Quality of Antiretroviral Treatment Services in Woliso Town, South West Shoa Zone, Central Ethiopia

By

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Thanks to 'Almighty of God' the beginning and ending of all things.

List of Abbreviations

AIDS	Acquired Immune- Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
CDC-	Communicable Disease Control
FGAE	Family Guidance Association of Ethiopia
FMOH	Federal Ministry of Health
HAART	Highly Active Antiretroviral Therapy
HC	Health Center
HCT	HIV Counseling and Testing
HF	Health facility
HIV	Human Immunodeficiency Virus
MDG	Millennium Development Goal
MOS-	Medical Outcome Study
OI-	Opportunistic Infections
NNRTIs	Non-nucleoside Reverse Transcriptase Inhibitors
PLWHA	People Living With Human Immune Deficiency Virus/ Acquired Immune- Deficiency Syndrome
PMAQ-	Patient Medication Adherence Questionnaire
UNGASS-	United Nations General Assembly Special Session
USAID	United State Agency International Development
WHO	World Health Organization

Abstract

Background: - Quality of clinical care is fundamental to achieve the goal of antiretroviral treatment services. But it is not known due to different factors especially in developing countries like Ethiopia. The objective of this study is to assess quality of antiretroviral treatment services by using Donabedian quality model in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia.

Methods: - Facility based cross sectional study by using both quantitative and qualitative methods of data collection were undertaken from 1-30 March/2011. A total of 324 clients on antiretroviral treatment from two health facilities were included in the study by using consecutive sampling technique in Woliso town health facilities. Total sample size was proportionally allocated to each health facility. Pre-tested instruments were used for data collection and data were analyzed by using SPSS version 16. Factor score was computed for the items identified to represent perception scale by Varimax rotation methods. Factor mean score was used to describe overall satisfaction level of client's on quality of ART services, and multiple linear regressions with stepwise method was used to identify independent predictors of overall satisfaction. Binary logistic regression with forward likelyhood method was undertaken to predict independent variable for adherence to ARV drugs. 50% of quantitative study for record review and observation of consultation session with health providers were carried out with additional in-depth interview with clients and health providers after informed written consent was taken from participants.

Result: - Minimum package requirements for provision of antiretroviral treatment were fulfilled as guideline except some limitation. A total of 314 (96.7%) participants were willing to response the questionnaire. The mean score level of overall client satisfaction was found to be 12.92±2 (86.1%). Perceived technical competence (β=0.127), perceived availability of basic resources for provision of antiretroviral treatment service (β=0.125), perception and knowledge of clients on ARV drugs (β=0.192) and perceived confidentiality of medical record (β=0.222) were the main positive independent predictors of overall satisfaction of client on quality of ART services at p-value less than 0.05. Adherence rate at 95% in past seven days was 93%. On the others hand perceived technical competence [OR, 1.285, 95% CL, 1.079-1.531] and convenience of opening hours [OR, 1.561, 95% CI, 1.061-2.293] were the main independent predictors of adherence to ARV drugs at p-value<0.05.

Conclusion and Recommendation; - Gaps exists on some structural requirement for provision of ART service differently in both health facilities. Perceived technical competence, perceived availability of basic resources for ART provision, perception and knowledge of clients on ARV drugs, perceived convenient of opening hours, perceived confidentiality of medical record were the main findings that need special attention for sustainability of quality of ART service. Continous health education, waiting area, separated room, and nutritional support should avail for clients.

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CHAPTER ONE

1.1. Introduction

Quality in health care has been defined in different ways. Quality means "doing the right thing right the first time and doing it better the next". Different scholars define quality from different perspective. From provider perspective "providing the best possible care available to the patient", from patient perspective "getting my care when and where I need it and from whomever I choice to cure my condition the fastest possible way". From perspective of administrator "provide effective care in cost-conscious environment that may include the rationing of health care, especially when resources are limited". So, one quickly realizes that quality has different meaning for different health care player [1].

Good quality means either meeting minimal standards for adequate care or achieving high standards of excellence. It includes the technical quality of care to the non-technical aspects of service delivery such as client's waiting time and staff attitudes, and to programmatic elements such as policies, infrastructures, access, and management [2].

Operationally, quality of care is a multidimensional concept that can be assessed by measures of the structure, process and outcome of care. More effective and more appropriate processes between provider and patient improve health outcomes. Better facilities, equipment, staffing, and training affect outcomes indirectly by improving processes. Evaluation of structure, process, and outcome allows assessment of the quality of care. Important dimensions of clinical quality include efficacy, appropriateness, accessibility, acceptability, effectiveness, efficiency and continuity. Both technical care and management of the interpersonal relationship must be considered while assessing quality of care. The goal of quality assurance is to improve the outcomes of patients, and ultimately, improving the quality of care can benefit not only individuals, but can improve the health and productivity of communities [3].

The discovery of antiretroviral therapy has been one of the" greatest successes" in the history of medicine [4]. It has been almost 20 years since HIV changed from deadly disease to chronic manageable disease. Combination of antiretroviral therapy (ART), or highly active antiretroviral therapy (HAART), is the cornerstone of management of patients with HIV infection [5].The primary goals of antiretroviral therapy are preventing

HIV-related morbidity and improving quality of life, reducing mortality and improving survival, restore and preserve immunologic function, maximally suppress viral load, ultimately preventing mother to child transmission and accidental HIV infection within health institutions [5,6].

National wise to mitigate the epidemic different efforts/strategies have been in place, and running different programme like formulation of HIV policy, guidelines for implementation of antiretroviral treatment and different guidelines on prevention and control of the epidemic on voluntary counseling and testing (VCT), provider initiation HIV counseling and testing (PIHCT), integrating the delivery of antenatal, delivery and postnatal care prevention mother to child transmission (PMTCT), prevention of sexual transmission infection (STI), condom promotion and distribution and blood safety have been in place up to community level to stabilize the spread of the viruses [7-10].

In 2003, the Government of Ethiopia introduced ART programme and launched free ART in 2005, by rapid expansion of ART services at both hospital and health centers in most parts of the country over the last five years has greatly contributed to improved coverage of treatment, especially through the reduction of the cost of transportation which is a barrier to many PLWHA **i**n small towns and rural areas or for those un access to treatment [11, 12].

Currently 511 health facilities (142 hospitals and 369 health centers) were providing ART service throughout the country; which translates 91% of the hospitals and 52% of governmental and nongovernmental the health centers [10, 12].

Oromia is one of the largest Region, shares the burden of the epidemic and running both treatment and prevention programme of HIV services .A total of 30 hospitals and 114 Health centers have started ART services in Oromia Regional State [13].To ensure sustainability of the service quality of treatment care is essential through availing structural requirement for provision of the services and the ways of giving care for clients based on their needs in order to harvest expected treatment outcome throughout nation. So, assessment of quality of antiretroviral treatment is backbone for ARV drug users, programme implementer, and health managers in all programme levels to hamper the consequence of the treatment.

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1.2. Statement of the problem

Since the cases of AIDS observed over 60 million people had been infected with HIV, and 25 million died worldwide [14].Globally in 2009, 33.3 million people are living with the virus, 2.1 million newly infected and 1.8 million were died. Sub-Saharan Africa shares 68% (22.5million) of global burden and 72% death [4].

The first HIV infection in Ethiopia was reported in 1984 from stored sera which later expended as an epidemic similar to elsewhere in sub-Saharan Africa [15].Ethiopia has one of the largest people of HIV infected in the world estimated 1.2 million people living with HIV, with the estimated adult HIV prevalence 2.4% and 397,818 people need ART, in Oromia Region estimation of 287, 301 people living with HIV, adult prevalence 1.6% and 95,515 need ART [16, 17].

