HIV Positive Sero Status Disclosure And Associated Factors Among HIV Positive Women Attending ART Clinic In Health Facilities, Jimma Town, South-West Ethiopia.

By:

**Getinet Kassahun (B.Sc.)** 

A Research Submitted to Jimma University, College of Public Health and Medical Sciences, Department of Nursing and Midwifery for the Partial Fulfillment for the Requirement for Master of Maternity Nursing (MSc).

Jimma, Ethiopia

June, 2015

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# **Advisors:**

- 1. Professor Tefera Belachew (MD, MSc, PhD)
- 2. Makeda Sinaga (BSc, RH/MPH)

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#### **ABSTRACT**

**Introduction:** Disclosure of HIV positive status to sexual partners, friends or relatives is a main way for prevention and care strategies. Identifying factors associated with disclosure is necessary to freely disclose of HIV positive status result to their sexual partners, parents and friends to achieve a goal 'zero new infection. Identifying factors associated with disclosure is a research priority as a high proportion of people living with HIV/AIDS never disclose in Ethiopia. The objective of this study was to assess the HIV positive status disclosure and associated factors among HIV positive women attending in Jimma Town Health Facilities, South West Ethiopia, 2015.

**Methods:** A health facility-based, cross-sectional study was carried out in Jimma Town Health Facilities from March 2-April 2/2015. Single population proportion formula was used to determine sample size. A total of 338 mothers were enrolled in the study. The study participants were selected by systematic sampling technique. Data were collected using a structured questionnaire. Data were entered using EpiData version 3.1 and analysis was carried out using SPSS version 21. Bivariable and multivariable logistic regression analysis were applied. The independent variables with p<0.05 in multivariable logistic regression analysis were considered as predictors of HIV positive sero status disclosure.

**Results:** The proportion of HIV disclosure status to someone was 86.1%. Sixty five (22.4 %) of the women faced negative outcome after disclosure. Main barriers of disclosure reported by non-disclosed participants were; fear of stigma and rejection, fear of breach of confidentiality, fear of being ashamed to family, fear of divorce and fear of accusation of infidelity. Being member of Anti-HIV/AIDS association [(AOR = 3.171; 95% CI, 1.183-8.501)], being on ART [(AOR= 4.559; 95% CI, 1.586-13.103)], being literate [(AOR=3.624; 95% CI, 1.049-12.522)] and being on follow up counseling [(OR =6.621; 95% CI, 1.719-25.498)] were significantly associated with disclosure of HIV positive sero status.

Conclusion: Even though, the magnitude of HIV positive sero status disclosure to somebody in this study is encouraging, negative outcomes following disclosure of sero status were reported by participants. Being on ART, being literate, being follow up counseling, and being member of Anti-HIV/AIDS association were associated with disclosure of HIV positive sero status. Therefore, more focus should be given to ongoing counseling, HIV/AIDS association, education and ART service during counseling sessions as well as facilitate safe sero status disclosure through education and awareness for the community.

**Key words:** Disclosure, HIV Positive Women, Jimma Town Health Facilities.

#### **ACKNOWLEDGMENTS**

First, I would like to express my heartfelt thanks to my advisors Professor Tefera belachew and Makeda Sinaga for their constructive comments and continuous follow-up support throughout the thesis work. Thank you for your guidance, critique and encouragement, without whom, this work would never have been completed in time.

Next, I would like to extend to all my friends, data collectors and supervisors, and all those who directly or indirectly contributed to the success of this thesis work.

I acknowledged Jimma University for financial support and facilitating the ethical review process and Jimma Town Health Facilities ART clinic staffs for their cooperation in giving valuable data source and creating favorable environment during the data collection.

I also give my special thanks to HIV positive women who participated in this study for their willingness to share their disclosure positive status.

Praise and Glory be to the Almighty God.

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#### ABBREVIATIONS AND ACRONYMS

AIDS- Acquired Immunodeficiency Syndrome

JUSH - Jimma University Specialized Hospital

JU -Jimma University

DPCD- Disease prevention and control department

EDHS - Ethiopian Demographic and Health Survey

FMOH -Federal Ministry of Health

HIV -Human immunodeficiency virus

SPSS -Statistical package for social science

SSA-Sub Saharan Africa

ARVs - Anti-Retroviral Drugs

ART - Anti-Retroviral Therapy

CTC - Care and Treatment Centre

PLWHA - People Living With HIV/AIDS

LWHA- Living with HIV/AIDS

PMTCT- Prevention of mother to child transmission

UNAIDS- Joint United Nations Programme on HIV/AIDS

USAID - United States Agency for International Development

HC - Health Center

WHO-World Health Organization

#### CHAPTER ONE -INTRODUCTION

#### 1.1. Background

The Human Immunodeficiency Virus epidemic continues to be a major public health problem worldwide. It has become one of the world's most serious health and development challenges. Despite the number of people newly infected continues to fall, the number of people living with HIV increased from previous years as more people are receiving the lifesaving antiretroviral therapy (ART). Women are biologically more susceptible to HIV. In addition to suffering from gender inequalities, discrimination and violence can also increase their vulnerability to infection. HIV is the leading cause of death of women of reproductive age [1, 2].

Disclosure of HIV positive women status has become one of the major concerns that should be addressed in HIV prevention & control activities which is one of the factors that determine the success of HIV/AIDS related programs [3].

Nevertheless, disclosure of HIV positive status has two sets of contrary effects. Through disclosure of HIV positive sero status promote safer sex practices, reduce HIV transmission, reduce risk behaviors, adherence to ART, partner testing and acceptance of referrals for HIV-related care, increase receiving care and socio-economic support from sexual partners, family and the community. In addition, it has important implications for each component of the strategy in the prevention of HIV infection in mothers and infants [4, 5, 6, 7].

On the other hand, it may cause loss of economic support, blame, abandonment, physical and emotional abuse, discrimination and disruption of family relationships. For the fear of these risks, women may not disclose their HIV positive status with their friends, family and sexual partners. This, in turn, leads to lost opportunities for the prevention of new infections and for the ability of these women to access appropriate treatment, care and support services where they are available [4,8,9,10,].

However, no specific studies or recent valuable data targeted on disclosure of HIV positive women sero status and associated factors to significant person in study area.

#### 1.2. Statement of the problem

The first cases were reported in 1981 and since the beginning of the pandemic more than three decades ago; around 78 million people have become infected with HIV and 39 million people have died of AIDS-related illnesses in the world. The number of PLHIV has increased from 31.4 million in 2003 to 35.0 million in 2013, as a result of: continuing new infections, people living longer with HIV, and general population growth. In 2013, women represented approximately 57 percent of all adults living with HIV worldwide [2, 11].

Globally, 35.0 million People Living with HIV (PLHIV), out of which 16.0 million were women in 2013. There were about 2.1 million people newly infected and 1.5 million people died with HIV in the same year [11].

Of the 35 million people living with HIV, 24.7 million are living in sub-Saharan Africa including 91% of the world's HIV-positive children in 2013, nearly 71% of the global total, the region hardest hit by the epidemic. There are also more women living with HIV in sub-Saharan Africa than HIV-positive men: women account for 58% of the total number of people living with HIV. An estimated 1.5 and 1.1 million people in the region became newly infected and died of AIDS respectively, accounting for 73% of the world's AIDS deaths in the same year [12].

According to the 2014 country progress report on the HIV response, the estimated 793,700 people living with HIV including 200,300 children and 45,200 AIDS related deaths in 2013 AIDS in Ethiopia and about 898,400 AIDS orphans. This number is rising as more people are living longer because of antiretroviral therapy, alongside the number of new HIV infection which, although declining, is still very high in the same year [13]. Adult HIV prevalence is estimated at 1.5% with females compared to males at 1.9% versus 1.0% respectively [14].

The disease prevalence is more in women than men in Sub-Saharan Africa countries including Ethiopia. HIV positive status disclosure among women has become one of the major concerns that should be addressed in HIV/AIDS prevention & control activities. This study will contribute Programmatic and policy strategies that have been used to increase disclosure in the community, which, in turn, will reduce heterosexual transmission of HIV and protects any potential child from contracting the virus.

#### CHAPTER TWO -LITERATURE REVIEW

Disclosure is the process of telling another person or community about ones HIV status. Disclosure of one's HIV status is done by the patient himself/herself to a person whom he/she preferred to tell. Mandatory HIV case-reporting, beneficial disclosures of HIV status and ethical partner counselling, particularly to sexual partners but also to friends, family and communities, have been suggested as sound public health measures [15]. HIV testing and counselling provide essential knowledge and support to individuals at risk for contracting HIV, enabling uninfected individuals to remain uninfected and those infected to plan for the future and prevent HIV transmission to others [15, 16]. A large proportion of new HIV infections in SSA occur among discordant couples, and disclosure may be one of the key strategies in reducing HIV transmission [17, 18].

Previous studies reported the rate of HIV status disclosure is 16.7% to 86% in developing countries [3, 19]. HIV testing and counselling is also a critical component of prevention strategies to reduce transmission of HIV from mother to child [20]. HIV testing of pregnant women should not only be the entry point to PMTCT of HIV, but also considered as an opportunity for prevention of sexual transmission of HIV [17]. The Policy in PMTCT programs advocates that all pregnant women, negative and positive, should be empowered to disclose their HIV status to their sexual partners through counselling [21]. Among HIV-positive pregnant women, studies has shown that disclosure of HIV status to partners led to increased - acceptance, use and adherence to maternal and infant ARVs, improved adherence to infant feeding method selected, increased use of cotrimoxazole prophylaxis, decreased mortality and increased survival and follow up among HIV exposed infants [22,23].

Meta analysis conducted among many studies showed that, in developed countries the disclosure rate of ranging from 42% to 100%; with the average disclosure rate of 79%. Where as, for developing countries the rate was ranged from 16.7% to 86%; with the average disclosure rate of 49% (4). There are reports that indicate the level and outcomes of disclosure may be affected by many factors. These factors include socio-economic status, ethnicity, age, duration of relation with the partner, level of education, discussion on HIV and its test among the partners before the test, number of partners and so on. It is also indicated that, as the length of time since diagnosis increases the rate of disclosure also increases [24, 25].

In a research done in Abidjan, 96.7% of the HIV negative woman and 46.2% of HIV positive women disclosed their HIV positive status to their sexual partners during a two year follow up. Those having co-spouse or living with family reduced the probability of disclosure; partners of HIV positive women informed about their wife's HIV status were more likely to undertake HIV testing [26]. In other studies in Africa and elsewhere, fear of accusations of infidelity, abandonment, discrimination, test result, prior discussion about testing, having a partner with tertiary education and knowing someone with HIV were important predictors of disclosure of HIV status among women [27, 28].

A study conducted in South Africa had revealed that people with low socio-economic status and low education level are less likely to disclose their HIV status [29]. Another studies also indicate that PLWHA who live in rural settings are two times more likely not to disclose their HIV status to any significant others compared to those who live in urban settings in Makonde district, Zimbabwe [30]. A cross sectional study was conducted among People Living with HIV/AIDS (PLWHA) in Ilorin, Nigeria at the HAART clinics of the University of Ilorin Teaching Hospital revealed that, total of 253 patients participated in the study. Their ages ranged between 26 and 58 years. The disclosure rate was 39.5%. As many as 60.5% of the respondents had not disclosed their HIV status to anybody [31].

A case control study conducted among persons living with HIV/AIDS (PHA) in Mityana district of Uganda revealed that prevalence of serostatus disclosure was 43%. In this study, having initiated anti-retroviral therapy, receiving ongoing counselling and not having tested for HIV during antenatal clinic were identified as predictors of HIV positive status disclosure [32]. Another similar study was carried out on 270 HIV infected adults attending Care and Treatment Clinic (CTC) at Sekou-Toure hospital in Mwanza, Tanzania showed that the prevalence of serostatus disclosure was 93.3% with participants aged above 30 years having significantly higher proportion of serostatus disclosure compared to those aged below 30 years [33].

A cross-sectional study conducted in Mekelle hospital revealed that, of the 315 HIV positive women who participated in the study, the prevalence of HIV disclosure status was 63.8%. In this study, Women who knew the HIV status of their sexual partner and those who got counseling had a positive association with HIV disclosure. This study also revealed that women with two years or beyond, since they knew their HIV status had more disclose their HIV status [34].

