

**HIV RELATED STIGMA AND ASSOCIATED FACTORS AMONG ART
CLIENTS IN JIMMA TOWN HEALTH FACILITIES; OROMIA REGIONAL
STATE, SOUTH WEST ETHIOPIA, 2015.**

Facility based Cross sectional study

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Abstract

Background:-HIV Stigma has an extremely important role in the AIDS epidemic, not only because of its effects on HIV-infected individuals, but also because of the ways in which stigma might be contributing to the spread of the epidemic. It profoundly affects the lives of individuals living with HIV/AIDS. Fear of being identified as having HIV may discourage a person from getting tested, from accessing medical services and medications.

Objective:-To assess HIV-Related stigma and associated factors among ART clients in Jimma Town.

Methods:-A cross-sectional study was conducted from March 11th to April 26th, 2015 in the three ART clinics found in Jimma town; 318 ART clients were responded to interviewer administered questioners after signing a written consent. In addition to sociodemographic, experience of HIV testing/diagnosis and social factors; a 45 likert scale items were used to evaluate the level of experienced (18 items), internalized (17 items) and perceived (10 items) HIV stigma among ART clients in Jimma town.

Result:-Three hundred eighteen respondents with 91.8% respondent rate, 204 (64.2%) females and 114 (35.8%) males were responded to the questioner. The majority of respondents 266 (83.6%) were found in the age group of 25-49 and the mean age of the respondents was 32.9± 8.1. The score of experienced HIV stigma was in the range of 20 to 86.7 with mean score of 41.5 (SD = 12.6), internalized HIV stigma score was in the range of 20 to 96.5 with mean score 50.5 (SD = 16.4); and perceived HIV stigma score was in the range of 20 to 100 with mean score of 56.2 (SD=19.2).

Conclusion:-The study revealed that ART use for less than one year, testing for HIV due to spouse HIV positive or death and coercion test were those characteristics statistically associated with the HIV stigma domains. Relatively high level of internalized stigma that show most PLWHA in Jimma town feel ashamed, blame them selves and prejudge their own wrongly for being HIV positive. Their perception about the public is also not good; perceived HIV stigma score is relatively higher, most of them fear discrimination which may be exerted from the public as a result they were working hard to keep their HIV status secret.

Recommendation:-Continuous counseling services should be given for new ART users. Voluntary testing should be encouraged than suspected testing. HIV Stigma reduction programs should be implemented by collaboration among Jimma town health office, ART clinics, net works of positive people and other stakeholders.

Key Words:-ART, HIV/AIDS, EXPERIENCED STIGMA, INTERNALIZED STIGMA, PERCEIVED STIGMA

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
CSA	Central Statistics Agency
DHS	Demographic and Health Survey
EDHS	Ethiopian Demographic and Health Survey
FDRE	Federal Democratic Republic of Ethiopia
GO	Government organizations
HIV	Human Immunodeficiency Virus
ICRW	International Center for research on Women
JUSH	Jimma University Specialized Hospital
JTHO	Jimma Town Health Office
NEP+	Network of Networks of HIV Positive People.
NGO	Non-governmental Organization
PLWHAs	People Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
USAID	United States Agency for International Development
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

In 2013, it was estimated that about 35 million people worldwide are living with HIV. Sub-Saharan Africa remains the most affected region by the pandemic, with more than two thirds of all people infected are living in the region [1]. Ethiopia, has not escaped the burden with estimated adult prevalence of 1.5% [2], large number of people living with HIV and a million of children orphaned due to AIDS [3]. Ethiopia has nine regional state governments and two city administrations; Oromia regional state government is the one with the largest general population size of all regions and city administrations. In 2010 the single point estimate of the country indicated that adult HIV prevalence in Oromia regional state was 1.6 slightly higher than the national single point estimate and the total PLWHA population in Oromia regional state was estimated as 287,301 [4]. All these victims of HIV are facing different challenges including stigma whether internal or external throughout their life.

Generally from the start of the HIV/AIDS epidemic, three phases have been identified: the epidemic of HIV, the epidemic of AIDS, and the epidemic of stigma, discrimination, and denial. It was noted that the third phase is “as central to the global AIDS challenge as the disease itself” [5]. HIV Stigma continues to have an extremely important role in the AIDS epidemic, not only because of its effects on HIV-infected individuals, but also because of the ways in which stigma might be contributing to the spread of the epidemic [6]. HIV stigma is a recurring challenge to HIV testing, care, and prevention. People who experience stigma and discrimination report a range of negative effects, including loss of income or Job, isolation from communities and inability to participate as a productive member of society as a result of their HIV status [7]. As a result of the pernicious effects of stigma and discrimination, on both people living with HIV and the effectiveness of HIV programs, the Global Commission on HIV and the Law urged that countries take immediate steps to repeal punitive laws and prohibit discrimination [8].

A recent systematic review found that, over the last decade, the evidence base for effective programming to reduce stigmatizing and discriminatory attitudes has expanded substantially [9]. However, despite the recognition of the significance and prevalence of stigma and discrimination, almost no country has prioritized activities to reduce or eliminate them in their national AIDS plans or program [10].

Interventions such as counseling of PLWHA, education of health workers and the community would lead to reductions in negative self-perception and verbal abuse and in turn improve the quality of life for PLWHA. However, the association between antiretroviral therapy and stigma suggested that

organizational aspects of antiretroviral delivery may lead to stigmatization of PLWHA [11]. It also influences physical health by hindering adherence to antiretroviral treatment, accelerating disease progression [12, 13]. In addition to behavioral reactions to perceived acts of stigma, emotional reactions included developing low self-esteem, accompanied by a diminished motivation to stay healthy, feeling angry and vengeful, and being emotionally stressed [14]. Thus various studies have been conducted to identify the effect and the magnitude of HIV stigma on the life of PLWHA in different settings but rare in Jimma town recently. Therefore this study was to assess the different aspects of HIV related stigma including their magnitude in the side of the PLWHAs in Jimma town health facilities particularly those attending in ART services.

1.2 STATEMENT OF THE PROBLEM

Stigma is not new to public health, nor is unique to HIV/AIDS. It has been associated with a number of diseases such as leprosy, urinary incontinence, and mental illness. Nevertheless most of the existing studies and commentaries have noted that stigma and discrimination remain a major fact of life for PLWHA in sub-Saharan Africa [15]. It affects mental health of the individuals by fostering depression, low self-esteem and anxiety. It also influences physical health by hindering adherence to antiretroviral treatment, accelerating disease progression [14, 16]. Different aspects of stigmas have been reported as factors constituting a serious obstacle for VCT service utilization and HIV prevention [17]. Similar study also indicated that PLWHA tend to experience self and anticipated stigmas due to their weak appearance caused by HIV-related complication, particularly during life before receiving ART [18], negative self-image, personalized stigma, disclosure stigma and public attitude stigma. These different aspects are all interrelated and may have an impact on the self-efficacy of the affected person, his or her participation in the community, personal well-being, and self-esteem [19].

A noticeable feature of HIV-related stigma is that PLWHA are often attributed as agents responsible for the potentially contagious and fatal infection, and associated with practices marked as deviant by many societies [20]. Significantly, stigma can have an intrapersonal dimension when acceptance of society's views leads to a form of self-discrimination where one feels deserving of society's condemnation [21] and this internalized stigma appears predictive of significant outcomes for PLWHA. Notably, stigma is a complex social construct and it is likely to impact differentially according to an individual's social context. Some studies show that men experience more internalized stigma than women while another study indicates that women experience more enacted stigma. Further evidence suggests that women are more easily discouraged by stigma from being tested for HIV or seeking any care services [22]. The people

living with HIV experience unemployment rates three times higher than national unemployment rates in different countries compared to average national unemployment rates and the reason for unemployment included stigma [23]. Some studies show that the most common mechanism of stigmatizing PLWHA in Ethiopia was Gossip including verbal insult and experiences isolation and rejection, but the PLWHA didn't initiate any legal action to secure their rights [24]. Moreover the situation of HIV stigma in Jimma town was not well addressed in literatures. Therefore the major aim of this study was to assess the different mechanisms of HIV related stigma including their magnitude in the side of the PLWHAs in Jimma town ART clinics.

CHAPTER TWO

2.1 LITERATURE REVIEW

HIV/AIDS-related stigma refers to the prejudice, discounting, discrediting, and discrimination directed at people perceived to have AIDS or HIV, and the communities with which they are associated [25]. HIV-related stigma has damaged the social and psychological well-being of many people living with HIV. Several studies show that HIV stigma is associated with low social support, poor physical and mental health and a poorer quality of life [26].

It is important to understand how stigma is used by individuals and communities, in cultures where communal life is common to produce and reproduce inequality. Stigmatization is part of a conservative confirmation of power relations, poverty, or moral authority resting on the ability to control sexuality [27]. Since PLWHA are assumed not to be able to contribute to the societal development and labeled as the “other” by the community, people try to secure the social structure, safety and solidarity by casting out offenders or confirming societal values [28]. Due to this inequality in some studies women reject to disclose their HIV status to avoid being isolated from participating in the sociocultural aspect like food preparation since food is regarded as an expression of support and acceptance or people refuse to buy food from PLWHA [29]. Therefore fear of being identified as having HIV or AIDS may discourage a person from getting tested, from accessing medical services and medications, and from disclosing their HIV status to family and friends.

Moreover some studies have demonstrated a relationship between stigma and multiple health-related outcomes, including poor antiretroviral therapy adherence, health-related quality of life, and increased HIV symptoms and depression [30] and less probability of disclosing HIV status among PLHA, those who experienced stigma to their sexual partner, and non-disclosure was associated with transmission risk behavior [31]. Another study conducted in USA, New York revealed that internalized stigma associates significantly with indicators of affective and behavioral health and well-being whereas experienced and perceived stigma associate with indicators of physical health and well-being [32].

A study conducted in Bangladesh showed that the percentage of PLWHA feeling guilty was two times higher among the males than among the females. About 88% of males blamed themselves for being HIV-positive while this result was found reversely true for the female which was about 20%. The percentage of PLHWA with low self-esteem was also higher among the males (61.2%) than among the females (38.4%)

[33]. According to a study conducted by Network of Positive people in Estonia 63% of study participant had been gossiped, 39% have verbally insulted/harassed/threatened, 24% physically assaulted, about 5% and 10% of respondents reported exclusion from religious activities, family activities and social gatherings within 12 months before the survey due to their HIV status [34]. Similarly; evaluation of stigma index conducted in six Iranian cities with 289 HIV infected patients interviewed out of which 62.2% percent of participants faced experienced stigma and 98.62% subjects reported internal stigma [35]. In India 33 percent of women and 20 percent of the men experienced actual stigma. However perceived stigma among women and men was 97% and 96% respectively, disclosure concerns for women was 85% and for men 86% and internalized stigma, 63% and 62% respectively as well [36] which indicated that there is no significant variation among the two sexes in the manifestation of experienced and perceived stigma. However in another study internalized stigma experience had gender based variation as study conducted in Nigeria Imo states females has higher mean scores of stigma experience than males, disclosure and negative self- image [37] as a similar study conducted in Kenya also indicated [38]. PLWHA of Pregnant women using ANC services also Experienced HIV-related stigma. A survey conducted in some rural Kenya indicated that at the postpartum visit, over half (55.8%) of the HIV positive women reported experiencing any stigma in the past few months, due to their HIV status and this was largely driven by the 45.5% of the women who said they had experienced self-stigma [39]. A cross sectional Study conducted from another Nigerian province Lagos Island showed that overall; stigma was experienced by 35% of the study respondents. Within this group, 37.1% personalized stigma, 43.1% disclosure stigma and 98.0% public attitude stigma [40].

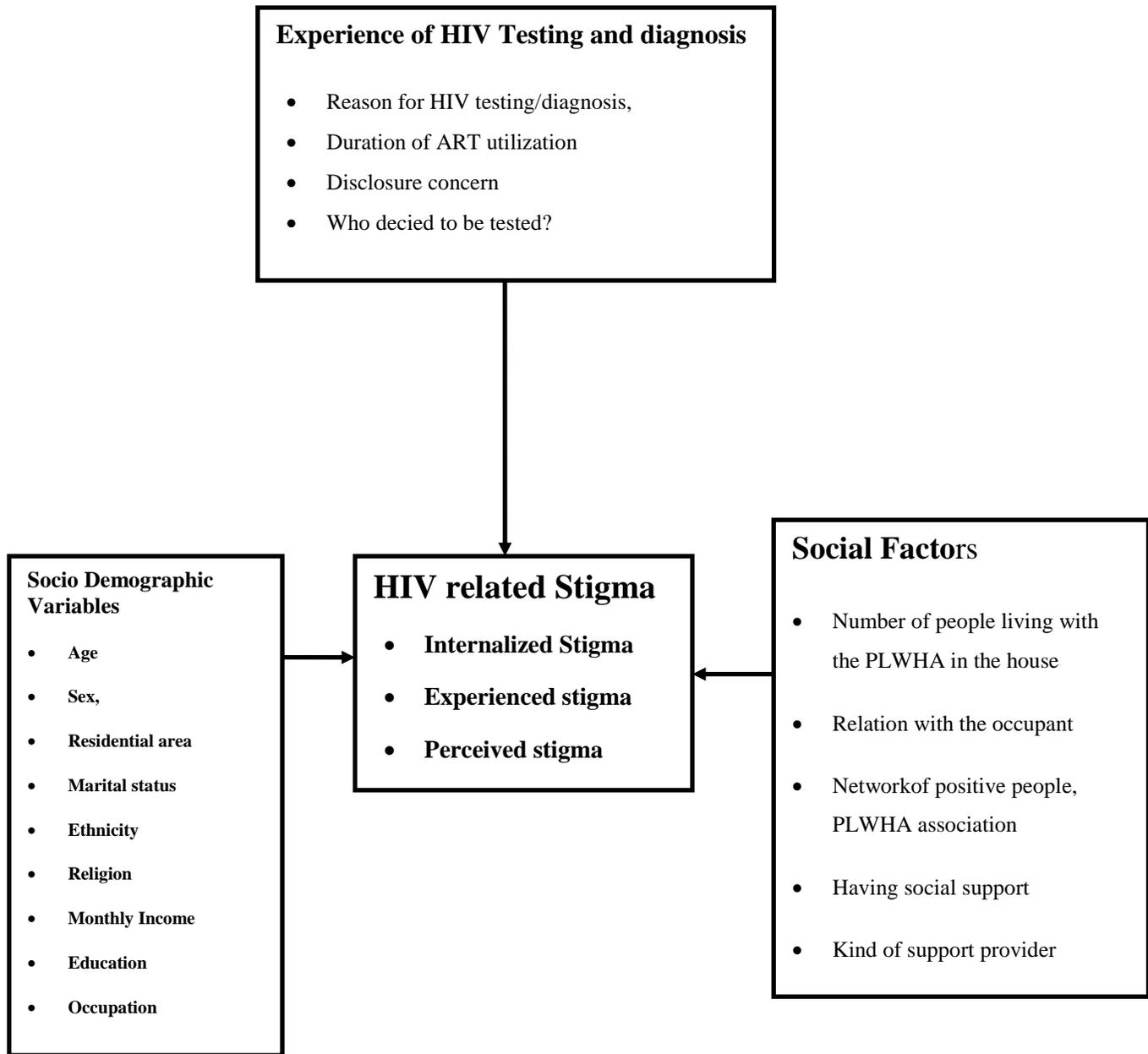
Some evidences also show that PLWHA are experiencing symbol of stigma from health care providers especially nurses and physicians. A study conducted in Puerto Ricans revealed that some of the PLWHA shared being rejected by nurses during service provision; the nurses' attitudes of rejection toward PLWHA persisted, even after receiving various trainings for HIV care [41].

