ASSESSMENT OF UTILIZATION OF PROVIDER INITIATED HIV TESTING AND COUNSELING AND ASSOCIATED FACTORS AMONG ADULT OUT PATIENT DEPARTMENT PATIENTS IN WONCHI WOREDA, SOUTH WEST SHOA ZONE, OROMIA REGINAL STATE ,CENTRAL ETHIOPIA.

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ASSESSMENT OF UTILIZATION OF PROVIDER INITIATED HIV TESTING AND COUNSELING AND ASSOCIATED FACTORS AMONG ADULT OPD PATIENTS IN WONCHI WOREDA, SOUTH WEST SHOA ZONE ,OROMIA REGINAL STATE ,CENTRAL ETHIOPIA

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ABSTRACT

Back ground: Currently in health facility, provider-initiated human immunodeficiency virus testing is the key entry point to prevention, care, treatment and support services but most people remains unaware of their HIV status due to various reasons. In many high-prevalence countries, fewer than one in ten people with HIV are aware of their HIV status. Reaching individuals with HIV who do not know their serostatus is a global public health priority.

Objective: To assess utilization of provider initiated HIV testing and counseling and associated factors among adult out patient department patients.

Methods: Health facility based cross sectional study was conducted among 392 adult outpatient department patients in Wonchi woreda from February 24 to March 24 /2013. The study participant was recruited patients from all adult outpatient department patients of all four public health facilities of wonchi woreda using systematic sampling. A structured interviewer administered questionnaire was used to elicit all important variables from the study participants and multiple logistic regression analysis was used.

Result: A total of 371 adult out patient department patients aged between 15 to 64 years were actively participated in the study and 291(78.4%) of them utilized provider initiated HIV testing and counseling and 80(21.6%) of them refused.Utilization of provider-initiated HIV testing and counseling were associated with divorced/widowed marital status[AOR (95%CI) = 0.32(0.15, 0.69)], being male sex [AOR (95%CI) =1.81(1.01, 3.24)], having comprehensive knowledge on HIV [AOR (95%CI) =0.408(0.220,0.759)],having awareness about provider initiated HIV testing and counseling [AOR(95%CI) =2.89(1.48,5.66)] and receiving test on HIV before[AOR (95%CI)=4.15(2.30, 7.47)] .

Conclusion: Utilization of provider initiated HIV testing and counseling among adult out patient departments in wonchi woreda public health facility was high (78.4%).Strengthening health information through mass media and peer education on HIV to address barrier to testing in the community such as low awareness on PITC, to increase up take of PITC among adult OPD patients.

Key words: utilization, human immunodeficiency virus testing, provider initiate

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Anti Natal Care
AOR	Adjusted Odds Ratio
ARV	Anti Retroviral
BCC	Behavioral Change and Communication
CI	Confidence Interval
CITC	Client Initiated Testing and Counseling
DHS	Demographic Health Survey
EDHS	Ethiopian Demographic Health Survey
EIFDDA	Ethiopian Inter-Faith Forum for Development, Dialogue and Action
ETB	Ethiopian Birr
HCT	Human Immune Virus counseling and testing
HCW	Health Care Worker
HIV	Human Immune Virus
IEC	Information Education and Communication
ILO	International Labor Organization
NGO	Non Governmental Organization
OPD	OutPatient Department
OR	Odds Ratio
PITC	Provider Initiated Testing and Counseling
PIHTC	Provider Initiated HIV Testing and Counseling
PLHIV	People Living with HIV
PLWHA	People Living With HIV /AIDS
STD	Sexual Transmitted Disease
STIs	Sexual Transmitted Infections
TB	Tuberculosis
UNAIDS	Joint United Nations Program on HIV/AIDS
USDOL	United States Department of Labor
UNICEF	United Nation Children's fund
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 Back ground

HIV testing and counseling is the process by which an individual, couple, or family receives HIV testing and counseling on HIV prevention, treatment, care, and support (1).It is the key entry point to prevention, care, treatment and support services, where people learn whether they are infected, and are helped to understand the implications of their HIV status and make informed choices for the future. Currently, most people remain unaware of their HIV status due to various reasons (2, 3).

WHO and UNAIDS recommend three types of HIV testing: Client-initiated or voluntary counseling and testing is initiated by clients seeking to know their HIV status. Provider-initiated testing and counseling recommended during treatment by health care providers to enable specific clinical decisions to be made and/or specific medical services to be offered that would not be possible without knowledge of the person's HIV status.Compulsory and Mandatory HIV screening: Compulsory HIV testing can only be performed for specific reasons with individuals or groups when requested by the court. In all cases of compulsory HIV testing, individuals shall be informed of test results. (2, 4, 5)

PITC is distinct from client-initiated HIV testing and counseling model in which individuals seek HIV testing and counseling services on their own initiative. Provider-initiated testing and counseling must include pre- and post-test counseling about HIV and an HIV test. However, the pre- and post-test counseling in PITC is often briefer than in CITC. Additionally, the pre-test counseling in PITC tends to focus on the importance of testing and informed consent as opposed to conducting an individual risk assessment. In 2007, the World Health Organization issued guidelines recommending that countries and organizations adopt PITC to increase HIV testing rates (6).

In 2009, more countries adopted policies on provider initiated testing and counselling, and the number of facilities providing HIV testing and counselling continued to increase.Over two thirds of countries in sub-Saharan Africa and Latin America and the Caribbean had introduced policies supporting provider-initiated testing and counselling. However, knowledge of HIV

status remained inadequate. According to 10 recent national population-based surveys in sub-Saharan Africa, the median percentage of people living with HIV who know their HIV status is below 40% .Expanding the availability and use of HIV testing and counselling services is a critical step towards ensuring access to services and interventions for prevention, treatment and care of HIV(7). HIV testing is also an integral part of the National HIV/AIDS Strategy to prevent the spread of HIV and improve health outcomes for those who are already infected (8).

HIV testing and counselling services were started in Ethiopia following the endorsement of the national AIDS policy in 1998. The first national guideline on HTC was developed in 2000. This was further revised, and a national plan of action to increase access to HIV services was developed in 2007 incorporating recent developments in HIV/AIDS care; and emphasizing universal access to prevention, treatment, care, and support services(9).

1.2 Statement of the problem

HIV, the virus that causes AIDS, “acquired immunodeficiency syndrome,”has become one of the world’s most serious health and development challenges.The first cases were reported in 1981 and today, more than 30 years later. There were 34.2 million people living with HIV in 2011, up from 28.9 million in 2001. The global prevalence rate among adult has leveled since 2001 and was 0.8% in 2011. 1.7 million People died of AIDS in 2011, a 24% decrease since 2005. HIV is a leading cause of death worldwide and the number one cause of death in Africa. Still, there were about 2.5 million new infections in 2011 or more than 7,000 new HIV infections per day. Although HIV testing capacity has increased over time, enabling more people to learn their HIV status, the majority of people with HIV are still unaware they are infected (10, 11).

Sub-Saharan Africa remains the most heavily affected region by HIV. In 2010, about 68% of all people living with HIV resided in sub-Saharan Africa, a region with only 12% of the global population. Sub-Saharan Africa also accounted for 70% of new HIV infections in 2010, although there was a notable decline in the regional rate of new infections. Most children with HIV live in this region (91%).Almost all of the region’s nations have generalized HIV epidemics that is; their national HIV prevalence rate is greater than 1%. AIDS has claimed at least one million lives annually in sub-Saharan Africa since 1998 (12).

HIV/AIDS has become a major public health concern, leading the Government of Ethiopia to declare a public health emergency in 2002. In 2011, adult HIV/AIDS prevalence in Ethiopia was estimated at 1.5 % with 1 % among males and 1.9% among females. Approximately 1.2 million Ethiopians were living with HIV/AIDS in 2010(13).

In 2007, over 8% of pregnant women in Ethiopia were estimated to be living with HIV (14). According to projections based on the single point estimate the national adult HIV prevalence for 2009 was estimated at 2.3% with 1,116,216 People Living with HIV/AIDS (PLHIV), 855,720 orphans and 44,751 deaths due to AIDS. The estimate national adult HIV incidence of 0.28% in 2009 translates to over 131,000 new HIV infections. The national urban HIV prevalence was 7.7% and an estimated 695,413 people living with HIV (PLHIV) resided in

urban areas, which accounted for 62.3% of the total HIV positive population in the country. The national rural HIV prevalence was 0.9% and estimated to be 420,802, accounts for 37.7% of the total population of PLHIV in the nation (15, 16, and 17).

People living in periurban and small market towns, as well as young women, are the most at risk segments of the population. HIV prevalence varies widely between urban and rural settings. A 2011 Ethiopia demographic and health survey (EDHS), reports show that urban adult HIV prevalence was 4.2 % and rural was 0.6 % (18,19).The epidemic in rural settings is generalized but varies significantly from region to region with rural HIV prevalence ranging from 0.4% in Somali region to 1.4% in Amhara. In Oromia region, the adult HIV prevalence was 1.5%. The prevalence among males and females were 1.2% and 1.8% respectively and 6.1 in urban and 0.6 in rural (15, 16).In south west shoa zone 6,947 population live with HIVand 1,112 new infection with 661 females and 451 males in 2012(20).

However, the use of testing globally is very low. Around the world, the proportion of the population who know their HIV status is generally low. In 23 countries Demographic and Health Surveys between 2005 and 2007, the proportion of adult women who reported having ever been tested and received their results ranged from a low of 2% in Niger to a high of 45% in Ukraine; the median was about 11% for women and 10% for men, and the report were slightly lower for countries of sub-Saharan Africa (9% of women and 8% of men) (WHO 2008). Such low utilization of testing and counseling indicates that obstacles are considerable, and programmes need a better understanding of how to overcome them (21).

Even in more developed countries, about 20% to 30% of seropositive individuals are unaware that they are HIV positive. This means that most people living with HIV get testing and counseling only when they already have advanced clinical disease (22, 23).Study in rural and urban Kenya on determinants of pathways to HIV testing overall, in the rural areas, 66.3% of respondents had never tested for HIV, 17.3 % had been tested through CITC and 16.3% through PITC. In urban areas, 49.6% of respondents had never tested, 30.4% had been tested through CITC and 19.9% through PITC. In both rural and urban areas, men were significantly more likely to test for HIV through CITC, while women were significantly associated with PITC (24).Study in Tanzania on factors affecting HIV counselling and testing among adults, shows that a significant proportion of married (17.7%) and un-married (16.5%) participants

judged HTC as not essential as it would not change the test result. Sixty-eight percent of the respondents did not consider themselves at risk and most of them (71%) were married. Importantly, 26% reported being scared of discrimination (25).

EDHS 2011report show that nationally 36 percent of women and 38 percent of men have ever been tested for HIV and received their test results and in Oromia region only 32.5 percent women and 31.9 percent men ever tested and received their test result (18).

Many countries offered client-initiated testing and counseling programme .However, in many high-prevalence countries, fewer than one in ten people with HIV are aware of their HIV status. Reaching individuals with HIV who do not know their serostatus is a global public health priority .To achieving the goal of universal access to care and treatment for all people with HIV WHO and UNAIDS(2007) have advocated provider-initiated HIV testing and counseling in addition to client-initiated testing and counseling (26).

Studies in Ethiopia and other African countries among different populations between 2007 and 2011 revealed less than expected acceptance of PITC and high HIV positivity rate in health care settings (27, 28, and 29). Thus, to achieve the purpose of PITC, it is crucial to assess PITC utilization status and clients' reasons for missing PITC in health care settings (30).To date, most studies related to acceptance of PITC in Ethiopia and other countries were done in TB, ANC, and STI clinics (31, 28, 32, and 33).These clinics are generally composed of a cohort of clients in terms of risk to HIV and higher HIV suspected wards than adult outpatient department (OPD) wards. PITC related studies are limited in adult OPD. Therefore, it is timely and appropriate to study utilization status and factors that influence client use of PITC, in adult OPD patients.

CHAPTER 2: LITERATURE REVIEW

2.1 Knowledge of HIV/AIDS among adult OPD patients.

Knowledge of HIV status helps HIV negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain free of disease.2011 EDHS shows that knowledge of AIDS is almost universal; 97 percent of women and 99 percent of men age 15-49 have heard of AIDS. Awareness of prevention methods increases with education and wealth (18).

The 2011 EDHS reveals that comprehensive knowledge of AIDS is low; only two women 15-49 of every ten (19 percent) and three men of every ten (32 percent) have comprehensive knowledge about AIDS. There has been only a slight increase since 2005, when 16 percent of women and 30 percent of men had comprehensive knowledge about AIDS. The majority of Ethiopian adults (63 percent of women and 78 percent of men) know that a healthy-looking person can have HIV (18).