Another study conducted in Axum health facilities revealed that, of the 361 HIV positive women who participated in the study. The majority (80.1%) disclosed their HIV positive result to at least one person and among currently have sexual partner, 81.2% disclosed to their current sexual partner. This study also revealed that marital status of respondents, knowledge of partners HIV status, and a member of Anti- HIV/AIDS association were identified as predictors of HIV positive status disclosure. In this study, also revealed that the most common barriers to disclosure mentioned by the women include, fear of abandonment, fear of stigma and rejection, fear of confidentiality, fear of embarrassing family members and fear of accusations of infidelity [35].

A cross-sectional study conducted in Woldia hospital revealed that, of the 334 PLWHA who participated in the study, overall proportion of HIV disclosure status to their partner was 76.7%. This study revealed that having follow up counseling, being on antiretroviral therapy, prior discussion and knowing partner status were significantly associated with disclosure [36]. Another facility based cross-sectional study was conducted at Kemissie Health center on 360 HIV positive adults clinical service users in Kemissie district, northeast Ethiopia showed that the level of disclosure to a sexual partner was 93.1%. This study revealed that Prior discussion and knowing partner status were significantly associated with disclosure [37].

A cross-sectional study conducted in Hawassa referal hospital revealed that, of the 384 HIV positive women who participated in the study, the proportion of HIV disclosure status was 85.7%. This study revealed that marital status and knowledge of Partner status were significantly associated with disclosure. In this study, also revealed that the common barriers of disclosure reported by the women were fear of stigma and rejection, fear of separation/divorce, fear of shaming their family and fear of accusation of infidelity [38].

A cross-sectional study conducted among men and women receiving antiretroviral treatment in eastern Ethiopia revealed that, of the 1540 clinical ART service users who participated in the study. The disclosure rate in these studies (88.4% to someone and 66.3% for their partner). This study also revealed that marital status of respondents and educational status were identified as predictors of HIV positive status disclosure [39].

A cross-sectional study conducted in Metu and Gore towns of Illubabor Zone showed that, of the 102 HIV positive women who participated in the study, overall proportion of HIV disclosure status to their partner was 69%. This study revealed that Partner age (years), Types of partner, membership of HIV association, discussion before test (HIV) and use of condoms were significantly associated with disclosure. In this study, also revealed that the common barriers to disclosure mentioned by the women include, fear of abandonment, fear of stigma and rejection, fear of confidentiality and fear of accusations of infidelity. Of the 29 women who disclosed their test results 22 (75.9%) women reported positive outcomes related to disclosure [40].

A cross sectional study was carried out among HIV positive adults clinical service users in Jimma University Specialized Hospital showed that the majority (94.5%) disclosed their result to at least one person. In this study also revealed that disclosure of HIV positive sero status was significantly associated with knowing the partner's HIV status, advanced disease stage, and discussion about HIV testing prior to seeking services [41].

In summary, There are other researches on HIV status disclosure which were undertaken in different areas with different methodology and different period of time. The disclosure of HIV positive sero status is determined by several factors as discussed in the literature. Most of these factors have direct influence on HIV positive disclosure. However, it may not be possible for one factor to entirely determine HIV positive disclosure, but rather, these factors are interrelated. Also disclosure of HIV positive is influenced by some of these factors, like socio demographic factors, HIV counseling and testing related factors; partner related factors and HIV /AIDS illness related factors. Therefore, this study could give recent valuable data that can be used to compare with results of similar other research in Ethiopia and other countries. Furthermore, the finding will be an input to the HIV prevention endeavor in devising evidence based intervention regarding status disclosure. This interrelationship is showed in the conceptual framework depicted in Figure 1.

## **Conceptual framework**

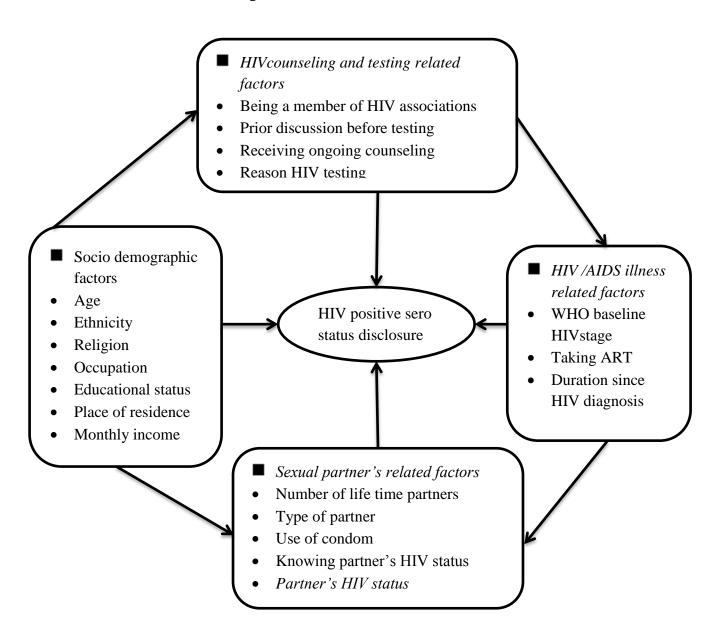


Figure 1. Conceptual framework was synthesized by the Investigator based on literature.

#### SIGNIFICANCE OF THE STUDY

Disclosure of HIV positive women sero status has key role in the prevention and control of HIV/AIDS. Disclosures of HIV positive women sero status has important implications for each component of the strategy (four-pronged approach) in the prevention of HIV infection in mothers and infants through discussions about HIV/AIDS may ultimately lead to behaviour change to reduce HIV potential risk; using contraception with their partners lead to reduce the number of unintended pregnancies; adhere to PMTCT prophylaxis that reduce HIV perinatal transmission; and to gain support and care among HIV-infected women.

However, Researches done at different areas with different research methodology and different period of time on HIV positive sero status disclosure revealed that significant proportion of non-disclosure and negative outcome of disclosure are common. Despite the mass enlightenment about the disease, it is still difficult to disclose ones status either openly or to sexual partner, parents, families or friends due to stigma attached to the disease and many on towards effect. Hence, investigating into this crucial issue and analyzing the possible factors that could affect disclosure is vital to salvaging Ethiopia from this catastrophic pandemic disease.

No specific studies or recent valuable data targeted on magnitude of HIV positive sero status disclosure and associated factors among HIV positive women in Jimma town health facilities.

Therefore, this study will help explore relevant information that decision makers and managers will develop programmatic and policy strategies to increase disclosure in the community, which, in turn, will reduce heterosexual transmission of HIV between partners and protects any potential child from contracting the virus as well as adherence to treatment regimens. It also contributes a lot in achieving a goal "zero new infection".

## **CHAPTER THREE: OBJECTIVES**

## 4.1. General objective

➤ To assess HIV positive sero status disclosure and associated factors among HIV positive women attending ART clinic in Health Facilities, Jimma Town, South-West Ethiopia, 2015.

## 4.2. Specific objectives

- > To determine the magnitude of HIV positive sero status disclosure among HIV positive women attending ART clinic in Health Facilities, Jimma Town.
- > To identify factors associated with HIV positive sero status disclosure among HIV positive women attending ART clinic in Health Facilities, Jimma Town.

#### CHAPTER FOUR: METHODS AND MATERIALS

### 5.1. Study area and period

This study was conducted from March 2 to April 2, 2015 among HIV positive women attending ART services at Jimma Town Health Facilities, Jimma town, which is the capital city of Jimma Zone and is located 352 km south west of Addis Ababa, capital city of Ethiopia with a total projected population of 151,010. The health facilities (Shenen Gibe Hospital, Jimma Health Center and JUSH) currently provides comprehensive health services including antiretroviral therapy (ART), voluntary counselling and testing (VCT), prevention of mother-to-child transmission (PMTCT) and treatment of opportunistic infection are available. According to the ART clinics report at the end of February 2015, there were 4,159 HIV-positive patients attending ART services in these public health facilities. Of these 4159, 2288 were HIV-positive women. The town has six government health facilities, these are: Jimma University Specialized Hospital, Shenen Gibe Hospital, and Jimma Health Centers, Higher 2 Health Centers, Mendera Kochi Health Centers and Bachobore Health Center [42].

#### 5.2. Study design

A facility-based, quantitative cross-sectional study was conducted in these selected health facilities.

#### 5.3. Source population

All HIV positive women attending ART clinics in Jimma Town Health Facilities ARV treatment units during the study period.

#### 5.4. Study population

Sampled HIV positive women attending ART clinics in Jimma Town Health Facilities ARV treatment units during the study period.

#### 5.5. Inclusion and exclusion criteria

**Inclusion criteria**: HIV positive women whose age is at least 18 years and above.

**Exclusion criteria:** Those HIV positive women who were unable to hear, unable to communicate coherently and mentally disabled were excluded.

#### 5.6. Sample size determination

The sample size for this study is determined by assuming

P= Assuming HIV positive women who disclosed their HIV sero status was taken to be 63.8% from similar study in Ethiopia (34).

 $Z \alpha/2$ = critical value for normal distribution at 95% confidence level which equals to 1.96

(Z value at alpha=0.05).

d= the margin of error (precision) between the sample and the population is 5%.

n = minimum required sample size

Based on this assumption, the actual sample size for the study is determined using the formula for single population proportion.

$$n = \frac{(Z \alpha/2)^2 * P (1 - P)}{d2}$$

$$n = \frac{(1.96)^2 * 0.638(1 - 0.638)}{(0.05)^2} = 355$$

(N is less than 10000), correction formula is used as follow:

nc= 
$$\frac{n}{1+\frac{n}{N}}$$
 nc=  $\frac{355}{1+\frac{355}{2288}}$  nc=307

Adding non responses rate of 10%, a total sample size of 307+31=338 HIV positive women were selected. Therefore, total sample size for this study was 338 HIV positive women attending ART services in those three health facilities.

Based on month of February 2015 client flow of the ART clinics in these health facilities by referring client registration book/ record, the total expected number of clients during the data collection period was 2,288 clients. The total expected numbers of HIV positive women attending each ART clinics during the study period were 1601,165 and 522 in Jimma University Specialized Hospital, Shenen Gibe hospital and Jimma Health Center ART clinics respectively and total HIV positive women were 2287 (1601+165+522=2288).

The sample size for each ART clinics was determined by proportionate allocation formula:

$$n_j = \frac{n}{N} N_j$$

n<sub>i</sub> =Sample size of each ART clinics.

 $N_i$  = Total expected HIV positive women attending each ART clinics during the study period.

n = Total sample size

N = Total expected HIV positive women attending ART clinics during the study period.

### 5.7. Sampling procedure/technique

All three health facilities those provide ARV treatments was included in the study. The calculated sample size was used to recruit study participants from the selected ART clinics proportional to the clinic's patient load. Systematic sampling technique was used to select eligible participants from each ART clinics. First, total expected numbers of women who visited the ART clinics during data collection period was 2288 HIV positive women, estimated based on the previous month client flow of the clinics (almost similar number of client flow every month). This was obtained by referring client registration book/ record for a month prior to data collection. The first woman was selected by lottery method (a random) then every seventh client (N/n=2288/338) was interviewed. Hence, every 7th individuals who came to attend ART service was selected for the interview throughout the data collection period.

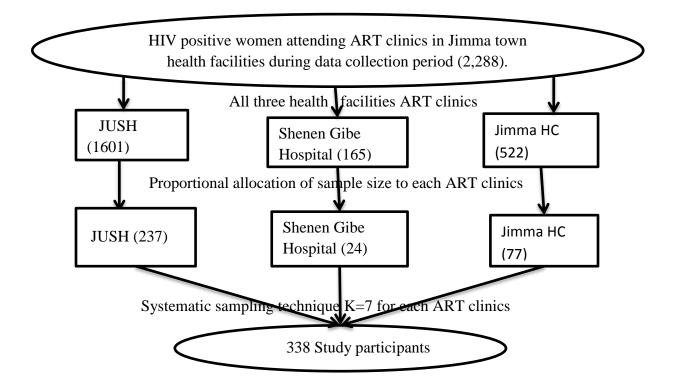


Figure 2 . Proportional allocation of sample size to each ART clinics by estimating expected HIV positive women attending ART services in Jimma town health facilities, South West Ethiopia.