The epidemic of HIV remains the leading cause of death worldwide and primary cause of death in Sub-Saharan Africa including Ethiopia. [18]

The epidemic has created severe burden on individuals, families, communities and nations, and the scale of the pandemic has also shifted HIV/AIDS to developmental crisis than just merely being public health problem. HIV/AIDS affect the economy by effect on labor supply, reductions on saving and investment as a result of increased demand and expenditure of health care and shift in public expenditure from investment to health care [19].

The innovations of antiretroviral drugs and provision of treatment inhibit the extent of the burden. But there are many challenges in successfully scaling-up ART, ensuring access to care and reorienting service delivery towards chronic disease care. Weakened and overloaded health systems threaten the quality of care and patient satisfaction levels, which can, in turn, seriously lessen the chances of a successfully confronting AIDS [20].

Quality of care and the resulting patient satisfaction influence care seeking behavior and determine the demand for health services. If patients experience dissatisfaction with the quality of care they receive, they may not adhere to treatment regimen, or they may fail to attend follow-up visits. For patients suffering from HIV/AIDS in particular adherence to regimen and strict follow up schedules play a central role in treatment success. Therefore, the quality of care and patient satisfaction underpin the success of public

health policies in enhancing access to care, especially for policies targeted at promoting access to ART [19, 21].

Globally the numbers of client on ART increases in high rate from time to time both in developed and developing countries. In 2009, 5, 250, 400 people were receiving antiretroviral therapy in low- and middle income countries, an increase of over 1.2 million people from December 2008. In Sub-Saharan Africa 3.91 million people was received ART in 2009 [22].

In Ethiopia up to 2009.more than 241, 236 people ever started ART and 176,644 currently on ART. ART coverage increased from 46% in 2008 to 53% 2009 [11].

Even though rapid incremental of coverage of ART services within the country, number of clients were lost to follow up from treatment. Study shows that nationally from a total of 97,258 patients enrolled into ARV treatment between September 2003 and August 2007, 24,038 (25%) were lost to follow up during the same period. Majority of them lost to follow up (44%) within 3 to 6 months from start of ART and 26% within 6 to 12 months. The reason of lost to follow up (discontinuing treatment) as reported from patients were economic problem, seeking wholly water or religious treatment, fear of drug side effects and poor patient handling [11].

Oromia is one of the largest Region, shares the burden of the epidemic and running both treatment and prevention programme of HIV services. According to Regional Health Bureau2010 performance report, there were 85,819 HIV clients eligible for ART of which 62,512 (73%) had on ART at the end of the year. During the year there were 37,539 detected HIV cases, and about 16,736 people were started ART within the year [23].

According to Oromia Regional Health Bureau monthly report of October 2010 total of 2,242 clients lost to follow up from treatment, and 18.2% of clients on ART were lost from Woliso town health facilities [24].Unless lose to follow up from treatment regimen mitigated, it will bring second irreversible economic crisis for individuals, communities and country by harvesting drug resistance virus. Doing studies on quality of care helps to identify gap between client's expectation and what has been providing for them from institution. Unless user expectation and available service inter related , it brings dissatisfaction on services and non adherence to treatment, which open the door for

immunological failure and drug resistance end up for increase the rate of morbidity and mortality.

So, better facilities, equipment, availability of drugs, staffing and training determine outcome through improving process which is the direct measure of quality. Therefore, beside the expansion of the service knowing the quality of service is essential to hamper treatment failure, and build prolong productive individual after initiation of antiretroviral treatment and contribute for achievement of millennium development goal (MDG).

To date, no studies have been assessed quality of ART services at Woliso town health facilities. This study attention is to assess the quality of ART services in health facilities in Woliso Town by using Donabedian quality model.

CHAPTER TWO

Literature review

According to simple system theory as it was applied to health care by Donabedian (1966) , each health care system can be divided into three components (elements of quality) for inference of information; structure, process and outcome.

Structure; denotes the attributes of the settings in which care occurs. This includes the attributes of material resources (such as facilities, equipment, and drugs), of human resources (such as the number and qualifications of personnel), and of organizational structure (such as medical staff organisation, methods of peer review, and methods of reimbursement).

Structural measures are the easiest to obtain and most commonly used in studies of quality in developing countries. Evaluations have revealed shortages in medical staff, medications and other important supplies, and facilities, but material measures of structure, perhaps surprisingly, are not causally related to better health outcomes. More pleasant environment may be conducive to better-quality care the evidence indicates only a weak link between such structural elements and better health outcomes [25]. It is a blunt approximation of process or outcomes; structural improvements by themselves rarely improve the health of a population.

Process – Process denotes what is actually done in giving and receiving care. It includes the patient's activities in seeking care and carrying it out as well as the practitioner's activities in making a diagnosis, treatment, education and recommending or implementing treatment.

Outcome denotes the effects of care on the health status of patients and populations. Improvements in the patient's knowledge and salutary changes in the patient's behaviour, and the degree of the patient's satisfaction with care and adhere to prescribed medication [1]. Donabedian model assumes that a desirable outcome is much more likely if the structural aspects of the health care setting (e.g. proper facilities and equipment) and the processes used in providing the care meet adequate standards. Much of contemporary quality assessment is based on this model [26].

Within this dimension structural and process quality were assessed by assessing the minimum package requirement for implementation of antiretroviral treatment and its implementation respectively. Client satisfaction and adherence to antiretroviral treatment considered to measure outcome quality of antiretroviral treatment. The three dimension of quality of care are inter related only if good structure increases the likelihood of good process, and good process increases the likelihood of a good outcome [27,28].

Studies show that client satisfaction is one measure or indicator of quality of healthcare services**.** Satisfaction is a psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with consumer's prior feelings about the consumption experience[29].While Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his /her perception of the real care him /her receives[30].

Client satisfaction with treatment processes may influence, and be influenced by, treatment outcomes. Clients who are not satisfied with a service may have worse outcomes than others because they miss more appointments, leave against advice or fail to follow through on treatment plans. It is worth keeping in mind that satisfaction with the treatment processes, treatment compliance, and positive treatment outcomes are inter- related. Ratings of different dimensions of satisfaction have been highly correlated in some studies, and scores on these dimensions have been added to yield overall satisfaction ratings. However, responses to specific items are of interest to service providers who want to find out how a particular aspect of the service could be improved [30].

Studies showed that patient satisfaction and adherence is one of the outcome measures of patient care [29, 31]. Patient satisfaction had been an important issue for health care managers and health care providers [32].

Various dimensions of patient satisfaction have been identified, ranging from admission to discharge services, as well as from medical care to interpersonal communication. Well-recognized criteria include responsiveness, communication, attitude, clinical skills, comforting skills and food service [33]. Several factors including patient's age, educational level, health status and the severity of illness influence satisfaction on care services [34, 35]. The relationship between health care providers and patients (interpersonal skills) has most influential factor for patient satisfaction [36].

Study indicated that the physical setting of services, information resources, and the competence of counselors, the costs of service, accessibility of services, helpfulness of support staff, the relevance of services to their needs, waiting times for service components, frequency of appointments, time spent with counselor, the 'humanness' of services, the effectiveness of services [30], shortage of OI drugs (4.20%).8.88% inadequate supply of ART drugs and 21.48% cleanliness of the room (37), shortage of

staff, long distances and poor referring system were reason for client's dissatisfaction and adherence to antiretroviral treatment [38].