A study conducted in 33 districts all over Ethiopia documented an HIV/AIDS awareness level of 93%. Sixty-nine percent said a healthy looking person can have HIV, 59% rejected two common misconceptions, about half of respondents mentioned that condom and faithfulness can prevent HIV infection, and 33.3% were found to have comprehensive knowledge on HIV/AIDS. An impact assessment study of ILO/USDOL workplace interventions in seven enterprises found that 70.2% of workers had knowledge of the three means of protection against sexual transmission of HIV infection (34).

Cross sectional study conducted in Gondar town on knowledge of pregnant women on mother to child transmission of HIV and its prevention shows (88.5%) of them knew mother to child transmission of HIV and (83.5%) of them knew mother to child transmission of HIV is preventable (35).Study done in Addis Ababa university to assess higher education students' attitudes and practice on preventive measures against HIV/AIDS, 65.5% of the respondents had favorable attitude to HIV prevention. (59.2%) of the respondents had experienced at least one of the three HIV prevention practices (36).

2.2. HIV testing and counseling among adult OPD patients

The purpose of HTC is to detect the majority that are HIV negative and keep them negative for ever and for the few positive get them to access early care and support services (37). The World Health Organization and UNAIDS and UNICEF support both client-initiated HIV testing and counseling and provider-initiated HIV testing and counseling at health facilities (38).

The 2007 WHO-UNAIDS guidance recommends that health care providers advise patients to take an HIV test as a standard part of medical care in the following situations: for any patients exhibiting signs that may be related to HIV infection; for all patients attending health facilities in settings with generalized HIV epidemics; and, in settings with low HIV prevalence, for patients who are seen at certain types of health facilities, such as those providing services for tuberculosis or STIs (4,21).PITC refers to HIV testing and counseling recommended by health care providers to patients attending health care facilities (2, 3).The main justification for routine PITC is to increase the number of patients tested and thus the number of HIV-infected patients identified and linked to medical care and support services. In2004, Botswana was the first African nation to introduce PITC in a widespread and systematic fashion. (23).

2.3 Utilization of PITC

Study in Botswana on routine HIV testing show approximately half of the respondents had heard of routine testing, a majority endorsed positive views toward routine testing after the policy was explained.Eighty-one percent were ‘‘very much’’ or‘‘extremely’’ in favor of routine testing. A majority agreed that routine testing results in decreased discrimination of HIV-positive people (60%), leads to decreased violence against women (55%), and makes it easier for people to get tested (89%) and to gain access to ART (93%). On the other hand, 43% believed that routine testing would cause people to avoid seeing their health provider for fear of being tested, and 14% thought that routine testing would lead to more violence against women (39).

A cross sectional survey in Uganda on attitudes to routine HIV counselling and testing, and knowledge about prevention of mother to child transmission of HIV among antenatal attendees

show majority of the antenatal attendees (98.5%) had positive attitudes towards routine HIV counselling and testing(40) .Study assessed the uptake of Provider Initiated HIV Testing and Counseling (PITC) amongst women attending an urban sexually transmitted diseases (STD) clinic in South Africa looked that uptake was 43.5% (32). Study in rural African settings show Implementation of PITC was highly acceptable and produced a three-fold increase in patients tested per practitioner compared to standard non-PITC (33).

Study conducted in Zimbabwe on an assessment of the Zimbabwe ministry of health and child welfare provider initiated HIV testing and counseling programme, both health care workers and patients embraced PITC because they had noticed that it had saved lives through early detection and treatment of HIV (41).Study done on Zambia on Opt-out provider-initiated HIV testing and counseling in primary care outpatient clinics after the addition of PITC to VCT, the number tested for HIV infection in the clinics was twice the number undergoing VCT alone (42).

Study done in South Africa on provider-initiated HIV testing and counseling: increased uptake in two public community health centers HIV test uptake increased under PITC (43).Study done in south Ethiopia at Arbaminch hospital on acceptability of HIV counseling and testing among adult tuberculosis patients overall acceptability rate was 35% (27).Study in Addis Ababa on factors affecting willingness to HIV counseling and testing among patients presenting with conventional sexually transmitted infections shows 74% of STI patients are willing (31).

Study in North West Ethiopia on predictors of HIV testing among patients with tuberculosis looked that uptake of HIV test is 70.6% (28). A cross sectional study done in Gondar town on Assessment of utilization of provider-initiated HIV testing and counseling and associated factors among pregnant women revealed that PITC acceptance rate among pregnant women was 82.5%(44) and PITC acceptability rate was (87.7%) in Nekemt town among pregnant women (45).

2.4 Factors associated with utilization of PITC among adults

The number of men, women, adolescents and children in the general population who know their HIV status remains inadequate. Significant expansion in the availability of, and equity of access to, HIV testing and counseling is required in order to meet universal access goals to

treatment and care. The result of low coverage and uptake of HIV testing and counseling, and low levels of knowledge of HIV status, is that many people living with HIV access HIV testing and counseling only when they already have advanced clinical disease (46).

2.4.1 Individual/patients related factors

Risk perception of HIV infection

Study conducted in South Africa on Uptake of Provider Initiated HIV Testing and Counseling among women attending urban Sexually Transmitted Disease Clinic shows of those who were provided with education, information and offered HIV testing, uptake was 43.5% . Of the 56.5% refusing to test, the reasons for not testing were having already been tested for HIV(61.8%), being afraid to test or felt unready to test (32.5%), the need to consult with partner (0.9%) and refusing with no explanation (4.2%) (32).

Study in rural south Africa on Client characteristics and acceptability of a home based HIV counseling and testing intervention shows most common reasons for not testing were: not beingready/feeling scared/needing to think about it(34.1%) ; knowing his/her status(22.6%) , being HIV-positive(18.5%) , and not feeling at risk of having or acquiring HIV(10.1%) (47).

study done on desire for HIV testing and counseling in Kenya: the individual-level HIV factors shows that after controlling for the individual level of socio demographics, a number of HIV factors were found to be associated with desire for HTC among individual women and men, including HIV anxiety, knowledge and stigma(48).Study carried out in jimma on Predictors of refusal of provider initiated HIV testing among clients visiting adult outpatient departments reveal that Clients' perceive barriers: feeling of unpreparedness for testing strongly aggravated refusal of test (30).

Socio demographic

A cross sectional study conducted in Nairobi on HIV testing and counseling 31% of all respondents had ever been tested for HIV through CITC, 22% through PITC. Overall, 62% of females and 38% of males had ever been tested for HIV. Males were less likely to have had PITC compared to females. Individuals aged 20-24 years were more likely to have had PITC compared to the other age groups. The divorced/separated/widowed were more likely to have

had CITC than their married counterparts, never married were less likely to have had PITC (49).

Study on provider-initiated HIV testing and counseling among tuberculosis patients in Eastern Sudan reveal a lower education status, rural residence, and unemployment were significantly associated with a lower rate of HIV testing (50).Study in south Ethiopia on acceptability of HIV counseling and testing among tuberculosis patients unemployment and self perceived high risk of HIV infection were associated with initial willingness (27).Study in Sub Saharan Africa reported on paternes of HIV testing secondary or higher level of education was a key determinant of testing, and awareness that treatment exists was independently positively associated with testing (51).

2.4.2 Provider related factors

Informed consent, confidentiality, and counseling

Study conducted in Zimbabwe reveal that main challenges which prevented optimum implementation were shortages of staff trained in PITC, HIV rapid testing and counselling; shortages of appropriate counselling space (41).Provider-initiated HIV testing and counseling should be implemented with the objective of maximizing the health and well-being of individuals through the timely detection of HIV, prevention of HIV transmission and subsequent access to appropriate HIV prevention, treatment, and care and support services. Implementation of provider-initiated HIV testing and counseling must include measures to prevent compulsory testing and unauthorized disclosure of HIV status, and potential negative outcomes of knowing one's HIV status. Informed consent should always be given individually, in private, in the presence of a health care provider (4).

Provider-initiated HIV testing and counseling is voluntary and the "three Cs" informed Consent, Counseling and Confidentiality must be observed at all times. A brief counseling or pre test education/information should always accompany testing even for diagnostic purposes and patients should never be forced to undergo testing against their will (2).

HIV/AIDS counseling is confidential communication between a client and a care provider aimed at enabling the client to make personal decisions relating to HIV/AIDS and cope with stress. Confidentiality is an important characteristic of counseling and testing services. Providers should keep client information private. Providers should also respect their clients' wishes regarding when and whom to tell about their HIV status (52).

Specifically with regard to provider-initiated testing and counseling, the Guidance says: "When recommending HIV testing and counseling, service providers should always aim to do what is in the best interests of the individual patient. This requires giving individuals sufficient information to make an informed and voluntary decision to be tested, maintaining patient confidentiality, performing post-test counseling and making referrals to appropriate services (53).

2.4.3 Social related factors

Attitude towards PLWHA (stigma and discrimination)

Widespread stigma and discrimination towards people infected with HIV/AIDS can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Thus, reduction of stigma and discrimination is an important indicator of the success of programmes to prevent and control HIV/AIDS. Most women and men age 15-49 (82% of women and 93 % of men) would be willing to care at home for a relative with AIDS. Accepting attitudes are generally more common among respondents in urban areas than among those in rural areas and increase with education and wealth (18).

Stigma and discrimination are one of the key barriers to combating the AIDS epidemic (54). Study in Sweden shows HIV/AIDS related stigma and discrimination is a big obstacle to HIV/AIDS prevention, care and treatment (55).The study in Nigeria on HIV/AIDS related stigma and discrimination reveal that a significant challenge to the success of achieving universal access to HIV prevention, treatment, care and support by 2010 is HIV/AIDS stigma and discrimination (56).

The study in Tanzania on Manifestations and reduction strategies of stigma and discrimination on people living with HIV/AIDS effects of stigma and discrimination are from both health facilities and communities. While religious leaders isolate people living with HIV/AIDS

(PLWHAs) and consider them as most promiscuous, health workers also have strong negative attitudes and feelings and as a result PLWHAs refrain from counseling and testing services (57).Study in North West Ethiopia on predictors of HIV Testing among patients with tuberculosis found that low awareness and stigma were the major reasons for non acceptance of HIV testing (32).

Conceptual framework of PITC utilization and associated factors

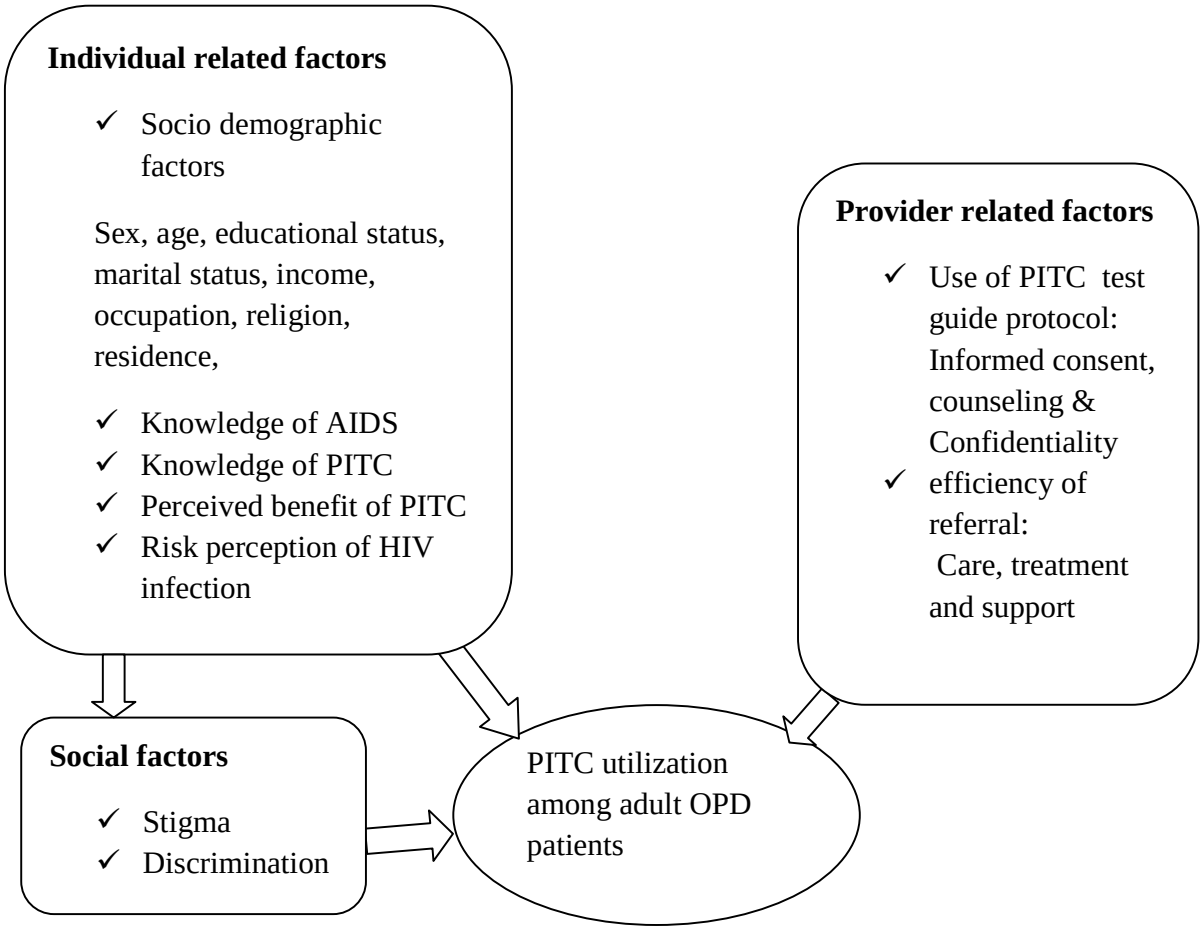


Figure 1: Adapted hypothesized Model for PITC utilization and associated factors (39)

2.5 Rational of the study

Testing for HIV is the gate way to treatment, care, and prevention. To scale up treatment and prevention, rapid increases in both the volume of testing and the ability to counsel those who are tested are needed. Provider-initiated testing and counseling is a priority strategy for increasing access for HIV exposed adult to preventive measures, and infected adult to treatment and care interventions (18). Only few studies conducted in Ethiopia on magnitude of utilization and determinants of utilization of provider initiated HIV testing and counseling among adult OPD patients. No study conducted so far in south west shoa zone as well in Wonchi woreda on assessment of PITC and associated factors among adult outpatient department patients.