#### 5.8. Data collection (Methods, Instruments and Procedures)

A structured Amharic and Affaan Oromo questionnaire was utilized for data collection. The questionnaire was developed in English after reviewing deferent literatures (29), (31), (33), (34), (37) and (41) and translated into two local languages (Amharic and Affaan Oromo) by independent translators who were health professionals and can speak Amharic and Affaan Oromo languages fluently and then back to English to make sure the questions are clear and to check for consistency. Finally the Amharic and Affaan Oromo version was used for data collection.

Five B.Sc nurses collectors and two B.Sc. nurse supervisors were recruited and trained on proper data collection procedures. Data collectors and supervisors were trained on the objective; benefit of the study, individual's right, informed consent and techniques of the interview for two days. Data collectors were counselors/ART nurses in the respective health institutions, which helped to maximize confidentiality and to get maximum response.

Daily supervision and checking for data completion was also conducted by supervisor. The principal investigator was responsible for coordination and supervision of the overall data collection process. Each HIV positive woman was interviewed and supported by clinical files, the interview took place in a secluded room which selected for this study.

The main components of the questionnaire were: socio demographic characteristics, Sexual partner's related factors, HIVcounseling and testing service related factors, HIV /AIDS illness related factors and questions which measure disclosure status and its related questions.

### 5.9. Data quality assurance

A carefully designed questionnaire was translated first into Amharic and Affaan Oromo; then back to English to assure its consistency. The questionnaire was pre-tested on 5% of the sample size was employed in HIV positive women on ART services in the neighboring Agaro town Health Center before the actual data collection period to make sure clarity of the questioner as well as understanding of the data collectors. Discussion was held based on the result of the pre-test and accordingly, some amendments were made.

Prior data collection, two day compressive training was given for the supervisors and data collectors. The principal investigator and supervisor made regular follow-up visits to monitor the quality of the data collection process. The collected data completeness and consistency of each of the questionnaires were checked and corrected on a daily basis throughout data collection and feedback was given to data collectors to encourage accuracy. Any error or ambiguity and incompleteness were corrected accordingly. All the information which was collected after taking written informed consent from each respondents as well as good interaction between respondent and interviewer was maintained; and confidentiality was assured to improve the quality of data. Interview was carried out in strictly private room which was prepared for this study.

The data were entered using EpiData Version 3.1, and then exported, edited, cleaned and analyzed by version 21 Statistical Package for Social Science (SPSS) statistical software.

5.10. Data Analysis

The completed questionnaire was checked for completeness by the investigator. An EpiData version

3.1 was used for data entry and then it was exported, cleaned and analyzed by version 21 Statistical

Package for Social Science (SPSS) statistical software.

Descriptive analysis was conducted to describe the study participants as applicable data were

presented using tables and figures. Bivariable and multivariable logistic regression analyses were

applied to see significance of association between dependent and independent variables. All

independent variables which had association in bivarible analysis with p-value less than 0.25 was

included in multivariable logistic regression model to determine the associated factors of HIV

positive sero status disclosure.

Multivariable logistic regression was used to control for possible confounding effects of selected

variables and to assess the separate effects of each variable. The variables with p<0.05 in multiple

logistic regression model was considered as significance of association between dependent and

independent variables.

**5.11. Study Variables** 

**Dependant variable:** HIV positive sero status disclosure

**Independent variables:** There were multiple independent variables. These included

> Socio-demographic variables (age, ethnicity, Religion, occupation, educational status, place of

residence, monthly income).

> Sex and sexual partner's related factors (Number of lifetime sexual partners, use of condom,

type of partner, knowing partner's HIV status, partner's HIV results).

➤ HIV /AIDS illness related factors (Taking ART, WHO baseline HIV clinical stage, suffered

opportunistic infection, Duration since HIV diagnosis).

➤ HIV counseling and testing service related factors (being member of HIV/AIDS associations,

prior discussion before testing, follow up counseling and reason for HIV testing).

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5.12. Operational definitions

HIV positive sero status disclosure: The act of informing HIV positive women sero status to at

least one significant person (sexual partner, parents, families, friends, religion leader or financial

supporter).

**HIV positive woman attending ART service:** Referred to a respondent visit ART clinics for care

who may be receiving ARV treatment or not.

**Follow up counseling:** Referred to a respondent on follow up care who had at least one counseling

on HIV positive sero status disclosure in the selected ARV treatment units.

**Sexual partner:** A person with whom one engages in sex acts either regular partner or not.

**Positive outcome of disclosure:** Are those facilitating encourage to disclose HIV positive sero

status.

**Negative outcomes of disclosure:** Are those making to conceal HIV positive sero status like

stigma, rejection, divorce and lack of economic support.

**Steady partner:** referred to a partner with whom the participant has a regular sexual relationship

and who is the spouse or regular boyfriend.

**Casual partner:** A partner with whom the participant has sex infrequently and was not married to.

**Multiple sex partners:** referred to a participant having two or more sex partners.

**Illiterate:** referred to respondent who can not read and write.

**Literate:** referred to respondent who can read and write.

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#### 5.13. Ethical consideration

Before data collection, the ethical approval and clearance for the study was approved from institutional review board of Jimma university collage of public health and medical sciences.

A formal letter was written from Jimma university collage of public health and medical sciences, department of nursing and midwifery was submitted to JUSH and Jimma town health office. A permission letter was obtained from the Jimma town health office and the respective health care facilities. Written informed consent was also obtained from the study participants after the purpose of the study was clearly explained to all study participants.

A consent form was attached as cover page on the questionnaire and was signed by all participating in the study. The right of study participants to refuse participation or withdraw from the study at any point was respected. All accessed data were kept confidential. They were also informed that the information obtained from them will not be disclosed to the third person. To assure complete confidentiality other identifying information including name was not recorded on questionnaires.

#### 5.14. Dissemination of the result

The findings of this study will be disseminated to Jimma zone health department, Jimma town health office, JUSH and to Jimma university collage of public health and medical sciences of graduate studies.

The findings will also be disseminated to different organizations that will have contribution to promote HIV sero status disclosure in the community, which, in turn, will reduce the spread and transmission of HIV. The findings may also be presented in different seminars and workshops. Finally, the thesis will be prepared for publication in journals.

#### CHAPTER FIVE: RESULT

#### **6.1** Characteristics of respondents

A total of 338 HIV positive women who met the set criteria were enrolled in the study with response rate of 337 (99.7%). Two hundred thirty six (70%), 77(22.9%) and 24(7.1%) of the study participants were from Jimma University Specialized Hospital, Jimma Health Center and Shenen Gibe hospital ART clinics, respectively.

## Socio-demographic Characteristics of Study Participants

Majority 287(85.2%) of the women were from urban area. One hundred seventy (51.6%) of the participants were in the age group 25-34, followed by the age group  $\geq$ 35 and 18-24 with 104 (30.9%) and 59 (17.5%), respectively. The mean age of the respondents was 31  $\pm$ 7.5 years. Majority of respondents 165 (49%) were married. Sixty eight 73(21.7%) were single, divorced 46 (13.6%) and widowed 53 (15.7%).

The dominant ethnic groups were Oromo 166 (49.3%) followed by Keffa 63 (18.7%), Amhara 58 (17.2%), Yeme 24 (7.1%), Guraghe 14 (4.2%) and other ethnic group 24 (7.1%). The majority 141(41.8%) of the participants were Orthodox followed by Muslim 137(40.7%) with Protestant 49(14.5%) and catholic 10(3%), respectively. One hundred thirty seven (40.7%), 52 (15.4%), 39 (11.6%) and 17 (5%) of the respondents had educational level of primary school, secondary school, read and write only and college and university level respectively and 92 (27.3%) were illiterate.

One hundred two (30.3%), 79(23.4%), 71(21.1), 57(16.9) and 28(8.3) of them were daily workers, house wives, merchant, government employee and others respectively. One hundred fifty seven (46.6%), 138 (40.9%) and 42 (12.5%) of the total participants earned <500, and 501- 999 Birr and  $\ge$ 1000 per month, respectively (Table 1).

Table 1.Socio demographic characteristics of HIV positive women who attend ART services at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 /2015.

Socio demographic variable (n=337)	Number(percent)
Age (in years)	
18-24	59(17.5)
25-34	174(51.6)
≥35	104(30.9)
Marital status	
Single	73(21.7)
Married	165(49)
Divorced	46(13.6)
Widowed	53(15.7)
Religion	
Muslim	137(40.7)
Orthodox	141(41.8)
Protestant	49(14.5)
Catholic	10(3)
Ethnicity	
Oromo	166(49.3)
Keffa	63(18.7)
Guraghe	14(4.2)
Amhara	58(17.2)
Yeme	12(3.6)
Others*	24(7.1)
Educational status	,
Illiterate	92(27.3)
Read and write only	39(11.6)
Primary School(1-8)	137(40.7)
Secondary school(9-12)	52(15.4)
College and University level	17(5)
Occupation	
House wife	79(23.4)
Daily worker	102(30.3)
Government worker	57(16.9)
Merchant	71(21.1)
Others**	28(8.3)
Residence	
Urban	287(85.2)
Rural	50(14.8)
Personal monthly income (in Birr) (approximately)	
<500	157(46.6)
501-999	138(40.9)
≥1000	42(12.5)

Others\*: Include Tigraye,Dauro and wolyita
Others\*\*: Include student, farmers, waiter and Jobless

## Sexual partners related characteristics of the respondents

In this study, 139 (41.2%) of the respondents had one life time sexual partner, 198(58.8%) had more than one life time sexual partners. Of all (337) the women, two hundred twenty three (66.2%) of the respondents had sexual partners currently among them 171(76.7%) had steady partner whereas, 52 (23.3%) had casual partners.

One hundred seventy three (74.9%) of these individuals used condom while one fourth did not use. Regarding the knowledge of partners HIV status 174 (85.7%) of the respondents knew their partner's status, among these 157(90.2%) said that their partners were HIV positive, 17(9.8%) of them were negative.

Majority of current sexual partners were from urban area 186 (83.4%). One hundred twenty two (54.7%) of sexual partners were in the age group  $\geq$ 35, followed by the age group 25-34, unstated age and 18-24 with 73(32.7), 21(9.4%)and 7(3.2%), respectively.

The mean age of sexual partners was  $36.4 \pm 8.9$  years. One hundred seventy eight (79.8%) and 45(20.2%) were literate and illiterate respectively. Eighty six (38.6%), 77(34.5%), 38(17%) and 22(9.9%) of them were government employee, merchant, daily worker and others respectively.

Nineteen 19(8.5) of women did not state monthly income of their partner. One hundred fifty two 44(19.7), 76(34) and 84(37.8) of the total participants earned <500, and 501- 999 birr and  $\ge$ 1000 per month respectively (Table 2).

Table 2. Sexual partners *related* to *factors* of respondents at Jimma town health facilities, South-West Ethiopia, March 2 –April 2 /2015.

Variables (n=337)	Number(percent)
Number of life time sexual partners	
Single	139(41.2)
Multiple	198(58.8)
Current sexual partner	
Yes	223(66.2)
No	114(33.8)
Type of sexual partner	
Steady partner	171(76.7)
Casual partner	52(23.3)
Partner's age (in years)	
18-24	7(3.2)
25-34	73(32.7)
≥35	122(54.7)
Unstated	21(9.4)
Partner's educational status	
Illiterate	45(20.2)
Literate	178(79.8)
Partner's occupation	
Daily worker	38(17.0)
Government worker	86(38.6)
Merchant	77(34.5)
Others*	22(9.9)
Partner's residence	
Urban	186(83.4)
Rural	37(16.6)
Partner's monthly income (in birr)	
(approximately)	
<500	44(19.7)
501-999	76(34)
≥1000	84(37.8)
Unstated	19(8.5)
Condom use	
Yes	141(63.2)
No	82(36.8)
knowing partner's HIV status	
Yes	174(85.7)
No	29(14.3)
Partner's HIV status	
Positive	157(90.2)

\*Others: Included the drivers and farmers

#### Health care service and illness related factors of the respondents

The length of time since the mothers knew their HIV status differed. In nearly 253(75.1%) of them, it had been 2 years beyond, since they knew their HIV status. The main reason for testing was illness 152(45.1%), followed by just wanting to know one's status 115(34.1%) and prevention of mother-to-child transmission 70(20.8%) caused them to get tested for an HIV test.

One hundred sixty (47.5%) of the mothers didn't have a discussion about HIV test with somebody prior to HIV test. About 111(32.9%) of the participants were not member of anti- HIV/AIDS association.

