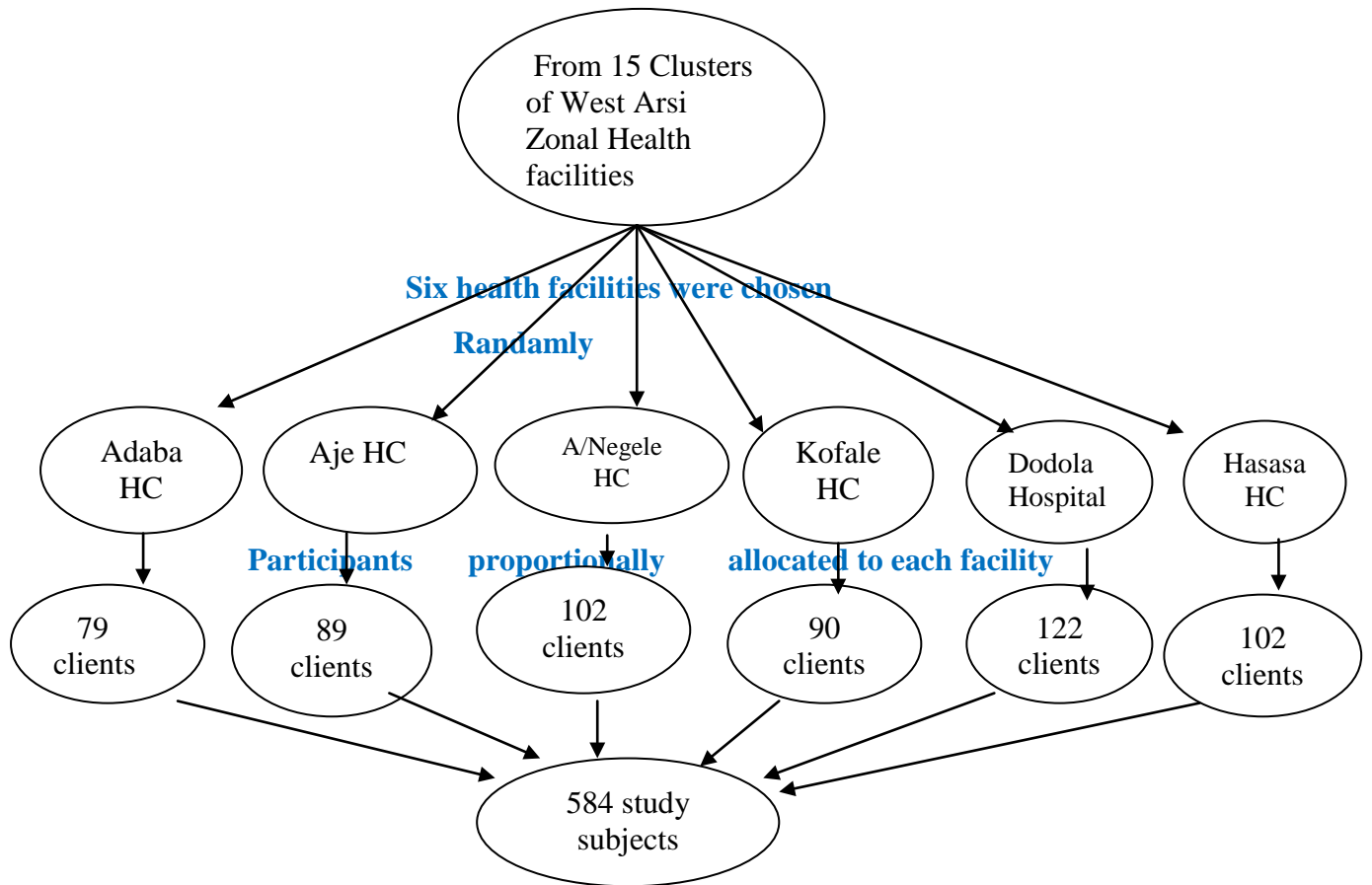
1. As knowledge on benefits or importance of PIHCT was low, there is a need for intensive and continued IEC/BCC at all level in general and health facilities level in particular.
2. As information (hearing) on PIHCT service, extent of support for PIHCT, and prior HIV testing were important predictors of PIHCT acceptability, promotional activities through different means should be in place to raise level of awareness, support and routine testing to facilitate its acceptability at all level in general and health facilities level in particular.
3. Awareness creation activities are still needed to be strengthened to reduce/avoid major barriers that affect PIHCT service utilization at all level.

10. References

1. World health organization. AIDS epidemic update, Geneva, Dec 2009.
2. Ministry of Health. Single point HIV prevalence estimate, Addis Ababa, June 2007.
3. Federal ministry of health. Guideline for HIV counseling and testing in Ethiopia, Addis Ababa, July 2007.
4. WHO. Investing in a comprehensive health sector response to HIV/AIDS – Scaling up treatment and accelerating prevention. 2004.
5. Jerene D., Endale A., Lindtjorn B. Acceptability of HIV counseling and testing among tuberculosis patients in south Ethiopia, Arba Minch. BMC international health and human rights 2007.
6. Ministry of Health. Integrated management of adolescent and adulthood illness acute care participant training manual, Addis Ababa Jan 2006.
7. Robert S. HIV testing: Rationale for changing recommendation, USA. HIV testing volume 15 issue 1 Feb/March 2007.
8. Ministry of Health. PIHCT participant handbook, Addis Ababa, Dec 2005
9. Ministry of Health. Ethiopia HIV/AIDS five year plan. Addis Ababa, 2003
10. Central Statistical Agency, ORC.MACRO. Ethiopia Demographic and Health Survey 2005, Addis Ababa, Calverton, Maryland, USA, 2006.
11. WHO. Guidance on provider-initiated HIV testing and counseling in health facilities, Geneva, 2007
12. WHO/UNAIDS. Policy statement on HIV testing, 2004
13. Federal ministry of health. National HIV/AIDS prevention and control office, AIDS in Ethiopia, Sixth report. Addis Ababa, Sep 2006
14. HIV/AIDS Prevention and Control Office. National HIV/AIDS policy, Addis Ababa, 2005
15. National Prevention Information Network. HIV Counselling, Testing, and Referral: Historical Perspective. CDC.1994
16. Paul Collini. Opt out HIV testing strategies, BMJ Publishing Group Limited 2006
17. WHO. The right to know: new approaches to HIV testing and counseling. WHO,2003
18. Weiser SD et al. Routine HIV testing in Botswana: a population-based study on attitudes, practices, and human rights concerns. PloS Medicine 3 (7): e261, 2006.
19. Nuwaha F, Kabatesi D, Muganwa M, Whalen CC. Factors influencing acceptability of voluntary counseling and testing for HIV in Bushenyi district of Uganda. East Afr Med J. 2002 Dec; 79(12):626-32)
20. RP Walensky, KA Freedberg. Voluntary HIV Testing as Part of Routine Medical Care in Massachusetts, MMWR, June 25, 2004/53(24); 523-526.