Indian studyin 2010 shows overall waiting time to meet health providers is (30min), ART Counselors spent less than 20 minutes with the majority (90%) of participants and Doctors spent less than 10 minutes with the majority (85%) of participants. The majority of participants found ART counselors sympathetic (84.4%), counselling session private (74.3%), and high level interaction with counsellor (94 %). 30% of participants were not informed about HIV testing for spouses/partners and children; CD4 tests to assess eligibility for ART was not discussed with 46 % of participants; and the need for regular follow-up for ART was not mentioned to a third of the participants. Linking clients with PLWHA network members for support was done for less than a quarter (24%) of the participants. Almost a third of the participants felt counselors did not encourage asking of questions (30%), and 41% of participants felt that doctors did not encourage questions [37].

South Africa study in 2008 shows less positive picture of patient satisfaction with shortage of human resources and waiting times was most important predictor of discontent among ART patients [20].

Study in Addis Ababa Hospital in 2009 at specialist antiretroviral therapy (ART) units shows long waiting time (82.5%), lack of description about antiretroviral therapy drugs (45.20%), staffs impoliteness (22.40%), 18.02% wanted comfort waiting hall, 14.32% expecting staffs politeness, 5.18% insisted sufficient number of ART units [39].Amhara Region study indicates in 2009 long waiting time, lack of OI drugs, absence of CD4 count machine and shortages of human power and inadequate laboratory were reasons of client dissatisfaction [40, 41].

Adherence

Adherence is defined as the extent to which a person's behaviour in terms of taking medications, following a diet, and executing lifestyle changes follows agreed recommendations from a health care provider [42]. In ART it implies taking the drugs in the right quantities, at the right time, and following dietary and other lifestyle changes for a lifetime. To obtain a successful treatment outcome the current treatment for HIV/AIDS requires adherence levels of greater than 95% of their doses (i.e. missing less

than 3 doses in a month). If a patient is taking less than 95% of their doses, they are at risk for developing viral resistance and ultimately treatment failure [43, 44].

Near-perfect adherence to ART is needed to keep the correct amount of the drugs in the bodies to fight the virus. With optimal adherence rates, studies have demonstrated that ART can suppress the viral load to undetectable levels, boost the immune system by increasing the number of CD4 cells, and improve the quality of life of PLWHAS [45, 46].

However, the virus is never completely eliminated from the body, and hence an inability to sustain a minimum 95% adherence rate has been associated with increases in the viral load [31]. Non-adherence can lead to inadequate halting of the multiplication of the virus, continued damage to the immune system, progression of HIV/AIDS, and the development of drug resistance to ART medications. [47].

Adherence rates were inversely proportional to the number of pills, capsules or tablets necessary for treatment [43].

Study in India in 2009 shows of 14% of respondent's non-adherence to ART and 70% of them cited distance and economic factors as the reasons for non-adherence [38].

Study in Papua New Guinea in 2010 examined that 62 % of participants reported complete adherence (no missed or late doses in the past week) and 79% reported not missing any doses in the last week [48].

Study in Guatemala City in 2010 shows 122 patients were interviewed mean adherence by pill count was 97%. A total of 108 (89%) had adherence ≥95% using self-reports. Family and spousal support for treatment were significantly associated with ≥95% adherence and forgetfulness, leaving medications at home and inability to travel to the clinic were reason for missing medications, and only 51 patients (41.8%) reported always having sufficient economic resources to reach the clinic for appointments and to refill prescriptions [49].

Qualitative study in Zambia 1n 2008 explores barriers of adherence to ART were lack of communication and information about ART, inadequate time during consultations, lack of follow-up and counselling, forgetfulness, stigma, discrimination and disclosure of HIV status, lack of confidentiality in the treatment centers, and lack of nutritional support [50].

In Nigeria reason of non adherence were cost of therapy, medication side effects, non availability of ARV drugs, and fear of stigma of taking the drugs [51].

Study found that physician-patient relationship quality was potentially important point of intervention to improve patients' medication adherence [52].

Study conducted national wide shows of 58,405 patients who ever started ART in December 2006, 46,045 (78.8%) patients were adhering to treatment during that month which is below the standard [53].Amhara region study in 2009 revealed that 92.4% of respondents were complied with greater than 95% of their drugs prescribed in the past seven days. Patients who were on treatment for 13-24 months were found to be more adhere when compared with patients who were on treatment for 3-6 months. 51.9% of the participants were CD4 account less than 200. The main reason for non-adherence mentioned by health professional were drug side effect, lack of knowledge of patients, forgetfulness, social problem, coming from out of catchment area, religion. Fear of stigma and discrimination, disclosure problem, holy water, poor adherence counseling, and being without support [40]. Other study in the same area in 2009 revealed that majority of respondents were female (54%), Urban resident (57%), initial CD4 count (baseline) >200cells/µl for 43.3%, and 60.4% for recent count, average patients satisfaction on services was 78%(3.9 out of 5), and >95% adherence rate was 97.7%. record review shows functional status documented during enrollment for 70.1% [54].Other study conducted in Addis Ababa in 2006 proportion of patients with good adherence was 81.2% [55].

Study conducted in Yirgalem Hospital in 2008 shows prevalence of adherence to ARV in the week before interview was 74.2%. Main reasons of non-adherence cited by the patients were; being busy or simply forgetting (51%), change in daily routine (9.4%), and being away from home (8.3%) [56].