Among the 337 participants interviewed, 85.8% of the respondents had follow up counseling. The majority of respondents 261(77.4%) were taking ART. The respondents were taking ART among them 209(80.1%) had been 1 years beyond, since they started their ARVs treatment.

20.2%, 32%, 35.3% and 12.5% of women had stag Stage I, II, III and stage IV of WHO clinical stages respectively. Of those, 169 (84%) of the respondents suffered from opportunistic infections as tuberculosis (TB) 103(51.2%), pneumonia 30(15%), herpes zoster/skin rash 60(29.9%), angular cheilitis 45(22.5%) and Others 51(25.3%) (Table 3).

Table 3. Health care service and illness related factors of respondents at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 / 2015.

Variables (n=337)	Number(percent)
Follow up counseling	-
Yes	289(85.8)
No	48(14.2)
Prior discussion before test	
Yes	177(52.5)
No	160(47.5)
Membership of Anti-HIV/AIDS association	
Yes	226(67.1)
No	111(32.9)
Duration since HIV diagnosis	
>2 years	253(75.1)
2≤ years	84(24.9)
Duration of ART	
>1 years	209(80.1)
1≤ years	52(19.9)
Suffering from opportunistic infection	
Yes	202(59.9)
No	135(40.1)
Hospital admission	
Yes	131(38.9)
No	206(61.1)
Taking ART	
Yes	261(77.4)
No	76(22.6)
WHO stage at baseline	
Stage I	68(20.2)
Stage II	108 (32)
Stage III	119(35.3)
Stage IV	42(12.5)
Reason for HIV testing	
Sick	152(45.1)
ANC	70(20.8)
Self-initiative	115(34.1)
Getting type of opportunistic infection*	
Tuberculosis(TB)	103(51.2)
Pneumonia	30(15)
Herpes zoster/skin rash	60(29.9)
Angular cheilitis	45(22.5)
** Others	51(25.3)
** Others 's deals about 1 and a sent 1	01(20.0)

<sup>\*\*</sup> Others include chronic diarrhea and fever

<sup>\*</sup>More than one response was possible

### 6.2 HIV positive sero status disclosure

The majority 290(86.1%) disclosed their HIV positive sero status to at least one significant person; and out of currently have sexual partner (223); 184(83%) disclosed to their current sexual partner; 239 (82.4%) family member (parents, sisters, brothers and child), 63(21.7%) close relatives (aunts and uncles), 32 (11.0%) close friend and 73 (25.2%) others (religion leaders and financial supporter groups). Majority of study participants disclosed to one people 165 (56.9%), followed by two to four people 102 (35.2%). Participants who disclosed their status to five people and above were 23 (7.9%) while only 47 (13.9%) participants did not disclose to anyone. Out of 290 respondents who disclosed their HIV positive status; 65 (22.4%) disclosed within one month, 136 (46.9%) disclosed between one and six months and 89 (30.7%) disclosed after six months of being notified HIV positive sero status. JUSH (86.4%), Jimma Health Center (85.7%) and Shenen Gibe Hospital (83.3%) were the rate of HIV positive sero status disclosure in each ART clinic (table 4).

Table 4. Rate of HIV status disclosure and Time of disclosure after aware HIV result among HIV positive women who attend ART services at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 /2015.

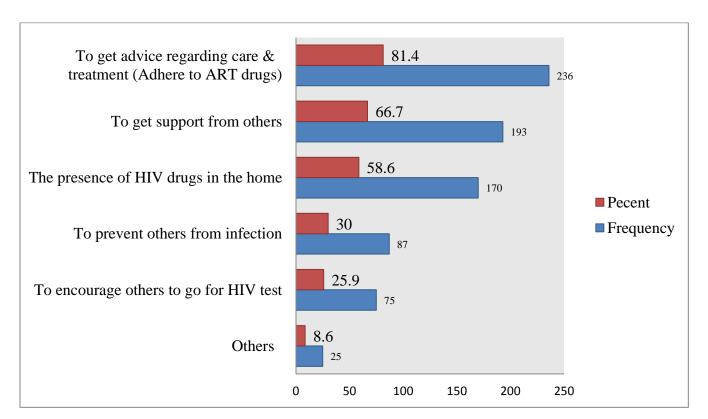
Variables	Number( Percent)
Disclosure to anyone (n =337)	
Yes	290(86.1)
No	47 (13.9)
Disclosure HIV positive sero status among currently have sexual	184(83)
partner(n=223)	
To whom you disclosed your HIV positive sero status(n=290)*	
Disclosure HIV sero status to family members	239 (82.4%)
Disclosure HIV sero status to close relatives	63(21.7%)
Disclosure HIV sero status to close friend	32 (11.0%)
Disclosure HIV sero status to others	73 (25.2%)
Number of persons was disclosed to	
1	165(56.9)
2-4	102(35.2)
>= 5	23( 7.9)
Time of disclosure after aware HIV result (n =290)	
<1 months	65(22.4)
1-6 months	136(46.9)
>6 months	89(30.7)
Disclosure prevalence each health facility	
JUSH	204 (86.4)
Jimma health center	66 (85.7)
Shenen gibe hospital	20 (83.3)

<sup>\*</sup>More than one response was possible

#### Reason of HIV positive sero status disclosure

Study participants were assessed on their reason about HIV positive sero status disclosure to others. With regard to reason of disclosure: getting advice regarding care and treatment 236(81.4%), getting support from others 193(66.7%), presenting of HIV drugs in the home 170(58.6%), preventing others from infection 87(30%), encouraging others to go for HIV test 75(25.9%) and other 25(8.6%) which were reasons for disclosure of one's status (figure 3).

Figure 3. Reasons for disclosure of HIV positive sero status among HIV positive women attending ART at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 /2015.



Others: includes Unresponse and educate others on HIV/AIDS

<sup>\*</sup> Totals are greater than actual size because more than one response is possible

### Outcomes of HIV positive sero status disclosure

The reaction of the first person to whom you disclosed your HIV positive sero status; shocked 85(29.3%), cried 38(13.1%), understood 187 (64.4%), laughed one (0.3%) and other three (1.0%).

Out of 290 respondents who disclosed their HIV positive sero status; 225 (77.6%) had received positive outcomes disclosure like emotional support, using family planning, freedom to use ART and financial/material support and 65 (22.4%) had faced negative outcomes disclosure like Friend and family blame, disruption of family relationships, Abandonment, Stigma and discrimination and others (Table 5).

Table 5. Initial reactions and outcomes of HIV positive sero status disclosure among HIV positive women attending ART clinic at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 / 2015.

Disclosure outcomes and initial reactions	Number(Percent)
What was the reaction of the first person to whom you	
disclosed your status? (n =290)*	
She/he was shocked	85 (29.3)
She/he cried	38(13.1)
She/he understood	187(64.4)
She/he laughed at me	1 (0.3)
Positive outcome of disclosure n=225(77.6%)*	
Emotional support	220 (97.8)
Using family planning	79 (35)
Freedom to use ART	242(107.6)
Financial/material support	54 (24)
Negative outcome of disclosure n=65(22.4%)*	
Disruption of family relationships	46(70.8)
Abandonment	58 (41.5)
Stigma and discrimination	27 (58.7)
Friend and family blame	52 (80)
Others**	28 (43)

Other\*\*: Divorce, hit/slap, divorce, loss of economic support

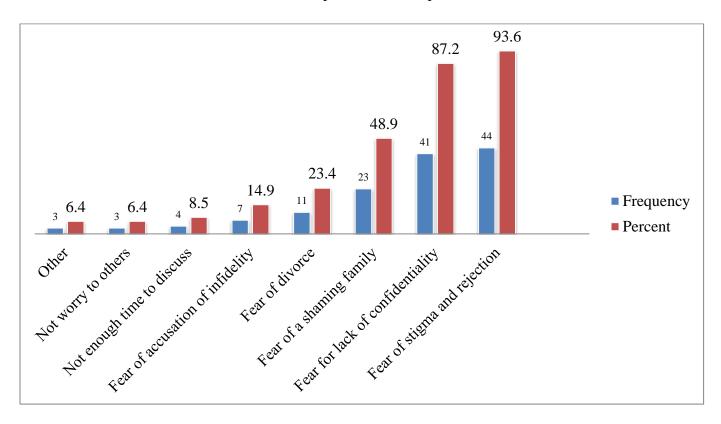
<sup>\*</sup>Total exceeds 100% because multiple responses are possible

### Reasons for non-disclosure of HIV positive sero status

Reasons for non-disclosure among those respondents who did not want to tell their HIV positive sero status were fear of stigma and discrimination 44(93.6%), fear of breach of confidentiality 41(87.2%), Fear of a shaming family 23(48.9%), fear of divorce 11(23.4%), 7(14.9%) fear of accusation of infidelity, 4 (8.5%) not enough time to discuss, not worry to others 3(6.4%) and other 3(6.4%) (Figure 4).

Despite adequate awareness and past effort globally effect of stigmatization is still on high side as it account for large proportion of reason for non-disclosure. Fear of divorce is also very important. This is expected as women in Africa at large place high value on their married life and will do all they can to preserve their family. The commonest barriers of disclosure reported by the women were fear of stigma and rejection.

Figure 4. Reasons of non-disclosure as reported by HIV positive women attending ART at Jimma town health facilities, South-West Ethiopia, March 2 – April 2 / 2015.



Other include fear of loss of economic support More than one response was possible

#### 6.3 Factors associated with HIV positive sero status disclosure

To assess factors associated with HIV positive sero status disclosure, the study participants with HIV positive sero status disclosure were computed for different variables and both bivariable and multivariable analysis were performed.

Explanatory variables (p-value <0.25) were entered again into multiple logistic regression analysis to control possible confounding (Adjusted for type of partner, prior discussion before test, members of Anti-HIV/AIDS association, receiving follow up counseling, suffered from opportunistic infection, woman education, duration since HIV diagnosis, condom use, WHO stage at baseline, started ART, number of life time sexual partners, partner education, hospitalization). Other independent variables (p-value >0.25) in the crude analysis were excluded from multiple logistic regression analysis.

The independent variables with p-value <0.05 in multiple logistic regression analysis were taken as significant predictors of HIV positive status disclosure. After adjusting variables in the multivariable logistic regression analysis variables remain significant at p-value <0.05 were; being membership of Anti-HIV/AIDS association, having follow up counselling, being literate and taking ART (Table 6).

Being members of Anti-HIV/AIDS association were 3.171 times more likely to be disclose their HIV positive sero status as compared to those not a member of Anti-HIV/AIDS association[(AOR = 3.171; 95% CI, 1.183-8.501)]. The multiple logistic regression output showed that being on ART were 4.559 times more likely to be disclose their HIV positive sero status than those who were not on ART [(AOR= 4.559; 95% CI, 1.586-13.103)]. Being literate were 3.624 times more likely to be disclose their HIV positive sero status as compared to counter part [(AOR=3.624; 95% CI, 1.049-12.522)]. Those who had follow up counseling were 6.621 times more likely to be disclose their HIV positive sero status as compared to those who did not have follow up counselling [(OR =6.621; 95% CI, 1.719-25.498)] (Table 6).

Table 6. Factors independently associated with HIV-positive sero status disclosure among HIV positive women, Jimma town health facilities, South-West Ethiopia /2015.