21. Kalichman¹ and L C Simbayi². HIV testing attitudes, AIDS stigma, and voluntary HIV counseling and testing in a black township in Cape Town, South Africa. *Sex Transm Infect* 2003; 79:442-447)
22. Sonia G, Claire P. Uptake of HIV screening in an antenatal clinic, Australian and New Zealand Journal of Obstetrics and Gynaecology 2005; 45: 365–367
23. Perez F, Zvandaziva C, Engelsmann B, Dabis F. Acceptability of routine HIV testing (“opt-out”) in antenatal services in two rural districts of Zimbabwe, *AIDS*. 2006 Apr 1; 41(4):514-20
24. Gichangi P, Estambale B, Bwayo J, Rogo K, Ojwang S, Njuguna E, Temmerman M. Acceptability of human immunodeficiency virus testing in patients with invasive cervical cancer in Kenya, *Int J Gynecol Cancer*. 2006 Mar-Apr; 16(2):681-5.
25. Melaku M. Assessment of VCT Utilization, and Willingness to Accept Provider-Initiated HIV Counseling and Testing among Tuberculosis Patients in Addis Ababa, 2007 (unpublished).
26. Girma S. Assessment of uptake of provider initiated HIV testing and counseling among OPD clients with possible clinical sign of HIV infection and factors associated with it in Addis Ababa, Ethiopia, 2008 (unpublished).

Annex1: Schematic presentation of sampling procedure among health facilities and OPD clients



Annex II: Knowledge assessing questions

Questions used to assess knowledge about HIV transmission

1. If HIV is transmitted through sexual intercourse
2. If HIV is transmitted from mother to child during pregnancy
3. If HIV is transmitted from mother to child during delivery
4. If HIV is transmitted from mother to child during breast feeding
5. If HIV is transmitted through blood contact
6. If HIV is transmitted by sharing of sharp materials with someone who is infected

Participants were scored as

Having good Knowledge- If Know all the 6 means, **having fair Knowledge** – If Know 3-5 means, **having poor Knowledge** – If Know 0-2 means

Questions used to assess misconceptions about HIV/AIDS are

1. If HIV is transmitted by shaking hands of a person living with HIV
2. If HIV is transmitted by wearing of cloths of a person living with HIV
3. If HIV is transmitted by sharing meal with a person living with HIV
4. If HIV is transmitted through mosquito bite.

Study participants were considered to have misconceptions about HIV/ AIDS transmission and prevention if, they agreed incorrectly to any of the four misconception questions

Questions used to assess knowledge on means of HIV prevention include

1. If HIV is prevented by abstinence
2. If HIV is prevented by staying faithful with one uninfected partner
3. If HIV is prevented by using condom every time during sex

Respondents were considered to be knowledgeable about HIV prevention if they correctly identified the three main methods of HIV prevention.

Questions used to assess knowledge about importance of PIHCT

1. If it helps patients get access to ART
2. If it makes easier for clients to get tested
3. If it results in less discrimination of HIV positive patients
4. If it increases number of tested people

Participants were scored as

Having good Knowledge- If Know all the 4 importance of PIHCT

Having fair Knowledge – If Know 2-3 of the importance of PIHCT

Having poor Knowledge – If Know 0-1 of the importance of PIHCT

Annex III: WHO clinical classification of possible sign of HIV infection.

Clinical sign of HIV infection

- Lymphadenopathy (PGL) – painless swelling in neck and armpit
- Herpes zoster
- Skin conditions including prurigo, seborrhea
- Repeated infections
- More than one month
 - Diarrhoea (unexplained)
 - Unexplained fever
 - Vaginal candidiasis
 - Herpes simplex ulceration (genital or oral)
- Prolonged fever
- Kaposi lesions (painless dark lumps on skin or palate oral cavity)
- Severe and recurrent bacterial infection –pneumonia or muscle infection
- Tuberculosis- Pulmonary or extra pulmonary
- Weight loss more than 10% without other explanation
- Oral thrush or oral hairy leukoplakia
- Oesophageal thrush

Other indications suggesting possible HIV infection:

- Other sexually transmitted infections
- A spouse or partner or child:
 - Known to be HIV positive
 - Has HIV or HIV related illness
 - Unexplained death of young partner
 - Injecting drug use
 - High risk occupation

Annex IV : Structured English Version Questionnaire

Addis Ababa University

Faculty of medicine, School of Public health

Information Sheet

Introduction: My name is _____ . I am representing the study team being coordinated by the department of community health, faculty of medicine, Addis Ababa, and interviewing OPD clients with possible clinical sign of HIV infection in Health center / Hospital about the acceptability of PIHCT and factors associated with it. You are selected to be one of the participants in the study. The study will be conducted through interview and I will use the information generated while providing the PIHCT service (information extracted from Pretest counseling, testing and Post test counseling), your name is not going to be required (registered) and the information you give us will be kept confidential and will be used only for study purpose. A code number will identify every participant and no names will be used. If a report of the result is published, only summarized information of the total group will appear. The interview as well the use of information, which is extracted while providing the service, is voluntary; you have the right to participate, or not to participate (refuse to do so) at any time during the interview. Your refusal will not have any effect on services that you or any member of your family receives. However, your participation is important to fulfill the study and in order to help design appropriate HIV testing strategy in health facilities in West Arsi zone and other similar settings. Is the purpose of the study clear?

Informed Consent

Title of Research: Acceptability and associated factors of provider initiated HIV counseling and testing among OPD clients selected health facilities of West Arsi zone, Ethiopia.