This study aims to assess PITC utilization and factors influencing its uptake among adult patients visiting OPD. So the findings of the study will help wonchi woreda and other similar settings to introduce measures that will improve utilization of provider initiated HIV testing and counseling.

It will also help as base line for farther finding in the area.

CHAPTER 3: OBJECTIVES OF THE STUDY

3.1 General objective:

To assess utilization of provider initiative HIV testing and counseling and associated factors among adult out patient department patients in Wonchi Woreda, south west Shoa Zone, Oromia Reginal state, Central Ethiopia.

3.2 Specific objectives:

- To assess PITC utilization among adult OPD patients
- To identify individual related factors influencing PITC utilization among adult OPD patients
- To identify social related factors influencing uptake of PITC among adult OPD patients
- To identify provider related factors affecting PITC utilization among adult OPD patients

CHAPTER 4: METHODS AND MATERIALS

4.1 Study area and period

The study was conducted in Wonchi Woreda public health facilities from February 24 to March 24 /2013. Wonchi woreda is one of the twelve woredas found in south west Shoa zone 9km away from the zonal town, Woliso to the north and 122km from Addis Ababa to the west. The woreda is divided into 23 rural kebeles and two urban kebeles having total population of 109,901 with 49.5% of them is women**.** Most of the population 105,015 (96%) live in rural area and are engaged in farming .The most harvested agricultural product are cereal crop such as wheat,barley,teff, and other cash crops. (58).

The Woreda shares border in East Dawo, in South Woliso, in West Ameya and Goro Woerda and Ambo woreda in North.It is characterized by two climatic conditions Dega and Weyina Dega.It has four public health centers, which routinely offer PITC service free of charge, namely Chitu, Dulele, Leman and Darian health center and 23 governmental health posts and three private small clinics (58).

4.2 Study design: Health facility based cross sectional study was conducted.

4.3 Source population: All adult population attending adult out patient departments in public health facilities in Wonchi woreda.

4.4 Study population: All adult population attending adult out patient departments of public health facility in Wonchi woreda during data collection period.

4.5 Eligibility criteria

4.5.1 Inclusion: All adult population (15-64 years) attending OPD of public health centers of Wonchi woreda for medical care during data collection period. Minimum age for inclusion taken from national WHO/ UNAIDS guidelines for HIV counseling and testing in which parental consent is not required.

4.5.2 Exclusion:

- ✓ All adult population who are seriously ill, not in clear mental state and unable to communicate (having hearing problem)
- ✓ All HIV positive adult patients who were already diagnosed

- ✓ All HIV negative patients who were tested within past 3 months and
- ✓ Patients coming for VCT service

4.6 Sample size determination:

The sample size was determined by using a single population proportion formula, by assuming 36.5% of adult OPD population in Ethiopia accepts PITC offered by health care provider (29), 5% margin of error, and 95 % confidence level and 10% non-response rate was added.

$$n = \frac{(Z_{\propto/2})^2 P(1-P)}{d^2}$$

$$n = \frac{(1.96)^2\ 0.365(1-0.365)}{(0.05)^2} = 392$$

Where n = required sample size

$Z_{\alpha/2}$ = critical value for normal distribution at 95% confidence interval which equals to 1.96 (Z value at alpha=0.05).

P=expected prevalence of PITC utilization

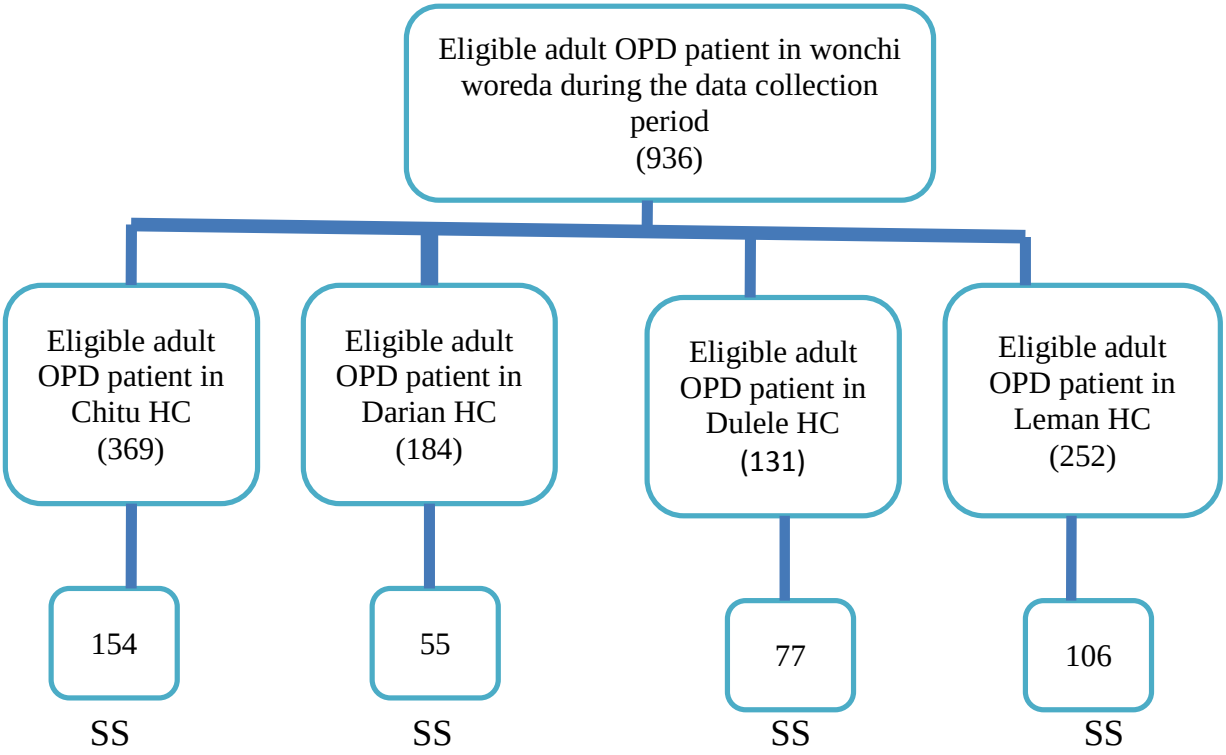
d= margin of error

4.7 Sampling technique

All the four public health centers of Wonchi woreda which routinely offer PITC for all adult patients attending OPD were used to sample the subjects in this study. Based on the number of customers who visited each health institution during the previous three months (monthly report of each health institution), proportional allocation of the total sample size was carried out to obtain the required sample size in each health institution. One hundered fifty four (154) from Chitu,106 from Leman,77 from Dulele,and 55 from Darian health center.Sampling interval was determined by dividing average number of adult patients visiting each health center during data collection period by the corresponding number of adult patients to be interviewed in each health center.

Adult OPD patients who accept recommended test from provider were given green card and sent to prepared data collection room/data collectors and patients who refuse recommended test

were given yellow card and sent to prepared data collection room/data collectors.Finally, the determined sample for each health center was achieved through exit interview by systematic sampling and voluntarily consenting adult patients within four weeks of working day.



HC - Health center SS – systematic sampling

Figure 2: schematic presentation of sampling procedure

4.8 Data collection procedure

A structured interviewer administered questionnaire was used to elicit the following information: socio-demographic data,comprehensive knowledge on HIV/AIDS,risk perception of HIV infection, perceived benefit of HIV test, stigmatizing attitude towards people having HIV/AIDS, knowledge of PITC of HIV, attitude towards PITC, utilization of PITC, and use of PITC protocol by counselors from the study participants.

The questionnaire was adapted from DHS as well as from different reviewed literatures. It was prepared in English and was translated into Afan Oromo then back to English to check for the consistency.The questionnaire prepared tried to address all important variables for the study.

Data collectors were degree holder (two in sociology and two in English) who speak the local language and had experience in data enumeration. Three BSc nurses and one health officer were supervising the data collection process. Supervisors were also speak the local language and had experience in data collection supervision.

4.9 Study variables under measurement

- **Dependent variable**
- ✓ PITC utilization among adult OPD patients
- **Independent variables**
- ✓ Individual related factors (sex, age, educational status, marital status, religion, residence, occupation, income, knowledge of HIV/AIDS,knowledge of PITC,risk perception of HIV infection, perceived benefit of PITC test)
- ✓ Stigma and discrimination toward PLWHA
- ✓ Provider related factors (use of PITC guide line protocol (informed consent, counseling, confidentiality),efficiency of referral(care, treatment and support)

4.10 Operational definitions

PITC: HIV testing and counseling recommended by health care providers to patients attending health care facilities

Utilization: Adult OPD patients who are willing to utilize PITC service.

Non-utilizers: Among interviewed adult OPD patients, those who refused to utilize PITC

Risk perception for HIV infection: respondents feeling of vulnerability of being infected by HIV/AIDS.

Perceived benefit of PITC: respondents who believed that PITC is beneficial for him/her/adult OPD patients

Misconception: Study participants were considered to have misconceptions about HIV/AIDS transmission and prevention if, they agreed incorrectly to any of the five misconception questions (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, through mosquito bite and through supernatural means)

Comprehensive knowledge about HIV: respondents ware considered to have comprehensive knowledge about HIV if they correctly identify the three main ways to prevent HIV transmission (HIV is prevented by abstinence, staying faithful with one uninfected partner and using condom every time during sex) and reject the five misconceptions about HIV transmission and prevention

Stigma: individual who has stigmatizing idea for at least one of five questions related to stigma towards people living with HIV/AIDS (Would you willing to share a meal with a person you knew had HIV/AIDS? If your family member became ill with HIV, would you willing to care for him/her in your own household? If you knew a shopkeeper or food seller had HIV, would you buy food from them? If a member of your family became ill with HIV, would you want it to remain secret? If a teacher has the HIV virus but not sick, should he/she be allowed to continue teaching?)

4.11 Data quality control

To assure the quality of data, data collection instrument was properly designed and both data collectors and supervisors were trained for two days on study instrument, interview techniques, and sampling technique. Supervisors were also trained on techniques of random observation of during data collection.

Before the actual data collection process, the questionnaire was pre-tested on Ameya woreda public health center 8km away from the study setting using 20 cases (5% of sample size).The pretest was conducted by involving the data collectors, supervisors and the principal investigator. After pre testing ambiguous and difficult questions to data collectors as well as the respondents were assessed and modification and correction before the actual data collection process was carried out.

Supervision was conducted by supervisors and the principal investigator. Data collectors submit the collected data daily to supervisors and the principal investigator. Each questionnaire was checked by nearby supervisors on daily basis for completeness and consistency. Completed questionnaire was rechecked by the principal investigator and the principal investigator followed the overall data collection activities closely.

4.12 Data processing, analysis, interpretation and presentation

Data was checked for consistency, edited, coded and entered in to Epidata version 3.1and exported to SPSS window version 16.0 for analysis and cleaned to identify and correct inconsistencies and missing values.

Frequency, proportion, summary statistics was used to describe the study population. Bivariate logistic regression analysis was computed to see the presence and degree of association between independent and dependent variable. A p-value less than 0.25 was used to select variables as candidate for multivariate logistic analysis and multivarible logistic regression was done to identify predictors of PITC utilization among adult OPD Patients. A p-value less than 0.05 were considered to declare statistical significance.