Variables (n=337)	HIV positive ser	o status disclosure	COR (95% CI) **	AOR (95%CI) ** *
	Yes	No	,	
Woman educational status				
Literate	228(93.1)	17(6.9)	6.490(3.361-12.530)*	3.624(1.049-12.522) *
Illiterate	62(67.4)	30(32.6)	1	1
Suffered from opportunistic				
infection				
Yes	181(89.6)	21(10.4)	2.056(1.104-3.830)	2.122(.592-7.614)
No	109(80.7)	26(19.3)	1	1
Hospitalization				
Yes	118(90.1)	13(9.9)	1.794(.908-3.544)	2.159(.574-8.118)
No	172(83.5)	34(16.5)	1	1
Follow up counselling				
Yes	268(92.7)	21(7.3)	15.082(7.335-31.012)*	6.621(1.719-25.498) *
No	22(45.8)	26(54.2)	1	1
Number of life time partners		` ′	1	-
Single partner	125(89.9)	14(10.1)	1.786(.917-3.479)	2.718(.846-8.737)
Multiple partners	165(83.3)	33(16.7)	1	1
Duration since HIV diagnosis	100(00.0)	33(10.7)	1	-
> 2 years	224(88.5)	29(11.5)	2.107(1.101-4.031)*	.649(.201-2.089)
≤2 years	66(78.6)	18(21.4)	1	1
Reason for HIV testing	00(70.0)	10(21.1)	1	1
Self-initiative	106(92.2)	9(7.8)	.654(.317-1.347)	1.098(.311-3.877)
Antenatal care	55(78.6)	` ′	2.100(.932-4.731)	.805(.236-2.743)
sick	129(84.9)	15(21.4) 23(15.1)	2.100(.932-4.731)	1
Taking ART	129(04.9)	23(13.1)	1	1
Yes	242(02.7)	10(7.2)	7 420/2 041 14 272)*	4 550/1 50/ 12 102)*
No	242(92.7) 48(63.2)	19(7.3)	7.430(3.841-14.372)*	4.559(1.586-13.103)*
	46(03.2)	28(36.8)	1	1
Prior discussion before test	150(00.0)	10(10.2)		1.052( 666.5.140)
Yes	159(89.8)	18(10.2)	1.955(1.039-3.679)*	1.852(.666-5.148)
No	131(81.9)	29(18.1)	1	1
Partner education				
Literate	150(84.3)	28(15.7)	1.733(.786-3.821)	.282(.068-1.174)
Illiterate	34(75.6)	11(24.4)	1	1
Membership of HIV/AIDS				
association				
Yes	204(90.3)	22(9.7)	2.696(1.442-5.041)*	3.171(1.183-8.501)*
No	86(77.5)	25 (22.5)	1	1
Type of partner				
Steady	151(88.3)	20(11.7)	4.347(2.090-9.040)*	2.175(.793-5.967)
Casual	33 (63.5)	19(36.5)	1	1
Condom use				
Yes	122(86.5)	19(13.5)	2.071(1.030-4.164) *	1.480(.506-4.328)
No	62(75.6)	20(24.4)	1	1
WHO stage at baseline	<u> </u>			
Stage III-IV	145(90.1)	16(9.9)	1.937(1.016-3.696) *	.689(.209-2.270)
Stage I-II	145(82.4)	31(17.6)	1.937(1.010-3.090)	1
250 1 11	113(02.4)	31(17.0)	1	1

<sup>\*</sup> Statistically significant (p<0.05). '1' reference category.

<sup>\*\*</sup> Crude odds ratio

<sup>\*\*\*</sup> Adjusted for other variables

#### CHAPTER SIX- DISCUSSION

Disclosure of HIV status may lead to increased opportunities for social support in order to discuss and implement HIV risk reduction with partners that may ultimately lower the number of newly infected, and even to reduce the risk of HIV transmission from mother to child and to take medications properly or improved access to treatment.

Disclosure of HIV status may also have potential risk for the infected women that may lead women not to disclose their HIV status, which in turn leads to missed opportunities for prevention of new infections to their partners and infants or adherence to treatment regimens. Thus disclosure of woman status is major public health goal for HIV prevention & treatment.

In this study, the prevalence of HIV positive sero status disclosure to at least one person is 86.1% and 13.9% of disclosure is delayed. The rate of disclosure in this study lies on the high side of the range 42% to 100%; with the average disclosure rate of 79% and 16.7% to 86%; compared with the average disclosure rate of 49% which was reported in the WHO meta-analysis study for developed and developing countries, respectively [4].

This finding is comparable to other studies [38, 39]. But it is slightly lower than that reported with studies elsewhere [33, 37]. The main reason for these differences might be due to the difference in population characters as this study was conducted in clinical setting and on women only whereas some of the other studies were conducted in community setting and some on both women and male ART service users. The other reason could be due to study period difference and socio demographic characteristics difference between the study participants. It is also slightly lower than that reported with study [41]. The reason for these differences could be study population difference.

The prevalence of HIV positive sero status disclosure in this study was higher than that have been documented in other studies [34,35]. The reason could be due to socio demographic characteristics difference between the study participants. The other reason could be also study population difference. It is also higher than that reported with study [40]. This could be explained by the fact that ART service was not started in the country at the time when study was carried out in Metu town. Women living with HIV are confident to disclose their HIV positive status in order to benefit from an existing ART services.

Sixty five (22.4%) of the women faced negative outcome after disclosure. The common negative outcome after disclosures was reported as friend and family blame; stigma and discrimination; disruption of family relationships and abandonment /divorce. This is consistent with that reported by WHO meta-analysis study for developing countries 4-28% [4]. This is also in line with the study carried out elsewhere in Ethiopia [40].

Forty seven (13.9%) of the respondents did not disclose their HIV positive status to anyone. The most common reasons for not disclosing a positive HIV result to somebody were reported as fear of stigma and discrimination, fear of breach of confidentiality, Fear of a shaming family, fear of divorce and fear of accusation of infidelity. These are similar to disclosure barriers reported by other studies [27, 33, 35, 37, 38, 40, 41]. This could be because of large number of participants were illiterate and might not get comprehensive information regarding the importance disclosure in clinics and the fact that in developing countries including Ethiopia, males are the source of income for the household than females, that might enforce them to conceal their sero-positive status. These risks may lead women not to disclose their HIV status, which in turn leads to missed opportunities for prevention of new infections to their partners and infants.

Similar to other findings [34, 35, 37,41], in this study also a member of Anti-HIV/AIDS association were more likely to be disclose HIV positive status to as compared to counter part. This could be individuals who were a member has frequent discussion related to HIV and they feel first to bring behavioral changes. The other reason may be because sharing ideas with association members gave strength for individuals spiritually as well as mentally, so that they can anticipate and accept the outcomes following disclosure and disclose their HIV status.

It was also observed that receiving follow up counselling was strongly associated with disclosure of HIV positive sero status. This finding is in line with other studies conducted in different studies [32, 36]. This might be played an important role in in behavioral interventions like counseling on positive living and a multidisciplinary approach to develop behavioral change through continuous ongoing counseling in order to facilitate disclosure to others.

Literate individuals were more likely to be disclose their serostatus. This finding is in line with other study (39). This could be educated individuals have a level of independence and access to health services and media, hence informed about the importance of disclosure. The other reason could be suggesting that education increases the ability to analyze, internalize and act on health information messages such as those related to importance of disclosure.

In this analysis, taking ART was strongly associated with disclosure of HIV sero status. Similar finding have been documented in other studies [32, 36]. This could be primary HIV positive women on ART often reported feeling of comfortable with their status. As a result of overcoming internalized feelings of shame facilitated disclosure of HIV status. This could be interaction of this group with other HIV infected people and see another infected person disclosed her status tended to gives PLWHA more courage to disclose their HIV positive sero status. The other reason could be also due to most of individual would have developed AIDS before starting the drugs. That means ART is initiated after clinical AIDS signs and symptoms occurred in which HIV positive women cannot easily be concealed (hide) their HIV positive sero status from the community.

#### CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

#### 8.1 Conclusion

In this finding, more than three quarter of study participants in the study area disclosed their HIV positive sero status to somebody. The most common reasons for nondisclosure among those respondents who did not disclose their HIV positive status to their partner/parents/families were; fear of stigma and rejection, fear of breach of confidentiality, fear of shaming to family, fear of divorce and fear of accusation of infidelity.

This study also revealed predictors of HIV positive sero status disclosure including being membership of Anti-HIV/AIDS association, taking ART, being literate and follow up counselling were identified as predictors of HIV positive sero status disclosure.

#### 8.2 Recommendation

Based on these findings the following recommendations were forwarded:

- ➤ Jimma town health office and OSSA in the ARV scale up program should focus on the importance in the area of HIV positive status disclosure, which directed towards HIV positive women, by promoting through health education and awareness for both HIV infected individuals and the community. It is also important to facilitate positive outcomes and minimize negative outcomes.
- Adherence and Disclosure counselors should focus on education, follow up counseling and ART taking. This should be an effective, on-going practice which will result to develop behavioral change in order to facilitate safe HIV positive sero status disclosure to others.
- ➤ Women's Anti-HIV/AIDS associations and supporting group associations should be strengthen and get support in material and moral to be sustainable in their work by NGOs and government institutions.
- Finally, the investigators recommend further research be undertaken on HIV positive sero status disclosure using longitudinal study.

## 8.3. Limitation and strength of the study

## Strength of the study

- ➤ Pre-tested and modified questionnaire was used for data collection.
- Nurses working in the ART clinic were used to collect the data from all respondents so that confidentiality could be reassured.

## Limitation of the study

- > Since the study was cross sectional, it shows only temporal relationship between exposure and outcome.
- > Social desirability and recall biases- the study groups may have introduced biases.
- ➤ Use of counselors as data collectors may create bias as they might direct the respondents during the interview; the respondents might have given a desired answer by the counselor or health provider particularly on high risk behavior.

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#### **ANNEXES**

# Annexes 1. English version questionnaires Jimma University

### College of Public Health And Medical Sciences,

### **Department of Nursing And Midwifery**

Questionnaire for the study on HIV positive status disclosure and associated factors among HIV positive

#### **Informed consent**

Hello, I am conducting research on HIV positive status disclosure and associated factors among HIV positive women. To aid me in my research, I politely request your cooperation in responding to my questionnaire truthfully. At the end of this study, the findings will contribute Programmatic and policy strategies that have been used to increase disclosure in the community, which, in turn, will reduce HIV transmission. I assure you that confidentiality is of primary importance. I am going to ask you questions some of which may be very personal. Your name will not be written on this form. You have the right not to respond at all or to withdraw in the meantime, but your input will have great value for the success of my objective. Do you agree to respond to this questionnaire? If yes so, indicate your agreement with your signature.

Signature	_	
Thank you for your coop	eration!	
Data collector's name & signature	Supervisor's name & signatureD	<b>a</b> te
filled//		
Questionnaire codeN <sup>o</sup> .	Health facilities Code	

## Part one: Respondent's socio-demographic variables

Code Nº	Questions	Coding classifications/responses	Skip to
101	Sex of the respondent	<b>F</b> emale	
102	How old are you?	Years(18>=)	
103	Where is your place of residence?	1. Urban	
		0. Rural	
104	What is your marital status now?	1. Single	
		2. Married	
		3. Divorced	
		4. widowed	
		5. Others Specify	
105	What is your religion?	1. Muslim	
		2. Orthodox	
		3. Protestant	
		4. Catholic	
		5. Others specify	
106	What is your ethnic group?	1. Oromo	
		2. Keffa	
		3. Guraghe	
		4. Amhara	
		5. Yeme	
		6. Others specify	
107	What is your education level?	1. Illiterate	
		2. Read and write only	
		3. Primary School(1-8)	
		4. Secondary school(9-12)	
		5. College and University level	

108	What is your occupation?	1. House wife
		2. Daily worker
		3. Government employee
		4. Merchant
		5. Others
109	What is your monthly income?	Birr per month
110	How many children do you have?	