Investigator: Tsegaye Tesfaye

Before agreeing to participate in this research study, it is important that you read the following explanation of this study. This statement describes the purpose, procedures, benefits, risks, discomforts, and precautions of the program. Also described are the alternative procedures available to you, as well as your right to withdraw from the study at any time. No guarantee or assurances can be made as to the results of the study.

Explanation of Procedures

This study is about learning the acceptability and associated factors of provider initiated HIV counseling and testing among OPD clients in selected health facilities.

Participation in the study involves completion of socio demographic characteristics, knowledge about HIV, personal HIV risk perception, stigmatizing attitude towards people living with HIV/AIDS, knowledge about PIHCT and willingness/acceptability of PIHCT.

The interviews will be conducted at a setting that is mutually agreeable to the participant and the researcher.

Risks and Discomforts

There are no risks or discomforts that are anticipated from your participation in the study.

Benefits

The anticipated benefit of participation is the opportunity to discuss feelings, perceptions, and concerns related to HIV and acceptability of PIHCT and factors affecting it.

Confidentiality

The information gathered during this study will remain confidential in a locked draw during this project. Only the researcher and Addis Ababa University will have access to the study data and information. There will not be any identifying names on the questioner, tape and participant's names will not be available to any-one. The tapes will be destroyed at the completion of the study. The results of the research will be published in the form of a graduate paper and may be published in a professional journal or presented at professional meetings.

The information will help health professionals and others to better understand of HIV and acceptability of PIHCT among OPD patients and factors affecting it.

Withdrawal without Prejudice

Participation in this study is voluntary; refusal to participate will involve no penalty. Each participant is free to withdraw consent and discontinue participation in this project at any time without prejudice

from this institution. Furthermore, a decision to participate or not to participate will not influence in any way the care you get from the health facility.

Cost and/or Payment to Subject for Participation in Research

There will be no cost for participation in the research. Also, participants will not be paid to participate in this research project.

Payment for Research Related Injuries

Addis Ababa University has made no provision for monetary compensation in the event of injury resulting from the research. In the event of such injury, assistance will be provided to access health care services. The cost of health care services is the responsibility of the participant.

Agreement

This agreement states that you have received a copy of this informed consent. Your signature below indicates that you agree to participate in this study.

Signature of Subject date.....

Signature of Researcher..... Date

Thank you very much!

For any questions

Contact Address: AAU, MF, SPH IRB Contact address Tele: 0115538734

Email address: aaumirb@yahoo.com

If the study subject agrees to participate in the study, start the interview.

01. Woreda-----

02. Name of health center/Hospital-----

03. Questionnaire identification number -----

04. Specify the Possible sign of HIV infection.....

06. Result of the interview

a. Completed

b. Respondent not available

c. Refused

d. Partially completed

e. Other (please specify) -----

07. Checked by supervisor

Name -----signature----- date -----

NB:

1. Please register the age, sex and characteristics of study subjects who refuse to participate in the study.

Annex V : Questionnaires

Part One : Socio-Demographic Variables

No	Questions	Classifications	Remark
101	How old were you at your last birthday?	Years(full yrs)	
102	Sex of the client	1. Male 2. Female	
103	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other (specify) 99. No response	
104	To which ethnic group do you belong?	1. Amhara 2. Oromo 3. Gurage 4. Tigray 5. Other (specify) 99. No response	
105	What is your current marital status?	1. Married 2. Single 3. Divorced 4. Widowed 5. Living together	
106	What is your completed educational status?	1. Illiterate 2. Read and write 3. Primary 4. Secondary 5. Tertiary	
107	What is your current occupation?	1. Farmer 2. Merchant 3 house wife 4. Student 5. Government employe 6. NGO employee 7 .Un employed 8. others (specify)	
108	What is your average household income per month?	1. In cash ----- 2. No income 99. No response	

Part Two:- Knowledge about HIV/AIDS

No	Questions	Classifications	Remark
201	Have you ever heard of HIV or the disease called AIDS?	1. Yes 2. No 99. No response	If response is no, stop here
202	Can HIV be cured?	1. Yes 2. No 99. No response	
203	How is HIV/AIDS transmitted? (Multiple response is possible, Needs probing)	1. Sexual intercourse 2. Mother to Child during pregnancy 3. Mother to Child during delivery 4. Mother to child during breastfeeding 5. Transfusion of infected blood 6. Sharing of Sharps with someone who is infected (Needles, etc) 7. Shaking hands a person living with HIV/AIDS 8. wearing clothes of a person living with HIV/AIDS 9. Sharing a meal with a person living with HIV/AIDS 10. Mosquito bite 11. Blood contact 12. Other (Specify) 99. No response	
204	How can people protect themselves from getting HIV/AIDS? (Multiple response is possible, Needs probing)	1. Avoiding Sex (abstinence) 2. Using a condom every time during sex 3. Staying with only one uninfected partner faithfully 4. Others (specify) 88. I don't know 99. No response	
205	Do you know any one who is infected with HIV or who has died of AIDS?	1. Yes 2. No 99. No response	
206	May a healthy looking person be positive for HIV?	1. Yes 2. No 99. No response	

Part Three: Personal risk perception

No	Questions	Classifications	Remark
301	Do you think you can get the virus?	1. Yes 2. NO 99. No response	If response is no, go to Q304
302	What are your chances of getting infected with HIV?	1. High 2. Medium 3. Low 99. No response	If response is low, go to Q401
303	If the answer is moderate or high, what are the reasons?	1. I had multiple sexual partner 2. I had sexual contact with out condom 3. I had injection with un sterile needle 4. I had Sexual contact with HIV positive person 5. Other specify 99. No response	
304	If your response is no to question number 301, what are the reasons	1. I trust my sexual partner. 2. no injection with un sterile needle 3. I always use condom 4. Other specify 5. No response 99.No response	

Part Four: Stigmatizing Attitude towards people living with HIV/AIDS

No	Questions	Classifications	Remark
401	Would you be willing to share a meal with a person you knew had HIV/AIDS?	1. Yes 2. NO 88. I do not know 99. No response	
402	If a Family member /Relative of yours became ill with HIV, the virus that causes AIDS, would you be willing to care for him/her in your own household?	1. Yes 2. No 88. I do not know 99. No response	
403	If you knew a shopkeeper or food seller had HIV, would you buy food from them?	1. Yes 2. No 88. I do not know 99. No response	
404	If a member of your family became ill with HIV, the virus that causes AIDS, would you want it to remain secret.	1. Yes 2. No 88. I do not know 99. No response	
405	If a teacher has the HIV virus but is not sick, should he/she be allowed to continue teaching?	1. Should be allowed 2. Shouldn't be allowed 88. I don't know 99. No response	
406	Do you think the names of PLWHA should be made public so that others can avoid them?	1. Strongly agree 2. agree 3. In different 4. Disagree 5. Strongly disagree	