Evidences also showed duration of ART therapy and status disclosure is associated. A study conducted in JUSH seven years back revealed that statistically significant association between duration of ART therapy and effect of access to ART on stigma, the longer the duration on ART, the more favorable effect on stigma reduction [42]. Another study conducted in the same setting to measure disclosure concerns indicated that among study participants the serostatus disclosure prevalence was 94.5 which is close to the case in Tanzania with about 93.3% [43]. From the study participants that 14.2% of disclosure was delayed and 20.6% did not know their partner's HIV status. Among those who did not disclose, 54% stated their reason as fear of negative reaction from their partner [44]. A cross sectional study conducted in Mettu and Gore

towns of Illubabor Zone again indicated that even if it is not statistically significant the length of diagnosis was also found to have some impact on disclosure and in that women who know their result for more than one year were most likely to disclose than those who know for a duration of one year or less [45]. Similar study conducted in Amhara regional State Woldia Hospital in 2010 found a significant association between higher educational status of the respondents and sexual partners knowing HIV status of sexual partner, being on ART, having followed up counseling, and being tested for HIV in ANC clinic with disclosure of HIV status to sexual partner. On the other hand, the frequently listed reason by individuals who didn't disclose their HIV positive status to sexual partner was perceived lack of communication skill to disclose. However the disclosure rate to sexual partner was 76.6% and 29% of disclosure was delayed. The finding was lower than the case in Hawasa referral hospital which was 85.7% and Jimma University Specialized hospital 90.8% of the respondents disclose to their sexual partner [46, 47 and 48]. Another study conducted in Gondar university specialized hospital which is found in the northern part of Ethiopia; to assess the association between depressive symptom and HIV-related stigma among PLWHA showed that the majority of participants (78%) reported experiencing stigma lately and found that higher levels of HIV-related stigma association with higher levels of depressive symptoms among PLWHA [49].

As observed from the review of different literatures the aspects of HIV related stigma among PLWHA varies depending on different variables including settings, socio-demographic, duration of ART therapy and socio-cultural conditions in which the PLWHAS are living. However, as far as my searching ability is concerned I haven't come across a recent comprehensive HIV related stigma study that shows the overall situation of HIV stigma among ART clients representing Jimma Town ART clients.

Figure 1:- Conceptual Framework of the study Variables



2.1 SIGNIFICANCE OF THE STUDY

The adult (15-49 years of age) HIV prevalence in Ethiopia is estimated at 1.5% and there are approximately 898,400 orphan children due to HIV/AIDS in the country, more than 439,000 PLWHA are getting ART service which are potential victims of HIV related stigma. Therefore the significance of this study is to increase the knowledge on the overall situation of HIV related stigma on ART clients. The finding is an evidence for policy makers to develop appropriate intervention for HIV stigma reduction in local context. Oromia regional state health bureau can use the finding as evidence for HIV/AIDS prevention and control programs to be implemented in the context of Jimma town and similar settings. JTHO can use the finding as a reference to intervene the effect of HIV Stigma on the human right of PLWHA in the town. The NEP+ and associations of PLWHAS in Jimma town will use the finding as evidence to implement different stigma reduction programs accordingly and awareness creation programs in their members as well as non member victims. ART providers and HIV counselors from the health facilities also use this finding to know the more risk groups and to follow appropriate guideline during service provision. Furthermore other stakeholders will use the finding to develop their HIV Stigma intervention plan accordingly. Finally this study serves as a reference to encourage practitioners and other researchers to focus on different aspects of HIV related stigmas for further investigation in different settings.

CHAPTER THREE: OBJECTIVES

3.1 General Objective

- To assess HIV-Related stigma and associated factors among ART clients in Jimma Town, Oromia Regional state, Ethiopia, 2015.

3.2 Specific Objectives

- To describe the HIV related stigma among PLWHAs attending ART Clinic.
- To identify factors associated with HIV stigma among the PLWHAs attending ART clinic.

CHAPTER 4: METHODS AND MATERIALS

4.1 Study area and period

Jimma Town is the capital of Jimma zone which is located 355 km away to the south west from Addis Ababa, the capital of Ethiopia. Administratively, Jimma town is separately administered under city municipal administration from the rest of the 18 woredas of Jimma zone. The town is divided in to seventeen kebeles which are considered as 13 urban and 4 semi-rural kebeles. The total population of the town for the year 2013 was estimated to be about 174778. In Jimma town there are 4 health centers and one hospital affiliated with the city administration health office and one specialized referral hospital affiliated with Jimma University. From these six health facilities only three of them JUSH, Shenen Gibe Hospital and Jimma health center are currently providing ART services and the study was conducted from March 11th to April 26th, 2015 **in the three ART providing health facilities.**

4.2 **Study design:** - For this study a facility based Cross sectional study design was employed.

4.3 Population

4.3.1 **Source population:**-The source population for the study was all adult ART clients attending ART clinic during the study period.

4.3.2 **Study Population:**-The study population for this study was representative number of age greater than 18 years of ART users in the three health facilities of Jimma town during the data collection period.

4.4 Inclusion and exclusion criteria

This survey considered all the adult ART clients visiting the ART clinic during the study period as eligible to take part in this study those age older than or equal to 18 years but excluded those unable to hear completely or partially.

4.5 Sample size and Sampling Technique

4.5.1 Sample size

The sample size for this study was calculated by using a single population proportion sample size calculation formula considering the following assumptions. The prevalence (p) for this study was taken from a study conducted at Jimma University Specialized Hospital in 2007 which was aimed at assessing the effect of access to antiretroviral therapy on HIV stigma among ART clients.

P = 86% (assuming the overall HIV-related stigma proportion among ART clients) [44].

d = 0.04 margin of error.

$Z_{\alpha/2} = 1.96$ with 95% CI.

$\alpha = 0.05$ level of significance.

None response rate = 10%

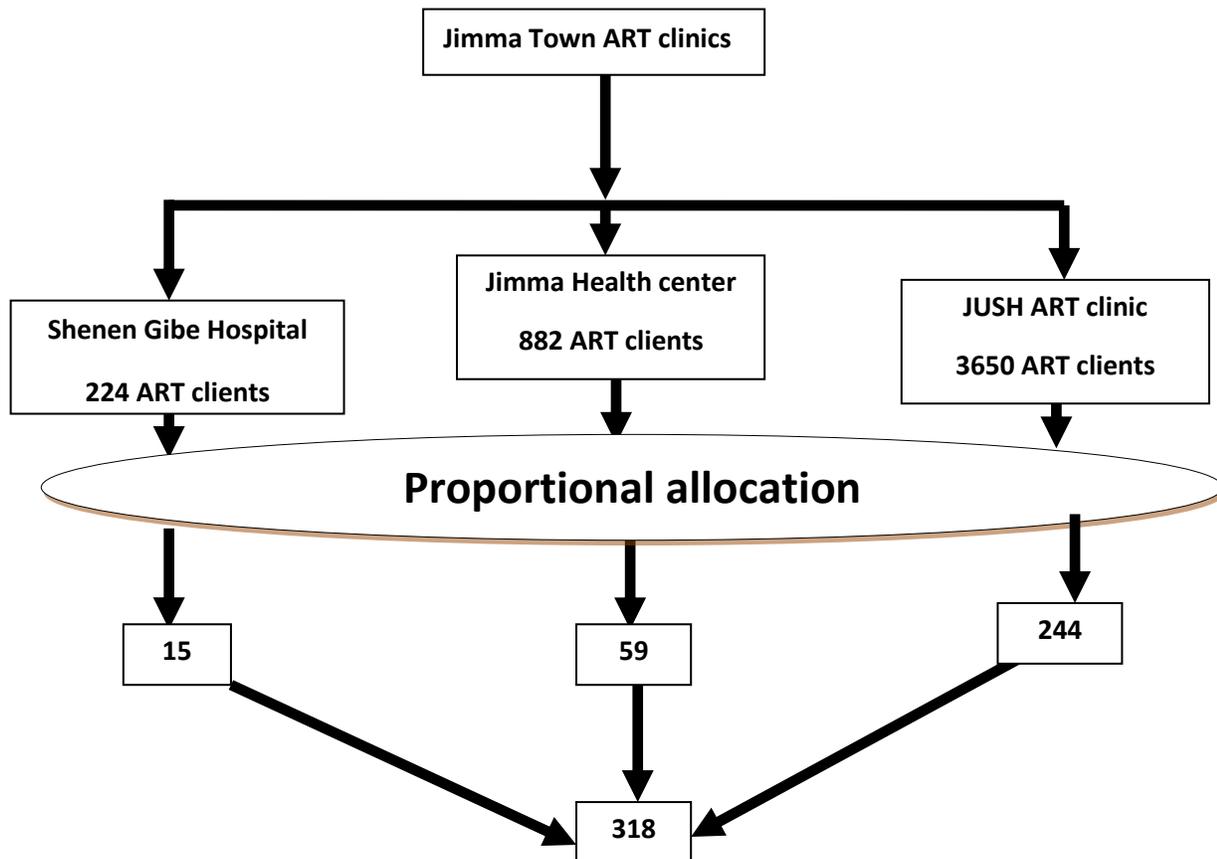
The single population proportion formula was as: $n = \frac{(Z_{\alpha/2})^2 p (1-p)}{d^2}$

$n = \frac{(1.96)^2 (0.86) (1-0.86)}{(0.04)^2} = 289$ individuals and considering 10 percent non response rates **29 individuals** were added and then the final sample size employed for the study was **318 ART clients**.

4.5.2 Sampling Procedure

This survey employed consecutive sampling technique to recruit all ART attendants for the study without jumping during the study period when they come to the clinic on their clinic appointment based on their willingness.

Figure 2:- Schematic presentation of sampling procedure



4.6 Materials

Structured questioner was adapted from similar studies in English language and then translated to Amharic and Afan Oromo by different individuals and then translated back to English to assure the consistency of each questions. The contents of the questioner were grouped in to four sections; Socio-demographic information 09 items, HIV testing and diagnosis information 05 items, Social support information 07 and overall stigma measurement tools have 45 items. These 45 stigma items were again sub grouped under the different domains as experienced stigma 18 items, perceived stigma 10 items and internalized stigma 17 items. The first three sections were adapted from related studies by the researcher based on information gathered during the review of literature while the stigma assessment sections were obtained and contextualized from stigma index validation studies conducted in six Iranian cities and china. The stigma measurement items were unbalanced likert scale format scored reversely as 5=strongly disagree, 4=disagree, 3=undecided, 2=agree and 1=strongly agree.

The reliability of the overall items was identified as Cronbach's alphas 0.94; the sample adequacy was observed as **KMO= 0.90, p= 0.000** to conduct factor analysis. The items were strongly correlated except five items "Exclusion from social gatherings, exclusion from religious gatherings, Denied from dental care services, Denied from family planning services and I believe that no one knows that I have HIV/AIDS" were below the normal correlation coefficients; deletion of these five items from the list couldn't bring significant change on the reliability and consistency of the tool and left undeleted for further analysis.

The HIV stigma items were initially computed and summed up to evaluate the score for the HIV stigma measurement and calculated for percentage to ease comparison among the domains.

The three stigma domains as experienced, internalized and perceived HIV stigma; the number of items under each domains was 18, 17 and 10 respectively with reliability of Cronbach's alphas 0.87, 0.89 and 0.87 respectively and sum of scores was used as continuous variable for further statistical analysis.

4.7 Study Variables

4.7.1 Dependent variable

HIV Related Stigma

- Perceived stigma
- Internalized stigma
- Experienced stigma

4.7.2 Independent variables

- **Socio demographic characteristics**
 - Age, Sex, marital status, residence, education, Occupation, Religion, Ethnicity, income.
- **Experience of HIV testing and diagnosis**
 - Reason for the first HIV testing, decision of the first diagnosis, duration of ART utilization, disclosure concern,
- **Experience of social support**
 - Relationship of person living with
 - Number of people living with
 - Source of information
 - Having social support
 - Type of support providers, if any.

4.8 Data collection procedure

Before the actual data collection the questioner was pretested at Agaro town health center ART clinic on 16 ART clients and checked for appropriateness and corrected accordingly. Then one ART provider from Shenen Gibe hospital, one from Jimma town health center and two ART providers from JUSH a total of four ART providing BSc. Nurses were trained for two days on the objectives of the study, eligibility criteria and data collection procedure through detail and practical approach to have deep understanding. The data collection started on the same date and time at each ART clinics. During data collection the data collector introduced the contents and objectives of the study to each eligible ART clients and again confirmed that the information that the participant provided will be kept and the participant's right to withdraw totally from participation or the right to reject to respond to any unfavorable question and finally asked them to sign on the consent form before he/she start the interview. Those agreed to complete the consent form were responded to the study tools properly.

4.9 Statistical Analysis

The collected data were cleaned, coded and entered in to EPI data version 3.1 templates and exported to SPSS version 20.0 for further statistical analysis. The continuous variables of the HIV stigma domains were checked for normality distribution to conduct linear regression. The independent categorical variables were computed in to dammy table to facilitate for linear regression. Then after testing for collinearity discriptive statistics, simple linear regression and multiple linear regressions were employed to complete the statistical procedure.