# Part two: Sexual partner's related factors

Code	Questions	Coding	Skip to
$N^{\underline{o}}$		classifications/responses	
201	Did you ever have sexual partner?	1. Yes	If no, skip to
		0. No	Q301
202	How many sexual partners have you	nº of lifetime partners	
	ever had?		
203	Currently, Do you have sexual	1. Yes	If no, skip to
	partner?	0. No	Q301
204	What type of sexual partnership?	steady partner	
		0. casual partner	
205	Do you live with sexual partner	1. Yes	If Yes, skip to
		0. No	Q206
206	How long do you live with sexual	month/year	
	partner		
207	Have you used condom when you	1. Yes	If no, skip to
	have sexual Intercourse with your	0. No	Q209
	sexual partner?		
208	How old is your partner?	years	

209	What is your partners' education	1. Illiterate	
	level?	2. Read and write only	
		3. Primary School(1-8)	
		4. Secondary school(9-12)	
		5. College and University level	
210	What is your partners'occupation?	1. Daily worker	
		2. Government employee	
		3. Merchant	
		4. Others	
211	What is your partners'monthly	Birr	
	income?		
212	What is your partners' religion?	1. Muslim	
		2. Orthodox	
		3. Protestant	
		4. Catholic	
		5. Others specify	
213	Where is your partners' place of	1. Urban	
	residence?	0. Rural	
214	Did your partner have HIV test?	1. Yes	If no skip to
		0. No	Q301
215	Do you know his HIV status?	1. Yes	If no skip to
		0. No	Q301
216	What is his HIV status?	1. HIV positive	
		0. HIV negative	

## Part three- Respondent's HIV counseling and testing related factors

Code	Questions	Coding classifications/responses	Skip to
$N^{\underline{o}}$			
301	Did you discuss on disclosure about	1. Yes	
	HIV test result with anyone before	0. no	
	testing?		
302	What was the reason for HIV	1. sick	
	counselling and testing?	2. Antenatal care	
		3. Self-initiative	
303	Did you receive follow up	1. Yes	
	counselling about HIV positive	0. no	
	status?		
304	Have you ever member of Anti-	1. Yes	
	HIV/AIDS association?	0. No	

## Part four - HIV/AIDS illness related factors

Code	Questions	Coding classifications/responses	Skip to
Nº			
401	How long since you did HIV	year/month	
	diagnosis?		
402	Did you start ART?	1. Yes	If no, skip to
		0. No	Q404
403	How long have you been receiving	year/month	
	ART treatment?		
404	What is your baseline WHO HIV	1. Stage I	
	stage?	2. Stage II	
		3. Stage III	
		4. Stage IV	
405	Were you suffered from	1. Yes	If no, skip to
	opportunistic infection?	0. No	Q407

406	What was opportunistic infection	1. Tuberculosis(TB)	
		2. Pneumonia	
		3. Herpes zoster/skin rash	
		4. Angular cheilitis	
		5. Others specify	
407	Were you admitted in hospital due to	1. Yes	
	illness after you known result?	0. No	

# Part five- HIV positive status disclosure

Code	Questions	Coding classifications/responses	Skip to
$N^{\underline{o}}$			
501	Have you disclosed your HIV	1. Yes	If no, skip
	positive status to anyone?	0. No	to Q511
502	Number of persons HIV status		
	was disclosed to		
503	What was the reason to disclose	1. To prevent others from infection	
	your HIV positive status?	2. To get support from others	
		3. To encourage others to go for HIV test	
		4. To get advice regarding care &	
		treatment(adhere to ART drugs)	
		5. The presence of HIV drugs in the home	
		6. Others	
504	How long ago did you disclose	year/month	
	after you knew your HIV positive		
	result?		
505	Who have you disclosed to?	Sexual partner	
		2. Family members (specify)	
		3. Close relatives (specify)	
		4. Close friend	
		5. others specify	
506	Who was the first person with	Sexual partner	
	whom you shared you HIV status?	2. Family members (specify)	

		3. Close relatives (specify)	
		4. Close friend	
		5. 5. others (specify)	
507	What was the reaction of the first	1. shocked	
	person to whom you disclosed your	2. cried	
	status?	3. understanding	
		4. laughed	
		5. others specify	
508	Did you disclose your HIV positive	0. Positive outcome	If
	sero status, What was your	1. Negative outcome	Negative, skip to
	outcome of disclosure?		Q510
509	If Positive disclosure outcome for	1. Emotional support	
	Q508, What was outcome?	2. Using family planning	
		3. Freedom to use ART	
		4. Financial/material support	
510	If Negative disclosure outcome for	1. Disruption of family relationships	
	Q508, What was outcome?	2. Abandonment	
		3. Friend and family blame	
		4. Stigma and discrimination	
		5. Others specify	
511	If no Q501, What is Reasons for	1. Fear of divorce	
	non-disclosure of HIV sero-	2. Fear of loss of confidentiality	
	positive status?	3. fear of upsetting family members	
		4. Fear of accusation of infidelity	
		5. No enough time to discuss	
		6. Not to worry others	
		7. fear of Stigma and rejection	
		8. others specify	

Thank you for your cooperation!!!

## Annexes 2. Amharic version questionnaires ጅጣዩኒቨርሲቲ

### የህብረተሰብ ጤና እና የህክምና ሳይንስ ኮሌጅ

#### የነርስ እና ሚድዋይፈሪ ትምህርት ክፍል

ከኤች. አይ.ቪ ቫይረስ *ጋ*ረ የሚኖሩ ሴቶች የደም ምር*መ*ራ ዉጤት ይፋ ለማድረ*ግ ተፅ*ኖ የሚፈጥሩ *መ*ንስኤዎችና ስርጭት ለማጥናት መጠየቅ

የፍቃደኛነት መግለጫ ፎርም

ጤና ይስተልኝ፡፡ የእኔ ተናት ከኤች. አይ.ቪ ቫይረስ *ጋ*ረ የሚኖሩ ሴቶች የደም ምርመራ ዉጤት ይፋ ለማድረግ ተፅኖ የሚፈጥሩ መንስኤዎችን ማጥናት ነዉ፡፡ ስለዚህ እርስዎ ጥያቄዎችን በግልፅነትና በቅንነት ለመመለስ እንዲተባበሩ በትትህና አጠይቃለሁ፡፡ በእዚህ ጥናት አላማ የኤች. አይ.ቪ ቫይረስ ስርጭትና መተላለፍያ መንገዶችን ለመከላከል ያመች ዘንድ ለሚዎሰዱ እርምጃዎች እቅድ ለማዉጣት ነዉ ፡፡ እርስዎ የሚሰጡት መልስ ከማንኛዉም አካል በሙሉ ሚስጥርነት እንደሚጠበቅና የእርስዎ ስም በመጠየቁ ላይ እንደማይዘንብ እንልፃለሁ፡፡የእርስዎ በዚህ መጠየቅ መሳተፍ በሙሉ ፍላጐትዎ ላይ የተመሰረተ ነዉ፡፡ ጥያቄዎችን ሙሉ በሙሉና የማይፈልጉትን ጥያቄ ካለ ያለመመለስ መብት አለዎት፡፡ ነገር ግን እረሰዎ የሚሰጡን መረጃዎች ለዚህ ጥናት አላማ መሳካት ጠቃሚ ድርሻ አለዉ፡፡

· ·		
መልሶቹን ለመመለስ ፍቃደኛ ነዎት?	? አዎ ካሉ ስምምነተዎን በፊርጣ ያረ <i>ጋ</i>	ግጡልኝ፡፡ ፌርማ
ለትብብርዎ በጣም አሳ	<sup>ወ</sup> ሰባናለሁ፡፡	
መረጃ ሰብሳቢ ስምና ፌርማ	_የተቆጣጣሪ ስምና ፌርማ	መረጃዉ የተሞላበት ቀን/ /
የመጠየቁ መለያ ቁ	ፕር የሔና ተቋም l	<u> </u>

## ክፍል- 1 አጠቃላይ የግለሰቡ ሁኔታ የተመለከተ መረጃ

ተ.ቁ	<b>ተያቄዎ</b> ች	ኮድ ክፍፍል/ <i>መ</i> ልሶች	<b>ይለፍ ወ</b> ደ
101	የተጠያቄዉ ጾታ	一位计	
102	እድሜሽ ስንት ነዉ?	9ørt (18>=)	
103	<i>መኖሪያሽ ሂት ነዉ?</i>	1. ከተማ	
		0. <i>1</i> നC	
104	የትዳር ሁኔታ	1. ያላንበቸ	
		2. ያኅበች	
		3. የፈታች	
		4. የሞተባት	
		5. ሌላ ካለ ይ <i>ገለፅ</i> _	
105	<i>ሀይጣ</i> ኖትዎ ምንድ ነዉ?	1.	
		2. አርቶዶክስ	
		3. ፕሮቴስታንት	
		4. ካቶሊክ	
		5. ሌላ ካለ ይ <i>ገ</i> ለፅ	
106	ከየትኛዉ ብሄር / ብሄረሰብ ነዎት?	1. አሮሞ	
		2. ከፋ	
		3.	
		4. አማራ	
		5. PP	
		6. ሌላ ካለ ይ <i>ገለፅ</i>	
107	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ	1. አልተማርኩም	
	ስንት ነዉ?	2. ማንብብና መፃፍ ብቻ	
		3. አንደኛ ደረጃ(1-8)	
		4. ሁለተኛ ደረጃ(9-12)	
		5. ኮሌጅና ዩኒቨርስቲ ደረጃ	

108	<i>መ</i> ደበኛ ስራዎ ምንድ ነዉ?	1. የቤት እመቤት
		2. የቀን ሰራተኛ
		3. የመንግስት ሰራተኛ
		4. ነጋኤ
		5. ሌላ ካለ ይ <i>ገ</i> ለፅ
109	የግል የወር ገቢዎ በብር ስንት ይሆናል?	ብC
110	ስንት ልጆች አሉሽ?	

ክፍል -2 የጾታ ጓደኛን ሁኔታ የተመለከተ መረጃ

ተ.ቁ	<i>ጥያቄዎ</i> ች	ኮድ ክፍፍል/ <i>መ</i> ልሶች	ይለፍ ወደ
201	የባብረ ስ <i>ጋ ግንኙነት ፈጽመ</i> ዉ	1. አዎ	የለም ካሉ ወደ ተ. ቁ 301
	ያዉቃሉ?	0. የሰም	ይለፍ
202	እስከ አሁን ስንት የወሲብ /ጠቅ <b>ሳ</b> ሳ	በቁፕር	
	የጾታ ጓደኞች አሉሽ ?		
203	አሁን የጾታ/ትዳር ጓደኛ አለዎት?	1. አዎ	የለም ካሉ ወደ ተ. ቁ 301
		0. የለም	ይለፍ
204	የጾታ/ትዳር ጓደኛ ግንኙነት ምን	1. ባለቤት/መደበኛ	
	ይመስላል?	0. ጊዜያዊ/መደበኛ ያልሆነ	
205	ከጾታ/ትዳር ጓደኛ ጋር ነዉ	1. አዎ	የለም ካሉ ወደ ተ. ቁ 207
	የሚኖሩት?	0. የለም	ይለፍ
206	ከጾታ/ትዳር ጓደኛ ጋር መኖር ከጀመሩ	ወር/ዓመት	
	ስንት ጊዜ ሆኖዎት?		
207	በባብረ ስ <i>ጋ ግንኙነት ግ</i> ዜ ኮንደም	1. አዎ	የለም ካሉ ወደ ተ. ቁ 209
	ይጠቀማሱ?	0. የለም	ይለፍ
208	የጾታ /የትዳር ጓደኛዎ ዕድሜ ስንት	ዓመት	
	ነዉ?		
209	የጾታ /የትዳር ጓደኛዎ ያጠናቀቁት	1. አልተማረም	
	ከፍተኛ የትምህርት ደረጃ ስንት ነዉ?	2. ማንብብና መፃፍ ብቻ	
		3. አንደኛ ደረጃ(1-8)	
		4. ሁለተኛ ደረጃ(9-12)	
		5. ኮሌጅና ዩኒቨርስቲ ደረጃ	

210	የጾታ /የትዳር ጓደኛዎ መደበኛ ስራ	1. የቀን ሰራተኛ	
	ምንድ ነዉ?	2. የመንባስት ሰራተኛ	
		3. Y2%	
		4. ሌላ ካለ ይ <i>ገ</i> ለፅ	
211	የጾታ /የትዳር ጓደኛዎ የወር <i>ገ</i> ቢ በብር	1nc	
	ስንት ይሆናል?		
212	የጾታ /የትዳር ጓደኛዎ ሀይጣኖትዎ	1. ሙስሊም	
	ምንድ ነዉ?	2. ኦርቶዶክስ	
		3. ፕሮቴስታንት	
		4. ካቶሊክ	
		5. ሌላ ካለ ይ <i>ገ</i> ለፅ	
213	የጾታ /የትዳር ጓደኛዎ መኖሪያ ሄት	1. ከተማ	
	ነዉ?	0. <i>า</i> mC	
214	የትዳር/የጾታ ጓደኛዎ የኤች.አይ.ቪ	1. አዎ	የለም ካሉ ወደ ተ. ቁ 301
	ኤድስ የደም ምር <i>ሞ</i> ራ አድርገዋል?	0. የለም	ይለፍ
215	የትዳር/የጾታ ጓደኛዎ የኤቾ.አይ.ቪ	1. አዎ	የለምና ካሉ ወደ ተ. ቁ
	ኤድስ የደም ምር <i>መራ</i> ዉ <sub>ጤ</sub> ት	0. የለም	301ይለፍ
	ያዉቃሉ?		
216	የትዳር/የጾታ ጓደኛዎ የኤች.አይ.ቪ	1. ኤች.አይ.ቪ ፖዘቲቭ	
	ኤድስ የደም ምር <i>መራ</i> ዉጤት ምን	0. ኤቸ.አይ.ቪ ነ <i>ን</i> ቲቭ	
	ነበር		
	I.	1	ı