Part five: Provider initiated HIV counseling and testing

No	Questions	Classifications	Remark
501	Have you ever heard of PIHCT?	1. Yes 2. NO 99. No response	If no, go to Q 508
502	If your response to Q501 is yes, where did you get the information? (Multiple response is possible, Needs probing)	1. Health workers 2. Mass media 3. family member 4. Friends 5. Other (specify) 99. No response	
503	To what extent are you in favor of PIHCT?	1. Extremely in favor 2. Very much 3. Some what 4. Not at all 99. No response	
504	Did you feel that PIHCT is important?	1. Yes 2. No 88. I don't know 99. No response	If no, go to Q 506
505	If your response to Q504 is yes, what are the reasons for feeling that PIHCT is important?	5. Helps patients get access to ART 6. Makes easier for clients to get tested 7. Results in less discrimination of HIV positive patients 8. Increase number of tested people 9. Other (specify) 99. No response	
506	Did you feel that PIHCT has influence?	1. Yes 2. No 3. I don't know 99. No response	If no, to Q 508
507	If your response to Q 506 is yes, what are the reasons for feeling that PIHCT has influence?	1. Will cause patients to avoid seeing health professionals for fear of being tested 2. Violate patients human right 3. Leads to more violence against women 4. Other (specify) 99. No response	
508	Do you agree that any one should check his/her HIV sero status?	1. Yes 2. No 99. No response	
509	At which time should one be tested for HIV? (Multiple response is possible, Needs probing)	1. When one is sick 2. Before marriage 3. If only has multiple partners 4. At any time	

		5. Other (specify) 99. NO responses	
510	Who are people in need of HIV test? (Multiple response is possible, Needs probing)	1. Female commercial sex workers 2. Drivers 3. People with history of unprotected sex 4. TB patients 5. Those with multiple partners 6. Any one sexually active 7. Those who are sick. 8. Any one at risk 9. Others (specify) 99. No responses	
511	Have you ever been tested for HIV?	1. Yes 2. No 99. No response	If no, go to Q 516
512	If your response to Q511 is yes, what were the reasons of having HIV test?	1. Voluntary testing by your self 2. Initiated by health worker for diagnosis 3. Donation of blood 4. Routine ANC 5. Others (specify) 99. No response	
513	If your response to Q 511 is yes, where did you do your test?	1. Gov. hospital/Clinic 2. Gov health center. 3. Stand alone VCT center 4. Private clinic/hospital 5. Others (Specify) 99. No response	
514	If your response to Q 511 is no, what are your reasons for not to be tested? (Multiple response is possible, Needs probing)	1. Fear of stigma and discrimination 2. Fear of partner's reaction 3. Unable to cope with the positive result 4. I am not risky person for HIV 5. Difficult to pay for VCT service 6. Belief as Being tested is not useful 7. Not sure of the confidentiality 8. Don't want to know the result 9. Partners trust 10. Self trust 11. other (specify) 99. No response	
515	The new guideline in Ethiopia for HCT recommends an HIV test for those with possible sign of HIV infection. We need to know if you have HIV in order to treat your illness. Are you willing to take the test?	1. Yes, I am willing 2. No, I am not willing 3. I don't know 99. No response	If response is no, go to Q 520

516	If your response to Q 515 is yes, what were the reasons to be tested? (Facilitating factors)	<ol style="list-style-type: none"> 1. TV/Radio messages 2. Knowing that treatment is available 3. Knowing that test result will be confidential 4. Heard that I could take test and get result on the same day 5. Was encouraged by someone who was tested 6. Was worried about the previous sexual contact 7. Parents/family/friends advised to have test 8. Was sick 9. Because you recommend it 10. Other (specify) 99. No response 	
517	If your response to Q 515 is no, what were your reasons for not being willing to be tested? (Barriers) Multiple response is possible, Needs probing)	<ol style="list-style-type: none"> 1. Fear of stigma and discrimination following the positive result 2. Fear of partner's reaction 3. Unable to cope with the positive result 4. I am not risky person for HIV 5. Fear of discrimination (bad treatment) by health providers 6. No access to good quality clinic 7. Other people advised not to test 8. Belief that testing is not useful 9. Not sure of the confidentiality 10. Don't want to know the result 11. Partners trust 12. Tested before 13. Other (specify) 99. No response 	
518	Record if the client accepted the pretest counseling and testing session	<ol style="list-style-type: none"> 1. Accepted 2. Not accepted 3. I don't know 99. No response 	
519	Record the result of the test.	<ol style="list-style-type: none"> 1. Positive 2. Negative 3. Not known 	
520	Record if the client accepted the posttest counseling session.	<ol style="list-style-type: none"> 1. Accepted 2. Not accepted 3. I don't know 99. No response 	

Do you have any question? This is the end of our interview. Thank you very much for taking time to answer these questions

_____/_____

_____/_____

AAU, MF, SPH IRB Contact address Tele: 0115538734

Email address: aaumirb@yahoo.com

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Annex Vi: Gaaffilee Afaan Oromootiin Qindaa'amaanii Qopha'aan

Yuniversiitii Finfinnee Fakultii yaala (Medical Faculty) Mana Barumsa Fayyaa Hawaasaa Uunkaa Odeeffannoo