4.10 Data quality control

A range of mechanisms were employed to address major areas of bias introduction during the data collection process. **First**, the questionnaire was pretested for appropriateness; **second**, the questioner was a structured questionnaire first adapted from similar studies in English language and contextualized and translated in to Afan Oromo and Amharic languages to be easily understood by the participants, **third**, the data collectors were trained intensively to gather the appropriate information, **fourth**, a day to day on site supervision was conducted by the investigator during the whole period of data collection.

4.11 Ethical considerations

Prior to data collection appropriate ethical clearance was obtained from the ethical committee of Jimma University college of Public health and medical sciences. Request for cooperation letter obtained from health education and behavioral sciences department to the study site authorities. Data collection started after permission obtained from the administrative bodies of the study setting. In the health facilities the ART providers introduced the objectives of the study to his/her ART client during the clinic appointment and then asked whether agree or disagree to participate in the study. Those ART clients agreed to participate transferred to the data collector. The data collector again started communication with in language that the client well understands and also assured for the participant the right to reject any question they disliked and have the right to withdraw totally from the participation at any unfavorable time he/she feels during the interview; also confirmed the confidentiality of the information provided by the respondent not to disclose to any third party except that the researcher will use for statistical analysis. Finally written informed consent was received from every study participant before data collection.

4.12 Dissemination plan

The finding of the study is to be presented to Jimma University scientific community and seek approval from evaluators. After having approved by JUCPHMS school of graduate studies the result will be presented to Jimma Town health planners, Jimma Town associations and Networks of positive people, on different conferences and other stake holders in the area to enable them take recommended actions during their planning, Stigma reduction and HIV prevention programs. Finally all the efforts will be made to publish the thesis on the scientific journals to disseminate the finding to the global community.

4.13 Operational Definition of terms and Concepts

- **HIV-related Stigma:** is the overall stigma; derogatory perception, remarks and treatment given to people due to their HIV positive status. It is prejudice, blaming and exclusion of PLWHA which was measured by the total 45 items likert scale format questions with possible score after converting to percentage ranging from the minimum 20 and maximum 100, the larger score showing more overall HIV related stigma among the ART clients.
- **Experienced HIV Stigma:**-It is an act of discrimination PLWHA faced including denial of health care, loss of education or employment, or isolation from family members. It was measured by 18 items of likert scale format questions with possible scores after converting to percentage ranging from minimum 20 and maximum 100 the larger score showing more experienced stigma.
- **Internalized HIV Stigma:**-The negative self-image PLWHA may have resulting from perceived and/ or experienced stigma like ashamed, blaming self because of being HIV positive. It was measured by the 17 items likert scale format questions with possible score after converting to percentage ranging from the minimum 20 and maximum 100 scores, the larger score showing more internalized stigma.
- **Perceived HIV Stigma:**-How PLWHA feel that they are being negatively treated by partners, family, friends, health care providers, and members of their community because of their HIV status. It was measured by the 10 items of likert scale format questions with possible score after converting the score in to percentage ranging from 20 to 100; the larger score showing more perceived stigma.
- **Disclosure concerns:** factors that are related to PLWHA, their worries whether to disclose their HIV status to others or keep it secret. Whether to tell to their families, friends and relatives about their HIV positive status. This was measured by the the 10 likert scale items under perceived HIV stigma domain.

CHAPTER FIVE: RESULTS

5.1 Socio-demographic characteristics

A total of 349 PLWHA attending ART service in three health facilities in Jimma town requested to participate in the study. Thirty one PLWHA (18 male and 13 female) were not agreed to participate with non-response rate of 8.9%. The reason for withdrawal was work related time shortage to stay with the data collector, lack of interest on the study and not willing to sign written consent as expressed by refusers. However 318 respondents 204 (64.2%) female and 114 (35.8%) males voluntarily participated in the study. Among those respondents 144 (45.3%) were in the age group of 30-39 and the mean age of the respondents was 32.9 ± 8.1 . With respect to religion composition 136(42.8%) respondents were Orthodox Christian and 105(33%) were Muslim while ethnicity Oromo and Amhara accounted 120(37.7%) and 107 (33.6%) of the total respondents respectively. More than half of the respondents 164 (51.6%) were married and regarding the educational level 135 (42.5%) respondents were elementary school while 65 (20.4%) individuals were not attended any formal education (**table 1**).

Table 1:- Socio-demographic characteristics of the respondents (N=318)

Characteristics		N (%)	Characteristic	N (%)	
Sex	Male	114(35.8)	Ethnicity	Oromo	120(37.7)
	Female	204(64.2)		Amhara	107(33.6)
Age in years	≤ 24 year	39(12.3)	Kaffa	31(9.7)	
	25-29 year	74(23.3)	Gurage	19(6.0)	
	30-39 year	144(45.3)	Tigre	16(5.0)	
	40-49 year	48(15.1)	Other*	25(7.9)	
	≤ 50 year	13(4.1)	Education	No education	65(20.4)
Marital status	Single	48(15.1)		Grade 1-8	135(42.5)
	Married	164(51.6)		Grade 9-12	72(22.6)
	Divorced	51(16.0)		College education	30(9.4)
	Widowed	55(17.3)	Higher education	16(5.0)	
Occupation	Government Employ	60(18.9)	Religion	Orthodox Christian	136(42.8)
	Private fulltime Employ	36(11.3)		Muslim	105(33.0)
	Temporary /per time employ	42(13.2)		Other*	77(24.2)
	Daily Laborer	59(18.6)	Average	≤ 750 Birr	169(53.1)
	Merchant	56(17.6)		Monthly Income	≥ 751 Birr
	Student	36(11.3)			
	Other*	29(9.1)			

**Ethnicity Other:- included Silte, Dawaro and Yem; Occupation other:- included commercial sex worker, religious and house servants and Religion other included traditional beliefs*

5.2 The Experience of HIV testing and diagnosis

The reasons for HIV testing for more than half of the respondents 162 (50.9%) were due to referral as they were suspected by health workers. The other reasons included self motivation to know their HIV status in response VCT campaign, spouse turned positive, illness or death of spouse. The decision of HIV testing for 24(7.6%) individuals was through coercion or without their knowledge. Majority 258(81.1%) of the respondents have used ART for more than one year but 60 (18.9%) respondents used ART for about one year and less. In regard of involuntary disclosure, 71(22.3%) respondents blame different people for involuntary status disclosure without their knowledge including 11 (15.5%) those blaming their health service providers (**Table 2**).

Table 2:- The Experience of HIV Testing and diagnosis of the respondents (N=318)

Characteristics	Category	N (%)
Years of ART use	2-3 years	103(32.4)
	6 years and above	93(29.2)
	4-5 years	62(19.5)
	One year and less	60(18.9)
Reason for HIV testing for the first time	Referral due to suspected HIV (E.g. TB)	162(50.9)
	Just wanted to know During VCT campaign	73(23.0)
	Spouse/partner/family member HIV+	25(7.9)
	Illness of Spouse/partner/family member	17(5.3)
	Death of Spouse/partner/family member	15(4.7)
	Due to Pregnancy ANC service	14(4.4)
	Referral by clinics for STIs	6(1.9)
	Preparation for marriage or sexual relation	3(0.9)
	Due to Other reasons	3(0.9)
Who was decided to be tested for HIV for the first time?	It was my voluntary action	190(59.7)
	I took the decision, but it was under pressure	104(32.7)
	I was made to take an HIV test (coercion)	24(7.5)
Has your HIV positive status been revealed without your consent?	No	247(77.7)
	Yes	71(22.3)
Whom do you blame for disclosing your HIV status without consent? (N=71)	Employer/Colleague/Friend	29(40.8)
	Family members/care giver	22(31.0)
	Health service providers	11(15.5)
	Spouse/Sexual partner	5(7.0)
	Others	4(5.6)

5.3 The Experience of Social Support

Regarding the number of family members, the majority 268 (84.3%) of the respondents were living with at least one family member and to the maximum six and more with various level of relationship in the house. However all family members were not encouraged them to take the ART drug properly; 189 (59.4%) individuals have someone/partner in the house who encouraged them to take the ART and other prescribed drugs. In respect to the network of positive peoples and association of PLWHA only 70 (22.0%) individuals were members of legally established association and networks of positive people found in

Jimma town. More than half of the respondents 174 (54.7%) have got different social supports at least once in the past three months and almost all 312(98.1) of respondents believed that HIV counselors provided information that helped them to cope with the effects of HIV/AIDS (Table 3).

Table 3:- The experience of social support among repondents (N=318)

Experience of Social Support			Experience of Social Support		
		N (%)			N (%)
With whom you lived in the past three months	Spouse only	138 (43.4)	What was the source of information you used to cope with HIV?	HIV counselors	312 (98.1)
	With family	121(38.1)		Peer discussion	158 (49.7)
	Living alone	50 (15.7)		TV, Radio and News papers' programs	135 (42.5)
	With Friends	9(2.8)		Home based Care providers	60 (18.9)
Number of people living with you in the house	1-3 people	142 (53.0)	Other source	5 (1.6)	
	4-5 people	100 (37.3)			
	6+	26 (9.7)			
Are you a member of PLWHA's associations and NEP+	No	248 (72.0)	Have you got any support with in the past three months	Yes	174 (54.7)
	Yes	70 (22.0)		No	144 (45.3)
Do you have regular source of information to cope with HIV?	Yes	315 (99.1)	Who provided the support for you? (N=174)	Relatives	85 (48.9)
	No	3 (0.9)		NGO	55 (31.6)
				GO	14 (8.0)
				Neighbors	11 (6.3)
				Religious group and others	9 (5.2)

5.4 Overall HIV stigma

By using the 45 HIV stigma items, evaluation of the over all HIV stigma score was conducted indicating that the minimum score as 20.4 and maximum 88.9 which was normally distributed with mean score of 48.2 (SD=13.6); as 47.2±13.3 for male and 48.7±13.7 for females.

5.4.1 Experienced HIV Stigma

Table 4 contains detail of items loaded to experienced HIV stigma. Components of experienced HIV stigma like “I have been aware of being gossiped and I have been aware of being verbally insulted or harassed” had higher score than the others; item mean 3.41 (SD=1.3) and 2.75 (SD=1.28) respectively. The experienced HIV stigma score was in the range of 20.0 and 86.7 with mean score of 41.5 (SD = 12.6); which was 40.6±12.4 for male and 42.0±12.7 for female. In respect of the approval response to each

experienced HIV stigma items more than half 186 (58.5%) of the respondents were indicated that they were aware of being gossiped; while 127 (39.9%) respondents had been verbally insulted or harassed due to their HIV positive sero-status. Nevertheless, denial of dental and family planning services 9(2.8%) were relatively the lowest scores from the rest of experienced HIV stigma components in the past twelve months.

Table 4:-Items, Factor scores and approval responses (N=318) of experienced HIV stigma

Experienced HIV stigma items	Factor score	Mean (SD)	Approval responses N (%)
I have been aware of being gossiped	0.79	3.4(1.3)	186(58.5)
I have been aware of being verbally insulted or harassed	0.76	2.7(1.3)	127(39.9)
My Spouse/partner experienced discrimination	0.54	2.6(1.0)	97(30.5)
I have been discriminated by other PLWHA	0.78	2.2(1.1)	71(22.3)
I have been Subjected to physical pressure or manipulation	0.66	2.2(1.2)	66(20.8)
I have been Excluded from social gatherings	0.81	2.2(1.5)	64(21.1)
I have faced experience Sexual rejection	0.64	2.2(1.2)	63(19.8)
I have been Excluded from family activities	0.61	2.2(1.4)	54(17.0)
I have been forced to Change place of residence	0.71	2.1(0.9)	54(17.0)
Being physically harassed or threatened	0.78	1.9(1.3)	36(11.3)
Being physically assaulted	0.8	1.8(1.2)	28(8.8)
I have been excluded from religious activities	0.87	1.8(1,5)	28(8.8)
I have lost job or source of income	0.66	1.8(0.9)	24(7.5)
I was forced to Change job/description or being refused promotion	0.54	1.7(0.8)	20(6.3)
Being refused employment/job opportunity	0.59	1.7 (0.8)	20(6.3)
Being dismissed, suspended or prevented from education	0.71	1.6 (0.7)	10 (3.1)
Being denied from family planning service	0.88	1.6(0.7)	10(3.1)
Being denied dental health care services	0.88	1.5(0.7)	9(2.8)

5.4.2 Internalized HIV Stigma

Table 5 shows items loaded to internalized HIV stigma with detail of descriptive statistics. Items “My self esteem was lowered, I feel ashamed and I am afraid of being gossiped due to my HIV positive status” had higher score than the others; with item mean 3.63 (SD=1.38), 3.63 (SD=1.3), 3.42 (SD=1.57) respectively. But few items, “I decided to withdraw from social gatherings and I decided to stop education/training” were relatively the lowest item scores; mean score 1.83(SD=0.95) and 1.82 (SD= 0.98) respectively. The internalized HIV stigma score was in the range of 20 to 96.5 with mean score of 50.5 (SD = 16.4); which was 49.2±15.7 for male and 51.3±16.7.

Regarding the approval response to each internalized HIV stigma items the majority of respondents 226(71.1%) feel that their self-esteem lowered, 221 (69.5%) felt ashamed, 199 (62.9%) feel fear of being gossiped due to HIV positive status. About 28 (8.8%) respondents had decided to stop participating in social gatherings and 25(7.9%) had decided to stop education/training due to their HIV positive status (Table 5).