ክፍል 3-የተሳታፊዉን የኤች.አይ.ቪ የምክርና ምርመራ አንልግሎት የተመለከተ መረጃ

አዎ
የለም
<i>Па</i> ра
ለርግዝና ክትትል
በእራስ ተነሳሽነት

303	ስለ ኤቸ.አይ.ቪ .ቪ ፖዘቲቭ የደም ምር <i>ሞራ</i> ዉጤት	1. አዎ
	ተከታታይ የምክር አገልገሎት አባኝተዋል?	0. የሰም
304	የፀረ-ኤቸ.አይ .ቪ ኤድስ ከበባት/ማህበራት አባል ሆነዉ	1. አዎ
	ያዉ.ቃሉ?	0. የለም

## ክፍል 4- ስለ ኤች.አይ.ቪ ኤድስ በሽታ *ሁኔታ* የተመለከተ መረጃ

ተ.ቁ	<i>ጥያቄዎ</i> ች	ኮድ ክፍፍል/ <i>መ</i> ልሶች	ይለፍ ወደ
401	ኤች.አይ .ቪ ኤድስ ቫይረስ እንዳለብዎ <i>ተመ</i> ርምረዉ		
	ካወቁ ምን ያህል ጊዜ ሆንዎት?	በወር/ዓመት	
402	θረ-ኤች.አይ.ቪ ኤድስ (ኤርቲ/ART) መዉሰድ	1. አዎ	የለም ካሉ ወደ
	ጀምረዋል?	0. የለም	ተ. ቁ 404
			ይለፍ
403	θረ-ኤች.አይ.ቪ /ኤርቲ መዉሰድ ከጀመሩ ስነት <i>ጊ</i> ዜ	በወር/ዓመት	
	ሆነዎት?		
404	ባዓለም አቀፍ ጤና ድርጅት <i>መ</i> ሰረት የእረስዎ	1.	
	የመጀመረያ የበሽታ ደረጃ ስንት ነበር?	2.	
405	በኤች.አይ.ቪ ኤድስ ተጓደኝ በሽታ ተጠቅተዉ ያዉቃሉ	1. አዎ	የለም ካሉ ወደ
	?	0. የለም	ተ. ቁ 407
			ይለፍ
406	በምን ዓይነት ተጻደኝ በሽታዎች ተጠቅተዉ ያዉቃሉ?	1. ቲቢ/በሳንባ ነቀርሳ	
		2. ኒሞኒያ/ተደጋጋሚ የመተንፈሻ	
		አካል በሽታ	
		3. አልማዝ ባለጭራ/ቆዳ ላይ	
		ሽፍታ	
		4. ተደ <i>ጋጋ</i> ሚ የአፍ <i>መ</i> ቁሰል	
		5. ሌላ ካለ ይጠቀስ	
407	የኤቸ.አይ.ቪ ዉጤትዎን ካአወቁ በኋላ በበሽታ	1. አዎ	
	ተጠቅተዉ ሆስፒታል ተኝተዉ ያዉቃሉ?	0. የለም	

## ክፍል 5-ኤች.አይ.ቪ ኤድስ ዉጤት ይፋ ስለማድረ*ግ* የተመለከተ መረጃ

ተ.ቁ	<u> </u>	ኮድ ክፍፍል <i>/መ</i> ልሶች	ይለፍ ወደ
501	የኤች.አይ.ቪ .ቪ ኤድስ የደም ምርመራ ዉጤት	1. አዎ	የለም ካሉ
	ለሴላ ሰዉ አሳዉቀዋል?	0. የለም	ወደ ተ. ቁ
			511 ይለፍ
502	የኤቸ.አይ.ቪ .ቪ ኤድስ የደም ምር <i>ሞራ</i> ዉሔት	በቁጥር	
	ለስንት ሰዉ አሳዉቀዋል		
503	የኤች.አይ.ቪ በደም ዉሰጥ መኖሩን ለሌላ ሰዉ	1. ኤቸ.አይ.ቪ ወደ ሌላ ሰዉ እንዳይተላለፍ	
	ይፋ ያደረጉበት ምክንያት ምንድነዉ?	ለመከላከል	
		2. ከተለያዩ አካላት ድጋፍ/እርዳታ ለማግኝት	
		3. የእራሳቸዉን ኤቸ.አይ.ቪ ዉጤት የማያዉቁ	
		<i>እ</i> ነዲመረመሩ ለመገፋፋት	
		4. ስለኤቾ.አይ .ቪ ኤድስ ህክምናና ክብካቤ	
		ለማንኘት(መድሃኒቱን እንዲወስዱ ድ <i>ጋ</i> ፍ	
		<i>መ</i> ስጠት)	
		5. ያለፍርሃት የፀረ-ኤች.አይ .ቪ ኤድስ መድሃኒት	
		በቤት ዉስፕ ለመጠቀም	
		6. ሌላ ካለ ይጠቀስ	
504	ኤቸ.አይ .ቪ ኤድስ ቫይረስ እንዳለብዎ		
	ተመርምረዉ ካወቁ ከስንት ጊዜ በኋላ ነዉ	መር/ዓመት	
	<b>ዉ</b> ጤትዎን ለሌላ ሰዉ ያሳወቁ?		
505	የኤች.አይ.ቪ .ቪ ኤድስ የደም ምር <i>መራ</i> ዉ <sub>ጤ</sub> ት	1. ለጾታ/ለትዳር ጓደኛ	
	ይፋ ያደረጉት ለማነዉ?	2. ለቤተሰብ አባል(ጥቀስ)	
		3. ለቅርብ ዘመድ(ጥቀስ)	
		4. ለቅርብ ወዳጅ ጓደኛ	
		5. ሌላ ካለ ይጠቀስ	
506	የኤች.አይ.ቪ .ቪ ኤድስ የደም ምርመራ ዉጤት	1. ለጾታ/ለትዳር ጓደኛ	
	በመጀመሪያ ደረጃ ማሳወቅ የፈለጉት ለማነዉ?	2. ለቤተሰብ አባል	
		3. ለቅርብ ዘመድ	
		4. ለቅርብ ወዳጅ ጻደኛ	
		5. ሌላ ካለ ይጠቀስ	

507	የኤች.አይ.ቪ .ቪ ኤድስ የደም ምርመራ ዉጤት	1. መደንገጥ	
	በመጀመሪያ ደረጃ ያሳወቁት ባለሰብ ምን ዓይነት	2. ማልቀስ	
	ስሜት ነበረዉ?	3. ተረዳ/ተቀበለ	
		4. መሳቅ	
		5. ሌላ ካለ ይጠቀስ	
508	የኤች.አይ.ቪ ቫይረስ በደሞዎ ዉሰጥ እነዳለ ይፋ	1. አዉንተዊ ጠቀሜታ	አልዉታዊ
	ካደረጉ የተፈጠረዉ ክስተት ምን ነበር?	2. አልዉታዊ ጉዳት	ካሉ ወደ ተ.
			ቁ 510 ይለፍ
509	ለተ.ቁ 508 አዉንተዊ ጠቀሜታ ካሉ ጠቀሜታዉ	1. ስነልቦናዊ ድ <i>ጋ</i> ፍ	
	ምን ነበር?	2. የቤተሰብ ምጣኔ አገልግሎት መጠቀም	
		3. ያለፍርሃት የፀረ-ኤች.አይ .ቪ ኤድስ መድሃኒት	
		መ <sub>ጠ</sub> ቀም	
		4. የንንዘብ/ቁሳዊ ድ <i>ጋ</i> ፍ	
510	ለተ.ቁ 508 አልዉተዊ ጉዳት ካሉ ጉዳቱ ምን	1. የቤተሰብ መሻከር/ዮላቻ	
	ነበር?	2. አለመቀበል/መተዉ	
		3. በጓደኛ/በቤተሰብ መወቀስ	
		4. መድሎና መንለል	
		5. ሌላ ካለ ይጠቀስ	
511	ለተ.ቁ 501 መልሰዎ የኤች.አይ.ቪ. ኤድስ የደም	1. የትዳር አጋር ፍቾ ፍራቻ	
	ምርመራ ዉጤት ይፋ አላደረኩም(የለም) ከሆነ	2. ሚስጥርን የሚጠብቅ ከማጣት ፍራቻ	
	ይፋ ያላደረጉበት ምክንያት ምን ነበር?	3. የቤተሰብን አበላት ቁጣ ፍራቻ	
		4. በትዳር ታጣኝ አለመሆን ክስ/ስሞታ ፍረቻ	
		5. ለዉይይት በቂ ጊዜ ማጣት	
		6. ለሴላ ሰዉ አለመጨነቅ	
		7. መንለልና መተዉ ፍረቻ	
		8. ሌላ ካለ ይጠቀስ	

ቃለ መጠይቁን ጨርሻለሁኝ፡፡ ላደረጉልን ትብብር በጣም አመሰግናለሁ፡፡

# Annexes 3. Afaan Oromo version questionnaires Yuuniversitii Jimmaa

### Kolleejjii Saayinsii Fayyaa Hawwaasummaa fi madikaala

#### Mummee barnootaa Narsii fi midwiferii

Gaaffiilee qorannoo dhibamtootin HIV/AIDS dhabbiilee fayyaa magaala jimmaa keesssatti hordofan, raga bu'a qorannoo dhiga HIV/AIDS hirriyaa yokaan namoota itti dhiyyataniti himmuun rakkowan isin muddate wal-qabaatte jiru qorachu ta'a.

# Guca walii galtee Akkam bultan/ooltan? Maqaan koo \_\_\_\_\_jedhama. qorannoo digirii lammaffaa argachuuf isaan barbaachisu Yuunivarsiitii Jimmaa,kolleejjii saayiinsii fayyaatti mummee barnoota Narsii fi midwafeeritti hojjechaa jiran waliinan hojjedha. Qorannon kun kan xiyyeefatu harmoolii qoricha farra HIV/AIDS fudhachaa jiran kun ragaa bu'a qorannoo dhiga isaan hirriyaa yokaan namoota itti dhiyyataniti himmuun rakkowan isin muddate wal-qabaatte jiru qorachu ta'a. Atis kan gaafatamtu gaaffilee kana wajjin walqabatanii jiran dha. Sababa ati qorannoo kana irratti hirmaateef tajaajilli ati argachuu qabdu sitti hin hir'atu. Magaa kee barreessuun hin barbaachisu akkasumas odeeffannoon ati naaf laattu iccitiidhaan qabama. Gaaffiileen kun daqiiqa kudha shanii hanga digdammati fudhachuu danda'aa. Gaaffilee gaafatamtu deebisuus ta'e yoo sitti hin tolu ta'e yeroo barbaaddetti addaan kutuuf mirga guutuuqabda; haa ta'u malee qorannoo kana keessaatti qooda fudhachuun kee bu'aa hedduu qaba. Qorannoo kana keessaatti hirmaachuuf fedha qabdu? Mallattoo Hirmaannaa keessaniif isin galateeffanna. Maqaa Gaafataa & Mallattoo \_\_\_\_\_ Maqaa nama qorannoo kana hordofaa jiruu & Mallattoo \_\_\_\_ guyyaa / / Koodii gaaffiichaa \_\_\_\_\_ koodii dhaabbata fayyaa \_\_\_\_\_

## Kutaa I: Odeeffannoo hawwaasummaa

Lakk	Jijjiiramtoota /Gaafiilee	Gartuulee deebii	Irra darbi
101	Saala	Dhalaa	
102	Umriiin kee meeqaa?	waggaan(>=18)	
103	Bakka jireenya	1. Magaala	
		0.Badiyyaa	
104	Haala heerummaa	1.Kan heerumte	
		2.Kan hin heerumne	
		3.Kan walhiikite	
		4.Kan irraa du'e	
105	Amantaan kee maal dhaa?	1. Musliima	
		2. Ortodookisii	
		3. Piroteestaantii	
		4. Kattoolikii	
		5. Kan biroo yoo ta'ee ibsi	
106	Qomoo ykn Sanyii	1. Oromoo	
		2. kaffaa	
		3.Guraage	
		4.Amarraa	
		5. Yeem	
		6. Kan biroo yoo ta'ee ibsi	
107	Haala barumsaa	1. Kan hin baraane	
		2. Kan dubbistuu fi barreessitu	
		3. Sadarkaa tokkoffaa (1-8)	
		4. Sadarkaa lammaffaa (9-12)	
		5. Sadaekaa kolleejii fi universiitii	