Backward conditional entry method was used. Both the Omnibus tests of model coefficient p value should be significant ($p<0.05$) and the Hosmer and Lemeshow Test p value shoudn't be significant ($p>0.05$) the model considered good were used to describe the performance of each model. Adjusted odds ratio and 95% CI were reported for interpretation.Tables, graphs and chart were used for result presentation.

4.13 Ethical consideration

Ethical clearance was obtained from health research and post graduate coordinate office of Jimma University College of Public Health and Medical Science as well as the south west Shoa Zone Health Bureau. The woreda health office, health facilities in which the study was conducted were notified in writing beforehand. Verbal consent of the study participants was obtained after explaining about the purpose of the study. Names and identifications of respondents were not collected to ensure confidentiality of the information collected.

4.14 Dissemination plan

First the final study report will be presented to Jimma University, College of Public Health Department of Epidemiology and will be submited in both hard and soft copy. The results of the finding will also submitted to Oromia regional state health bureau, south west Shoa zonal health bureau and Wonchi Woreda Health Offices in hard copy. The findings will also be sent for publication in reputable journals.

CHAPTER 5: RESULT

5.1 Socio demographic characteristics of the respondents

Of the total of 392 patients requested for interview, 371 patients (94.6% response rate) aged between 15 to 64 years were interviewed. The rest 14(3.6 %) and 7 (1.8%) were refusal and incomplete interview, respectively. The mean (± SD) age of the study participants was 31.9± 12.2 years. Among all patient participated in the study 194(52.3%) were males.The majority [352 (94.9%)] of the respondents were from rural area. Nearly all [362(97.2%)] of the study participants were Oromo by ethnicity. More than two in five of the participants [152(41%)] were illiterate. One hundred eighty two (49.1%) of the study participant were followers of orthodox by religion followed by protestant 176(47.4%) (Table 1).

With regard to their marital status, two hundred twenty seven (61.2%) were married.More than four in ten (42.9%) were farmers, 116(31.3%) were housewife. Half of the respondents186 (50.1%) have average household monthly income of <=499ETB (Table 1).

Table 1: Socio-demographic characteristics of the respondents, Wonchi woreda March, 2013

Variables	NO	Percent (%)
Age		
15-24	118	31.8
25-34	118	31.8
35-44	66	17.8
45-54	42	11.3
55-64	27	7.3
Sex		
Male	194	52.3
Female	177	47.7
Residence		
Rural	352	94.9
Urban	19	5.1
Religion		
Orthodox	182	49.1
Protestant	176	47.4
Muslim	13	3.5
Ethnicity		
Oromo	362	97.6
Others*	9	2.4
Marital status		
Married	227	61.2
Single	98	26.4
Divorced /widowed	46	12.4
Educational status		
Illiterate	152	41.0
Primary	151	40.7
Secondary and above	68	18.3
Current occupation		
Merchant	10	2.7
House wife	116	31.3
Farmer	159	42.9
Student	56	15.1
Government employee	9	2.4
Un employee	21	5.7
Average house hold monthly in come		
<=499ETB	186	50.1
500-1000ETB	159	49.9
>1000ETB	26	7.0

***Others Amhara and Gurage**

5.2 HIV/AIDS knowledge and Personal risk perception of HIV infection

All participant 371(100%) have heard about HIV/AIDS. Nine of ten respondents (87.6%) believed that HIV/AIDS was definitely not curable disease. Most of the respondents [369 (99.5%)] mentioned sexual intercourse as a means of HIV transmission. Three hundred sixty eight (99.2%),three hundred eight (83.0 %) and two hundred fifty one (67.7%)mentioned that HIV can be transmitted by sharing sharp material,through blood transfusion, and mother to child transmission respectively(Table 2) .

Most of the participants were aware that HIV is not transmitted by sharing meal with a person living with HIV [367(98.9%)], shaking hand of person living with HIV [357(96.2%)], sharing cloths of person living with HIV [354(95.4%)], supernatural means [299(80.6%)] and mosquito bite [310 (83.6%)].Nearly two third (64.7%) have no misconception on HIV transmission. All of the respondents371(100%) reported that avoiding sex (abstinence) as method of HIV prevention,350(94.3%)staying with only one uninfected partner(faithful) and 210(43.3%) participant reported using condom every time during sexual intercourse prevents HIV (Table 2)

Most of the respondents 240(64.7%) do not have comprehensive knowledge on HIV transmission and prevention. Two hundred twenty three (60.4%) of the study participant reported that they don't know someone who infected with or died of AIDS.Three hundred thirteen (85.1%) of the respondent believed that health looking person can have HIV (Table 2).

Three hundred thirty nine (91.4%) of the participants do not perceive themselves as having a risk for HIV. Their reason for so were they trust their sexual partner [164(48.5%)], no injection with unsterile needle [172 (50.9%)]. On the other hand,risk rating for those who perceived as having a risk for infection was low for 21(65.6%) , moderate for 5 (15.6%) and the rest 6(18.8%) rated as high. The main reason for having high or moderate perception of having HIV infection were having multiple sexual partner [4(36.4%)], injection with unsterile needle [5(45.5%)] and sexual contact without condom [2(18.1%)] (Table 2).

Table 2: Knowledge and personal risk perception on HIV infection among adult OPD patients in Wonchi woreda, March, 2013

Variable /questions	NO	Percent (%)
Can HIV be cured?		
Yes	46	12.4
No	325	87.6
HIV/AIDS transmitted through		
Sexual intercourse	369	99.5
sharing sharp material	368	99.2
Blood transfusion	308	83.0
Mother to child transmission	251	67.7
HIV/AIDS not transmitted through		
Sharing meal with a person living with HIV	367	98.9
Shaking hand of person living with HIV	357	96.2
Sharing cloths of person living with HIV	354	95.4
Supernatural means	299	80.6
Mosquito bite	310	83.6
HIV/AIDS can prevented by		
Avoiding sex (abstinence)	371	100
Staying with only one uninfected partner	350	94.3
Using condom every time during sexual intercourse	210	43.3
Misconception on HIV		
Have misconception	131	35.3
Have no misconception	240	64.7
Comprehensive knowledge on HIV		
Comprehensive	131	35.3
Not comprehensive	240	64.7
May healthy looking person be Positive for HIV?		
Yes	313	85.1
No	55	14.9

Continuation of table 2

Do you think you can get the virus? (n =371)	**NO**	**%**
Yes	32	8.6
No	339	91.4
Reason for not having the virus(n=338)		
Trust their sexual partner	164	48.5
No injection with unsterile needle	172	50.9
Using condom every time during sex	2	0.6
What are your chances of getting Infected with HIV? (n=32)		
Low	21	65.6
Moderate	5	15.6
High	6	18.8
Reason for having high or moderate perception of having HIV infection(11)		
Having multiple sexual partner	4	36.4
Injection with unsterile needle	5	45.5
Sexual contact without condom	2	18.1

5.3 Attitude towards people living with HIV/AIDS

Two hundred thirty nine (64.8%), 349 (94.1%) and 146(39.5%) of the participants said that they would share meal with HIV positive person, are willing to care for HIV positive and purchase from shop of HIV positive person, respectively.Nine of 10 (85.7%) of the participants reported that if somebody is HIV positive in the family they will not keep it secret. Two hundred sixty five (73.4 %) of the participant do think that an HIV positive teacher without illness should be allowed to continue teaching. Overall, only 105 (28.3%) of the participants do not stigmatize HIV infected individuals and seven of ten of the respondent (71.7%) stigmatize PLWHA (figure 3).

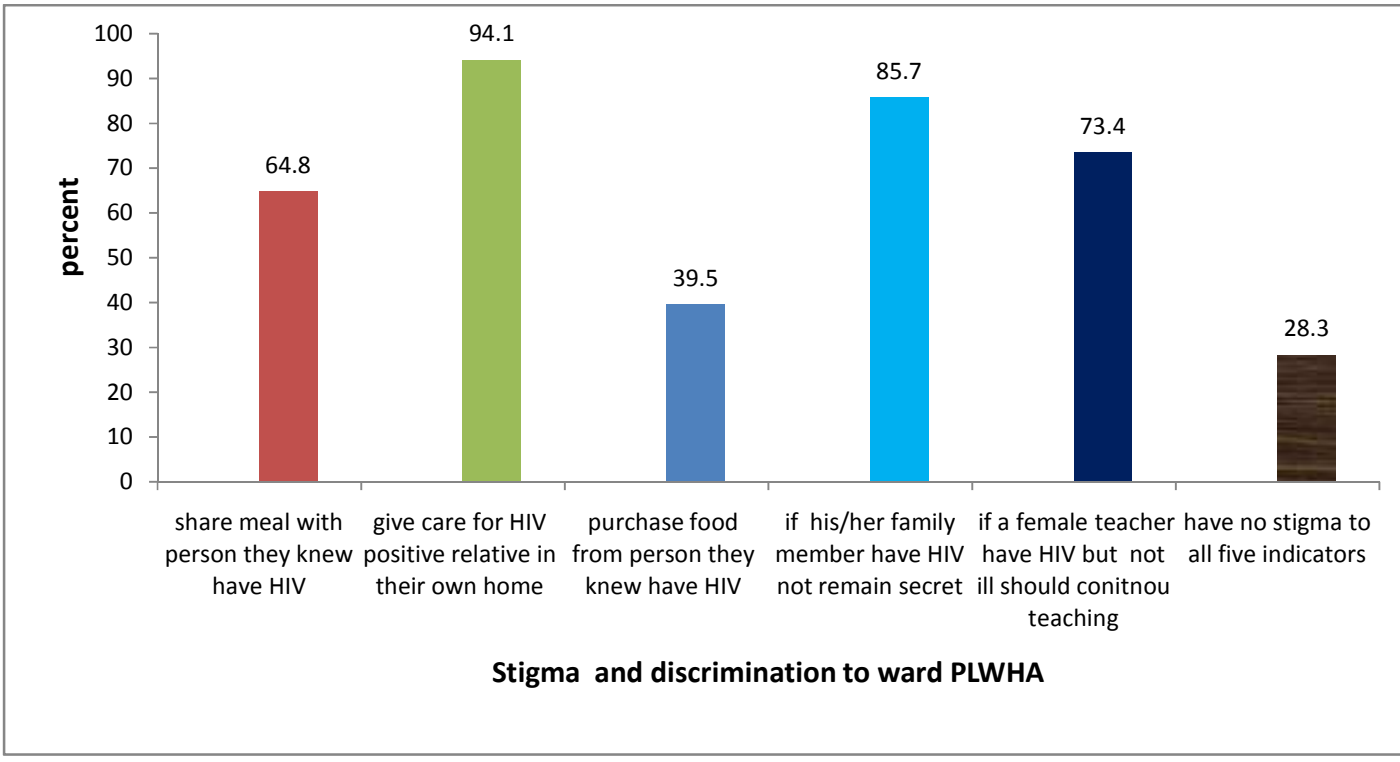


Figure 3: stigma and discrimination to ward PLWHA of adult OPD patients in wonchi woreda March, 2013

5.4 Knowledge about and attitude towards PITC among adult OPD patients.

Of 371 patients interviewed only one hundred forty two (38.3%) reported that they were aware of the availability of PITC before this interview. The most common source of information for PITC mentioned by participants were health worker [115 (81%)] and the least were media [17(12%)] as shown in figure 4 below.Majority of the patients have positive attitude toward PITC;52.1% were extremely or very much in favor of PITC as shown on table 3 .