Table 5:- Items, Factor scores and approval responses (N=318) of Internalized HIV stigma

Items	Factor score	Mean (SD)	Approval response N (%)
My Self-esteem lowered due to HIV positive status	0.86	3.6(1.4)	226 (71.1%)
I feel ashamed for being HIV positive status	0.84	3.6(1.4)	221 (69.5%)
I am afraid of being gossiped	0.50	3.4(1.6)	199 (62.9%)
I blamed myself for being HIV positive status	0.63	3.0(1.6)	153 (48.1%)
I feel guilty for being HIV positive status	0.78	3.0(1.4)	144 (45.3%)
I blamed others for being HIV positive status	0.36	2.8(1.6)	126 (39.6%)
I decided not to have children due to my HIV positive status	0.81	2.6(1.5)	108 (34.0%)
Being afraid verbally insulted for being HIV positive status	0.74	2.5(1.5)	113 (35.5%)
I decided not to have sex due to HIV positive status	0.88	2.4(1.4)	86 (27.0%)
I decided not to get married due to HIV positive status	0.85	2.3(1.4)	76 (23.9%)
Being afraid that someone reject Sexual relation	0.70	2.2(1.3)	63 (19.8%)
I felt suicidal feeling for being HIV positive status	0.65	2.1(1.2)	49 (15.4%)
I feel to be punished for being HIV positive status	0.82	2.0(1.1)	44 (13.8%)
I am afraid of being physically threatened or assaulted me	0.79	1.9(1.2)	41 (12.9%)
I decided to stop working due to HIV positive status	0.64	1.8(1.0)	31 (9.7%)
I decided not to attend social gatherings due to HIV positive status	0.89	1.8(0.9)	28 (8.8%)
I decided to withdraw from education/training	0.72	1.8 (1.0)	25 (7.9%)

5.4.3 Perceived HIV Stigma

The perceived HIV stigma components like fear of discrimination and worry of involuntary disclosure of sero status were the highest item mean score as indicated “I am afraid of about people discriminating against me and I am worried that people may tell my HIV status to others” had the highest mean score with 3.4 ± 1.5 and 3.4 ± 1.4 respectively; while “I feel as I am unclean, People told me that getting HIV is what I should deserve” had the lowest item mean score (2.2 ± 1.13 and 2.0 ± 1.1 respectively). Moreover, the perceived HIV stigma score was in the range of 20 to 100 with mean score of 56.2, (SD=19.2); which was 56.4 ± 19.21 for female and 55.7 ± 19.2 for males. Regarding the approval response to each perceived HIV stigma items more than half of respondents 191(61.1%) had strong fear of discrimination which may be exerted from the public and 171(53.8%) respondents worry about involuntary status disclosure. Significant number of respondents 49(15.4) feel as they were unclean due to their HIV positive sero status (Table 6).

Table 6:- Items, Factor scores and approval responses (n=318) of Perceived HIV stigma

Perceive HIV stigma Items	Factor score	Mean (SD)	Approval Response N (%)
I am afraid of about people discriminating against me	0.77	3.4(1.5)	191(60.1)
I am worried that people may tell my HIV status to others	0.86	3.4(1.4)	171(53.8)
I told people close to me to keep my HIV status as a secret	0.77	3.3(1.5)	165(51.9)
I think that People seem afraid of me if they knew my HIV status	0.83	3.3(1.4)	165(51.9)
I am working hard to keep my HIV status as a secret	0.85	3.2(1.6)	185(58.2)
I feel that no one knows my HIV positive status	0.71	2.8(1.5)	122(38.4)
I feel guilty because of my HIV positive status	0.70	2.5(1.4)	86(27.0)
I feel as I am a bad person due to my HIV positive status	0.79	2.2(1.3)	56(17.6)
People told me that getting HIV is what I should deserve	0.76	2.2(1.3)	59(18.6)
I feels as I am unclean due to my HIV positive status	0.73	2.0(1.1)	49(15.4)

5.5 Factors associated with HIV stigma

5.5.1 Factors associated with experienced HIV stigma

Simple linear regression was conducted to identify factors p value less than 0.25 to be candidate for the final model. Then the final was run by using these variables. Sex as being female compared to males, being single in marital status and being widowed, educational level being uneducated and elementary level and occupation as being partimer/ daily laborer were some of the socio-demographic factors statistically associated with experienced HIV stigma. Where as years of ART utilization less than one year, reasons of

the first HIV testing like test for TB referral were some of the factors statistically association with experienced HIV stigma from the HIV testing and diagnosis experiences have positive (incremental) association with experienced HIV stigma. However number of family number the respondent living with have inverse relation with experience of HIV stigma (Table 7).

Table 7:-Factors associated with experienced HIV stigma from multiple linear regression models

Characteristics	Unstandardized					
	Coefficients			95.0% CI for β		
	B	SE	Sig.	Lower	Upper	
Sex	Female	6.73	1.77	.000	3.3	10.2
	Single (unmarried)	9.41	2.92	.001	3.7	15.1
Marital status	Widwed	12.27	2.58	.000	7.2	17.4
	Divorced (Reference)					
Education	No formal education	14.47	2.45	.000	9.6	19.3
	Elementary Education	10.83	2.05	.000	6.8	14.9
	Secondary (Grade 9-12) school (Reference)					
	Fultime private employ	9.52	2.98	.002	3.7	15.4
Occupation	Other Occupations	9.38	3.63	.010	2.2	16.5
	Daily laborer (Reference)					
	4-5 family members	-3.97	1.68	.019	-7.3	-1.7
Number of family member	More than 6 family members	-6.20	2.81	.028	-11.7	-1.7
	1-3 family members (Reference)					
	Used ART less than 1 year	13.00	2.47	.000	8.1	17.9
Years of ART Use	Used ART 2- 3 years	6.20	2.15	.004	2.0	10.4
	6 \leq years (Reference)					
Reason for HIV testing for the first time	Testing for HIV due to Souse HIV positive	10.10	3.32	.003	3.6	16.6
	Testing for HIV due to referral for TB	6.31	1.94	.001	2.5	10.1
	Testing simply to know status (Reference)					
Decision for the HIV testing	Test due to coercion	11.88	4.20	.005	3.613	20.1
	Voluntary testing (Reference)					

The final multiple linear regression model from table 7 showed that being a female increases the score of experienced HIV stigma on average by 6.7 compered to that of male with $\beta=6.73$, $p=0.00$, 95%CI (3.2, 10.3). Regarding the marital status a single women being widowed increases the score of experienced HIV stigma on average by 12.3 as compared to those divorced with $\beta=12.3$, 95%CI (7.2,17.4) and $P=0.00$. The education status also has statistically significant association to experienced HIV stigma indicating that being none educated (Not attended any formal education) increased the score of experienced HIV stigma on average by 14.5 compared to those attended secondary (Grade 9-12) education with $\beta=14.5$, 95%CI (9.6, 19.3) and $p=0.00$. New entry (One year and less) to ART drug was also anther factor statistically have

positive association with experienced HIV stigma. Being user of ART for one year and less increased the stigma score on average by 13.00 with $\beta = 13.0$ at 95%CI (8.1, 17.9) and $p=0.000$ compared to those used ART for 6 years and above. In respect of reason for the first HIV testing “Testing due to Souse HIV positive” had statistically significant association with experienced HIV stigma; that HIV testing due to spouse being HIV positive increases the score of experienced HIV stigma on average by 10.1 compared to those tested for HIV voluntarily to know their status (VCT); $\beta=10.1$, at 95%CI (3.6, 16.6) and $p=0.003$ Nevertheless, number of family members living with the respondent was inversely associated factor with experienced HIV stigma; there is a reduction trend (inverse relation) with experienced stigma score as the number of family member increases. Those respondents living with 4-5 family members reduced the score of experienced HIV stigma on average by 3.97 compared to those living with less than 4 family members; $\beta= -3.97$, 95%CI (-7.3,-1.7) and $p=0.019$.

5.5.2 Factors associated with Internalized HIV stigma

Linear regression was conducted to identify candidate variables p-value less than 0.25 for multiple regressions. Thus among the socio demographic charactersitics “No formal education, being elementary education and being other occupation” and “Taking ART for less than or equal to one year” from HIV testing and diagnosis experience were significantly associated with the internalized HIV stigma (*Table 8*).

Table 8:- Candidate Factors selected for internalized HIV stigma from linear regression model

Characterstics		Unstandardize		Sig.	95.0% Confidence	
		d Coefficients			Interval for β	
		B	SE		Lower	Upper
Ethnicity	Other ethnic groups	17.489	4.443	.060	8.742	26.236
Religion	Orthodox Christian	19.179	3.767	.210	11.763	26.595
Educational status	No formal education	8.764	3.184	.006	2.496	15.032
	Elementary education	8.000	2.654	.003	2.776	13.224
Occupation	Other Occupations	10.740	4.324	.074	2.228	19.252
Experience of HIV testing and diagnosis	Taking ART \leq one year	14.302	3.005	.000	8.385	20.219
	Testing due to TB referral	6.887	2.277	.083	2.405	11.369
	Testing due to Souse Positive	9.582	3.919	.055	1.868	17.297
	Testing due to spouse death	14.356	4.844	.093	4.821	23.892
	coercional test	19.132	5.227	.000	8.845	29.418
Social support	Known After testing conducted	24.706	8.134	.103	8.699	40.713
	Living with more than (6+)	-9.186	3.498	.009	-16.070	-2.303
	Member of NEP+	-6.978	2.238	.002	-11.382	-2.575

Finally multiple regressions model was conducted based on these candidate variables and found that educational *status* (No formal education and elementary education) and occupation (other occupation) from the socio demographic characteristic and HV testing and diagnosis experiences (taking ART \leq one year, testing for HIV due to TB referral, and Testing due to spouse positive/death) were factors statistically associated with internalized HIV stigma score.

Table 9:-Factors associated with internalized HIV stigma from multiple regression models

	Characteristics	Unstandardized				
		Coefficients			95.0% CI for β	
		β	SE	Sig.	Lower	Upper
Educational status	No formal education	30.03	3.91	.000	22.3	37.7
	Elementary education	25.69	3.12	.000	19.5	31.8
	Secondary (Grade 9-12) school (Reference)					
Occupation	Other Occupations	17.63	6.11	.004	5.6	29.7
	Daily laborer (Reference)					
Years of ART use	Taking ART for \leq one year	20.81	3.83	.000	13.3	28.4
	Taking ART for \geq 6 years (Reference)					
Reason for first HIV testing	Testing due to Souse Positive	33.32	5.64	.000	22.2	44.4
	Testing due to spouse death	29.16	7.07	.000	15.3	43.1
	Testing due to TB referral	26.80	2.86	.000	21.2	32.4
	Simply to know status (Reference)					
Decision to conduct the first HIV testing	Tesing by coercion	19.13	5.23	.000	8.8	29.4
	VCT (Voluntary testing) (Reference)					
Experience of Social support	6+ family member	-9.20	3.50	.009	-16.1	-2.3
	1-3 family member (Reference)					
	Being member of PLWHA's Association, NEP+	-7.00	2.24	.002	-11.4	-2.6

The final multiple regression models for the internalized HIV stigma also confirmed that educational status of respondents has statistically significant association. That was being none educated (Not attended any formal education) increases the score of internalized HIV stigma on average by 30.0 compared to those attended at least secondary (Grade 9-12) education at $\beta=30.0$, 95%CI (22.3, 37.7) and $p=0.00$. New entry (One year and less) to ART drug was another factor statistically and positively associated with internalized HIV stigma indicating; being using ART for one year and less increased the internalized HIV stigma score on average by 20.8 with 95%CI (13.3,28.4) and $p=0.000$ compared to those used ART for 6 years and above. In respect of reason for the first HIV testing “Being tested due to Spouse death” had statistically significant association with internalized HIV stigma; increases the score of internalized HIV stigma on average by 29.2 compared with those tested simply to know their status after VCT service; $\beta=29.2$, at 95%CI (15.3, 43.1) and $p=0.000$.

Out of the seven items used to measure Experience of social support due to positive sero-status being a member of associations of PLWHA was also another statistically associated factor. Being member of associations of PLWHA and NEP+ had inverse association with internalized HIV stigma score reducing the stigma score on average by 7.0 as compared with those none members of the association; at $\beta=-7.0$, 95%CI (-11.4, -2.6) and $p=0.002$.

5.5.3 Factors associated with perceived HIV stigma

After conducting linear regression variables having P-value less than 0.25 were taken as a candidate for the final multiple regressions model (Table 10).

Table 10:- Candidates of variables for perceived HIV stigma from linear regression model

Characteristics	Unstandardized Coefficients			95.0% CI for β	
	β	S.E	Sig.	Lower	Upper
Ethnicity	Tigre	18.066	6.360	.205	5.545 30.586
	Other ethnic	19.512	5.541	.076	8.603 30.421
Religion	Orthodox	20.703	4.698	.108	11.454 29.952
	Muslim	23.029	5.752	.210	11.705 34.352
	Protestant	18.367	5.167	.111	8.194 28.539
	Religion other	34.510	11.46	.063	11.948 57.073
Experience of HIV testing and diagnosis	Use ART less \leq one year	14.084	3.748	.000	6.705 21.463
	Testing due to TB referral	9.337	2.840	.001	3.746 14.927
	Testing for Marriage	30.768	13.97	.129	3.251 58.284
	Status Reveald by Family Members	4.826	10.79	.155	16.423 26.075
	Testing by coercion	18.1	6.31	.004	5.7 30.5
	Members of PLHWAS Associatio, NEP+	-10.3	2.70	.000	-15.6 -4.9
Social support experiences	Social support by NGO	23.6	5.30	.000	13.1 33.9

Multivariables linear regressions conducted to identify factors associated with perceived HIV stigma by entering the candidate variables. The model indicated that “ethnicity (being other ethnic) from the socio demographic characteristics and HIV testing and diagnosis experiences (taking ART \leq 1year, Testing due to TB referral, and status revealed by family member) and social support factors (Being obtaining support from NGOs) were those positively (incremental association) associated with perceived HIV stigma score. However being member of associations and NEP+ was inversely associated with perceived HIV stigma.

Table 11:-Factors associated with perceived HIV stigma from Multiplelinear regression model

Characteristics		Unstandardize d Coefficients			95 % CI for β	
		β	S.E	Sig.	Lower	Upper
Years of taking ART drug	Use ART less \leq one year	33.2	5.22	.000	22.9	43.4
	Taking ART for \geq 6 years (Reference)					
Reason for the first HIV testing	Testing due to TB referral	44.1	3.31	.000	37.6	50.7
	Simply to know status (Reference)					
Decision to conduct the first HIV testing	Testing by coercion	18.1	6.31	.004	5.7	30.5
	VCT (Voluntary testing) (Reference)					
Involuntary disclosure by others	Status Revealed by Family Members	22.0	7.27	.003	7.70	36.3
	Status revealed by Spouse/sexual partners (Ref.)					
Being member of NEP+ and association	Members of PLHWAS Associatio, NEP+	-10.3	2.70	.000	-15.6	-4.9
	Non memebrs of PLWHA association (Ref.)					
Social support providers	Social support by NGO	23.6	5.30	.000	13.1	33.9
	Relegious groups (Reference)					

As indicated in Table 11 perceived HIV stigma had statistically significant association to the years of using ART drug. Being new entry (One year and less) to ART drug was one of the factors positivly associated with perceived HIV stigma which increased the score on average by 33.2 with 95%CI (22.9,43.4) and $p=0.00$ compared to those attended ART service for 6 and more years. In respect of reson for the first HIV testing “Testing due to TB referral (suspected by health care providers) had statistically significant association with perceived HIV stigma; increased the score on average by 44.0 compared with those tested simply to know their status after VCT service; $\beta=40.1$, at 95%CI (37.6, 50.7) and $p=0.00$.