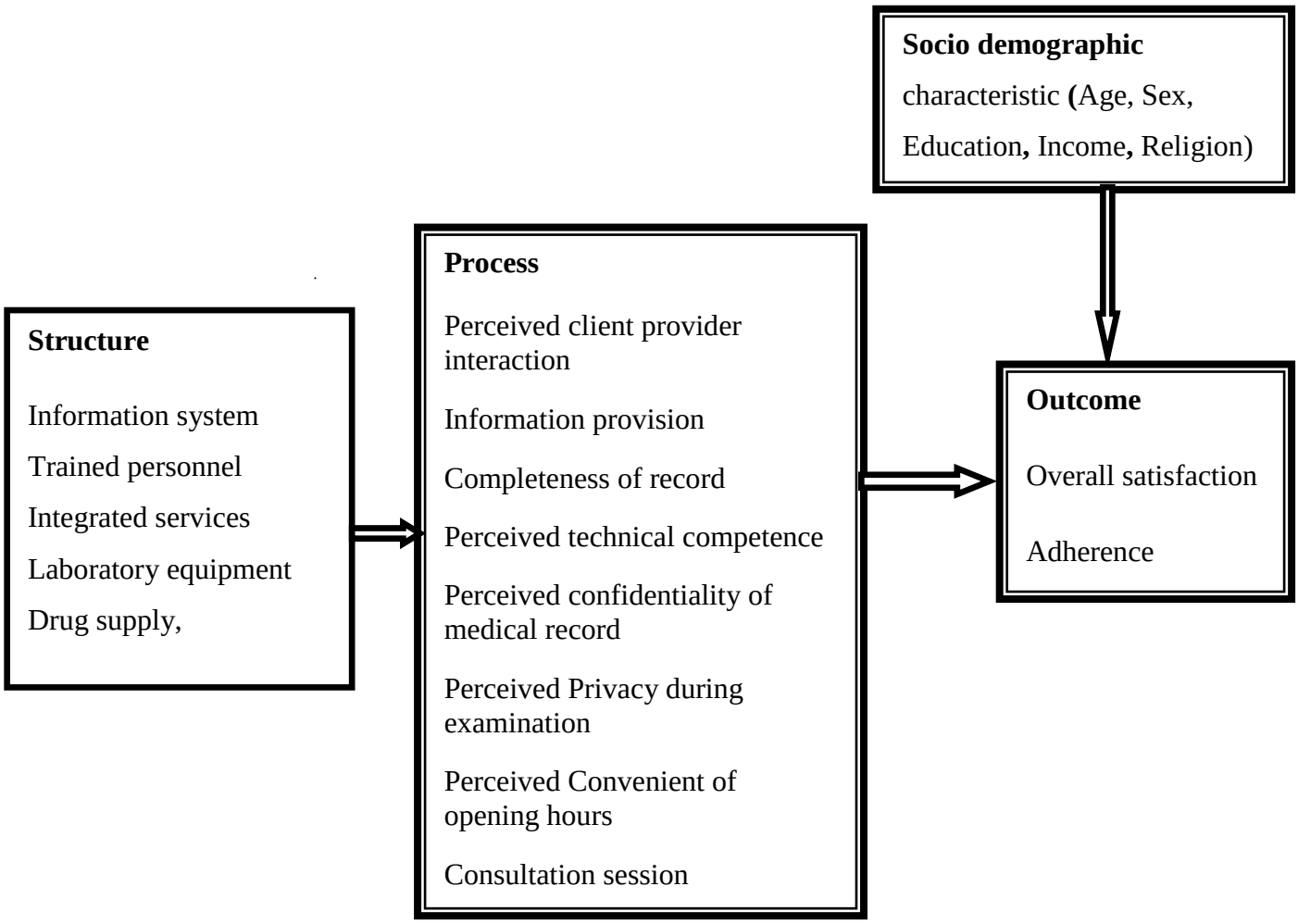

Figure 1: Conceptual frame work of Quality of ART Service adapted from Donabedian (2003) Model and Guideline for implementation of ART in Ethiopia (2007).

CHAPTER THREE

Significance of the study

Currently ART service is decentralized to assure issue of equity and accessibility for users to reduce economic barrier of ART adherence to prescribed drugs through different enabling factors. This strategy makes a number of PLWHA beneficiaries of the ART services especially for those unable to access the service through long distance and economically poor segment of the population. Besides of these in order to sustain and increase adherence to ART drugs, quality of clinical service is essential and should be always on continuum way to alleviate lost to follow up and drug resistance.

However as far as investigators' knowledge there is no study conducted on quality of ART services especially in Woliso Town. So this study was proposed to assess quality of ART service in health facilities providing ART in Woliso Town. The finding of this study helps for local health planners and policy makers to adjust their plans on ART services, and initiates health professionals delivering the service to improve their performance. It also serve as corner stone to achieve goal of highly active antiretroviral treatment and has a contribution for achievement of MDG, and help governmental, nongovernmental, and private organization who takes part directly and indirectly in HIV care and treatment for their planning and improve performance in line with the finding through providing the gaps excited. The finding of the study also serves as base line information for other similar studies that may be conducted in the future

So, further knowing the existing quality of ART service in facilities that delivering ART help to take timely measures and lessons for the improvement of the way of implementing the program to satisfy and bring treatment goal for users'.

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CHAPTER FOUR

Objectives of the study

4.1 General objective

To assess quality of antiretroviral treatment (ART) services in health facilities providing ART in Woliso Town, 2011

4.2 Specific objective

1. To assess the actual existing structural for provision of antiretroviral treatment services.
2. To assess process of ART service provision to ART user clients.
3. To measure ART user clients' overall satisfaction to ART service provision.
4. To find proportion of clients adherence to antiretroviral treatment drugs.
5. To identify the predictors of overall satisfaction and adherence to ARV drugs.

CHAPTER FIVE

Methodology

5.1 Study Area and period

The study was conducted at health facilities providing ART services in Woliso Town, from March 1-30, 2011.Woliso is a town in central Ethiopia located in South West Shoa Zone of Oromia Region, 115km South West of Addis Ababa, it has a latitude and longitude of 8°32′N 37°58′E8.533°N 37.967°E with an elevation of 2,063 meters above sea level. Woliso town is the administrative center of South West Shoa Zone. The town is composed of four kebele with a total population of 45,330. Regarding infrastructure there were one public health center, one nongovernmental hospital, four private clinic and 10 private drug stores within the town (Woliso Town Health Office Annual Report of 2010).

In the town currently one Nongovernmental Hospital (Saint Lukas Hospital) and one public health center were providing ART services. Cumulatively a total of 4,055 clients were ever enrolled and 1,397 were currently on ART. Among clients 3,092and 963 were ever enrolled, and 807 and 590 were currently on ART services at Saint Lukas Hospital and Woliso health center respectively. Of currently on ART 703 and 548 were adults >18years old in Saint Lukas Hospital and Woliso HC respectively [13]

Clients load in both health facility were assessed a week before study was conducted. In Woliso health center averagely 35 clients were visit ART clinic per day of this 12 for refill ARV drugs, and the rest for others chronic care and newly enrolled clients. In Saint Lukas Hospital averagely 45 clients visit per day among of this 14 clients for refill ARV drugs and the rest for other chronic care and those newly enrolled or referred from others HIV comprehensive care.

5.2 Study design

Facility based cross sectional study design using quantitative and qualitative methods of data collection to assess quality of ART services in Woliso Town Health Facilities.

5.3 Population

5.3.1 Source population

Source population were all adults receiving ARV drugs, health providers working in ART clinics, Head of Woliso Health Center and Medical director of Saint Lukas Hospital and medical record of clients.

5.3.2 Study population

Study population were sampled adult clients on ART, selected health providers working in ART clinics, head of health center, medical director and sampled follow up records of client on ART who were included in observation of consultation session.

5.3.3 Inclusion criteria

- Those clients on ART who were 18 years old and above who could give informed consent.
- Clients on ART at least for three months.
- Trained health provider working in ART clinic for more than one month.
- ART clinic, ART Pharmacy and Laboratory department

5.3.4 Exclusion criteria

- Severely ill patients or cases of neurocognitive impairments were excluded

5.4. Sample size determination and sampling technique

5.4.1 Sample size for quantitative study

Sample size was calculated by using single population proportion formula considering the following assumptions:

P=Proportion of clients satisfied on ART services, 50% taken because no relavent study on quality of ART services

W=Margin of error = 5%

Z = Z-score at 95% confidence interval = 1.96

Non-response rate= 10%

n=sample size:

$n= Z\alpha/2^2$ P x (1-P)/W^2

$n= (1.96)^2 \times 0.5 \times 0.5 / (0.05)^2$

n=384

Since the population was less than 10,000 by using the correction formula Nt =n/1+n/N, where

Nt= total sample size and N= Source population (total aduls >18 years old currently on ART) =1,251

Nt=384/1+384/1,251=294 and by adding non response rate of 10% the final sample size were 324 from Woliso town health center and Saint Lukas Hospital.

5.4.2 Sample Size for Qualitative Study

A total of fifteen participants were selected for qualitative study. Four health providers two from each health facility and head of health center and medical director were interviewed.

One key informant from Abidiwakeyo Association (representative of PLWHA or leader within Town) and four voluntary adherence supporters two from each health facility and six attendants' three from each facility were interviewed three days after quantitative data collection was completed.