108	Haala hojii	1 .Hojii mana keessaa qofa 2.Dafqaan
		bulaa
		3.Hojii mootummaa
		4.Hojii daldaala
		5.Kan biroo yoo ta'e ibsi
109	Galii kee kan ji'aa waliigalaan meeqaa?	1"ETB"
110	Daa'imma meeqa qabduu?	Lakk

## Kutaa II :Oddeeffannoo waa'ee abba warraa ykn hirriyaa ishee ilaalatu.

Lakkk	Gaafilee/Jijjirammaa	Deebii	Irra darbi
oddii			
201	Qunnamitii saala rawwatanii beektuu?	1.Eeyyee	Yoo lakki
		0.Lakki	jette G301ti
			darbi.
202	Umurii kee keessati hirriyaa qunnamti	Lakk	
	saala waliin rawwatu meeqa qabateetaa?		
203	Yeroo amma kana hirriyaa qunnamti saala	1.Eeyyee	Yoo lakki
	waliin rawwatu qabdaa?	0.Lakki	jette G301ti
			darbi
204	Haala hirriyaa kee maal fakkaataa?	1.Dhaabata/abba warraa	
		0.Yeroof/dhaabataa miti	
205	Hirriyaa kee dukaa jiraata?	1.Eeyyee	Yoo lakki
		0.Lakki	jette G206ti
			darbi
206	Hirriyaa kee faana hamam waliin	ji'an/waggaan	
	jiraatanii?		

207	Yeroo hirriyaa kee waliin qunnamitii saala	1.Eeyyee	Yoo lakki
	rawwatu kondomii ni fayyadamtaa?	0.Lakki	jette G209ti
			darbi
208	Umuriin hirriyaa kee waggaa meeqaa?	aggaan	
209	Haali barnoota hirriyaa kee maali	6. Kan hin baraane	
	fakkaataa?	7. Kan dubbistuu fi	
		barreessitu	
		8. Sadarkaa tokkoffaa (1-8)	
		9. Sadarkaa lammaffaa (9-	
		12)	
		10. Sadarkaa koleejjii fi	
		universiitii	
210	Haali hojii hirriyaa kee maali fakkaataa?	1.Dafqaan bulaa	
		2.Hojii mootummaa	
		3.Hojii daldaala	
		4.Kan biroo yoo ta'e ibsi	
211	Galii hirriyaa/abba warraa kee ji'aan	1qarshiin	
	meeqa?		
212	Haali amantaa hirriyaa/abba warraa	6. Musliima	
	maliia/	7. Ortodookisii	
		8. Piroteestaantii	
		9. Kattoolikii	
		10. Kan biroo yoo ta'ee	
		ibsi	
213	Bakka jireenya hirriyaa/abba warraa kee	1.Magaala	
	essaa?	0. Badiyaa	
214	Hirriyaan/abba warraa kee qoranno HIV	1. Eyyee	Yoo lakki
	godheera	0. Lakki	jette G301ti
			darbi.

215	Firii qorannoo HIV hirriyaa kee beektaa?	2. Eyyee	Yoo lakki
		1. Lakki	jette G301ti
			darbi.
216	Firiin qorannooHIV hirriyaa kee maal	2. HIViin dhiga isaa keessa	
	fakkataa?	jira	
		1. HIViin dhiga isaa keessa	
		hin jiru.	

## Kutaa III- Oddeeffannoo waa'ee qorannoo fi gorsa HIV ilaalatu

Lakkk	Gaafilee/Jijjirammaa	Deebii	Irra darbi
oddii			
301	Osoo qorannoo HIV hin godhiin firii	1. Eeyyee	
	qorannoo kee nama biraati akka himtu	0. Lakki	
	mari'ateeta?		
302	Sabaaba maliif gara gorsaa fi	Waan dhukkubsateef	
	qorannoo HIV deemtee?	2. Hordoffii tajaajila ulfatiif	
		3. Ofuuma gorsaa fi qorannoo	
		HIV barbaaddeti	
303	Waa'ee HIV gorsa itti fufiinsa qabu	1. Eeyyee	
	isiniif laatamaa?	0. Lakki	
304	Dhaabbata miseennsa farra	1. Eeyyee	
	HIV?AIDS taateetaa?	0. Lakki	

## Garee IV - Oddeffannoo waa'ee "HIV/AIDS" ilaalatu[

Gaafilee/Jijjirammaa	Deebii	Irra darbi
Eerga HIV dhigaa kee keessa	Waggaan/ji'aan	
jirachuun beekame waggaa		
meeqaa?		
	Eerga HIV dhigaa kee keessa jirachuun beekame waggaa	Eerga HIV dhigaa kee keessaWaggaan/ji'aan jirachuun beekame waggaa

402 Farra HIV eegalteetaa?		1. Eeyyee	Yoo lakki jette
		0. Lakki	G404ti darbi.
403	Farra HIV yeroo hammamiif	waggaan/ji'aan	
	fudhatee?		
404	Akkaata dhaabbata Fayyaa	1.Sadaarka I	
	adunyaati HIV kee yoo jalqaaba	2.Sadaarka II	
	ilaalamte sadarkaa kam irra jiraa?	3.Sadaarka III	
		4.Sadaarka IV	
405	Dhukkuba biraa HIV/AIDS waliin	1. Eyyee	Yoo lakki jette
	wal qabaatun qabamteetaa?	0. Lakki	G407ti darbi.
406	Dhukkuba isa kamitu si qabaatee?	1. Dhukkuba daranyoo (TB)	
		2. Dhukkuba nimooniyyaa	
		3. Herpes zoster/Gogaa irra	
		maddan bahu.	
		4. Cheelilaayitis angulaari	
		5. Kan biro yoo ta'e ibsi	
407	Erga Dhukkubsachuu keessan	1. Eeyyee	
	bartani hospitaala ciisiteen	0. Lakki	
	beektuu?		

# Kutaa V: Oddeeffannoo waa'ee HIViin dhiga isaan keessa jiru himachuu ilaalata

Lakk.	Gaafilee/Jijjirammaa	Deebii	Irra darbi
.koddii			
501	Waa'ee HIViin dhiga kee keessa	1. Eeyyee	Yoo lakki
	jirachuu isaa namati birooti	0. Lakki	jette G511 ti
	himteetaa?		darbi.
502	Nama meeqatti waa'e dhukkuba kee ifa goote ykn himte?		

503	Akka ati ifa gootuf sababa kan ta'e	1.	Kanin biroo dhukkuba irraa	
	maaliif?		ittisuu	
		2.	Kanin biro irra deegarsa	
			argaachu	
		3.	Kanin biro qorannoo dhigaa	
			HIV gochuuf jajaabeessu	
		4.	Gorsa waa'ee yaala fi	
			deegarsa argachuuf	
		5.	Qorichi farra HIV/AIDS	
			mana jiraachuu	
		6.	Kan biroo yoo jiraate ibsi	
504	Waa'ee HIViin dhiga kee keessa		_waggaan/ji'aan	
	jirachuu isaa erga beekte kan namati			
	biroo erga himtee yeroo hangam			
	turteetii?			
505	Yoo deebiin kee eeyye ta,e ,eyyuti	1.	Hirriyaa/abba warraa kee	
	himtee?	2.	Matii kee(specify,ibsi)	
		3.	Fira itti	
			dhiyaatu(specify,ibsi)	
		4.	Hirriyaa baay'ee itti dhiyaatu	
		5.	kan biro yoo ta'e ibsi	
506	Dursa eeyyuti himatee waa'ee	1.	Hirriyaa/abba warraa kee	
	qorannoo firii dhuga keetii?	2.	Matii kee	
		3.	Fira itti dhiyaatu	
		4.	Hirriyaa baay'ee itti dhiyaatu	
		5.	kan biro yoo ta'e ibsi	
507	Namti ati dursitee itti himte miira	1.	Ofi walaale	
	maaltu itti aga'amee?	2.	Ni boo'e	
		3.	Ni hubbate	
		4.	Ni kolfe	

HIVn kun dhigaa kee keessa jiraachu	1.	Haala gaarii uumera	Yoohaalaya
isaa nama himuu kee kun bu'aan	2.	Haala yarraa /gadhee uumera	rraa/gadhee
isaa maal fakkaataa?			ta'e G510 ti
			darbi
Deebii gaafii lakk.508 irrati namaati	1.	Deegarsa saayikoolojii	
himuun kee bu'aa gaarii uumera yoo	2.	Qusannoo maatii	
ta'e ,bu'ichi maaldhaa?		fayyadamuu	
	3.	Bilisaan qorcha farra HIV	
		fayyadamu.	
	4.	Deegarsa malaaqa/meeshalee	
Deebii gaafii lakk.508 irrati namaati	1.	Walitti dhufeenya matii	
himuun kee bu'aa badaa uumera yoo		diguu/jeequ	
ta'e ,bu'ichi maaldhaa?	2.	Arii'atamuu	
	3.	Araabsa matii fi hirriyaa	
	4.	Loogiif gooddii	
	5.	Kan biro yoo jiraate ibsi	
Yoo deebiin kee gaafii lakk.501 lakki	1.	Sodaa abba warraa wajiin	
ta'e ,sabaaba maallif HIV in dhiga		wal hiikuu.	
keessa akka jiru namati himuu hin	2.	Sodaa hicciitin bahuu	
barbaanee?	3.	Sodaa dheekamsa maatii	
	4.	Sadaa hirriyaa/abba warra	
		wajiin amantaa dhaabu.	
	5.	Mari'achuuf yeroo dhabu	
	6.	Dantaa nama biraa qabaachu	
		dhabu.	
	7.	qoodamuu fi adda baafamuu	
		Soda	
	8.	Kan biro ta'e ibsi	
	isaa nama himuu kee kun bu'aan isaa maal fakkaataa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa gaarii uumera yoo ta'e ,bu'ichi maaldhaa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa badaa uumera yoo ta'e ,bu'ichi maaldhaa?  Yoo deebiin kee gaafii lakk.501 lakki ta'e ,sabaaba maallif HIV in dhiga keessa akka jiru namati himuu hin	isaa nama himuu kee kun bu'aan isaa maal fakkaataa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa gaarii uumera yoo ta'e ,bu'ichi maaldhaa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa badaa uumera yoo ta'e ,bu'ichi maaldhaa?  2. 3. 4.  Yoo deebiin kee gaafii lakk.501 lakki ta'e ,sabaaba maallif HIV in dhiga keessa akka jiru namati himuu hin barbaanee?  3. 4. 5. 6.	isaa nama himuu kee kun bu'aan isaa maal fakkaataa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa gaarii uumera yoo ta'e ,bu'ichi maaldhaa?  Deebii gaafii lakk.508 irrati namaati fayyadamuu  Bilisaan qorcha farra HIV fayyadamuu  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa badaa uumera yoo ta'e ,bu'ichi maaldhaa?  Deebii gaafii lakk.508 irrati namaati himuun kee bu'aa badaa uumera yoo ta'e ,bu'ichi maaldhaa?  Yoo deebiin kee gaafii lakk.501 lakki ta'e ,sabaaba maallif HIV in dhiga keessa akka jiru namati himuu hin barbaanee?  Yoo deebiin kee gaafii lakk.501 lakki ta'e ,sabaaba maallif HIV in dhiga keessa akka jiru namati himuu hin barbaanee?  Yoo deebiin kee gaafii lakk.501 lakki ta'e ,sabaaba maallif HIV in dhiga keessa akka jiru namati himuu hin barbaanee?  Yoo daad dheekamsa maatii  Sodaa dheekamsa maatii  Sodaa dheekamsa maatii  Sodaa dheekamsa maatii  Sodaa dhrriyaa/abba warra wajiin amantaa dhaabu.  Mari'achuuf yeroo dhabu  Dantaa nama biraa qabaachu dhabu.  Joodamuu fi adda baafamuu

### GALAATOMA!!!!