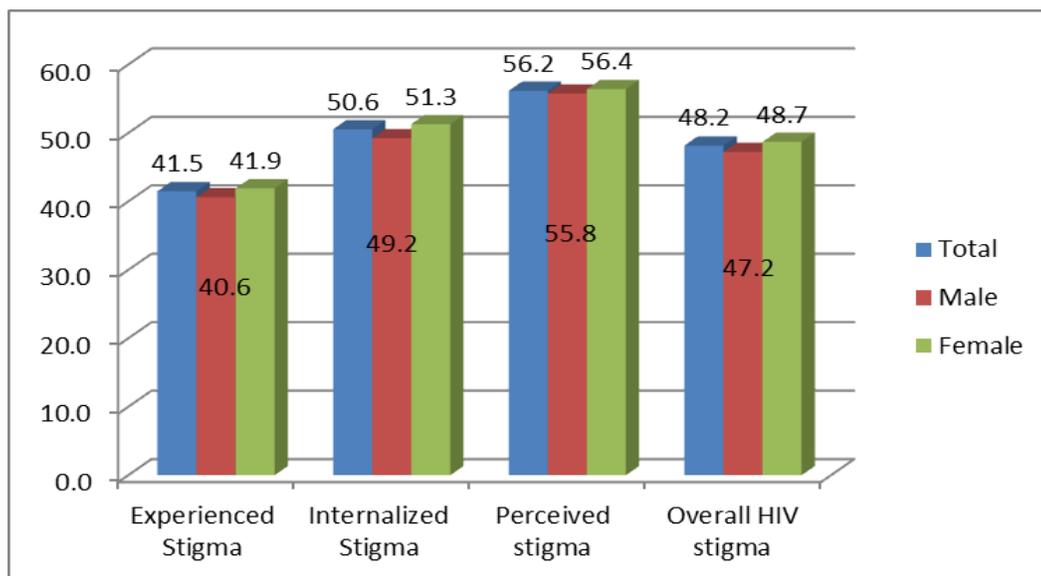
Experience of social support due to positive sero-status was also another statistically associated factor to perceived HIV stigma. Particularly being member of association of PLWHA and NEP+ had inverse association with perceived HIV stigma score reducing the stigma score on average by 10.3 as compared with those none members of the PLWHAs association; $\beta=-10.3$ at 95%CI (-15.6, -4.9) and $p=0.00$.

5.6 Comparison and correlation across the stigma domains

The three stigma domains were significantly and positively correlated to one another. The experienced HIV stigma was correlated with internalized HIV stigma at $r= 0.71$, $p= 0.00$ and with perceived HIV stigma at $r= 0.52$. The internalized HIV stigma and perceived HIV stigma were strongly correlated with $r=0.68$, $p= 0.00$. Therefore an increase on score of one of the HIV stigma domain result an increase on the score of the other HIV stigma domain.

Moreover, the magnitude of the three HIV stigma domains indicated that experienced HIV stigma was slightly lower than the rest HIV stigmas domains including the overall HIV related stigma. Internalized HIV stigma was higher than that of the experienced HIV stigma but lower than the perceived HIV stigma. In regard of the statistically associated factors educational status and occupation were those statistically associated predictors of both internalized and experienced HIV stigma from the socio-demographic characteristics in which being non-educated (attending no formal education) intensified the score of both HIV stigma domians. Inaddition, Years of ART drug use, reason for HIV testing and the power of decision to be tested during the first diagnosis were those associated predictors of the three HIV stigma domians varying only in the level of change. However there is no socio demographic variable statistically associated with perceived HIV stigma. Moreover eventhough sex was not statistically determinant factor of the stigma domains except for experienced HIV stigma, females were more affected as compared to that of males in all the three domains (**Figure 3**).

Figure 3:- Graphical representation of Comparison across the different stigmata domains



CHAPTER SIX:-DISCUSSION

More than thirty years passed after HIV epidemic emerged; various prevention and control measures conducted across the world to overcome the effect of the pandemic. However, HIV-related stigma remained highly prevalent. Therefore different researchs are needed to provide a greater understanding of the problem on HIV-infected individuals and the society in general including prevention strategies. This cross sectional study was conducted referring to this concept in Jimma town ART clinics that comprises a sample of 318 ART attending PLWHA from three ART clinics.

In this study the female PLWHA had a consistent higher mean score of HIV stigma experience in the three forms of stigma than the males including the overall HIV stigma but statistically associated with experienced HIV stigma only. This finding was consistent with the study conducted in Kenya which indicated that many women living with HIV reported high levels of stigma, resulting in a desire to hide their status from family and friends for fear of being discriminated against [50]. The reason for the higher HIV stigma score for female than males could be because HIV-related stigma builds upon other existing gender related prejudices in the community. Women may suffer more stigmas, because when they become infected with HIV they will be viewed as having been promiscuous at least once in their life time by the community; however most evidences suggest that in the majority of cases, women acquired the virus from their male sex partners and biologically; infected through unprotected heterosexual intercourse than men [51].

According to this finding the mean score of experienced HIV stigma is lower than the rest of stigma domains which may be due to the location of of the ART clinic that the majority of the clients may be from urban setting which have relatively higher access to various media programs that may help the public attitude reject the act of discrimination against PLWHA. This finding is lower than the case in Malawi (43.0%) and Kenya (22.8%) [52].

Among the experienced HIV stigma components Gossip, verbal insult, psychological pressure or manipulation and harassment were the most prevalent experiences about 58.5%, 39.9%, 20.8% and 11.3% respectively. These results were better than the case in Cambodia as it was gossip (37.6%), manipulation and psychological pressure (33.9%), loss of employment (36.6%), harassment and threats (24.6%), violence (11.2%) [53]. The reason for this variation may be due to the difference in study period and study design of both findings. The HIV stigma Index validation survey of Cambodia was community based and conducted in 2010 some five years back to the current facility based finding.

The experience of denial from health service is the lowest score among the experienced HIV stigma items which is about 2.9% from dental care and almost same result for denial from family planning services. This lower result even though not null could be an indication of positive attitude towards PLWHA from the health care providers but still need to be improved. In contrast 3.5% of the respondents blamed health service providers for involuntary sero-status disclosure. Moreover, Exclusion of PLWHA from different public gatherings is not eliminated; out of the 318 respondents 17.0% excluded from social gathering, 7.5% from religious gatherings and even 19.8% from family activities; at least once in the past twelve months. This finding is in line with study conducted as stigma index validation survey in seven Asia Pacific countries [54].

The other finding of this study was that the act of discrimination towards PLWHA was not only from the non-infected community members but also PLWHA themselves discriminate among each other; 22.3% of study participants indicated that they were discriminated by other PLWHA at least once in the past 12 months before the study period. This may be due to lower awareness about the HIV transmission and weakness of the legally established PLWHA's associations and Network of positive people to bring the victims of HIV together, discuss on their commonalities and stand together for their rights rather than discriminating one another. The survey indicated that being the member of associations of PLWHA has meaning full effect and statistically significant association with HIV stigma. The prevalence of HIV stigma among the members of PLWHA's association is much lower (3.5%) as compared to non-members of the association (12.3%). This may be due to the fact that PLWHA's associations and network of positive people provide appropriate information of coping mechanism to improve the self esteem of the members.

The factors that showed significant association with experienced HIV stigma among the socio demographic characters were marital status being single (unmarried or widowed) and educational level (No attended any formal education and elementary education). The finding showed that lower level of educational status has positive association with the experienced HIV stigma but couldn't indicate whether attending higher education reduces the score of experienced HIV stigma or not. This finding is against the study conducted in Canada that indicated among participants with high school education or greater the outcome stigma was decreasing [55]. Number of years of ART utilization is another factor significantly associated with all the HIV stigma domains. New entry to ART utilization needs more frequent visit to health facility for medication purposes than those attended the ART for many years which exposed them to be identified as different from their previous normal life to the public and therefore this is the time when health care providers should exert significant assistance for the new comers of the ART clients to build their self efficacy that can help them to resist the challenge.

Internalized HIV stigma is another pressing problem among PLWHA in the ART clinics of Jimma town as the mean score is higher as 50.5 ± 16.3 ; even though most of socio-demographic variables have no statistically significant associations some factors like educational status as “No formal education, and elementary education) have statistically significant association. The unique finding of this part is that occupation “occupation other” being statistically associated with the internalized stigma score. Twenty two (6.9%) of respondents of the other occupation were from commercial sex workers and very few from religious services. These people have different characteristics from the others in accepting and internalizing the effect of the stigmatization due to their unique life style from the majority. Thus appropriate stigma reduction strategies should be employed during counseling service separately for these unique groups.

The most prevalent internalized HIV stigma form observed in this survey is that 69.5% PLWHA felt ashamed and more than half (62.6%) PLWHA fear of being gossiped about 45.3% of PLWHA felt guilt, 48.1% blame themselves for being HIV positive. This finding closer to study conducted in Sri Lanka to validate HIV stigma Index that 54% of the PLHA felt ashamed, and 45.5% felt guilty and blaming self for being HIV positive 51% [56] and the major difference is that in the case of Sri Lanka male PLWHA were more stigmatized than females but in the current study female PLWHA are more stigmatized than males. This may be due to the socio-cultural and economic status difference in both countries. In the current setting there is a culture of male domination that may be linked with HIV related stigma as well.

Generally it is known that cross sectional study couldn't indicate cause and effect relationship, but there is a belief that internalized HIV stigma may be developed due to mistaken belief about HIV/AIDS. In this survey out of 65 individuals who didn't attend any formal education 38 (58.4%) scored higher internalized HIV stigma compared to 54.8% among those completed primary school and 40% among those attended higher education. Social support is another factor that affects the level of internalized HIV stigma in this study. The score among those received social support (21.1%) is significantly less than that of unsupported (30.2%) respondents. However there is an indication that the social care and support provision should be based on appropriate social and ethical procedures. Out of the ART clients received social support at least once from close family member with in the past three months **19.5%** scored high internalized HIV stigma compared to 11.5% for those supported by NGOs. This may be due to skill variation in providing psychosocial and instrumental support services between an ordinary family member and professional support providers from NGO. On the contrary, those supported by NGOs (5.2%) have high experienced HIV stigma score as compared to those supported by family members (3.4%). This may be due to the visibility of the social as well as the instrumental support provided by NGOs to the total community to identify the support receiver as a unique person from others people.

Perceived HIV stigma is another domain included in this study. The most important finding of this part is that PLWHA in Jimma town attending ART service in health facilities experience a higher level of perceived HIV stigma compared to the other two HIV stigma domains considered in this study with mean score of 56.2, SD=19.2; female (Mean 56.4±19.21) and males (Mean 55.7±19.2); the effect was almost higher in females than that of males. Even though age was not statistically associated with perceived HIV stigma respondents within age group between 26-49 years scored higher perceived HIV stigma 49.1% compared to the two extremities less than 25 years 11.6% and 50 years and above 1.6%. Most of individuals within this group are participating in various societal activities that helped them to evaluate the negative effect of experience of discrimination against them from the public as a result of their HIV sero-status. This can be evidenced from the relatively higher score for the disclosure concern items; most of the respondents fear discrimination (60.1%) as a result almost same proportion (58.2%) work hard to keep their HIV status as a secret from the public and 51.9% worried whether their close partner may disclose their sero-status without their consent or keep as a secret. Moreover the score of stigma scales to the negative self-image like feeling of unclean, bad person and guilty are lower than that of the disclosure concern scores which is in line with a study conducted in China Henan province [57].

Limitations of the study

The ART attending PLWHA might not have similar characteristics with those do not attend ART currently which may preclude generalizability of the finding. Moreover, the response to some stigma items might be prone to recall bias.

CHAPTER SEVEN:-CONCLUSION

This study indicated that PLWHA in Jimma town attending ART service experience relatively lower levels of experienced HIV Stigma but high level of internalized and perceived HIV stigma. Regarding the associated factors years of ART use, reason for the first test for HIV and decision power for HIV testing were those statistically significant factors across the three HIV stigma domains. In addition, though most of the socio-demographic variables have not been found to play statistically significant role on HIV Stigma; the experience of the three stigma domains across the gender group is meaningfully different, dominating to affect females than males. Among different stigmatizing experiences from the public, gossip causes a high level of self-exclusion from different societal gatherings. The finding also indicated that most of the PLWHA in Jimma town ART clinic are suffering from verbal insults from the public. This may be thought as a simple error from an individual but affects their life by reducing self-esteem of the victim and decided to be excluded from participating in different activities confidently. The observed high level of internalized stigma shows that most PLWHA in Jimma town feel ashamed, blame and prejudice their own wrongly due to their HIV sero-status. The perception about their environment is also not encouraging since perceived HIV stigma score the highest among different countries. Most of PLWHA in Jimma town ART clinics fear discrimination which may be exerted from the public as a result they are working hard to keep their HIV status as a secret. The majority of the respondents' education level is below secondary school education with a significant number of respondents not attending any formal education and most PLWHA in the town are not participating in legally established associations and networks of positive people. This may be the reason for high perceived HIV stigma. Then the next step is to look at locally appropriate interventions dealing with members of the community, healthcare personnel and networks of PLWHA to decrease stigmatization and potentially improve quality of life of the PLWHA in the town.

CHAPTER NINE:-RECOMMENDAION

The result from this finding suggest that the effect of perceived and internalized HIV stigma are high in Jimma town ART clinics and needs too much be done by different organizations working for and with the PLWHA at individual level.

- **Jimma town health office** should focus on
 - ❖ Expanding ART clinics with trained service providers
 - ❖ Support all sectors to included stigma reduction stratagies in their routine programs.
- **ART clinics in Jimma town** should be facilitated more and classify the ART users according to their years of ART utilization and provide VCT services differently accordingly, particularly new entry to ART should be given prior attention.
- **Associations and Network of positive people** in the town should
 - ❖ Cover the entire HIV positive peoples in the town giving more attention to new victims of the pandemic.
 - ❖ Establish strong counseling service that focus on individual level than group attention
- **Researchers should focus on** qualitative study to findout the effect of HIV related stigma on the individual life of PLWHA.
- **Donners and Stakeholders in Jimma town** should form collaboration and implement stigma reeducation programs at community level.

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58. Annex- 1- Consent form (English Version)

My Name is _____; I am going to collect data on HIV related stigma among ART clients for a research on HIV related stigma. The name of the researcher is _____. HIV related Stigma is very common problem in this country. I am going to give you brief information and invite you to be part of this research. There may be some words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain.