5.4.3. Sampling techniques

5.4.3.1. Sampling technique for quantitative study

Both Woliso Health Center and Saint Lukas Hospital were included in the study. The total of study subjects were proportionally allocated to both health facilities depending on the total number of clients on ART within each health facility. Consecutive sampling technique was used until allocated sample filled in each health facility for exit interview. Consecutive sampling technique was selected because clients were randomly selected during the first day of data collection from appointment record and starting from selected subject all subjects fulfill the criteria was included in the study until allocated sample size filled at both facilities.

Fifty percent (50%) of exit interview were taken for observation of consultation session by using in-out technique. In-out technique were used because the observer was immediately leave the room to fill the observed process point on checklist, until the next client would treated and would get written consent from next subject by facilitation of health providers providing the services.

For clients participated in observation their follow up record were also reviewed for its completeness.

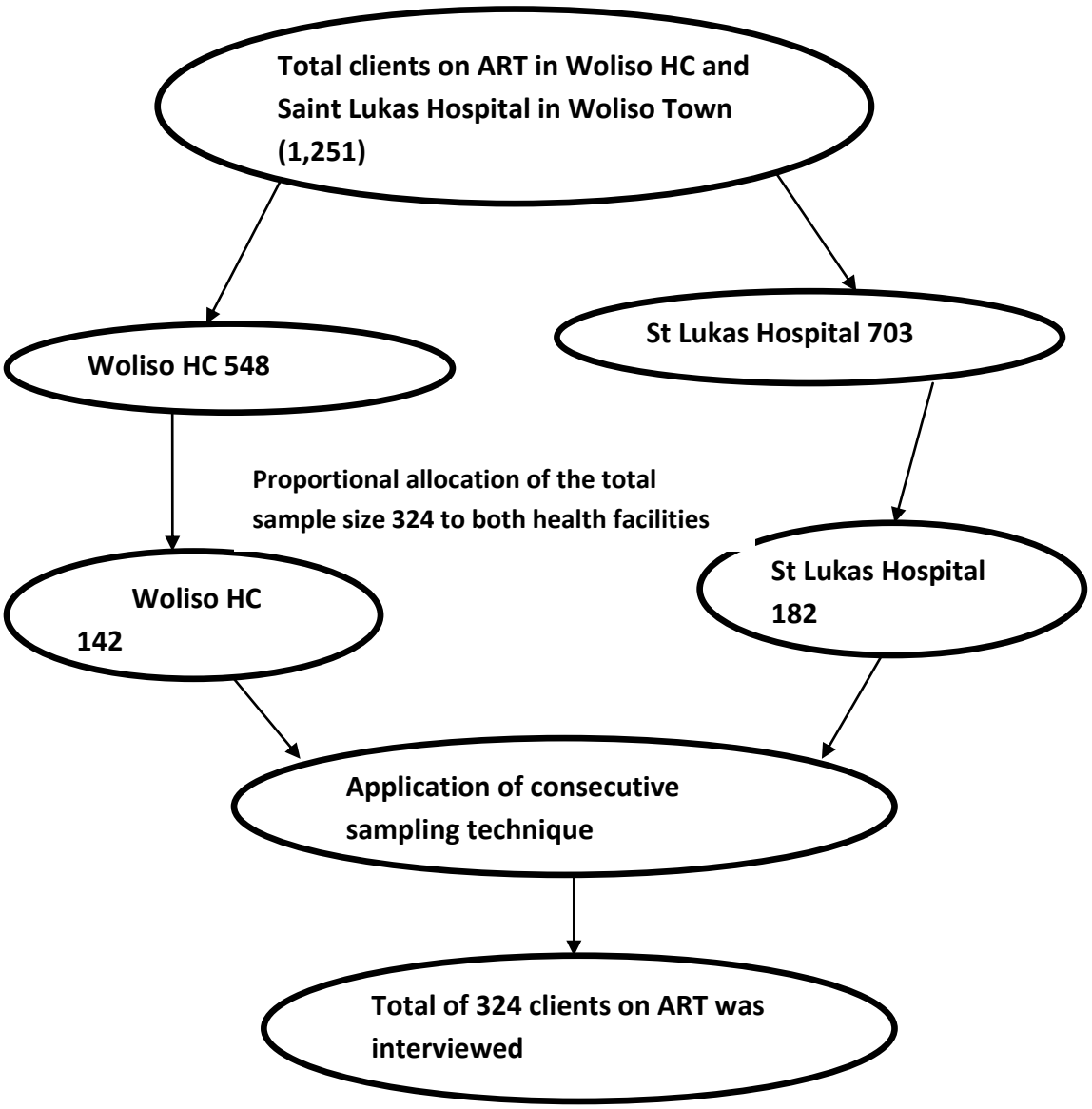

Figure 2: Schematic presentation of sampling procedures

5.4.3.2. Sampling technique for qualitative study

Purposive sampling technique was used to select study subjects from clients on ART and health providers. Key informant who was representative of people living with HIV/AIDS (PLWHA) association (Abdi Wekeyo) was included for in-depth interview within the town, four adherence supporters two from each health facilities and three clients on ART for more than two years were interviewed from both facilities after quantitative data collection completed for next consecutive three days.

5.5 Data collection and measurement

5.5.1 Variables

Dependent variable /Outcome Variable

- Client overall satisfaction
- Adherence

Independent variable /Exposure Variable

Socio-demographic variable

- Age
- Sex
- Religion
- Marital status
- Educational level
- Income
- Ethnicity
- Residence

Structure variable

- Trained professionals
- Infrastructure
- Material and drugs supply
- Information system
- Time spent reach to health facility
- Provision of integrated services

Process variable

- Perceived convenience of service hours
- Perceived client-provider interaction
- Completeness of follow up record
- Perceived provider technical competence
- Information provision
- Consultation session
- Perceived convenience physical setting of ART clinic
- Client perception and knowledge on ARV drugs
- Perceived confidentiality of medical record
- Perceived privacy during physical examination
- Perceived availability of basic resources for ART

5.5.2 Data collection instruments

For quantitative data collection close ended structured and semi-structured questionnaire were adapted after review of relevant literatures for assessment of client perception on process of ART provision, overall satisfaction of clients on ART services and adherence to ARV drugs. The instrument incorporated of questions and that consider dimensions used in Donabedian quality model. The instruments were prepared in English and translated into local languages (Afan Oromo and Amharic) and back translated into English for its consistence and accuracy.

The instruments comprises of socio demographic characteristics (age, sex, educational level, ethnicity, religion, income, residence, occupation)

Checklist were used to assess structural arrangement for antiretroviral treatment services which was developed from guideline for implementation of antiretroviral treatment in Ethiopia that consist of minimum package requirement for provision of ART services (Human Resource, Infrastructure, Equipment /Examination tool, Management information system, reagents and supplies for laboratory, Comprehensive HIV Services, Manual and Guideline) attached on Annex

Checklist was also used to assess availability of basic information on client follow up record (client monthly update information registration)

To assess process of consultation session observational checklist which was developed from guideline for antiretroviral treatment in adults and adolescents in Ethiopia (2007) , WHO 2006 challenge to antiretroviral treatment and USAID/ Ethiopia - HIV/AIDS Care & Support Project study were used.

Questionnaire for assessment of process of provisions of ART follow up services from client perspective which is adopted from client satisfaction questionnaire and relevant literature and guideline for implementation of ART services in Ethiopia [20, 57-59].

Likert scale response questionnaire with five point scale consists of 29 items were used to assess clients perception on process of ART service provision. These consist of; perceived accessibility 11 items, client perception of technical competence four items, perceived client provider interaction seven items, and client perception and Knowledge on ARV drugs six items.