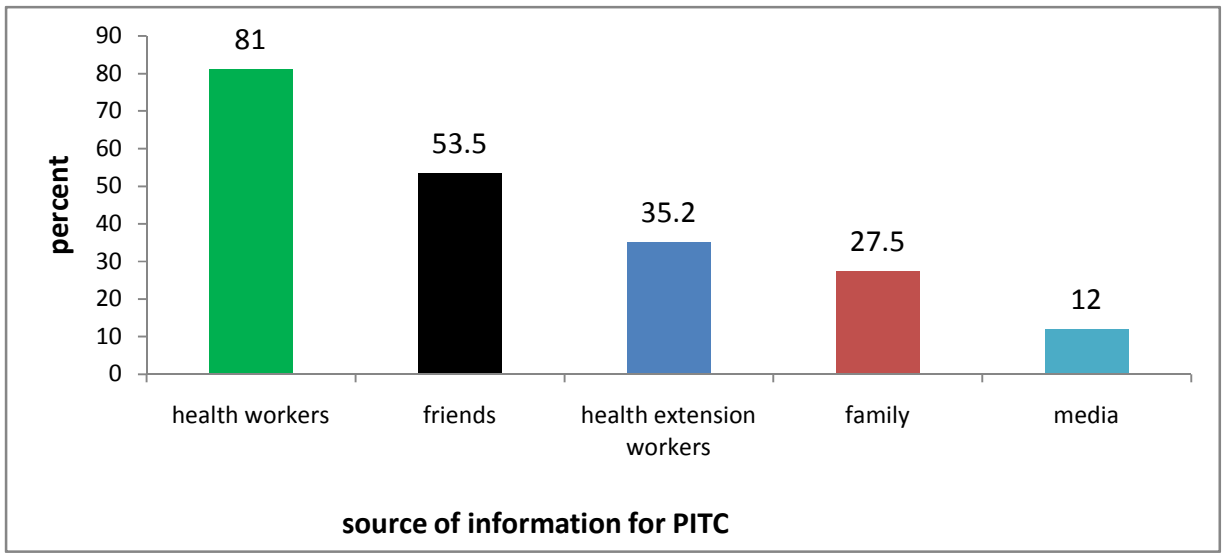


Figure 4: Source of information for PITC among adult OPD patients in Wonchi woreda, March, 2013

Many of the participants [347(93.5%)] believed that PITC is important in that it helps patients get access to ART and makes HIV testing easier for clients [282(76.0%)]. Some 29(7.8%) of the respondent reported that PITC have influence on patients being violates patient human right [16 (54.5%)] and will cause patients to avoid seeing health professionals for fear of being tested [13(45.5%)] (table 3).

Three hundred forty eight (94.1%) of the respondents agreed that any one should check his/her sero status for HIV. With regard to the timing of the test [315 (84.5%)] believe that the time of test is at any time, [170(45.8%)] think it should be before marriage. When asked who needs HIV testing majority responded that anyone who is sexually active [248 (66.8%)], those who are sick [210 (56.6%)] as shown table 3.

Table 3: Knowledge and Attitude Related to PITC among adult OPD patients Wonchi woreda March, 2013.

Variable	NO	Percent (%)
Have you ever heard of PITC?(371)		
Yes	142	38.3
No	229	61.7
To what extent are you in favor of PITC (n=142)		
Extremely	53	37.3
Very much	21	14.8
Some what	68	47.9
Reason for importance of PITC (n=371)		
Helps patients get access to ART	347	93.7
Makes easier for clients to get tested	282	76.1
Increase number of tested people	47	12.7
Results in less discrimination of HIV Positive patients	29	7.9
Did you feel that PITC has influence on patient?(371)		
yes	29	7.8
no	342	92.2
What are the reasons for feeling that PITC has influence on patients?(29)		
Violet patients human right	16	54.5
Will cause patients to avoid seeing health professionals for fear of being tested	13	45.5
At which time should one be tested for HIV? (n=371)		
When one is sick	148	39.9
Before marriage	170	45.8
If only has multiple partners	34	9.2
At any time	315	84.9
Who are people in need of HIV test? (n=371)		
Female commercial sex workers	63	17.0
Drivers	48	12.9
People with history of unprotected sex	76	20.5
TB patients	15	4.0
Those with multiple partners	58	15.6
Any one sexually active	248	66.8
Those who are sick	210	56.6
Any one at risk	193	52.0

5.5 Previous history of HIV test of the respondent

Only 217(58.5%) of the participant have ever been tested for HIV before data collection.Reasons of the test were voluntary test [148(68.2%)], initiation by health worker [47(21.7%)], routine ANC [21(9.7%)].Among those who undergo HIV testing, [135(62.2%)] got the test in government health center, 42(19.4%) in standalone VCT centers and [40(18.4%)] in governmental hospital (table 4)

The reasons reported by the respondents who never had the test were self trust [113 (73.4%)], partners trust [72(46.8%)], thinking self as not being at risk [71(46.1%)] as shown in table 4

Table 4: Previous history of HIV test of adult OPD patients in wonchi woreda March 2013

Variables	NO	%
Have you ever been tested for HIV		
yes	217	58.5
No	154	41.5
Reason of the test		
Client initiated(VCT)	148	68.2
Provider initiated(PITC)	47	21.7
Routine ANC	21	9.7
Blood donation	1	0.4
Where do you do your test		
Government health center	135	62.2
Stand alone VCT center	42	19.4
Government hospital	40	18.4
Reason for not tested		
Self trust	113	73.4
Partners trust	72	46.8
Thinking self as not being at risk	71	46.1
Unable to cope with the positive result	57	37
Fear of the result	28	8.2
Fear of stigma and discrimination	12	7.8
Not sure of confidentiality	2	1.3
Belief that being tested is not useful	2	1.3

5.6 PITC utilization and reasons for utilization among adult outpatient department patietns

The overall utilization of PITC among the respondents was [291(78.4%)] and the rest [80(21.6%)] refusal of PITC (Figure 5).

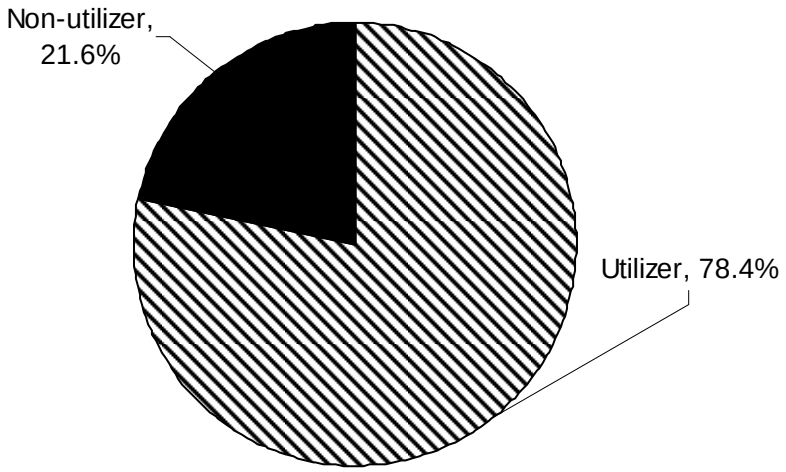


Figure 5: PITC utilization among adult OPD patients of wonchi woreda March, 2013

The perceived facilitators for PITC utilization were recommendation by health worker [268 (92.1%)], sickness [253 (86.9%)], heard that he/she could take test and get result on the same day 128 (44.0%) as shown table 4.

On the other hand, reported barriers for PITC utilization were, thinking one self as not being at risk [60(75%)], partner trust [48 (56.2%)], unable to cope with the positive result [41(51.2%)], tested before [23 (28.3%)] table 4.

Table 5: Reasons for utilization and refusal of PITC among adult OPD patient of Wonchi woreda, Oromia, central Ethiopia, 2013

Reason for utilization of PITC:	n =291
Health worker recommend it	268(92.1%)
He/she was sick	253(86.9%)
Heard that he/she could take test and get result on the same day	128(44.0%)
Knowing that treatment is available	45(15.5%)
TV/radio messages	13(4.5%)
Parents/family/friends advised to have test	9(3.1%)
Knowing that the test result will be confidential	7 (2.4%)
Was encouraged by someone who was tested	7(2.4%)
Was worried about the previous sexual contact	6(2.1%)
Reason for refusal of PITC	n=80
Thinking self as not being at risk	60(75%)
Partner trust	48 (56.2%)
Unable to cope with the positive result	41(51.2%)
Tested before	23 (28.3%)
Fear of test result	13 (16.2%)
Fear of stigma and discrimination following the positive result	3(3.8%)
Belief that testing is not useful	2(2.5%)
Fear of discrimination by health providers	1(1.2%)

5.7 Factors associated with PITC utilization among adult OPD patients

5.7.1 Association between utilization of PITC and each explanatory variable among adult OPD patients using bivariate logistic regression

In bivariate logistic regression sex, marital status, educational level, having awareness about availability of PITC, having HIV test before and giving explanation on process of testing for

patient by counselor were significantly associated with PITC utilization as shown table 6 below.

Knowledge about cure, transmission & prevention of HIV/AIDS, misconception, perceived benefit of PITC, risk perception of HIV infection, stigma and discrimination, provider related factors such as informed consent, confidentiality, efficiency of referral and support were not significantly associated with PITC utilization.

Table 6: Association between utilization of PITC and each explanatory variable among adult OPD patients using bivariate logistic regression.

Explanatory variable	**PITC utilization**		**crude OR (95% CI)**	**P value**
	utilizer No (%)	**Non utilizer No (%)**		
Sex				
Male	163(84)	31(16)	**2.013(1.214, 3.338)**	**0.007**
Female	128(72.3)	49(27.7) [R]	1.00	
Educational status				
Illiterate	109(71.7)	43(28.3)	**0.552(0.323, 0.953)**	**0.033**
Primary	124(82.1)	27(17.9) [R]	1.00	
Secondary and above	58(85.3)	10(14.7)	1.263(0.573, 2.782)	
Marital status				
Married	183(80.6)	44(19.4) [R]	1.00	
Single	85(86.7)	13(13.3)	1.572(0.804, 3.072)	
Divorced /widowed	23(50)	23(50)	**0.240(0.124, 0.468)**	**0.000**
Heard about PITC Before				
Yes	127(89.4)	15(10.6)	**3.128(1.828, 6.160)**	**0.000**
No	164(71.6)	65(28.4) [R]	1.00	
Have you tested for HIV before?				
Yes	192(88.5)	25(11.5)	**4.267(2.508, 7.258)**	**0.000**
No	99(64.3)	55(35.7) [R]	1.00	
Provider explained for you about HIV testing process				
Yes	116(87.9)	16(12.1)	**2.651(1.461, 4.812)**	**0.001**
No	175(73.2)	64(26.8) [R]	1.00	

R –referance group

5.7.2 Association between utilization of PITC and selected explanatory variable among adult OPD patients using multiple logistic regressions

In order to measure the association between utilization of PITC and a number of explanatory variables, adjusted OR with 95% CI were computed using multiple binary logistic regressions. The association between selected explanatory variables and utilization of PITC was presented in table 7 below.

Compared to female adult OPD patients, male adult OPD patient were 1.81 times more likely to utilize PITC [AOR & (95%CI) =1.81(1.02, 3.24)]. Divorced/widowed adult OPD patients were 68% times less likely to utilize PITC compared to married adult OPD patient [AOR & (95%CI) = 0.32(0.15, 0.69)].

Adult OPD patients who have comprehensive knowledge of HIV were 59% times less likely to utilize PITC compared to adult OPD patients who do not have comprehensive knowledge of HIV[AOR & (95%CI) = 0.41(0.220,0.759)]. Patient who heard about PITC before data collection were 2.89 times more likely to utilize PITC compared to adult OPD patients who don't heard about PITC before[AOR & (95%CI) = 2.89(1.48,5.66)]. Adult OPD patient who received HIV test before were 4.15 times more likely to utilize PITC than those who were not tested before[AOR & (95%CI) =4.15 (2.30, 7.47)].Finally, explaining the process of testing for adult OPD patient by counselor were positively associated with PITC utilization.Patient who reported of having received an explanation about the process of testing were 2.26 times more likely to utilize PITC than patients who reported of not having an explanation about the process of testing in OPD by provider[AOR & (95%CI) =2.26(1.15, 4.45)].

On the contrary, educational level, income status, residence, age, current occupation, having knowledge on HIV transmission and prevention, holding stigmatizing attitude towards people having HIV/AIDS,risk perception of HIV infection, perceived benefit of PITC testing and provider related factors such as informed consent, confidentiality, efficieny of referral and support, were not independently associated with utilization of PITC.

Table 7: Association between utilization of provider initiated HIV testing and counseling and selected explanatory variable (using crude and adjusted OR).

Explanatory variable	PITC utilization		Crude OR (95%CI)	Adjusted OR (95%CI)
	Utilizer No (%)	Nonutilizer No (%)		
Sex				
Male	163(84)	31(16)	**2.01(1.214,3.338)***	**1.81(1.015,3.240)***
Female	128(72.3)	49(27.7) R	1.00	1.00
Marital status				
Married	183(80.6)	44(19.4) R	1.00	1.00
Single	85(86.7)	13(13.3)	1.57(0.804,3.072)	1.81(0.852, 3.829)
Divorced /widowed	23(50)	23(50)R	**0.24(0.124,0.468)***	**0.32(0.149,0.696)***
Comprehensive Knowledge On HIV				
Comprehensive	96(73.3)	35(26.7)	0.63(0.382,1.049)	**0.408(0.220,0.759)***
Not comprehensive	45(18.8)	195(81.2)R	1.00	1.00
Heard about PITC Before				
Yes	127(89.4)	15(10.6)	**3.13(1.828,6.160)***	**2.89(1.480,5.659)***
No	164(71.6)	65(28.4) R	1.00	1.00
Have you tested for HIV before				
Yes	192(88.5)	25(11.5)	**4.27(2.508,7.258)***	**4.15(2.301,7.472)***
No	99(64.3)	55(35.7) R	1.00	1.00
Provider explained for you about HIV testing process				
Yes	116(87.9)	16(12.1)	**2.65(1.461,4.812)***	**2.26(1.148,4.448)***
No	175(73.1)	64(26.8)R	1.00	1.00

*** statistically siginificant variable P<0.05 R –reference group**

Melticollinarity was checked using carmer's v coefficient.