HIV related stigma among PWHA is one of the most common problems occurring in the everyday life of PLWAS. The effect of HIV related stigma on ART users is not well recognized. So many studies show that the current HIV stigma reduction interventions are not adequately minimizing the problem. Most people still remain to keep their HIV status as a secret, feel shame, feel guilty and blame themselves and/or others for being HIV positive. Therefore the reason of doing this research is to find out effect of HIV related stigma on the life of ART clients. So we are inviting all adults taking ART drug and attending their follow up in this clinic to participate in the research.

Your participation in this research is entirely voluntary. Whether you choose to participate or not, all the services you receive at this clinic will continue and nothing will change. Even when we go through the questions you may change your mind later and stop participating even if you agreed earlier. If you participate in this research your information will not be shared with other body except the researcher and it will be kept confidentially.

The question takes about 45 minutes and it is a single time response no need of contacting again in another day and you will not be given any money or gifts to take part in this research.

Statement by the participant

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant _____ **Signature** _____ **Date** _____

Statement by the person taking consent

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of person taking the consent _____ **signature** _____ **Date** _____

Annex 2 Research Question (English Version)

PART I. Socio demographic characteristics of the ART Client		
Q.no.	List Of Questions to be answered by ART clients at Jimma Health center, Shenen Gibe hospital and Jimma University Specialized Hospital ART clinics	Answer
101	Age in year	
102	Sex 1= Male 2= Female	
103	What is your Marital Status? 1= Single 2=Married 3= Divorced 4= Widowed	
104	What is your Monthly income in Ethiopian Birr?	
105	What is your Ethnicity? 1= Oromo 2= Amhara 3= Kaffa 4= Guragae 5= Tigre 6=others (Specify _____)	
106	What is your Educational Status? 1= No formal education 2= Elementary school (Grade 1-8) 3=Secondary school (9-12) 4= College education 5= Higher education 6=Other Specify_____	
108	What is your Religion? 1= Orthodox Christian, 2= Muslim 3=Catholic 4=Protestant 5=Others Specify_____	
109	What is your Occupation? 1= Government employ 2= Private employ 3=Daily laborer 4=Merchant 5= Student 6= House wife 7= others (Specify)_____	
Part II. HIV Testing and ART Utilization		
201	When did you start ART drug (In months or years)? 1= with in last 1 year , 2= 2-3 years ago 3= 4-5 years ago 4= 6 years and above	
202	What was the reason for HIV testing? (Response can be as many) 1=Just I wanted to know my status 2=Referral due to suspected HIV related symptoms (e.g. TB) 3=Spouse/partner/family member HIV positive 4=Illness of spouse/partner/family member 5= Death of spouse/partner/family member 6=Referral by clinic for STIs	

	7= Preparation for marriage or sexual relationship 8= Pregnancy related 9= other reason (Specify_____)	
203	Has your HIV status ever been revealed without your consent? 1= Yes 2= No	If 2 skip to 205
204	If “yes” to question 204, whom do you blame for this involuntary status disclosure without consent? 1=Health professionals, 2= Families/care givers 3=Spouse/sexual partner 4= other (Specify_____)	
205	During the first diagnosis was the decision to be tested for HIV up to you? 1= Yes, I took the decision myself to be tested (i.e. it was voluntary action) 2= I took the decision to be tested, but it was under pressure from others 3= No, I was made to take an HIV test (coercion) 4= No, I was tested without my knowledge 5= I only found out after the test had been done	
Part III. Social factors		
301	With whom you are living for the last three months? 1= With spouse only 2=With family 3= With friends 4= Living alone 5= Other specify_____	
302	With how many people you are living with? (exclude yourself) 1= One to three 2= Four to five 3= Six and above	
303	Do you have someone who encourages you to take ART drugs regularly? 1=Yes 2=No	
304	Are you a member of any PLWHA’s association? 1=Yes 2=No	
305	Have you got any support from external body due to your HIV status in the last three months? 1=Yes 2=No	
306	From whom do you get support in the last three months due to your HIV status? 1= Relatives 2= Neighbors 3= Religious group 4= NGO (Non-governmental organizations) 5= Government organization 6= Others specify_____	

Part IV Experienced Stigma:- Please indicate your experience of stigma you faced from other people due to your HIV positive status in the past 12 months		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
401	Being excluded from social gatherings	(1)	(2)	(3)	(4)	(5)
402	Being excluded from religious activities/place of worship	(1)	(2)	(3)	(4)	(5)
403	Being excluded from family activities	(1)	(2)	(3)	(4)	(5)
404	Being aware of being gossiped	(1)	(2)	(3)	(4)	(5)
405	Being verbally insulted, harassed or threatened	(1)	(2)	(3)	(4)	(5)
406	Being physically harassed or threatened	(1)	(2)	(3)	(4)	(5)
407	Being physically assaulted	(1)	(2)	(3)	(4)	(5)
408	Being subjected to physical pressure or manipulation by your spouse/partner	(1)	(2)	(3)	(4)	(5)
409	Experienced sexual rejection as a result of your HIV status	(1)	(2)	(3)	(4)	(5)
410	Being discriminated against by other people living with HIV	(1)	(2)	(3)	(4)	(5)
411	Your Spouse/partner experienced discrimination as a result of your HIV status	(1)	(2)	(3)	(4)	(5)
412	Being forced to change place of residence or being unable to rent accommodation	(1)	(2)	(3)	(4)	(5)
413	Lost a job or source of income because of HIV status	(1)	(2)	(3)	(4)	(5)
414	Being refused employment/job opportunity because of HIV status	(1)	(2)	(3)	(4)	(5)
415	Change of job/description or nature of work, or being refused promotion as a result of HIV status	(1)	(2)	(3)	(4)	(5)
416	Being dismissed, suspended or prevented from attending an educational institution because of HIV status	(1)	(2)	(3)	(4)	(5)
417	Being denied dental health services as a result of HIV status	(1)	(2)	(3)	(4)	(5)
418	Being denied family planning service as a result of HIV status	(1)	(2)	(3)	(4)	(5)
501	I feel ashamed for my being HIV positive,	(1)	(2)	(3)	(4)	(5)
502	I feel guilty for my being HIV positive,	(1)	(2)	(3)	(4)	(5)
503	low self-esteem due to my HIV Positive	(1)	(2)	(3)	(4)	(5)
504	Blamed myself for my being HIV positive	(1)	(2)	(3)	(4)	(5)
505	I blamed others for my being HIV positive	(1)	(2)	(3)	(4)	(5)
506	I felt suicidal for my being HIV positive	(1)	(2)	(3)	(4)	(5)
507	I feel I should be punished for my being HIV positive	(1)	(2)	(3)	(4)	(5)

508	I decided not to attend social gatherings,	(1)	(2)	(3)	(4)	(5)
509	I decided not to get married due to my HIV Positive status,	(1)	(2)	(3)	(4)	(5)
510	I decided not to have sex due to my HIV Positive status,	(1)	(2)	(3)	(4)	(5)
511	Decided not to have children due to my HIV Positive status,	(1)	(2)	(3)	(4)	(5)
512	Decided to stop working due to my HIV Positive status,	(1)	(2)	(3)	(4)	(5)
513	I decided to withdraw from education or training due to my HIV Positive status ,	(1)	(2)	(3)	(4)	(5)
514	Being afraid about being gossiped about due to my HIV Positive status	(1)	(2)	(3)	(4)	(5)
515	Being afraid verbally insulted by others due to my HIV Positive status	(1)	(2)	(3)	(4)	(5)
516	Being afraid physically threatened or assaulted by others due to my HIV Positive status	(1)	(2)	(3)	(4)	(5)
517	Being afraid that someone would not want to be sexually intimate because of your HIV status	(1)	(2)	(3)	(4)	(5)
601	I have told people close to me to keep the fact that I have HIV a secret	(1)	(2)	(3)	(4)	(5)
602	I worry that people who know I have HIV will tell others.	(1)	(2)	(3)	(4)	(5)
603	People seem afraid of me once they learn that I have HIV.	(1)	(2)	(3)	(4)	(5)
604	I work hard to keep my HIV a secret	(1)	(2)	(3)	(4)	(5)
605	Since learning that I have HIV, I worry about people discriminating against me.	(1)	(2)	(3)	(4)	(5)
606	I feel guilty because I have HIV.	(1)	(2)	(3)	(4)	(5)
607	Having HIV makes me feel that I'm a bad person.	(1)	(2)	(3)	(4)	(5)
608	In many areas of my life, no one knows that I have HIV.	(1)	(2)	(3)	(4)	(5)
609	Having HIV makes me feel unclean.	(1)	(2)	(3)	(4)	(5)
610	People have told me that getting HIV is what I deserve for how I lived my life	(1)	(2)	(3)	(4)	(5)

The End of the Question _____

I thank you very much for your Participation on behalf of Jimma University

Anex 3:- Informed consent (Amharic Version)

ስሜ _____ ይባላል; በኤች.አይ.ቪ ምክንያት የፀረ ቫይረስ መድሀኒት ተጠቃሚ የሆኑ ሰዎችን ውስጣዊ ራስን የማግለል ስሜት ላይ ጥናት ለማድረግ መረጃዎችን እያሰበሰቡ ነው። እኔ መረጃ ሰብሳቢ ስሆን በዋናነት ጥናቱን የሚያካሄዱት ሰው _____ ይባላል። ኤች.አይ.ቪ በደማቸው ውስጥ ያለባቸው ሰዎች ውስጣዊ የመገለል ስሜት በሀገራችን በሰፊው ይታያል። ስለዚህ አሁን ስለጥናቱ ማብራሪያ ከሰጠሁም በኋላ ለመጠይቅ እንዲተባበሩንና ተሳታፊ እንዲሆኑ እጋብዟለሁ። በማብራሪያ ወቅት አንዳንድ ግር የሚሉና ያልገባዎት ቃላት ሊኖሩ ስለሚችሉ እንዲህ አይነት ሁኔታ ሲያጋጥም ማብራሪያውን አቁሜ ጊዜ ሰጥቼ እንዳስረዳዎት ይንገሩኝ።

በኤች.አይ.ቪና ተያያዥ በሆኑ ምክንያቶች የውስጥ መገለል ኤች.አይ.ቪ በደማቸው ውስጥ ያለባቸው ሰዎች በዕለት ተዕለት ህይወታቸው ከሚከሰቱ ችግሮች አንዱ ነው። አንዳንድ ጥናቶች እንደሚያመለክቱት በኤች.አይ.ቪ ምክንያት የሚከሰት የውስጥ መገለል ችግርን ለመቅረፍ የተሰሩ ስራዎች አጥጋቢ ውጤት አላሰጡም። በተለይ ደግሞ ይህ የውስጥ መገለል የፀረ ኤች.አይ.ቪ መድሀኒት አጠቃቀም ላይ ያለው ተጽዕኖ ተገቢ ትኩረት አልተሰጠውም። በርካታ የመድሀኒቱ ተጠቃሚዎች አሁንም በሚስጥር ለመያዝ ይጨነቃሉ፣ ሀፍረት ይሰማቸዋል፣ ራሳቸውን እንደ ተዋረደ ሰው ይቆጥራሉ፣ በቫይረሱ ለመያዣ ራሳቸውንና ወይም ሌላውን ሰው ይኮንናሉ። ስለዚህ ይህ ጥናት በዚህ ክሊኒክ ውስጥ የፀረ ኤች.አይ.ቪ መድሀኒት ተጠቃሚ የሆኑ ሰዎች በህይወታቸው የሚሰማቸውን የመገለል ስሜትና በኑሯቸው ላይ ያሳደረውን ተጽዕኖ እንዲሁም ተያያዥ ሁኔታዎችን መተንተን ይሆናል ማለት ነው። እኛም እርስዎ ለጥናቱ መረጃ ለመሰብሰብ በተዘጋጁ መጠይቆች ላይ እንዲሳተፉ የጋበዝንዎት መሆኑን እንገልጻለን።

መጠይቆቹን ለመመለስ የሚሳተፉት ሙሉ በሙሉ በራስዎ ብቻ ፈቃደኝነት ነው። በዚህ ጥናት ላይ ቢሳተፉም ባይሳተፉም በዚህ ክሊኒክ ቀደም ሲል በሚያገኙት አገልግሎት ላይ ምንም ለውጥ አያመጣም። አገልግሎቱ እንደነበረ ይቀጥላል። እንዲያውም አሁን ሳስረዳዎት ቢሰማሙም በመጠይቁ መሀል የትኛውም ነጥብ ላይ ሀሳብዎን የሚያስቀይር ቢኖር የማቋረጥና መልስ ያለመመለስ መብትዎ የተጠበቀ ነው። በዚህ የጥናትና ምርምር ጥያቄ ላይ በመሳተፍዎም የተለየ ስጦታ ወይም የገዘብ ክፍያ አያገኙም። የሰጡት ሀሳብም ሆነ ምላሽ ተመራማሪው ለምርምሩ ማሟያ ከሚጠቀምበት በስተቀር ለሌላ አካል ተላልፎ ስለማይሰጥ ምስጥራዊነቱ የተጠበቀ ነው።

ይህን የጥናትና ምርምር መጠይቅ ጀምሮ ለማጠናቀቅ ወደ 45 ደቂቃ አካባቢ ሊወስድ ይችላል። ዛሬ በዚህች ሰዓት ከሰጡት ምላሽ ውጭ ሌላ ቀጠሮ ይዘን መገናኘትም አያስፈልግም።

የተጋበዘው ሰው ስምምነት ማረጋገጫ

ከላይ የተዘረዘሩ ሀሳቦችን አንብቢያለሁ/ ተነቦልኝ አዳምጬ ተረድቻለሁ። ያልገባኝን ሀሳብ ጠይቄ እንድረዳም ጊዜ ተሰጥቶኝ ጠይቄ በአግባቡ ተረድቻለሁ። ስለዚህ በራሴ ፈቃደኝነት በመጠይቁ ላይ ለመሳተፍ መስማማቴን አረጋግጣለሁ።

የተሳታፊ ሙሉ ስም _____ ፊርማ _____ ቀን _____

የስምምነት ሰነዱን ያስፈረመው ሰው

ከላይ እንደ ተጠቀሰው ተሳታፊው/ዋ ስለጥናቱ በተሰጣቸው ማብራሪያ ላይ ያልገባቸውን እንዲጠይቁ እድል ተሰጥቷቸው ለአቀረቧቸው ጥያቄዎችም በበቂ ሁኔታ ምላሽ ተሰጥቷል። ስለዚህ ተሳታፊው ያለምንም ግፊት በራሱ ነጻ ፍቃድ ለመሳተፍ የተስማማ መሆኑን አረጋግጣለሁ።