Seensa: Maqaan koo-----jedhama. Ani garee qo'annaa gaggeesu kan kutaa Fayyaa hawaasaa fakuulitii fayyaa finfinneetiin hoggannamu bakka bu'udhaan gaffii fi deebii dhukkubsatoota mallattoo dhibee HIV ta'uu danda'an Buufata fayyaa/Hoospitaala_____ti waa'ee tajaajila "PIHCT"tiif waa'ee sababillee tajaajila kana akka fudhatamuu fi hinfudhatamnee gufuu ta'u irratti hojeedha. Atiis hirmataa qo'annaa kanaa tokkoo akka tatuu filatamiteeta. Qo'annaan kan raawatamu gaafii fi deebiidhaan. Anis odeeffannoo keenninsa tajaajila kana irraa argamu itti fayyadama(odeeffannoo qorannaa dhiigaatiin dura, qorannoo dhiigaatii fi qorannoo dhiigaatiin boodaa hunda jechaadha.) Maqaan kee hin galmaa'u. Odeeffannon ati nuuf kennitu iccitiin isaa ni eeggamma akkasumaas kaayyoo qo'annaatiif qofa oola.. Hirmataan kamiyyuu lakkofisa addaa(koodii) keennameef beekkama malee maqaa isaanti hin fayyadamnu. Yoo bu'aan qo'annaa kan maxxanfamu ta'ees odeeffannoon hirmatoota hundaa kan cuunfamee qofatu maxxanfama. Gaafiif deebiiniis ittifayyadama odeeffannoon yeemmu taajajili keennamu argamu fedhii irratti hundayaa. Qo'annaa irratti hirmatuuf ta'ee didduuf yeeroo gaafiif deebii kamiyyuu mirga qabda. Diduun kee tajaajila atis tatee maatiin kee argatu irratti dhiibbaa kamiyyuu hin geesissu. Haa ta'u malee qo'annaa kana irratti hirmanaan kee qo'annicha galmaan gahuuf akkasumas dhaabbilee yaalaa tiif iddoo walfakkaattu hundati qorannaa dhiigaa HIVtiif tarsimoo sirii ta'e ka'uuf barbaachisaadha.

Eeyyama odeeffannoo irratti hunda'e (informed consent)

Mata duree qo'annoo: dhaabbilee yaala godina Arsi Lixaati Fudhataama tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeeyyii fayyaatiin keennamuuf haala isaan walqabatee jiru dhukkubsataa deddeebi'ee yaalamu irraatti qorannoo gaggeeffamu

Qoraataa: Tsaggayee Tasfaayee

Qorannoo kana irratti osoo hin hirmaatiin dura, ibsa qorannoo kanaaf kenname duubisuun ni barbaachisa. Barreeffamni kun kaayyoo adeemsa bu'aaf, saxiilama, midhaa fi of-eeggannoo saganticha jiru ibsa. Dabalataan carraa addaa qabdaaniif mirgaa qorannoo keessaa yeeroo kamituu ba'uu ykn dhissuu kan dandeetan ta'uu ibsa. Qoranno irraati hirmatuu irraa kan ka'e wabiin ykn gatiin keennamu hin jiru.

Ibsa adeemsicha qorannoo

Qorannaan kun waa'ee fudhataama tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeessaatiin keennamuuf haala isaan walqabatee jiru dhukkubsataa deddeebi'ee yaalamu irraatti qorannoo gaggeeffamu ta'uu ibsa.

Qorannaa irratti hirmachuun of-keessaa kan qabu gaaffii fi deebii haala jiruuf jireenya hawaasuma waa'ee beekkumsa HIV, saaxilama dhunfaa haala itti ilaalan, ilaalcha addaan qoqqodiinsaa warra HIV/AIDs wajjin jiraatuu, waa'ee beekkumsa tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeessaatiin keennamuuf akkasumaas fudhataama tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeessaatiin keennamuuf ilaala .

Gaaffii fi deebiin kan gaggeeffamu kutaa hirmataaf qorataaf bakka mija'uuti ta'uu qaba..

Saxiilamaaf Midhaa

Qorannaa irratti hirmatuun saxilaamaaf midhaan inni fiduu hin jiru.

Bua'a

Qorannaa irratti hirmatuun bu'aan eeggamu inniis carra waan nutti dhaga'amu mari'achu, saxilama dhuunfaa haala itti ilaalanii fi waa'ee fudhataama tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeessaatiin keennamuuf haala isaan walqabatee jiru hubachuu ta'a.

Iccitii

Odeeffannoon yeroo gaaffiiif deebii funaanamu of-eegganaan minjala keessaatti itti cufamee ta'aa. Odeeffannoo kana ilaaluuf carraa kan qabu qoraataaf Yunivarsitii Finfinnee qofa. Gaaffii irratti maqaan hirmaataa waan hin barreeffamneef hirmataa eenyuumtuu hin beeku, teppiinis hin waraabamu. Firiin qorannaa kana waraqaa eebbaa, barreeffama adda addaa irratti maxxafamee ba'uu akkasumas walga'ii tokko tokkoo irratti dhiyaachuu ni danda'a.

Odeeffannoon argame ooggeyyii fayyaatiif kan birootiif haala gaariin waa'ee fudhataama tajaajila gorsaaf qorannoo dhiigaa kaka'umsa ogeessaatiin keennamuuf haala isaan walqabatee jiru hubachuu akka danda'an ni qarqaara.

Qorannaa keessaa ba'uu

Qorannaa kan irratti kan hirmatamu fedhiin qofa. Hirmachuu dhabuun hin adabsisuu. Hirmaataan kamiyyu yeroo barbaadetti qorannaa kana keessa dhisee ba'uuf eeyyama isaa kaasuudhaan ni danda'a. Dabalaataan murtiin hirmachuu fi hirmachuu dhabuu tajaajila argachu qabdaan irratti dhiibbaa kamiyyuu hin geessisu.

Qoranna irrati hirmaatuuf hirmaataaf kaffaltii/gatii ilaalchisee

Qorannaa kana irrati hirmatuuf gatiin bahu hinjiru. Akkasumas hirmaataan qorannaa irrati akka hirmatuu gochuuf kaffaltiin kanfalamu tokkoos hinjiru

Qorannaan walqabatee midhaa dhufuuf kanfaltii

yunivarsiitiin Finfinnee qorannaan walqabatee midhaa dhufuu danda'u kamiifuu kanfaltii qarshii kaffaluuf qoopheese tokkoo hin jiru. Yeroo midhaa saniti kunuunisa tajaajila fayyaa akka argataan haala ni mijeessa. Tajaajila fayyaa keennamuuf gattiin/ basiin ba'u kan kanfalu hirmataadha.