After data were collected and entered into SPSS factor analysis were carried out for data reduction and the items that measure the same concept were computed together. Factor analysis is a way of testing the construct validity of a scale by determining whether the components of the scale measure similar constructs by loading onto the same factors. The amount of variance extracted by a factor is an indication of the homogeneity of the scale.

In this study, confirmatory factor analysis (CFA) using principal axis factoring with Varimax rotation, with the Eigen value greater than 1 criterion were considered. Factors loading greater than or equal to four were considered as significant. Finally the following four factors and four items were taken to measure perception of clients on ART service process of provision from 29 items; the rest seven items were deleted. The following components were extracted.

Perceived technical competency

Perceived technical competency of the provider is the subjective judgment of the clients about the professional skills and abilities of the health provider to diagnose, manage and provide health information about their problem. It was measured by four items

Each item was scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 4-20. The scale has high internal consistency (Cronbach's $\alpha = 0.733$). The items covers health providers give appropriate diagnosis, treatment, health education on HIV/AIDS and ARV drugs. Finally items score were computed and construct perceived technical competence of health providers.

Perceived availability of basic resources

It is subjective opinion of clients on availability of resources within health facility during their appointment periods like ARV drugs, OI drugs, trained health providers, Laboratory services when needed, emergency services. Each items was scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 5-25. The scale has high internal consistency (Cronbach's $\alpha = 0.804$). Lastly the five items were computed as perceived availability of basic resources concept used for provision of ART services.

Perceived clients provider interaction

Perceived clients provider interaction is clients view on interaction of health providers' during the clinical encounter. It was measured by 4 items. Items was scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 4-20. The

scale has high internal consistency (Cronbach's α=0.810) .The items consists of health providers is respectful, listen my problem, let me talk, clear language during consultation and finally computed.

Perception and knowledge of clients on ARV drugs

Perception and knowledge of clients on ARV drugs is clients attitude and their knowledge on ARV drug they receiving concerning when, how, for how long, and if not appropriately taken it consequence. Measured by 4 items, which scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 5-20. The items has high internal consistency (Cronbach's α=0.87). Finally the items were computed to measure the concept of perception and knowledge of clients on ARV drugs.

In addition to this four constructed factors additional four items were taken separately to measure different dimension of ART services. These are perceived confidentiality of medical record, perceived privacy during physical examination, perceived convenient of physical setting of ART clinic, and perceived convenient of opening hours. The response of each item was also scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 1-5. Finally each factors and items mean score were used to describe perception of clients on each dimension of process of ART provision.

The overall satisfaction of clients was assessed by using five point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 5-25 consists of five items. Finally three items score ranging of 3-15 with internal consistency (Cronbach's α=0.797) and explained variance 71.1% were taken to measure overall satisfaction level of clients on quality of ART service and the rest two items excluded or deleted due to low variance. Annexed

Table 1: Factory analysis result with reliability scores

Factors	No. of items	Adequacy of sample size(KMO)	Reliability Score(Cronbach's Alpha=α)
Perceived technical competence	4	0.744	0.73
Perceived availability of basic resources	5	0.821	0.804
Perceived interaction of client and providers	4	0.773	0.81
Perception and knowledge of clients on ARV drugs	4	0.803	0.873
Overall satisfaction of clients	3	0.708	0.797

Questionnaire for assessment of adherence to antiretroviral drugs were adapted from Medication Adherence Questionnaire (MAQ) and relevant literatures. It consists of items on any missing dose on previous one day, in the last three days, seven days and thirty days to assess adherence ARV drugs. To identify reason of non adherence (reason not taking medication or barriers) one sub-scale consists of 21 items were used.

5.5.3 Data collection method

Both quantitative and qualitative data collection methods were used. Consecutive sampling technique followed by exit interview data collection technique was carried out to assess quality of ART services from client perspective.

In-depth interview data collection technique was conducted to collect qualitative data from participants by using semi-structured interview guide instrument supported by voice record and note taking.

Observational checklist were used to assess minimum package requirement for ART services depending on guideline for implementation of ART service in health facilities (trained human resource, minimum laboratory service package requirement, and minimum pharmacy service package requirements), record review (to assess the completeness of basic information on client follow up record) and to observe the process of provision of ART service during consultation session at both health facilities.

5.5.4 Data collectors' selection and training

Two diploma nurses who were not trained on antiretroviral treatment, not providing ART services and willing to collect the data were selected for exit interview by consideration of ability to speak both Afan Oromo and Amharic. Two Health officers for observation (consultation session) who have training on ART services and have work experience two years and above were recruited to collect data during consultation session and record review. Overall data collection process was supervised by principal investigator and corrections were made on any error committed during data collection and clarify any unclear part on instrument. Prior to data collection training were given for data collectors for two days on data collection instruments (methods of data collection, brief explanation of data collection tools, and procedure they should follow while data collection) by principal investigator.

5.5.5 Pre test

A week before the actual data collection time, pretest were carried out in Tulu bolo Health Centers in South West Shoa Zone by using structured and semi- structured questionnaires on 5% (16) of the actual sample size to determine the acceptability of the question to be asked and the methods used, reaction and willingness of the respondents, time required, performance and adequacy of data collectors and either to modify or change ambiguous and clear ideas. Data collection instruments were corrected based on the result and clarity on instrument was given for data collectors prior to actual data collection. Average time taken for exit interview was found to be 15 minute per individual.

5.6. Data analysis and interpretation

The completed questionnaires were checked for completeness, consistency and were coded by the principal investigator. Data cleaning were performed to check for accuracy, consistencies and values starting from the day of data collection. Data entry was done by experienced data clerk using SPSS window version 16. Any error was corrected and missing values were excluded during analysis. Data analysis was performed using SPSS version 16 software's. Descriptive statistics were used for frequency, description and data exploration. Factor analysis and reliability estimate were conducted for each components arranged to measure perception of clients on process of ART provision and over all client satisfaction. Before factor loading was done negatively warded instrument was changed into positively warded. Factors with reliability

scores >0.7 of Cronbach's alpha was taken. Perception of clients on process of ART provision and overall satisfaction were analyzed as continues variable and explained by using mean score of each factors and items. Linear multiple regression analysis was used to identify the predictors of overall satisfaction of clients on quality of ART services. Adherence to ART were calculated regarding any skipping doses in the previous day, in previous three days, in previous seven days and in the previous month by translating quantitatively into percent. Finally adherence to ARV drugs in past seven day at >95% was considered to measure and describe adherence to ARV drugs by dichotomizing into adherence and non-adherence. Those clients took greater 95% of prescribed medication was considered as adherence to ARV drugs and less than 95% was considered as non-adherence to ARV drugs. Binary logistic regressions were used to determine predictors of adherence to ART services from independent variable. P-value less than 0.05 were considered as cut off point for statically significant throughout the analysis.

In addition qualitative findings were transcribed from Afan Oromo and Amharic into English and put under theme. Then the final narration was triangulated with quantitative findings.

5.7 Data quality control measures

Data were collected by trained data collectors and pretesting of the instrument was made before the actual data collection, and necessary corrections were made accordingly. Principal investigator were supervised the data collector on daily basis for completeness and consistence, of the filled questionnaires, if there was any missing value it was corrected in daily data collection . In addition to this the data were thoroughly cleaned and carefully entered in to computer for commencement of analysis.

For qualitative study tape recorder and note taking were used while conducting in-depth interview for properly catch up the information forwarded from participants. Analysis of the finding was done daily until saturation of issues rose from previous participants.