CHAPTER 6: DISCUSSION

HIV testing and counseling is the key entry point to prevention, care, treatment and support services, where people learn whether they are infected, and are helped to understand the implications of their HIV status and make informed choices for the future. PITC is one of the elements of HTC regarded as accessible to all patients in all settings. Even currently, most people remain unaware of their HIV status due to various reasons (2, 3).These studies assess uptake of PITC and associated factors among adult OPD patient of public health facility of wonchi woreda.

Though low knowledge on HIV among respondent,[131(35.3%)] have misconception and [240(64.7%)] have no comprehensive knowledge on HIV the utilization rate of PITC among the respondent were high [291(78.4%)]. These report were higher than acceptance rate of HIV testing and counseling reported by different studies done in south Ethiopia at Arbaminch (35%),north west Ethiopia(70.6%)(27,28), PITC in Dessie town among adult OPD patients(36.5%)(29), in east Sudan(12.7%) and in rural south Africa 43.5%(50,32) and lower than PITC in Gondar town among pregnant women(82.5%) (44).

This increasing result in utilization of PITC among adult may due to high governmental concern giving awareness on HIV to achieve zero HIV infection, zero discrimination to PLWHA and zero HIV/AIDS related death.

All participants, 371(100%), have heard about HIV/AIDS, comparable with EDHS 2011 (18). Only 131(35.3%) have comprehensive knowledge on HIV which were higher than EDHS 2011 and lower than study by Alemayehu .L et al in Addis Ababa (31).

One hundred thirty one of the respondent (35.3%) have misconception which is lower than a study conducted in 33 districts all over the Ethiopia in which 41% not rejected two common misconceptions and study by Alemayehu .L et al in Addis Ababa (34, 31) .

Three hundred thirteen (85.1%), of the respondent believed that health looking person can have HIV which is greater than study conducted in 33 districts all over the country sixty-nine percent said a healthy looking person can have HIV and EDHS 2011(34,18).

Although all subjects included in this study reported that they had heard of HIV/AIDS, the assessment done on their knowledge of the modes of transmission and preventive measures indicated the fact that most of the interviewed adult OPD patients six of ten were lacking the comprehensive knowledge. This indicates the prevailing fact among our population in general.

Three hundred thirty nine (91.4%) of the participants not perceived themselves as having risk for HIV. The reason for not get the virus were they trust their sexual partner 164(48.5%), no injection with unsterile needle 167 (50.9%) and using condom every time during sex 2(0.6%).These report were higher than study by Degu et al in south Ethiopia among TB patient, Muheza district in Tanzania 68% of the respondents did not consider themselves at risk and North east Ethiopia in Dessie town (27, 25, 29).

Three hundred thirty nine (64.8%) of the participant would be willing to share meal with HIV positive person, 349 (94.1%) were willing to care for HIV positive and 146(39.5%) purchase from shop of HIV positive person in line with EDHS 2011 report (18). 318 (85.7%) of the participants report that if somebody is HIV positive in the family they would not keep it secret which is higher than report on EDHS 2011 59 % of women and 66% of men would not want to keep secret the fact that a family member is infected with HIV.

Two hundred sixty five (73.4 %) of the participant do think that an HIV positive teacher without illness should be allowed to continue teaching, which is higher than EDHS 2011 report. Overall, only 105 (28.3%) of the participant have no stigma to all five indicators in line with EDHS 2011. Study in North West Ethiopia on predictors of HIV Testing among patients with tuberculosis found that low awareness and stigma were the major reasons for non acceptance of HIV testing (32).

Concerning attitudes towards PITC in this study, only one hundred forty two (38.3%) reported that they were aware of the availability of PITC before this interview which is lower than study in Botswana fifty-four percent of respondents had heard of routine testing (39).Majority of the patients have positive attitude toward PITC 52.1% were “extremely” or “very much” in favor of PITC, this report were lower than study in Uganda (40). These might be due to difference in study setting and study population.

All of the participant believed that PITC were important being helps patients get access to ART 347(93.5%) and makes easier for clients to get tested 282 (76.0%) and followed by increase number of tested people 47(12.7%) this result is comparable with study conducted in Zimbabwe and Zambia (41,42).

Some of the respondent 29 (7.9%) reported that PITC have influence on patient. Reason for influence of PITC were being violet patient human right 15(54.5%) and will cause patients to avoid seeing health professionals for fear of being tested 14(45.5%) this finding is higher than study in Gondar town 17.75% of mothers believed that routine testing would cause people to avoid seeing their health care provider for fear of being tested and 8.25% of mothers thought that routine testing would lead to more violence against women and population based study in Botswana (44, 39).

The most frequent perceived facilitators for PITC utilization were health worker recommends it 268 (92.1%), he/she was sick 253 (86.9%), heard that he/she could take test and get result on the same day 128(44%). Knowing that treatment is available 45(15.5%), TV/radio messages 13(4.5%), knowing that the test result will be confidential 7 (2.4%) were the least perceived facilitators for PITC utilization which is less than study in Botswana which reported the most common facilitating factors among those tested were TV or radio messages (69%), knowing that treatment was available (65%), and knowing that the test results would be confidential (64%) (39).

On the other hand, reported barriers for PITC utilization were, thinking self as not being at risk 60(75%), partner trust 48 (56.2%), unable to cope with the positive result 41(51.2%), tested before 23 (28.3%), fear of test result 13 (16.2%) which is higher than study done in urban and rural south Africa (32,47).

Male adult OPD patient were 1.81 times more likely to utilize PITC which is in line with study in Eastern Sudan and sub Saharan Africa report Ethiopia uptake of testing and results collection was higher among men (50, 51) These results indicate fear of partner by female since most of our respondent was rural community that females are dominated by their husband in rural area due to community norm.

These results were contrary with study in Kenya Nairobi that reveal males were less likely to have had PITC compared to females and study in Addis Ababa among adult OPD patients presenting with conventional sexually transmitted infections (31, 49).These may be due to difference in study setting and sample size.

Divorced/widowed marital status among adult OPD patients was negatively associated with utilization of PITC. Divorced/widowed adult OPD patient were 68% times less likely to utilize PITC compared to married adult OPD patient, this might be divorced/Widowed respondent may have more than one sexual partner that they perceive themselves high risk to HIV infection that lead them fear to receive their test result. This result was inconsistent with study in Kenya Nairobi reports divorced/Separated/widowed were more likely to have had PITC than their married and never married counterpart (49) .This may be due to difference in socio cultural and study setting.

Comprehensive knowledge on HIV has negative association with utilization of PITC; adult OPD patients who have comprehensive knowledge of HIV were 59% times less likely to utilize PITC compared to adult OPD patients who do not have comprehensive knowledge on HIV. This finding is contrary with study in Gondar town among pregnant women (44). This might be due to that people who not have comprehensive knowledge on HIV, in our study, had no or low risk for HIV infection than who have comprehensive knowledge which made them confident enough to utilize PITC. Thus it is difficult to judge people who have comprehensive knowledge on HIV who were relatively more educated than who not have comprehensive knowledge on HIV have less utilization of PITC.

Having health information/awareness on provider initiated HIV testing and counseling were positively associated with utilization of PITC. Patient who heard about PITC before data collection were 2.89 times more likely to utilize PITC compared to adult OPD patients who don't heard about PITC before. This might be due to that those who ever not heard of PITC need time to think of HIV test and/or discuss with whom they want to discuss before receiving PITC service. This finding is in line with case control study conducted in East Gojjam and study in North West Ethiopia (21, 28) and contrary of study in South Africa among women

attending urban sexually transmitted disease clinic (32). This could be due to difference in study setting and socio culture.

Having HIV test before were positively associated with utilization of PITC, during the study adult OPD patient who received HIV test before were 4.15 times more likely to utilize PITC than those who were not tested before. This is due to individuals who were tested before know the presence of PITC in the facility, have awareness on benefit of PITC, they think their result were negative as previous & have readiness to have it. This finding is in line with finding in Addis Ababa among adult OPD patients presenting with conventional sexually transmitted Infections, study in North West Ethiopia and study done by Dalal et al in South Africa (31, 28, and 43).

Patient who reported of having received an explanation about the process of testing were 2.26 times more likely to utilize PITC than patients who reported of not having an explanation about the process of testing in OPD by provider.This might be explaining the process of testing for the patient could reduce stress on fear of test result and increase readiness to receive test because PITC testing done by their counselor with in short time.

CHAPTER: 7 CONCLUSIONS AND RECOMMENDATION

The over all PITC utilization among adult OPD patient in the study setting was 87.4%. Knowledge on HIV is low in the tudy population; majority of the participants didn't have comprehensive knowledge (64.7%) and (35.3%) fail to reject misconception about means of HIV transmission and prevention. Only thirty two (8.6%) of the participants perceived themselves as having risk for HIV. Majority of the participants (71.7%), have not expressed accepting attitude to all five indicators of stigma and discrimination to ward PLWHA.

Generally being male sex, having awareness about PITC preceding the study, receiving test before and explaining process of testing during counseling were factors independently positively associated with utilization of PITC where as divorced/widowed marital status and having comprehensive knowledge on HIV were negatively associated with PITC utilization.

Based on the result of the finding the following recommendations were forwarded for concerned body:

Woreda health office should strength health information through peer education on HIV to address barrier to PITC testing in the community especially for females .The health facility should give health education about PITC in mass and indivdually for adult OPD patient to promot awareness of PITC in the community.The counselor should give process of HIV testing for all adult OPD patients. Zonal health office and NGO working in area on HIV should strength PITC services by training counselor, equipping material for HIV testing and counseling and Interested researcher should conduct further research to assess health institution related factors beside patient, social and provider related factors determining PITC utilization.

STRENGTH AND LIMITATION OF THE STUDY

Being a cross-sectional survey, causality cannot be inferred from these findings. The study is limited by being facility based and therefore precludes generalization to all adult OPD patients in Ethiopia indicating a need for further study on assessment of PITC and associated factors among adult OPD patients using a more representative sample of adult OPD patients in the country.

Despite this limitation, the study provides useful information that will inform health service planners to design a strategy to increase the utilization of PITC among adult OPD patients in Ethiopia

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Annexes

I: Structured English Version Questionnaire

Jimma University College of Public Health and Medical Science

Consent form that certify the respondents agreement before the interview on assessment of utilization of provider initiated HIV/AIDS testing and counseling and associated factors among adult OPD patients in wonchi woreda south west shoa zone , central Ethiopia

Introduction: my name is ---------- I am representing the study team being coordinated by the department of epidemiology ,college of public health and medical science Jimma university and interviewing all adult OPD patients in…….. Health center about the utilization of PICT 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 PICT 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 wonchi woreda and other similar setups.

Was the information/objective clear? Yes ☐ No ☐

Are you willing to participate in the study? Yes ☐ No ☐

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

01. Name of kebele ----------

02. Name of health center----------

03. Questionnaire identification number ----------

Name of the interviewer ……..Signature ……Date…….

04. I have been informed about this study and understand its purpose and objective. I understand the details, have been informed about the requirements and here by agree to participate in the study.

05. Result

1. Completed
2. Refused
3. Partially completed
4. Other (please specify) ----------

06. Checked by supervisor

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

NB:

1. No need of enforcing the patients to be included in the study.

2 .Please register the age and sex of study subjects who refuse to participate in the study.