Waliigaltee (Agreement)

Waliigalteen kun kan ibsuu koppii eeyyama odeeffannoo irratti hunda'ee fudhachuu keessaan. Mallattoon keessaan kan asi gadii kan agarsiisu qorannaa irrati hirmachuuf waligaluu keessaan.

Mallattoo Hirmaataa Guyyaa.....

Mallattoo Qorataa..... Guyyaa

Hirmaataan qo'annaa kana irratti hirmachuuf eeyyaamamaa yoo ta'ee gaaffii fi deebii jalqaab.

01. Aanaa_____

02. Maqaa Buufata Fayyaa_____

03. Lakkofsa gaafileen itti beekkamu_____

04. Mallattoo dhibee HIV ta'u danda'u addaan basii ibsi_____

05. Bu'aa gaaffiif deebii

a. Gutuudha

b. Hirmaataan hin jiru

c. Hirmataan dideera

d. Hamma Tokkoo guutuudha

e. Kan biroo(Yaboo ibsii) -----

07. Superviseeraan too'aatameera

Maqaa superviseeraa-----Mallattoo----- Guyyaa-----

Yaada

1.Yaboo hirmataan qo'annaa irratti yoo hirmachu dide umuriif saala isaa/ishee galmeessi.

Gaaffii yoo qabbaataan haala asii gaditiin qunnamaa

AAU, MF, SPH, IRB Contact address Tele: 0115538734

Email address: aaumirb@yahoo.com

Kutaa tokko: Gaaffilee haala jiruuf jireenya hawaasumaa ibsaan

Lak.	Gaaffilee	Tarreefama deebii ta'uu danda'an	Yaada
101	Umuriin kessaan meeqa?	Waggaa___(waggaa gutuun yaa ibsamuu)	
102	Saali gafatamaa maali?	1. Dhira 2. Dhalaa	
103	Amaantaan keessaan malii innii?	1. Orthodoxii 2. Muslimma 3. Proteestantii 4. Catholikii 5. kan □biroo (□ibsi)	
104	Sabni kessaan malii innii?	1. Amara 2. Oromoo 3. Guragee 4. Tigree 5. kan biroo (□ibis)	
105	Yeroo ammaa haallii ga'eela kessaanii malii inii?	1. kan fuudhe/heerumte 2. kan hin fuune/hin heerumne 3.kanhikee/te(Divorsed) 4. kan adda jiratu/ttu(Widowed) 5. kan waliin jiratu/ttu	
106	Sadaarkaan barumsa ol-aanaa baraataanii xumurtaan hangamidha?	1. kan hin baraanee 2. dubbisuu/tu fi barreessu/tu 3. barumsa jalqabaa 4. sadarkaa lammaaffaa 5. sadarkaa ol-aanaa	
107	Hojiin yeroo ammaa hojjataan maaliidha?	1. Qotee bulaa 2. Daldalaa 3 Hadha manaa 4. Baraata/baraattuu 5 . Hojeetaa moottummaa 6 .Hojeetaa mitti mottummaa 7 .kan hojii hinqabnee 8 .kan biroo (ibsi)	
108	Galiin matii kessaan ji'aan jiddugaleessaan hangaam?	1. qarshiidhaan ----- 2. galii hin qabu 99. deebii hinkenine	

Kutaa lammaaffa:- waa'ee HIV/AIDS ilaalichisee beekkumsa qaban

Lak.	Gaaffilee	Tarreefama deebii ta'uu danda'an	Yaada
201	Waa'ee <u>HIV/AIDS dhageessanii beektuu?</u>	1. Eyyee 2. Miti 99. Deebii hin kennine	
202	Dhukkubinni HIV yaala waan qabu isiinitti fakkaataa?	1 Eyyee 2 Miti 99. Deebii hinkennine	
203	Dhukkubinni HIV karaa kamiin dadarba? (deebiin tokkoo olii nidandaama, hinduubsiin, deebiikenaan irrattii mari)	1. Qunnamti saala 2.Haadha irra gara da'immati yeroo ulfaa 3.Haadha irra gara da'immati yeroo harmaa hoosisan 4.Dhiiga HIV iin faalamee keennun 5.NamaHIViini qabamee wajjiin meshaa qara qabaan waliin fayyadamu (lilimoo, kkF) 6.Salaamata fudhuu 7.kafana dhukubsataa HIV/AIDSii uffachuu 8.Dhukkubsataa wajiin nyachuu 9.Ilbisaan 10. Dhiiga tutuquun 11. kan biroo (ibsi) 99. Deebii hinkenine	
204	Namnii HIV/AIDSiiif akkaa hinsaxilaminee kara kamiimn itissu dandama? (deebiin tokkoo olii nidandaama, hinduubsiin, deebiikenaan irrattii maarii)	1. Qunamitii saala dhisuun 2. yeeroo qunamitii rawataan hunda koondomittii fayadmu 3. Nama HIVii hinqabinee wajjiin tokkoof tokkoo ta'uudhaan amaanummadhaan jirachuu 4. kan biroo (ibsi) 88. Hinbeekuu 99. Deebii hinkenine	
205	Nama dhibee HIV tiin qabamee dhibameeru beekta? YKN Nama dhibee AIDStiin du'ee beekta?	1. Eyyee 2. Miti 99. deebii hinkenine	
206	Namnii fayyaa fakkatuu dhibee HIV niqaba jechuu dandeenyaa?	1. Eyyee 2.Miti 99. Deebii hinkenine	

Kutaa 3ffaa: Saxilama dhuunfaa haala itti ilaalan(personal risk perception)

Lak.	Gaaffilee	Tarreefama deebii ta'uu danda'an	Yaada
301	Vaayireesii HIVtiin qabama jette yaaddaa?	1. Eeyyee 2. Miti 99. Deebiin hinkennamne	Deebiin yoohinjiree ,gafi304ti darbbi
302	Carran HIVtiin qabamuu kee hangami?	1. Baayyee 2. Jiddugaleessa 3. Xiqqaa 99. Deebiin hinkennamne	
303	Yoo deebiin kee jiddugaleessa /baay'ee ta'ee , sababbiin isaa malli?	1.Jallallee qunnamiti saalaa heddumeessuu 2. Ani wolqunnamiti saalaa kondomiin ala fayyadamuu 3. limmoo hinwoddamnee fayyadamuu 4. Nama HIV qabu wajjin qunnamitii saalaa raawwwachuu 5. kan biraa (ibis) 99. Deebiin hinkennamne	
304	Gaaffii 301fi , yoo deebiin kee miti ta'ee sababbiin isaa malii?	1. Ani jalallee walqunamtii saalaa koo ni amana. 2. limmoo hinwoddamnee hin fayyadamnee 3. yeroo hundaa Kondomii fayyadama 4 kan biraa (ibis) 99. Deebiin hinkennamne	