ስምምነቱን ያስፈረመው ሰው ስም _____ ፊርማ _____ ቀን _____

Annex 4-Questioner (Amharic Version)

ክፍል I. አጠቃላይ መረጃዎች:- በሽንገን ግቤ ሆስፒታል፣ጂማ ዩኒቨርሲቲ ሪፈራል ሆስፒታልና ጂማ ጤና አጠባበቅ ጣቢያ የፀረ ኤች.አይ.ቪ. መድሀኒት የሚከታተሉ ታካሚዎች የሚመለሱ የመረጃዎች				
የጥ.ቁ	ዝርዝር ጥያቄዎች			መልስ
101	እድሜዎ ስንት ነው?			
102	ፆታ	1= ወንድ	2= ሴት	
103	የሚኖሩበት አካባቢ	1= ገጠር	2= ከተማ	
104	የጋብቻ ሁኔታ?	1=ያላገባ/ች	2=የአገባ/ች	3=አግብቶ የፈታ/ች
	4= አግብቶ የሞተባት/በት			
105	በቤተሰብ ደረጃ የወር ገቢዎ ስንት ብር ይሆናል?			
106	የምን ብሔረሰብ ተወላጅ ኖት? 1= ኦሮሞ 2= አማራ 3= ካፋ 4= ጉራጌ 5= ትግሬ 6= ሌላ ይጠቀስ _____			
107	የትምህርት ደረጃዎ ምን ያህል ነው? 1= ምንም የመደበኛ ትምህርት ያልተማረ 2= የአንደኛ ደረጃ ትምህርት (1-8) 3= የሁለተኛ ደረጃ ትምህርት (9-12) 4= የኮሌጅ ትምህርት 5= የከፍተኛ ደረጃ ትምህርት			
108	የምን ሀይማኖት ተከታይ ኖት? 1= ኦርቶዶክስ ክርስቲያን 2= የእስልምና ሀይማኖት 3= ካቶሊክ ክርስቲያን 4= ፕሮቴስታንት ክርስቲያን 5= ይጠቀስ _____			
109	የስራ ዘርፍ? 1= የመንግስት ሰራተኛ 2= የግል ድርጅት ተቀጣሪ 3= ጊዜያዊ ሰራተኛ 4= የጉልበት ሰራተኛ 5= የግል ንግድ 6= የቤት እመቤት 7= ተማሪ 8= ሌላ ከሆነ ይጠቀስ _____			
ክፍል II. የኤች.አይ.ቪ. ምርመራና ፀረ ቫይረስ መድሀኒት አጠቃቀምን የተመለከተ መረጃ				
202	ፀረ ኤች.አይ.ቪ. መድሀኒት መጠቀም ከጀመሩ ምን ያህል ጊዜ ይሆናል? 1= አንድ አመትና ከዚያ በታች 2= ከ2 እስከ 3 ዓመት 3= ከ4 እስከ 5 አመት 4= ስድስ ዓመትና ከዚያ በላይ			
203	መጀመሪያ የኤች.አይ.ቪ. ደም ምርምራ ያደረግሃቸው/ሽው በምን መክንያት ነው? (ብዙ መልሶችን መምረጥ ይቻላል)			

	<ol style="list-style-type: none"> 1. የራሴን ጤንነት ማወቅ ስለፈለግሁ 2. በአጋጣሚ ለሌላ ህመም ምክንያት (ምሳሌ. ቲቢ) ስመረመር 3. ባል/ሚስት/የቤተሰብ አባል ቫይረሱ ስለተገኘበት 4. ባል/ሚስት/የቤተሰብ አባል በጠና ስለታመመ/ች 5. ባል/ሚስት/የቤተሰብ አባል በመሞቱ/ቷ 6. በአባልዘር በሽታ ምክንያት በክሊንክ ስለታዘዘ 7. የጋብቻ ዝግጅት ለማድረግ 8. የእርግዝና ክትትል ለማድረግ 9. በሌላ ከሆነ ይጠቀስ _____ 	
204	ቫይረሱ በደምዎ ውስጥ መገኘቱን ያለእርስዎ ፍቃድ ለሌላ ሰው የተናገረ ይኖራል ብለው ያስባሉ? 1= አዎ! 2= አይደለም!	
205	ለተራ ቁጥር 204 ጥያቄ መልስዎ “አዎ” ከሆነ ያለእርስዎ ፍቃድ ለሌላ ሰው አሳልፎ የተናገረው ማን ይሆናል ብለው ይገምታሉ? 1= የጤና ባለሙያ, 2= የቤተሰብ አባል/ ተንከባኝ/ቢዬ 3= የስራ ባልደረባ/ጓደኛ 4= ባል/ሚስት ወይም የወሲብ ወዳጅ 5= ሌላ ከሆነ ይጠቀስ_____	
206	ለመጀመሪያ ጊዜ የደም ምርመራ ያደረጉት በራስዎ ውሳኔ ነበር? 1= አዎ, ውሳኔው የራሴ ብቻ ነበር 2= ውሳኔው የራሴ ቢሆንም ግፊት የሚያደርጉ ሰዎች ግን ነበሩ 3= በሌሎች ሰዎች ግፊትና ተጽእኖ ነበር የተመረመርኩት 4= ምንም ሳላውቅ ነበር እንደመረመር የተደረገው 5= እኔ ያወቅሁት ምርመራው ተደርጎ ውጤቱ ከታወቀ በኋላ ነበር	
ክፍል III. ማህበራዊ ሁኔታዎች		
301	ባለፉት ሶስት ወራት ከማን ጋር ነበር የሚኖሩት? 1= ከባለቤቱ/የወሲብ ወዳጅ ጋር ብቻ 2= ከቤተሰብ ጋር 3= ከጓደኛ/ኞች ጋር 4= ብቻዬን ነው የምኖረው	
302	ራስዎትን ሳይጨምር ከቤት ውስጥ ስንት ሰዎች ሁነው ይኖራሉ? 1= ከ1 እስከ ሶስት 2= ከአራት እስከ አምስት 3= ስድስትና በላይ	
303	ፀረ ኤች.አይ.ቪ መድሀኒቱን ሰዓቱን ጠብቀው እንዲ ወስዱ ከቤት ውስጥ የሚያበረታታዎ ሰው አለ? 1=አዎ አለኝ 2= አይ የለኝም	
304	ኤች.አይ.ቪ በደማቸው ያለባቸው ሰዎች የመሰረቱት ማህበር አባል ነዎት? ሁነው ያወቃሉ? 1= አዎ 2= አይደለሁም 3= ቀደም ሲል ነበርኩ አሁን ግን አይደለሁም	

305	ኤች.አይ.ቪ በደምዎት ውስት በመኖሩ ባለፉት ሶስት ወራት ከሌላ አካል ድጋፍና ክብካቤ አግኝተው ያውቃሉ? 1= አዎ 2= አላውቅም	
306	በደምዎት ውስት ኤች.አይ.ቪ በመኖሩ ምክንያት ባለፉት ሶስት ወራት ድጋፍና ክብካቤ ያደረገልዎት አካል ማን ነበር? 1= የስጋ ዘመድ/ዶች 2= ጎረቤት/ቶች 3= የሀይማኖት ቡድኖች 4= መንግስታዊ ያልሆነ ድርጅት/ቶች 5= የመንግስት ድርጅት/ቶች 6= ሌላ ይጠቀስ_____	

የሚከተሉትን አረፍተ ነገሮች በጥምና ካዳመጡ በኋላ በደምዎ ውስጥ ኤች.አይ.ቪ በመኖሩ ባለፉት 12 ወራት የደረሰብዎትን የማግለል አጋጣሚዎችን አስመልክቶ በምን ያህል ደረጃ እንደሚስማሙ ይግለጹ		በጣም አልስማማም	አልስማማም	አልወሰንኩም	እስማማለሁ	በጣም እስማማለሁ
401	ከአንዳንድ ማህበራዊ ስብሰባዎች ተገልለው ነበር	(1)	(2)	(3)	(4)	(5)
402	ከሀይማኖት ተግባራት/ ስብከቶች ተገልለው ነበር	(1)	(2)	(3)	(4)	(5)
403	የቤተሰብ ጉዳዮችን እንዳይሳተፉ ተገልለው ነበር	(1)	(2)	(3)	(4)	(5)
404	ሰዎች ስለእርስዎ ያንሾካሾካሉ፣ እርስዎን ያማሉ	(1)	(2)	(3)	(4)	(5)
405	በቃላት ስድብና ማስፈራራት ደርሶቦት ያውቃል	(1)	(2)	(3)	(4)	(5)
406	በጉልበት ድብድብና ማንገራገር ደርሶቦት ያውቃል	(1)	(2)	(3)	(4)	(5)
407	ሌሎች ሰዎች እርስዎን በንዴትና በቁጣ ሰድቦዎት ያውቃሉ	(1)	(2)	(3)	(4)	(5)
408	በትዳር አጋርዎ/ወዳጅዎ አማካይነት ተጽዕኖና ጫና ደርሶቦት ነበር	(1)	(2)	(3)	(4)	(5)
409	የወሲብ እምቢታ/ክልከላ አጋጥሞት ነበር	(1)	(2)	(3)	(4)	(5)
410	በሌሎች ኤች.አይ.ቪ በደማቸው ውስጥ የሚገኝ ሰዎች መድሎ ተፈጽሞቦት ያውቃሉ	(1)	(2)	(3)	(4)	(5)
411	ባለቤት/ወዳዎ በእርስዎ ላይ የመድልዎ ተግባር ፈጽሞ/ማ ነበር/ረች	(1)	(2)	(3)	(4)	(5)
412	የሚኖሩበትን አድራሻ እንዲቀይሩ ተገደው ወይም ቤት ለመከራየት ጠይቀው ተከልክለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
413	ኤች.አይ.ቪ በደምዎ ውስጥ በመኖሩ ብቻ የገቢ ምንጭዎን ወይንም መደበኛ ስራዎን አጥተው ነበር	(1)	(2)	(3)	(4)	(5)
414	ኤች.አይ.ቪ በደምዎ ውስጥ በመኖሩ ብቻ የስራ ውድድር ወይም ቅጥር ተከልክለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
415	ኤች.አይ.ቪ በደምዎ ውስጥ በመኖሩ የስራ መደብ ለውጥ እንዲያደርጉ ወይም የደረጃ ዕድገት ክልከላ ደርሶቦታል	(1)	(2)	(3)	(4)	(5)
416	ኤች.አይ.ቪ በደምዎ ውስጥ በመኖሩ ብቻ ከሚማሩበት ትምህርት ተቋም ትምህርትዎን እንዲያቋርጡ ተገደው ወይም እንዳይማሩ ተከልክለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
417	ኤች.አይ.ቪ በደምዎ ውስጥ በመኖሩ ብቻ የጥርስ ህክምና አገልግሎት ተከልክለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
418	ቫይረሱ በደምዎ ውስጥ በመኖሩ ብቻ የቤተሰብ ምጣኔ አገልግሎት ተከልክለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
501	ቫይረሱ በደምዎ ውስጥ በመኖሩ ሀፍረት ይሰማዎታል	(1)	(2)	(3)	(4)	(5)
502	ቫይረሱ በደምዎ ውስጥ በመኖሩ ውርደት ይሰማዎታል	(1)	(2)	(3)	(4)	(5)
503	ቫይረሱ በደምዎ ውስጥ በመኖሩ በራስ መተማመን ቀንሷል	(1)	(2)	(3)	(4)	(5)
504	ቫይረሱ በደምዎ ውስጥ በመገኘቱ ራዎን ይወቅሳሉ	(1)	(2)	(3)	(4)	(5)

505	ቫይረሱ በደም ውስጥ በመገኘቱ ሌሎችን ይወቅሳሉ	(1)	(2)	(3)	(4)	(5)
506	ቫይረሱ በደም ውስጥ በመገኘቱ ራዎን ለማጥፋት ሞክረው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
507	ቫይረሱ በደም ውስጥ በመገኘቱ ቅጣቱ ይገባኛል ብለው ያስባሉ	(1)	(2)	(3)	(4)	(5)
508	ቫይረሱ በደም ውስጥ በመገኘቱ ማህበራዊ ስብሰባዎች ላይ መሳተፍ የለብኝም ብለው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
509	ቫይረሱ በደም ውስጥ በመገኘቱ ጋብቻ መፈጸም የለብኝም ብለው ወስነው ያውቃሉ	(1)	(2)	(3)	(4)	(5)
510	ቫይረሱ በደም ውስጥ በመገኘቱ ወሲብ መፈጸም የለብኝም ብለው ወስነዋል	(1)	(2)	(3)	(4)	(5)
511	ቫይረሱ በደም ውስጥ በመገኘቱ ልጅ መውለድ የለብኝም መፈጸም የለብኝም ብለው ወስነዋል	(1)	(2)	(3)	(4)	(5)
512	ቫይረሱ በደም ውስጥ በመገኘቱ ስራ መስራትን ማቆም አለብኝ ብለው ወስነዋል	(1)	(2)	(3)	(4)	(5)
513	ቫይረሱ በደም ውስጥ በመገኘቱ ትምህርቱን አቋርጣለሁ ወይም ስልጠናዬን አቆማለሁ ብለው ወስነዋል	(1)	(2)	(3)	(4)	(5)
514	ቫይረሱ በደም ውስጥ በመገኘቱ የሰዎች መጠቋቋሚያ/ ማንሸካሸኪያ እሆናለሁ ብለው ይሰጋሉ	(1)	(2)	(3)	(4)	(5)
515	ቫይረሱ በደም ውስጥ በመገኘቱ ሰዎች በቃላት ይሰድቡኛል ብለው ይሰጋሉ	(1)	(2)	(3)	(4)	(5)
516	ቫይረሱ በደም ውስጥ በመገኘቱ ሰዎች በጉልበት ያስፈራሩኛል ብለው ይሰጋሉ	(1)	(2)	(3)	(4)	(5)
517	ቫይረሱ በደም ውስጥ በመገኘቱ የወሲብ ወዳጅ ሊሆነኝ የሚፈልግ ሰው አላገኝም ብለው ይሰጋሉ	(1)	(2)	(3)	(4)	(5)
601	የሚቀርቡኝና ቫይረሱ በደም ውስጥ መኖሩን የሚያውቁ ሰዎች ለማንም እንዳይናገሩብኝና ምስጥሬን እንዲጠብቁ ነግሬያቸዋለሁ	(1)	(2)	(3)	(4)	(5)
602	ቫይረሱ በደም ውስጥ መኖሩን የሰሙ ሰዎች ለሌላ ሰው ይነግሩብኛል ብዬ እጨነቃለሁ	(1)	(2)	(3)	(4)	(5)
603	ቫይረሱ በደም ውስጥ መኖሩን ካወቁ ሰዎች የሚፈሩኝ ይመስለኛል	(1)	(2)	(3)	(4)	(5)
604	ቫይረሱ በደም ውስጥ መኖሩን ማንም ሰው እንዳያውቅብኝ ጠንክራ እሰራለሁ	(1)	(2)	(3)	(4)	(5)
605	ቫይረሱ በደም ውስጥ መኖሩን ካወቅሁ ጊዜ ጀምሮ ሰዎች መድሎ ይፈጽሙብኛል ብዬ እጨነቃለሁ	(1)	(2)	(3)	(4)	(5)
606	ቫይረሱ በደም ውስጥ በመገኘቱ የወራዳነት ስሜት ይሰማኛል	(1)	(2)	(3)	(4)	(5)
607	ቫይረሱ በደም ውስጥ በመገኘቱ የክፉ ሰው ስሜት እንዲሰማኝ አድርጓል	(1)	(2)	(3)	(4)	(5)
608	በኖርኩባቸው በበርካታ አካባቢዎች ቫይረሱ በደም ውስጥ መገኘቱን ማንም ሰው አያውቅም	(1)	(2)	(3)	(4)	(5)
609	ቫይረሱ በደም ውስጥ መገኘቱ የቆሽሽ ሰው አድርጌ ራሴን እንድመለከት አድርጎኛል	(1)	(2)	(3)	(4)	(5)
610	በቫይረሱ መያዘ ለአኗኗሪ ተመጣጣኝ ቅጣት ስለሆነ መቀበል እንዳለብኝ ሰዎች ነግረውኛል	(1)	(2)	(3)	(4)	(5)