Part One: Socio-Demographic Variables

No of questions	**classifications**	**Remark**
101. How old were you at your last birthday?	……Years (full yrs)	
102.Sex of the patients	1.Male 2.Female	
103. What is your religion?	1.Orthodox 2.protestant 3.muslim 4.catholic 5.other(specify)	
104 .To which ethnic group do you belong?	1.oromo 2.Amhara 3.gurage 4.tigre 5.other(specify)	
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(1-8) 4.Secondary(8-12) 5.Teritary(>12)	

107. What is your current occupation?	1. Merchant 2. House wife 3.Farmer 4. Student 5. Government employee 6. NGO employee 7. Un employed 8.Other (Specify)	
108. What is your average household income per month?	1.In cash------ 2.No income 99.No response	
109. In your opinion which of the following show your economic status	1.high 2.medium 3. low	
110.Usual Place of residence	1.Urban 2.Rural	
111. Distance from nearby health institution	……in KM	

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 withHIV/AIDS 8.wearing clothes of a person livingwith HIV/AIDS 9.sharing a meal with a person livingwith HIV/AIDS 10. through supernatural means 11.Mosquito bite 12.Blood contact 13.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 faithful 4.being aware that health looking individual can have HIV 5.Others (specify) 88.I don't know 99.No response	
205 Do you know anyone 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 of HIV infection

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 Q 304
302 What are your chances of getting infected with HIV?	1. High 2.Medium 3.Low 99.No response	
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 99.No response	

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

No Questions	**Classification**	**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	

Part five: knowledge and attitude of provider-initiated HIV testing and counseling

No .Questions	Classifications	Remark
501 Have you ever heard of PITC?	1.Yes 2.No 99.No response	If no, go to Q 504
502 If your response to Q501 is yes, where did you get the information? (Multiple response is possible, Needs probing)	1.Health workers 2.Health extension worker 3.Mass media 4.Family member 5.friends 6.Other(specify) 99.No response	
503 To what extent are you in favor of PITC?	1.Extremely in favor 2.Very much 3.Some what 4.Not at all 99.No response	
504 Did you feel that PIHTC 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 PITC	1. Helps patients get access to ART is important? 2.Makes easier for clients to get tested 3.Results in less discrimination of HIV positive patients 4.Increase number of tested people 5.Other(specify) 99.No response	
506 Did you feel that PITC has influence on patient?	1.Yes 2.No 3. I don't know 99.No response	If no, go to Q508

507. If your response to Q506 is yes, what are the reasons for feeling that PIHTC has influence?	1.Will cause patients to avoid seeing health professionals for fear of being tested 2.Violet 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 ofunprotected 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 514
512 If your response to Q511 is yes, what was the reason of having HIV test?	1.Voluntary testing by your self 2. Initiated by health worker fordiagnosis. 3.Donation of blood 4.Rotine 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 risk 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 HTC recommends an HIV test for adult patients attending OPD. Are you tested for HIV today?	1.Yes, I am tested 2.No,I am not tested	If response is no, go to Q 517
516.If your response to Q515 is yes ,what were the reasons to be tested?(Facilitators)	1.TV/Radio messages 2.Knowing that treatment is available 3.Knowing that test results will beconfidential 4.Heard that I could take test andget result on the same day 5.Was encouraged by someonewho was tested 6.Was worried about the previoussexual contact 7.Parents/family/friends advisedto have test 8.Was sick 9.Because you recommend it 10.other(specify) 99.No response	
517..If your response to Q515 is no, what were your reasons for not being willing to be tested?(Barriers) (Multiple response is possible, Needs probing	1.Fear of stigma anddiscrimination following the positive result 2.Fear of partner's reaction 3.Unable to cope with the positiveresult 4.I am not risk person for HIV 5.Fear of discrimination (badtreatment) 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	

Part six: questions to assess provider related factors

S.N^{o}	Provider related factors	Yes	NO
1	Did the provider inform you about HIV transmission?		
2	Did the provider inform you about HIV prevention?		
3	Did the provider inform you about benefits of HIV test?		
4	Did the provider inform you that HIV test is optional?		
5	Did the provider assure you on confidentiality of HIV test?		
6	Did the provider obtain informed consent from you?		
7	Did the provider explain you about HIV testing process?		
8	Did the provider counsel you based on your test result?		
9*	Did the provider discuss on the prevention after test result?		
10*	Did the provider discuss on partners testing/disclosure?		
11*	Did the provider support & link to care and treatment?		

Applicable for only HIV positive patients

Part seven: questionnaire to assess health institution related factors

1. Have you got health information on PITC before seeing health worker at OPD?
   1. Yes 2. No
2. Do you think patient's privacy is kept during PITC at this health facility?
   1. Yes 2.No
3. If No to Q2, why you said patient's privacy is not kept during PITC?----------
   ---
4. Do you trust on confidentiality of patients HIV test result at this health facility?
   1. Yes 2. No
5. If No to Q4, why you do not trust on confidentiality of patients HIV test result?----------
   ---
6. Do you know that ART is available for HIV positive patients at this health facility?
   1. Yes 2.No
7. Do you know any support given to HIV positive patients at this health facility?
   1. Yes 2.No
   8. If yes to Q7, what types of support you know given to HIV positive patients.

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

II. GAFFANNOO /BAR GAAFFII AFAAN OROMOOTTI HIKAME YUNIVERSITTI I JIMMAATTI KOLLEJJII FAYYAA HAWAASAA FI SAAYINSII MEEDIKAALAA

UNKAA WALII GALTEE DEEBII KENNITOOTA/LATTOTAA MIRKAANEESSU

Kayyoon qo'annoo kana sadarkaa itti fayyadama qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu fi sababoota qorannoo dhiigaa kanan wal qabattan buufatoolee fayyaa aanaa wancii keessa jiranii qorachuu fi adda baasuu ta'a.

Seensa /Itti gala

Ani maqaan Koo obbo/adde_____jedhama.Ani garee qo'annoo kana gaggeessu yuniversitti jimmaatti koollejjii fayyaa hawaasaa fi saayinsii meedikaalaa muumee ipidimooloojiin hoganamuu fi fayyadama qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatootaa gaheessotaaf kennamu fi sababoota qorannoo dhiigaa kanan wal qabattan irratti buufata fayyaa kanatti oddeefannoo funaanaa jiru bakka bu'en hojechaa jira.

Ati hirmaatota qo'annoo kana keessaa tokko taatee filatamteeta.Qo'annoon kun immoo oddeefannoo gaheessotni fayyadama qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatootaa gaheessotaaf kennamu irratti qabanii fi tajaajila qorannoo dhiigaa dhibee HIV/AIDS yeroo dhukkubsattoni gaheesotaa kutaa qorannoo waliigalaa gaheessota seenan oggeessoota fayyaa irraa argataan (garsa qorannoon dura,yeroo qorannoo fi qorannoon booda)funaanuun gaggeefama.Maqaan kee hin galmeefamu.Tartibin lakkoofsa hirmatoota adda baasuuf nu gargaara. Iccittin oddeffannoon ati nuu laatu sirritti ni eegama.Oddeffannoo ati nuu laate kana qo'annoo kana qofaaf fayyadamna.

Yoo bu'aan qo'annoo kanaa maxxanfamee, oddeffannoo walii gala hirmatoota hundaatu barrefama. Qo'annoo kana irratti hirmaachuu,hirmaachuu dhiisuu fi yeroo barbadanitti deebii kennuu adda kutuuf miirga guutuu qabdu. Hirmaachuu dhiisuu fi deebii kennuu addan kutuun kee tajaajila ati fi maatiin kee buufata fayyaa kana irraa argatuutti dhiibaa tokko illee hin fidu.Garuu hirmanaan kee qo'annoo kana fixaan baasuu fi haala qorannoon dhiigaa HIV/AIDS

buufataalee fayyaa aanaa wancii fi wanciin wal fakkaata itti karrorfamu foyyessuuf baay'ee barbaachisa.

Kayyoon qo'annoo kana ifaa? Eeyee ☐ lakki ☐

Qo'annoo kana irratti hirmaachuuf fedha qabda? Eeyee ☐ lakki ☐

Galatoomii!

Yoo dhukkubsatan itti hirmaachuuf walii galee gaaffii gafaachuu itti fuufi.

01. Maqaa gandaa_____

02. Maqaa buufata fayyaa_____

03. Lakkoofsa gaaffilee_____

Maqaa gaaffii gaaffataa/ttuu_____mallaattoo_____guyyaaa_____/_____/____

04. Anni waa'ee qorannoo kana beekee, bu'aa fi kayyoo isaas sirritti hubadheera .Barbaachisumma isaa waanan hubadheef qorannoo kana keessatti hirmachuuf murteessera

05. Bu'aa oddeeffannoo funaansa

1. Xumurrameera

2. Hirmaachuu dide/didde

3. Gar tokkettu funaaname

4. Kan biroo ibsi

06. To'ataan/ttun mirkana'eera?

Maqaa _____mallaattoo_____guyyaa____/_____/_____

HUB: Dhukkubsatootni akka hirmaataniif dhiibaa gochuun hin barbaachisu

Umurii fi saala dhukkubsatoota hirmaachuu didanii galmeessuu hin dagaatina

KUTAA TOKKOFFAA: Gaaffilee haala hawaassummaa dhukkubsatootaa qoratu

Tartiba Lakk.	Gaaffilee	Gossaawwan deebii	Yaada
101.	Umuriin kee meeqa?	_____waggaan	
102 .	Saala	1 .dhiira 2.dubartii	
103	Amantaa	1.ortoodoksii 2.pirootestantii 3.musliima 3.catoliikii 4.kan biroo(ibsi)	
104.	Sabbuumaa	1.Oromoo 2.Amaaraa 3.Guraagee 4.Tigiree 5.Kan biroo(ibsi)	
105.	Haala fuudha fi heerumaa	1.fuudheera/heerumteetti 2.hin fuune/hin heerumne 3.hiikeera/hiikteetti 4.irraa du'e/duute 5.waliin jiratu	
106.	Sadarkaa barumsaa	1.hin barane 2.barreessuu fi dubbisuu ni danda'a 3.sadarkaa 1fffaa(4-8) 4.sadarkaa 2ffaa(8-12) 5.sadarkaa ol aanaa(>12)	

107.	Gosa hojii	1.daldalaa 2.haadha warraa 3. qotee bulaa 4.barataa 5.hojjetaa/ttuu moottummaa 6.hojjetaa/ttuu NGO 7.hojii hin qabu/du 8.kan biroo(ibsi)	
108.	Galiin mana keessanii ji'atti giddugalleessan hangam ta'a?	1. qarshiin_____ 2.galiin hin jiru 99.deebiin hin kennamne/ ni callise/te	
109.	Akka yaada keetti galiin keessan kun kam keessatti rammadama	1.olaanaa 2.giddugalleessa 3.gadi aanaa	
110.	Bakki jireenyaa	1.magaala 2.baadiyaa	
111.	Fageenya buufata fayyaa irraa qabdan	_____KM	

KUTAA LAMMAFFAA: Gaaffilee beekumsa dhukkubsatootni dhiibee HIV/AIDS irratti qaban qoratu

Tar .lakk.	Gaaffilee	Gossawaan deebii	yaada
201	Waa'ee dhibee HIV/AIDS dhaggeesee beektaa?	1.eeyee 2.lakki 99.deebiin hin kennamne/ni callise/te	Yoo deebiin lakkii ta'e assumatti dhaabi
202	Dhiibee HIV/AIDS irraa fayyuun nidanda'amaa?	1.eeyee 2.lakki 99.deebiin hin kennamne /ni callise/te	
203	Dhiibeen HIV/AIDS attamitti daddarbaa? (deebiin tokkoo ol ni danda'ama)	1. walqunnamti saala 2.haadha irra gara daa'immatti yeroo ulfaa 3.haadha irra gara daa'immatti yeroo da'umsaa 4. haadha irra gara daa'immatti yeroo harma hoosiisu 5. dhiigaa vaayirasii HIV'n faalame waliidabarsuun 6.meeshaalee qara qaban namoota dhibee kana qaban waliin fayyadaamuun(lilmoo.millaacii fi kkf) 7.nama dhibee HIV/AIDS qabu harka qabachuun 8.huccuu nama dhibee HIV/AIDS qabu uffachuun 9.nama dhibee HIV/AIDS qabu waliin nyaachuun 10 .dhekkamsa waaqan 11.bookee busaan iddamuun 12. dhiigaa vaayirasii HIV'n faalame xuquun 13. kan biro(ibsi) 99.deebiin hin kennamne/ ni callise/te	

204	Dhibee HIV/AIDS attamitti of irraa Ittisuun danda'ama? (deebiin tokkoo ol ni danda'ama)	1.walqunnamti saala irraa of qusachuun 2.Condoomii yeroo wal qunnamti saala yeroo hunda seeraan fayyadamuun 3. Jalaalee/hiriyaa tokko dhibee HIV/AIDS hin qabne waliin wal ammantaan jiraachuun 4.Namni fayyaa fakkaate deemu HIV qabachuu akka danda'u beekuun 5.kanbiroo(ibsi) 88.hin beeku 99.deebiin hin kennamne/ ni callise/te	
205	Nama HIV/AIDS qabu ykn HIV/AIDS Du'e kan beektu qabda?	1.eeyee 2.lakki 99.deebiin hin kennamne / ni callise/te	
206	Namni fayyaa fakkaatee deemu dhiibbee HIV/AIDS qabachuu ni danda'aa?	1.eeyee 2 lakki 99.deebiin hin kennamne / ni callise /te	

KUTAA SADDAFFAA: **Gaaffileehubanaa dhukkubsatootni dhibee HIV/AIDS'n qabamu fi qabamuu dhiisuu irratti qaban qoratu**