Kutaa 4ffaa: Ilaalcha addaan qoqqodiinsaa warra HIV/AIDSii wajjin jiraatuu

Lak.	Gaaffilee	Tarreefama deebii ta'uu danda'an	Yaada
401	Nama HIV/AIDSiin qabamuu isaa beektuu wajjiin nyaata wajjiin nyachuuf ati eeyyamta ?	1.Eyyee 2.Miti 88. Ani hinbeeku 99. Deebiin hinkennamne	
402	Yoo maatii /fira kee keessaa namnii HIViin,viressi AIDSii fiduun qabamee jiraate kunuunsa isaa/ishii mana kee keessatti keennuuf eeyyamta ?	1.Eyyee 2.Miti 88. Ani hinbeeku 99. Deebiin hinkennamne	
403	Namnii HIViin qabame osoo mana qinxaaboo ykn mana nyaataa qabaatee isa irraa bittee fayyadamtaa ?	1.Eyyee 2.Miti 88. Ani hinbeeku 99. Deebiin hinkennamne	
404	Osoo miseensa maatii keetii keessaa namni HIVn, vaayirasii AIDS fiduun qabamee jiraatee, iccitii ta'ee akkaa turu barbaaddaa?	1.Eyyee 2.Miti 88. Ani hinbeeku 99. Deebiin hinkennamne	
405	Osoo barsiisaa HIVn qabamee garuu hin dhukkubsanne jiraatee akka barsiisummaadhaan itti fufu hayyamamuu fi qaba?	1. Hayyamamuu fi qaba 2.Hayyamamuu fi hin qabu 88. Ani hinbeeku 99. Deebiin hinkennamne	
406	Maqaan nama HIV/AIDSii wajjin jiraatuu osoo ummataaf ifa ta'ee ummani waan ofi irraa fageesu sitti fakkataa	1. Bayee ittiwaligala 2. Ittiwaligala 3. Hinbeeku 4. Ittiwali hingalu 5. Bayee ittiwali hingalu	

Kutaa 5ffaa: Kaka'umsa Ogeessatiin walgorsaaf qorannoo HIV (PIHCT)

Lak.	Gaaffilee	Tarreefama deebii ta'uu danda'an	Yaada
501	Tajaajila qorannoo dhiigaaf gorsa ogeessii fayyaa kenuu dhageetanii beektuu?	1. Eeyee 2. Miti 99. Deebii hinkennamne	Miti yoo ta'ee , gaffii 508tii darbi
502	Yoo deebii kee kan lak. 501eeyyee ta'ee odeeffannoo eessaa arggatee? (debiin hidduu nidanda'ama, xinxalani gafachu gafata)	1. hojjata fayyaa irraa 2. beeksisaaf qunnamtii 3. miseensa maatii 4. hiriyyaa 5. kan biraa(ibsi) 99. Deebii hinkennamne	
503	Tajajila qorannoo dhiigaaf gorsa kana hangam deegartaa?	1. bayyee bayyee deggara 2. bayyee deggara 3. xinnaa deggara 4. hindeggaru 99. Deebii hinkennamne	
504	Tajajila qorannoo dhigaaf gorsa ogeesii fayyaa kenuu barbachisa jettee yaaddaa?	1. Eeyee 2. Miti 88. Ani hinbeeku 99. Deebii hinkennamne	Miti yoo ta'ee , gaffii 506tii darbi
505	Gaaffii 504debiin eeyyee yoo ta'e sababni tajajila gorsa fi qorannoo dhiigaa ogeesii fayyaa kennuu barbaachisaa dha jettee maaliif yaadda?	1. Dhibamaan tajaajila Qoricha farra HIV akka argatu 2. Maammilli haala salphaan akka qoratamu 3. Qooqqoodni namoota Vaayirasii waliin jiraatanii akka xiqqatu 4. Lakkofsi Namoota qoratamanii akka dabaluu gargaara 5. Kan biraa(Ibsi) 99. Deebii hinkennamne	
506	Tajaajilli Gorsaa fi Qorannoo dhigaa ogeessi fayyaa kennu dhiibbaa qaba jettee yaaddaa?	1. Eeyyee 2. Miti 88. Ani hinbeeku 99. Deebii hinkennamne	Miti yoo ta'e gaaffii 508tti darbi
507	Deebii gaffii 506 eeyyee yoo ta'e sababiin tajaajilli Gorsaa fi Qorannoo dhiigaa ogeessi fayyaa kennu dhiibbaa qaba jetteef maal faadhaa?	1. Dhukkubsattootni sababa soda qorannootiif ogeeyii fayyaa dheessuu fida 2. Mirga namummaa dhukkubsattootaa ni daangessa 3. Dubartoota irratti caalmaadhaan dhiibbaa geessisa 4. Kan biraa(Ibsi) 99. Deebii hinkennamne	
508	Namni kamiyyuu dhiiga isaa qorachiisuudhaan of beekuu qaba jettee amantaa?	1. Eeyyee 2. Miti 99. Deebii hinkennamne	
509	Namni kamiyyuu yeroo akkamii dhiiga isaa qoratamuu qabaa? (Deebii hedduu ni danda'ama, Xiinxalanii ilaaluu ni barbaada)	1. Yoo dhukkubsatan 2. Gaa'elaan dura 3. Yoo hiriyya qunnamtii saalaa hedduu qabaata qofa 4. Yeroo kamiyyuu	