5.8 Operational definitions of terms and concepts

Structure – minimum package/resources requirement for provision of ART services and described comparing with guideline for implementation of ART services.

Process- Ways of service provision according to guideline and were measured by interviewer guide five point liker scale questionnaire by using mean score level to describe process of service provision from client perspective, and observational checklists during consultation session and by reviewing clients' follow up format.

Outcome-The extent to which service provided concise with client expectation and were explained by mean score level for overall satisfaction of clients, measured by five point Likert scale instrument, and the rate of adherence to antiretroviral drugs in past seven day, and took >95% of prescribed doses .

Quality-Continuous provision of desirable activities with available resource to bring expected outcome and measured as structure, process and outcome (adherence and overall satisfaction of clients on ART services) by using Donabedian quality model.

Overall Satisfaction: Clients opinion of care received from ART services/ staff and was acknowledged as an outcome indicator of quality of service. It was measured by five points Likert scale items and described by mean score of concepts.

Adherence: Client willingness and properly took prescribed ART drugs. Measured by questioning about the number of doses missed during the past seven and 30 days and translated quantitatively in to percentage adherence. Ideal adherence means a patient must take more than 95% of their prescribed doses (i.e. missing less than 3 doses in a month) is good adherence. Miss 3-9 (85-94%) doses in a month considered as fair and <84% poor adherence.

Perceived client-provider interaction: Personals dimensions /perceptions for service principally the received expressive content of exchanges between providers and clients. These may include treating patients with dignity or respect and greeting, let him/her talk, attentive and listen client's problem, and clear consultation language. It was measured by five point Likert scale items and was explained by using mean score level.

Waiting time – the time interval between arriving of ART clinic and met health profession for ART services. Average waiting time below 30min was considered as short and above 30min was considered as long waiting time.

Information provision –HIV/AIDS and ARV drugs related message transfer from health providers to clients during treatment /follow up. It was measured with six items and were described by number of clients on follow up who get information/education on ART related information by using frequency and percent.

Perceived availability of basic resources:- Clients view on availability of resources for provision of ART services (ARV drugs, OI drugs, Trained health providers, laboratory service when needed and medical care availability during emergency services), and was assessed by five point Likert scale with five items, and explained by mean score level after computed to under one factor/component.

Perceived technical competence: - Clients perception on skill and knowledge of health providers during diagnosis, treatment, and providing health information about HIV/AIDS and ARV drugs. It was assessed by five point Likert scale with four items from clients perspective and measured and described by mean score level with translating the mean into percent.

Perceived confidentiality of medical record: - Clients view on secrecy of their medical information within the facility. It was assessed by one items with five points Likert scale, and described by mean score level with translating the mean score into percent.

Perceived privacy during physical examination:- Clients outlook on isolation of place physical during examination. Measured by one item five points Likert type item and described by mean score level.

Perceived Convenience of physical setting: - Clients view on bodily arrangement and location of ART clinic. Was measured by one item five points Likert scale and described by mean score level.

Perceived convenient of opening hour:- Client view on convenient of working hours of ART clinic. Was measured by one item with five points Likert scale and was described by mean score level.

Perception and knowledge of clients on ARV drugs: - Clients awareness and understanding about antiretroviral treatment drugs on the effect of the time to take medication, missing dose, and consequence of missing dose or take incorrectly. Were measured by four times five points Likert scale and described by mean score level.

5.9. Ethical consideration

Prior to data collection appropriate ethical clearance were obtained from the Ethical clearance committee of Jimma University College of Public Health and Medical sciences. Based on the ethical approval, supportive letter were written by the Department of Health Services Management to the Southwest Shoa Zone Health Department, Woliso Town Health Office, Saint Lukas Hospital, Woliso Health Center and Tulu bolo HC. In addition formal letter of permission were produced from administrative bodies of Zonal Health Department to the Woliso Town Health Offices, Health Centers and Saint Lukas Hospital.

Before data collector met study subjects they were trained on how to keep confidentiality of each study subjects. In addition to maintain confidentiality health providers treating PLWHA were requested for clients' consent to participate in the study before they met data collectors for exit interview and observation of consultation session. Then Verbal and written consent were obtained from the study participants, after each study subject was adequately informed about the purpose, methods, anticipated benefit and risk of the study by data collector. Confidentiality and privacy were explained and reassured that anything said would be for research purposes only and no one even their health providers wouldn't have access to their response and no need of mention their name, and the interview were conducted in secured or quite place. In addition the data collector were informed study subjects that participation is entirely voluntary, they have the right to refuse or withdraw, and their treatment would not be influenced whether they take part or not. Then those participants willing to participate were meet the data collector for face to face interview. A letter of agreement was attached to the questionnaire to obtain the written permission of each individual. The same procedure was done for observation of consultation session in addition to health provider providing consultation session was requested for informed consent and he/she would also told the right to participate or refuse. During the observation, the observer was made every effort to sit in the background such that she/he didn't not made eye

contact with either the client or the provider. Observer was wear appropriate clothing (white gown).

In addition to this the data collectors were trained on how to handle sensitive and emotional issues and on the importance of keeping confidentiality and anonymity. For clients participated in observation they were requested for their follow up record review for assessment of completeness of basic information.

5.10. Data presentation and dissemination

The findings will be presented to;-

- Department of Health Services Management at Jimma University College of Public Health and Medical Science, then
- Communicated with Zonal Health Department, Woliso Town Health Office, Woliso HC, Saint Lukas Hospital and other relevant stake holders.
- Regional Health Bureau and federal Ministry of Health
- Scientific community in conferences as needed and efforts will be made for possible publication

Chapter 6

Results

1. Structure Assessment

The minimum package requirement for provision of ART services were assessed based on guideline for implementation of ART in Ethiopia (2007). Depending on the guideline, one of the essential criteria for services to be accredited before implementing an ART programme is meeting the minimum package for clinical, laboratory and pharmacy services (Table2).

Table 2:-Distribution of Minimum Package Requirement for Provision of ART Services in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia, March 2011.

Type of package	Minimum Requirement as standard	Type of Health Facility	
		Woliso Health facility	Saint Lukas Hospital
Trained Human Power availability	Medical doctor*, Health Officer ,BSc Nurses, Diploma nurse, Pharmacy personnel, laboratory, personnel, case manager, data clerk	Health officer(3) Nurse(1) Druggist(2) Lab.Technicial (2) Data clerk (2) Case manager (2)	MD(GP) (1) Health Officer(1) BSc Nurse (1) Dip. Nurse (2) Data clerk (3) Pharmacist (2) Lab.technicial (7)
Availability of Infrastructure	Examination room, private counseling room, onsite pharmacy storage, pharmacy secured storage, pharmacy confidentiality counseling room, specimen collection area for laboratory	There was no separated examination , private counseling , and pharmacy confidentiality counseling room	All rooms were fulfilled as standard
Availability of examination equipment	Otoscope, stethoscope, Ophthalmoscope*, BP cuff, Reflex hammer	There was no Otoscope and Reflex hammer in ART clinic	All were available except reflex hammer
Management Information system in ART clinic	logbook, record format reporting format, special ART drug prescription, lockable file cabinet, Referral slip and feedback	All were available and functional, with additional three computers	All were available and functional , with additional two computers
Management Information system in pharmacy	lockable drawer, bin card stock card, receiving voucher models, prescription form, Reporting form, Registration book	All were available	All were available