የመጠይቆቹ መጨረሻ

መጠይቆቹን በመመለስ ስለተባበሩን በጅማ ዩኒቨርሲቲ ስም እጅግ አድርጌ አመሰግናለሁ

Annex 5. Research question Afan Oromo Version

Kuta I. Socio demographic characteristics of the ART Client		
Q.no.	Gaafilee maamiltoota ART buufata fayyaa Jimmaa, Hospitaala shaman gibe fi clinika ART Hospitaala addaa yunivarsitii jimmaa tiin deebi'uu qaban	Answer
101	Umrii waggadhaan	
102	Saala 1= dhiiraa 2= dubara	
103	Iddoo jireenyaa 1= Magaalaa 2= Baadiyyaa	
104	Haala fuudhaafi heerumaa? 1= Hin heerumne/fuune 2= Herumte/fudhe 3= Kanhikike 4= Abbaan manna/ haati manaa irraa du'e/duute	
105	Galiin ji'arraa argattu qarshii/Birr meeppa ta'a?	
106	Sabni kee maali? 1= Oromo 2= Amaara 3= Kaffaa 4= Guraagee 5= Tigree 6= Kanbiroo (Ifa godhi_____)	
107	Sadarkaan barnoota keeti maali? 1= Hin baraane 2= Sadarkaa gad-aananaa (kutaa 1-8) 3= Sadarkaa lammaffaa (kutaa 9-12) 4= Barnoota kolleejii 5= Barnoota ol-aanoo 6= Kanbiroo (Ifa godhi_____)	
108	Amantaan kee maali? 1= Orthodoxii, 2= Musluma 3=Katholikii 4=Proteestaantii 5= Kanbiroo (Ifa godhi_____)	
109	Hujiin kee maali? 1= Hojjetaa mootumma 2= Hojjetaa dhaabata dhuunfaa 3=Dafaan nula 4=Daldaalaa 5= Barataa 6= Haadha manaa 7= Kanbiroo (Ifa godhi_____)	
Kuta 2. Qoraanoo HIV tifi ittii fayyadamaa ART		
201	Dawaa HIV (ART) yoom eegalte (Ji'aan ykn waggaaan?) 1= Waggaa tokko gaheera, 2= waggaa 2-3 gahe 3= Waggaa 4-5 gahe 4= Waggaa 6 fi isan ol.	
202	Sababnii qorannoo HIV gooteef maali? 1= Waanin of baruu barbaadeef 2=Mallattoo HIVn walqabataniin shakkmee 'refer' waan ta'eefi (Fk. TB) 3= Qadhimaan/jaalalleen/maatii keessaa namni HIV qabu waan jiruufi 4= Qdhimaan/jaalalleen /miseensa maatii keessaa waan dhukkubeeffi	

	<p>5= Haatimanaa/jiaalallee/ garee maati keessaa waan du'aniif 6=Sababa nafa saalaa (STI) tiif kilinikni "referi" godhee.</p> <p>7= Qophii fuudhaatiif ykn jalallee walqunnamtii saalaatiif qopa'uuf. 8= Ulfaan walqabaatee</p> <p>9= Kanbiroo (Ifa godhi_____)</p>	
203	<p>Hayyama keetiin malee, HIV qabaachuun kee himamee beekaa? 1= Eeyye 2= lakki:</p>	
204	<p>Yoo deebiin gaafii 204 'eeyye' ta'e kan iccitii kee hayyama kee malee baase eennu jettee yaadda? 1=Ogeeyyii fayyaa, 2= Maatii/ nama isa kunuunsu 3= Haatimanaa/jiaalallee</p> <p>4= Kanbiroo (Ifa godhi_____)</p>	
205	<p>Dura HIV qoratamtu, murtii qorannoo kana situ dabarfatee (murteeffatee)?</p> <p>1= Eeyyee, qoratamuudhaaf murtii natu dabarfate. 2= Akkan qoratamu natu murteeffate, garuu dhiibbaan qaama biraa jira. 3= Akkan HIV qoratamu godhame 4= Odoo ani hinbeekin naqoratan</p> <p>5= Eega qorannoon naaf gaggeeffamen arge</p>	
Kuta 3. Rakkoo hawaasummaa		
301	<p>Ji'oota jahan dabran eennuun waliin jiraataa turte? 1= niitii/abaa mana koo waliin 2= maatii waliin 3= hiriyoota koo waliin 4= addan jiraadhe 5= Kanbiroo (Ifa godhi_____)</p>	
302	<p>Namoota meeqq waliin jiraatta? (<i>odoo of itti hind eda'in</i>) 1= takkorra hanga sadihii</p> <p>2= Afurirraa hanga shanii 3= Jahaa fi isaa ol</p>	
303	<p>Akka qoricha HIV (ART) fudhattu nama yeroo hunda sijajjabeessi niqabda? 1=eeyyee 2=lakki</p>	
304	<p>Waldaha namoota dhukubba HIV waliin jirataanii keessatti miseensa taatee jirtaa?</p> <p>1=Eeyyee 2=lakki</p>	
305	<p>Ji'a sadeen darban keessaa sababa HIV qabduuf qaama alaatiin gargaarsa kamuu argattee jirtaa?</p> <p>1=Eeyyee 2=lakki</p>	
306	<p>Ji'a sadeen darban keessaa sababa HIV qabaachuu keetif eennurraa (Qaama kamirra) gargararsa argatte?</p> <p>1= Firra irraa 2= Olla irraa 3= garee amantii irraa 4= NGO (dhaabbata mit-mootuma) irraa</p> <p>5= Dhaaabbata mootumma irraa 6= Kanbiroo (Ifa godhi_____)</p>	

Sababa HIV qabachu keetiif Ji'a 12n dabran keessatti muuxannoo loogummaa namni biro sirraan ga'e ibsi		Baayyee irti hin amanu	Irti hin amanu	Hin murteessine	Irtin amana	Baayyee irti amana
401	Walgahii hawaasatti akka hin hirmaanne sidhoorguu (dhorgamte)	(1)	(2)	(3)	(4)	(5)
402	Iddoo amantaan ittigaggeeffamturraa sibaasuu (Sidhoorgu)	(1)	(2)	(3)	(4)	(5)
403	Hojji maatiin kee dalagurra sidhoorguu.	(1)	(2)	(3)	(4)	(5)
404	Hamatamuu kee hubatee jirta	(1)	(2)	(3)	(4)	(5)
405	Affaaniin arrabsamtee	(1)	(2)	(3)	(4)	(5)
406	Qama/dhaqna kee simiidhanii	(1)	(2)	(3)	(4)	(5)
407	Qama kee rukutamtee beeytaa	(1)	(2)	(3)	(4)	(5)
408	Haadha manaa/abaa mana/jaalallee tiin dhiibbaa sirra ga'er	(1)	(2)	(3)	(4)	(5)
409	Sababa HIV qabduuf, muuxanno walqunnamtii saalaa sididuun sirra gahe	(1)	(2)	(3)	(4)	(5)
410	Namoota biroo HIV qabaaniin loogummaan/fanfansuun sirra gahe.	(1)	(2)	(3)	(4)	(5)
411	Sababa ati HIV qabduuf muuxannoon loogumma Haadha manaa/abaa mana/jaalallee tee mudate (mudate)	(1)	(2)	(3)	(4)	(5)
412	Iddoo jireenyaa akka gad lakkistee deemtu ykn iddoo/mana jireenya akka hin kireeffanne dhiibbaa godhame	(1)	(2)	(3)	(4)	(5)
413	Waan HIV qabduuf hojii dhabuu/madda galii dhabuun simudatee	(1)	(2)	(3)	(4)	(5)
414	Sababa ati HIV qabduuf, siqaacaruu diduu/carra hojjii sidhoorguu.	(1)	(2)	(3)	(4)	(5)
415	Sababa ati HIV qabduuf iddoo hojii keetii, haala hojii keetii jijjiiruu ykn sadarkaa guddinaa sidhoorgachuu.	(1)	(2)	(3)	(4)	(5)
416	Sababa ati HIV qabduuf, dhaabbata barnoota itti baraturraa ari'amtee/ dhoorgamte	(1)	(2)	(3)	(4)	(5)
417	Sababa ati HIV qabduuf, tajaajila fayyaa ilkaanii didamte (dhabde)	(1)	(2)	(3)	(4)	(5)
418	Sababa ati HIV qabduuf, tajaajila karoora maatii didamte (dhoorgamte/dhabde)	(1)	(2)	(3)	(4)	(5)
501	HIV qabaachuu kootiif nan yeella'a/ qaanefadha,	(1)	(2)	(3)	(4)	(5)

502	HIV qabaachuu kootiif yakkamaa ta'uu koottu natti dhagahama	(1)	(2)	(3)	(4)	(5)
503	Sababa HIV qabuuf uffitti amanamummaan koo xiqqaadha,	(1)	(2)	(3)	(4)	(5)
504	HIV qabaachuu kootif uffitin gadda/ uffin abaara	(1)	(2)	(3)	(4)	(5)
505	HIV qabaachuu kootif namoota birrattin abaara/ gadda	(1)	(2)	(3)	(4)	(5)
506	HIV qabaachuu kootif of-ajjeessutu natti dhagahama.	(1)	(2)	(3)	(4)	(5)
507	HIV qabaachuu kootif akkan adabamu natti dhagahama	(1)	(2)	(3)	(4)	(5)
508	Waltajjii hawaasarratti akka hin hirmaanne murteeffadhen jira	(1)	(2)	(3)	(4)	(5)
509	HIV waanan (gatiin) qabuuf , akka fuudhuu/heerumuu hindandeenye murteessen jira.	(1)	(2)	(3)	(4)	(5)
510	HIV waanan (gatiin) qabuuf , walqunnamtii saalaa akka hingoone murteessen jira.	(1)	(2)	(3)	(4)	(5)
511	HIV waanan (gatiin) qabuuf, akka daa'ima/ijoollee argachuu hinqabne murteessen jira,	(1)	(2)	(3)	(4)	(5)
512	HIV waanan (gatiin) qabuuf, HIV waanan (gatiin) qabuuf hojii akkan dhaabu murteessen jira	(1)	(2)	(3)	(4)	(5)
513	HIV waanan (gatiin) qabuuf, barnoota ykn leenjii dhiisuu/addaan muruu murteessen jira,	(1)	(2)	(3)	(4)	(5)
514	HIV qabaachuu kootiif, namooni nahamatan jedhen sodaadha,	(1)	(2)	(3)	(4)	(5)
515	HIV qabaachuu kootiif, namoonni jechaan na'arrabsan jedhen sodaadha,	(1)	(2)	(3)	(4)	(5)
516	HIV qabaachuu kootiif, namooni birroo qaama koo midhuu ykn natumu jedhen sodaadha,	(1)	(2)	(3)	(4)	(5)
517	HIV qabaachuu kootiif, qadhimaa (jaalallee walqunnamti saalaa) naaf ta'uuf fedhii hinqaban jdhen sodadha,	(1)	(2)	(3)	(4)	(5)
601	HIV qabaachuu koo akka iccitii koo eeganitti namoota natti dhiyaatanitti nan hima.	(1)	(2)	(3)	(4)	(5)
602	Namoonni HIV qabaachuu koo beekan nama biratti najalaa himu jedhee rakkadha,	(1)	(2)	(3)	(4)	(5)
603	HIV qabaachuu koo yoo beekan namoonni nasodaatan seya.	(1)	(2)	(3)	(4)	(5)
604	Iccitii HIV qabaachuu koo eeggachuuf ciminaan hojjedha,	(1)	(2)	(3)	(4)	(5)
605	Yoo HIV qabaachu koo beekan, namoonni loogii narratti gaggeessan jedhee rakkadha/ yaada.	(1)	(2)	(3)	(4)	(5)
606	Sababa HIV qabuuf leeyya'aa/qaana'a ta'uu natti dhagahama.	(1)	(2)	(3)	(4)	(5)

607	HIV qabaachuun akka ani nama badaa ta'uu koo natti dhagahamu nagochee jira.	(1)	(2)	(3)	(4)	(5)
608	Iddoo jiraadhe kamittuu/ hundattuu, namni tokkolleen HIV qabaachuu hin beekan	(1)	(2)	(3)	(4)	(5)
609	HIV qabaachuun, qulqulluu tahuu dhabuu koo ttuu natti dhagahama.	(1)	(2)	(3)	(4)	(5)
610	Haala ati jireenya jiraachaa turtetu HIV kana siqabsisse jedhanii namoonni naaf himan.	(1)	(2)	(3)	(4)	(5)

Dhuuma gaffii

Declaration

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

Name: _____

Name of the institution: **Jimma University**

Date of Submission: _____

Signature: _____

This thesis is submitted with my approval as university advisor

Name and Signature of the first advisor _____

Name and Signature of the second advisor _____