		5. Kan biraa(Ibsi) 99. Deebiin hinkennamne	
510	Ummata kamitu qorannoo HIV barbaada? (Deebiin heddu ni danda'ama, Xiinxalanii ilaalu ni barbaada)	1. Hojataota mana buna 2. konkolaachisaa 3. ummata seenaawalqunamiti saalaa offi eegaanna hinqabine qabu 4. Dhibama TB ii 5. kan hiriyyaa walqunamiti saalaa heddu qabu 6. kan walqunamiti saalaa gochuu danda'uu 7. kan dhibamaan. 8. kan saxilaamuu dandaa'n hundinnuu 9. Kan biraa(Ibsi) 99. Deebiin hinkennamne	
511	HIViif qoratamtee beekta? (Bu'aa isaa hinbarbadu)	1. Eeye 5. Miti 99. Deebiin hinkennamne	Miti yoo ta'e gaaffii 516 tti darbi
512	Deebiin gaffii 511 eeyyeen yoo ta'e sababiin HIViif qoratamtee maal faadhaa?	1. Qorannoo fedhii dhuunfaa 2. Dhibee addaan basuuf kakka'umsa ogeessa fayyatiin 3. Dhiiga laachuu 4. Tajajila idilee ANC tiif 5. Kan biraa(Ibsi) 99. Deebiin hinkennamne	
513	Deebiin gaffii 511 eeyyeen yoo ta'e, eessattii qoratamtee?	1. Hospitaala/Klinika mottumaa 2. Buffataa fayyaa. mottumaa 3. Wirtuu VCT qofa hojaatu tii 4. Hospitaala/Klinika dhunfaa tii 5. Kan biraa(Ibsi) 99. Deebiin hinkennamne	
514	Deebiin gaffii 511 miti yoo ta'e sababiin HIViif hin qoratamineefi maal faadhaa? (Deebiin heddu ni danda'ama, Xiinxalanii ilaalu ni barbaada)	1. Sodaa qoqqodiinsa 2. Sodaa deebii hiriyyaa 3. Bu'aan qorannaa HIV positivii yoo ta'e fudhachu fi dandammachu dadhabu 4. Ani nama HIV iif saaxilamu miti 5. Tajajila wirtu VCTiif kafalu dadhabu 6. Qoratamuun bu'aa hinqabu ilalicha jedhuun 7. Iccitiin eegammuu isaa amaantaa wanhinqabineef 8. Bu'aa qorrannoo beekuu wan hinbarbaneef 9. Hiriyyaa koo amana 10. Ofitti amana 11. Kan biraa(Ibsi) 99. Deebiin hinkennamne	
515	Qajeelfamni harawaa Ethiopia kan HCTii wara mallattoo dhibee HIV ta'uu dandaan qabaniif qorrannoo dhiggaa hakka rawatamu hayama. Dhibee kee yaluuf bu'aa qorrannoo HIV kee beekuun barbachisaa. Ati qoratamuuf eeyyamamaa	1. Eeyyee. Ani eeyyamamaa dhaa 2. Miti . Ani eeyyamamaa miti 3. Ani hin beeku 4. Deebiin hin kennamne	Deebiin miti yoo ta'ee, gaaffii 520 ti darbi

	dha?		
516	Deebiiin gaffii 515 eeyee yoo ta'e sababbiin qorannoo kana qoratamteef maali?(Deebiiin heddu ni danda'ama, Xiinxalanii ilaaluu ni barbaada)	<ol style="list-style-type: none"> 1. Dhamsa TV/Radi'oo 2. Akka yaattiin jiru beekuun 3. Iccitiin bu'aa qorannoo kan eegamuu ta'u isaa beekuun 4. Guyyuma tokkoti qoratamuun firii qoorannoo fudhatu akka danda'u dhaguun 5. Namni kana dura qorqamee na kakaseeti 6. walqunamiti saalaa kan duraatiif heddu yaaddee 7. Maatiin/ hiriyyaan akka qoratamu gorsa naf laatee 8. wan dhibameef 9. wan ati akka qoratamuuf yaddaa keeniteef 10. Kan biraa(Ibsi) 99. Deebiiin hinkennamne 	
517	Deebiiin gaffii 515 miti yoo ta'e sababiin qoratammuf eeyyamamaa ta'uu diddeef mali?(Barriers) (Deebiiin heddu ni danda'ama, Xiinxalanii ilaaluu ni barbaada)	<ol style="list-style-type: none"> 1. Soda qoqqoodinsaa bu'aa qorannoo HIV +ve taheen walqabatee dhufu? 2. Sodaa haala deebii hiriyya 3. bu'aa qorannoo HIV +ve fudhachuudhaan dandamachuu dhabuu 4. Ani dhibee kanaaf saaxilamaa miti 5. Soda qoqqoodinsa yaalii ogeeyyii fayyaatin uumamu dheessuu 6. Kilinikaa yaalaa qulqulina qabu dhiyeennatti argachuu dhabuu 7. Akka hinqoratamne namni biro waan nagorseef 8. Ilaalacha qoratamuun bu'aa hoiydsdfuiop[]trryinqabu jedhuun 9. Shakki iccitii qabaachuu 10. Bu'aa beekuu waan hinbarbaadnef 11. Hiriyya koo waan amanuuf 12. Kaanan dura waan qoratameef 13. Kan biraa(Ibsi) 99. Deebiiin hinkennamne 	
518	Yoo maamilii gorsa qorannoon duraafi yeroo qorannoo eeyyamamaa ta'e galmmeessi.	<ol style="list-style-type: none"> 1. Fudhatamera 2. Hin fudhatamine 3. Ani hinbeeku 99. Deebiiin hinkennamne 	
519	Bu'aa qorannoo galmeessi.	<ol style="list-style-type: none"> 1. Positivii 2. Negativii 3. Hin beekamu 	
520	Yoo maamilii gorsa yeeroo qoranno boodaafi tole jedhe (eeyyamamaa ta'e) galmmeessi.	<ol style="list-style-type: none"> 1. Fudhatamera 2. Hin fudhatamine 3. Ani hinbeeku 99. Deebiiin hinkennamne 	

Gaaffii qabduu? Kun dhuma gaaffi fi deebii keenyaati. Yeroo kee nuuf kennitee gaaffi keenna tasgabbiin waan nuu deebifteef baayyee galatoomi.

Annex VIII: Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in this or another university and that all sources of materials used for this thesis have been fully acknowledged.

Name: *Tsegaye Tesfaye Mengesha (BSc.)*

Signature: _____

Date: _____

Place: Addis Ababa University College of health science, School of public health

Date of submission: may _____, 2011.

This thesis work has been submitted for examination with my approval as university advisor.

Name: *Adamu Addissie (MD, MPH, MA)*

Signature: _____

Date: _____