Tar . Lakk.	Gaaffillee	Gossawwaan deebii	yaada
301	Dhibeen HIV/AIDS na qaba jettee yaadee beekta?	1.eeyee 2.lakki 99.deebiin hin kennamne / ni callise /te	Yoo deebiin lakki ta'e gara gaaffii **304** darbi
302	Carraan ati dhibee HIV/AIDS'n qabamuuf qabdu Hammami?	1.ol aanaa 2.giddugalleessa 3.gadaanaa 99.deebiin hin kennamne / ni callise /te	
303	Yoo deebiin gaaffii 302 giddugalleessa Ykn ol aanaa jette, maaliif?	1.wal qunnamti saala dangaa hin qabne wanaan godhuuf 2. wal qunnamti saala kondoomii malee wanaan godheef 3.lilmoo qulqulluu hin taaneen wanaan waranadheef 4. wal qunnamti saala nama HIV/AIDS qabu waliin wanaan godheef 5.kan biroo(ibsi) 99.deebiin hin kennamne / ni callise /te	
304	Yoo deebiin kee gaaffii **301** lakkii ta'e maaliif?	1.jalaalee/hiriyaa koo wanaan amanuuf 2. lilmoo qulqulluu hin taaneen waan hin warananneef 3.yeroo hundaa kondoomii wanaan fayyadamuuf 4.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	

KUTAA ARFAFFAA: Gaaffilee ilaalcha dhukkubsatootni namoota dhibee HIV/AIDS qaban irratti qaban qoratu

Tar lakk	Gaaffilee	Gossawwaan deebii	yaada
401	Nama HIV/AIDS qabu waliin nyaata ni nyaataa?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	
402	Otoo maatiin kee ykn firii kee dhibee HIV/AIDS'n qabamee mana keetti gargaarsa/walaansa gotaafii?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	
403	Otoo nama suuqii daldalu ykn nyaata gurguru dhibee HIV/AIDS qabachuu isaa beektee nyaata irraa bitee nyaataa?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	
404	Otoo maatiin kee ykn firrii kee dhibee HIV/AIDS'n qabamee, dhoksaa dhibee HIV/AIDS'n qabamu isaa/ishee dhegdaafii?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	
405	Yoo barsiiftuun dhibee HIV/AIDS qabaate,garuu hin dhukkubsane barsiisuu itti fufuu qabdi moo hin qabdu?	1.itti fufuu qabdi 2.itti fufuu hin qabdu 3. hin beeku 99.deebiin hin kennamne / ni callise /te	

KUTAA SHANNAFFAA: Gaaffilee beekumsa dhukkubsatootni qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu irratti qaban qoratu

T.L akk.	Gaaffilee	Gossawwaan deebii	yaada
501	Waa'ee qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu dhaggessee beektaa?	1.eeyee 2.lakki 99. Deebiin hin kennamne / ni callise /te	Yoo deebiin lakki ta'e gaaffii lakk. 504 darbi
502	Yoo deebiin kee gaafii **501** eeyee ta'e oddeeffannoo isaa eessa argate?(deebiin tokkoo ol ni danda'ama)	1.oggesoota fayyaa 2.midiiyaleera 3.maatii koo irraa 4.hiriyaa irraa 5.kan biroo(ibsi) 6.deebiin hin kennamne / ni callise /te	
503	Waa'ee qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu Hangam beekta	1.baay'iseen beekaa 2.baay'een beekaa 3.hanga tokkon beekaa 4.homaan beeku 5.deebiin hin kennamne / ni callise /te	
504	Qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu barbaachisaa dha jettee yaada?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	Yoo deebiin kee lakki ta'eGaaffii **506** darbi

505	Yoo deebiin kee gaaffii **504** eeyee ta'e? Maaliif jette?	1.akka dhukkubsatootni yeroon qorichaa lubbuu dheeressu argatan godha 2.dhukkubsatootni salphaatti qorannoo argatu 3.dhibbaa qaanii dhukkubsatoota dhibee kana qaban irraa hambisa 4. Baay'ina namoota qoratamanii dabala. 5.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	
506	Qorannoo dhiigaa dhibee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu dhibbaa qaba jettee yaada?	1.eeyee 2.lakki 3.hin beeku 99.deebiin hin kennamne / ni callise /te	Yoo deebiin kee lakki ta'e Gaaffii 508 darbi
507	Yoo beebiin kee gaaffii **506** eeyee ta'e maaliif dhibbaa qaba jette?	1. Dhukkubsatootniqaanii qoratamaniif oggessoota fayyaa ilaalu hin danda'ani. 2.mirga dhukkubsatoota dhiiba 3.mirga dubartoota dhiiba 4.kanbiroo(ibsi) 99.deebiin hin kennamne / nicallise /te	
508	Namni hunduu dhiigaa isaa qorattamuu qaba Jettaa?	1.eeyee 2.lakki 99.deebiin hin kennamne / ni callise /te	
509	Namni tokko yeroo akkam akkami dhiigaa isaa qorattamu qaba jetta?(deebiin tokkoo ol ni danda'ama)	1.yeroo dhukkubsatu 2 .fuudhaa fi heerumaan dura 3 .yoo walqunnamti dangaa hin qabne tasiise 4.yeroo hundaa 5.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	

510	Namoota akkamitu dhiigaa isaa qoratamuu qaba? (deebiin tokkoo ol ni danda'ama)	1.dubartoota mana bunaa keessaa hojjettan 2.konkoolachistoota 3.namoota seenaa walqunnamti Dangaa hin qabnee qaban 4.dhukkubsatoota dhibee sombaa 5.namoota hiriyaa dubaraa tokko Ol qaban 6.namoota walqunnamti saalaaf gahan hunda 7.namoota dhukkubsatan 8.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	
511	Dhibee HIV/AIDS qoraatamtee beektaa?	1.eeyee 2.lakki 99.deebiin hin kennamne / ni callise /te	
512	Yoo deebiin kee gaaffii 511 eeyee ta'e, sabaabiin qoratamteefii maalii?	1.feedhi keettin 2. gorsa oggeessoota fayyaan mana yaala keessatti argadhetu na kakkase 3.dhiiga arjoommuuf 4.hordoffii da'umsa duraaf 5.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	
513	Yoo deebiin kee gaaffii 511 eeyee ta'e qorannoon eessatti siif tasiifame?	1.Hospitaala moottummaa 2.buufata fayyaa moottummaa 3.bakka qorannoo fedhii irratti hunaa'eef qopha'eetti 4.hospitala/kiliinika dhunfaa 5.kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	

514	Yoo deebiin kee gaaffii **511** lakki ta'e sababa Maaliif hin qoratamne? (deebiin tokkoo ol ni danda'ama)	1.dhibaa hawaasa keessa jiru sodaaf 2.hiriyaa koo sodaaf 3.yoon dhibee sana qabadhe dan damaachuu waan hin dadeenyeef 4.anni nama HIV/AIDS 'f saaxilamu mitti 5.gaatiin qorannoo HIV/AIDS kafalaamuu waan natti ulfaateef 6.qoratamuun waan bu'aa hin qabneef 7.icciti qorannoo na kennamutti waan hin amaneef 8.bu'aa qorannoo koo beekuu waan hin barbanneef 9.hiriyaa koo waanan amanuuf 10.waanan of amaanuuf 11 kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	
515	Seeri amma itiyoophiyaan qorannoo dhiigaa dhibee HIV/AIDS irratti qabdu dhukkubsatootni gaheesoota kutaa qorannoo seenaan hundi qoratamuu qabu jedha. Atoo amma qoratamteetaa?	1.eeyee qoratameera 2.lakki hin qoratamne	Yoo deebiin kee lakki ta'e Gaaffii 517 darbi
116	Yoo deebiin kee gaaffii 515 eeyee ta'e, sababin akka qoratamtuuf sikakkaase maali? (deebiin tokkoo ol ni danda'ama)	1.ergaa raadiyoo/televiziinii irraa darbu 2.akka qorannoon jiru beekeen 3. iccittin bu'aa qorannoo koo waan eegamuuf 4.bu'aa qorrannoo koo yeroo gabaabaa keessatti waanan baruuf 5.nama duraan qoratametu akkanQoratamu na jajjabeesse 6.walqunnamti saala kanaan dura Godhetu	

		na dhiphise 7.maatii/hiriyoota kootu akkan qoratamu na goorse 8.wanaan dhukkubsadheef 9.oggeessi fayyaa amma waan na gorseef 10.kan biroo (ibsi) 99.deebiin hin kennamne / ni callise /te	

517	Yoo deebiin kee gaaffii 515 lakkii ta'e, sababin akka hin qoratamne si godhu maali? (deebiin tokkoo ol ni danda'ama)	1.dhibaa hawaasa keessa jiru sodaaf 2.hiriyaa koo sodaaf 3.yoon dhibee sana qabadhe dandamaachuu waan hin dadeenyeef 4.anni nama HIV/AIDS 'f saaxilamu waan hin taaneef 5.dhibaa oggeessota fayyaan(yaalamuun)narra gahu soda 6.buufatni fayyaa gaariin waan hin jireef 7.namootni biroo akka anni hin qoratamne waan na gorsaniif 8.qoratamuun akka bu'aa hin qabnetti waanan amanuuf 9.iccitti bu'aa qorannoo kootti waan hin amaneef 10.bu'aa qorannoo koo baruu waan hin barbaneef 11. hiriyaa koo waanan amanuuf 12.kanaan dura waanan qoratameef 13. kanbiroo(ibsi) 99.deebiin hin kennamne / ni callise /te	

KUTAA JA'AAFFAA: Gaaffilee sababootaoggeessota fayyaa qorannoo dhiigaa dhibbee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu kennanin wal qabatan qoratu

Tart Lakk.	Gaaffilee oggeessota fayyaan wal qabatan	Eeyee (1)	lakki (2)
1	Oggeessi fayyaa akkataa itti dhibeen HIV/AIDS daddarbu sitti himeeraa?		
2	Oggeessi fayyaa akkataa itti dhibeen HIV/AIDS ittifamu sitti himeeraa?		
3	Oggeessi fayyaa faayidaa qorannoon dhibee HIV/AIDS qabu sitti himeeraa?		
4	Oggeessi fayyaa qorannoo dhibee HIV/AIDS tassisuun filannoo kee irratti akka hunda'u sitti himeeraa?		
5	Oggeessi fayyaa iccittin bu'aa qorannoo kee akka eegamu sitti himeeraa?		
6	Oggeessi fayyaa eeyyama sirraa fudhateera?		
7	Oggeessi fayyaa adeemsa qorannoon dhibeen HIV/AIDS itti tassisamu sitti himeera?		
8	Oggeessi fayyaa bu'aa qorannoo kee irratti hunda'ee gorsa siif kenneraa?		
9*	Oggeessi fayyaa waa'ee ittisa HIV/AIDS si faana mari'ateera erga bu'aa qorannoo kee bartee?		
10*	Oggeessi fayyaa waa'ee hiriyaa/maatii kee qorachiisu fi bu'aa qorannoo kee nama itti himachuu qabdu si faana mari'ateeraa?		
11*	Oggeessi fayyaa gargarsi fi qorichi lubbuu dheeressu eessa akka jiru sitti himeeraa?		

Warra mallattoourjii (*) qaban namoota dhibeen HIV/ADIS dhiigaa isaani keessatti argametu gafatama?

KUTAA TORBAFFAA: Gaaffilee buufata fayyaa waliin wal qabatu qoratu

1. Barumsa fayyaa qorannoo dhiigaa dhibbee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu irratti otto oggeessa fayyaa waliin kutaa qorannotti wal hin argin dhaggeesse beektaa?

1. Eeyee 2.lakki

2. Kutaa qorannoon dhiigaa dhibbee HIV/AIDS oggessoota fayyaan kutaa qorannoo walii galaa gaheesotatti dhukkubsatoota gahessootaaf kennamu kun mijattaa dha qobbummaa isanii in eega jette yaada?

1. Eeyee 2.lakki

3. Yoo deebiin kee gaaffii" 2" lakki jette maaliif mijattaa mitti / qobummaa isanii hin eegu jette?

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4 .Iccitin dhukkubsatoota buufata fayyaa kana keessatti ni eegama jette amantaa?

1. Eeyee 2.lakki

5.Yoo deebiin kee gaaffii" 4" lakki jette maaliif iccittin dhukkubsatoota hin eegamne jette?

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6. Qorichi lubbuu dheeressu namoota dhibee HIV/AIDS qabaniif buufata fayyaa kana keessa akka jiru beekta?

1. Eeyee 2.lakki

7. Akka gargarsi namoota dhibee HIV/AIDS qabaniif buufata fayyaa kana keessatti kennamu beekta?

1. Eeyee 2.lakki

8. Yoo deebiin kee gaaffii" 7" eeyee ta'e gargarsi akkami fa'a akka kennamu beekta?

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Gaaffii qabdaa? Gaaffii fi deebii keenya xumureera, yeroo kee arsaa gootee na faana turuu keef baay'ee galaatoomi!