Management Information system in Laboratory	log book Reporting format	All were available and functional	All were available and functional
Availability of Guidelines	Guideline for implementation of ART services in Ethiopia, Guideline for the use of ART in Ethiopia, Palliative care manual, Opportunistic infection treatment pocket book	Only Guideline for the use of ART in Ethiopia was available	Only Guideline for the use of ART in Ethiopia was available
Availability of Reagent Laboratory	Sterilizing equipment, microscope, Refrigerator, Centrifuge, HIV Test Kits, Infection prevention supplies, reagent hematology auto analyzer clinical chemistry auto analyzer**,** CD+4 machine*****	Sterilizing equipment, hematology auto analyzer clinical chemistry auto analyzer was not available	All were available during data collection period
Availability of comprehensive HIV care services	Voluntary counseling and testing, Provider initiative counseling and testing, prevention mother to child transmission, palliative care, Opportunistic infection treatment services, Sexual transmission infection, Nutritional support	All services were in place for clients despite of Nutrition support	All services were in place for clients despite of Nutrition support
ARV drug availability	stavudine –Lamivudine-Nevarapine, Zidovudine-lamivudine-Nevarapine, Tedinovir-lamivudine , Stavudine-Lamivudine,and , Efenviranz (EFV 600mg), Efenviranz (EFV 200mg),Nevirapine 200mg lamivudine,and 150mg, Abacavir -300mg, Didinovir -250mg,Didinovir-400mg,Lupinavir-250mg	All were available except Lupinovir	All were available except Abacavir 300mg,and Didinovir
OI drug availability	Cotrimoxazole -480mg, Isozonide pyridoxine , Fansider , Folic acid Fluconazole, Acyclovir , Multivitamin	All were available except multivitamin	All were available except pyridoxine, fancider, and Acyclovir

***Only for Hospital**

Socio-demographic Background of Respondents

Out of 324 participants intended to be included in the study, 314 (96.7%) clients had responded to the questionnaire. Of the respondents 176 (56.1%), and 138 (49.1%) were from Saint Lukas Hospital and Woliso Health Center respectively. Of the respondents one hundred sixty eight (53.5%) were females. The mean age of respondent was 34.37 with Standard deviation of 8.7. One hundred seventy seven (56.4%) was reside in urban area, two hundred fifty two (80.3%) were Oromo in ethnicity, one hundred eighty (57.3%) were married, two hundred fifteen (68.5%) were Christian Orthodox in Religion; ninety one (29%) were illiterates, and ninety six (30.6%) were farmers.

One hundred eight three (58.3%) live with their family and one hundred ten (35%) were live alone. Out of respondents elevens (3.5%) were using active substance (Chat chewing, cigarette smoking and alcohol) currently and of these nine (89%) use alcohol. Seventy six (24.2%) of study subjects didn't disclose their HIV status for someone else. About three hundred (95.5%) were heard about availability of ART services for the first time from health providers, and one hundred twenty seven (40.4%) were not know other health facility providing ART services (Table3).

Table 3: Socio-demographic characteristic of clients interviewed on quality of ART services at Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia, Martch.2011. (N=314)

Variable		No	Percent	Variable		No	Percent
Sex	Male	146	46.5	Whom do you live with?	live alone	110	35.0
	Female	168	53.5		Family	183	58.3
Age	Mean 34.37 SD ±8.7						
Residence	Rural	137	43.6		unstable place	2	.6
					parent	17	5.4
	Urban	177	56.4		No answer	2	.6
Ethnicity	Oromo	252	80.3	Active substance use	yes	11	3.5
	Amhara	34	10.8		No	303	96.5
	Gurage	22	7.0	Type of substance use	Alcohol	9	89
	Tigre	5	1.6		Khat	3	11
	Others	1	.3				
Marital status	Single	55	17.5				
	Married	180	57.3	Disclose HIV Status	Yes	233	74.2
	Divorced	32	10.2		No	76	24.2
	Widowed	29	9.2		I don't know	5	1.6
	Separated	18	5.7	Know other HF Give ART	yes	187	59.6
Religion	Orthodox	215	68.5		I don't know	127	40.4
	Muslim	31	9.9	Who told you for the first time about ART services in this HF?	health professional	300	95.5
	Protestant	65	20.7		mass media	7	2.2
	catholic	2	.6		PLWHA Association	3	1
	others	1	.3		Friends	3	1
Educational status	illiterate	91	29.0		Relatives	1	.3
	Read and Write	22	7.0				
	Primary school	89	28.3	Who know your HIV status?	Partner	80	33.8
	Secondary school	84	26.8		Offspring	32	13.5
	Diploma and above	28	8.9		Parent	56	23.6
Occupational status	Employed	67	21.3		Brother/Sister	22	9.3
	unemployed	29	9.2		Relative	37	15.6
	Merchants	80	25.5		Friend	10	4.2
	Farmer	96	30.6	Monthly Income	Median 300EB		
	others	42	13.4				

*Others- out of category mentioned *EB-Ethiopia Bir

2. Process of ART Service provision

Clients were interviewed on time spent to reach to health facility, waiting time, and health information provided during appointment providers.

One hundred sixty eight (53.5%) of respondents took less than thirty minutes to arrive to health facility for ART service. Two hundred thirty respondents (73.2%) explained that they waited less than 30 minutes, and seventy seven (24.5%) wait 30-60minute to get health profession.

Health information provided during appointment schedule was assessed by binary response (yes, no) questionnaire from client perspective. Majority of respondents or three hundred seven (98.1%) clients were provided health information/education about HIV/AIDS and ARV drugs. Only two hundred fifty seven (81.8%), and two hundred seventy seven of respondents (88.2%) were informed about side effect of ARV drugs and ARV is lifelong medication respectively. (Table4)

Table 4: Health Information provided for clients on ART at Woliso Town Health Facilities, South West Shoa, Central Ethiopia, March 2011. (N=314)

Type of Information provided	**Frequency**	**Percent**
Information given to respondents about HIV/AIDS and ARV drugs during appointment date	307	98.1
AIDS has no cure	295	93.9
Benefit of ART drugs	282	89.8
Side effect of ART	257	81.8
Treatment is life long	277	88.2
adherence to treatment is crucial	279	88.9
Practicing safe sex while on treatment is crucial	290	92.4

The extent of clients perception level on expected ART services provided were measured by five point Likert scale and for each components and items their mean score level perception had measured. The mean clients' perception level on components of perceived technical competency of health providers was 18.02 with SD±2.2, perceived availability of basic ART resources 20.78 with SD±2.82, perceived client provider interaction 16.8 with SD±2.97, and perception and knowledge of clients on ARV drugs 16.89 with SD±2.87. Perceived privacy

during physical examination 4.02 with SD±1.08, perceived confidentiality of medical record 4.04 with SD±1.06, perceived convenient of physical setting of ART clinic 3.88 with SD±1.32, and perceived convenient of opening hours 4.18 with SD±0.944. The mean score level of process of provision of ART services between health facilities were found to be different (Table5).

Table 5: Mean score perception level of clients' on process quality of ART service provision in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia, March 2011(N=314)

Clients Perception on process quality of ART service	Name of health facilities			
	Saint Lukas Hospital	Woliso Health Center	Woliso health facility	
	Mean	Mean	overall mean	Standard deviation
Perceived technical competence of health providers	18.20	17.82	18.02	2.19
Perceived availability of basic resources	21.28	20.44	20.91	2.86
Perceived client provider interaction	16.94	16.62	16.79	2.97
Perceived privacy during examination	4.07	3.95	4.02	1.06
Perceived confidentiality of medical record	4.07	3.99	4.03	1.06
Perception and knowledge of clients on ARV drugs	17.41	16.23	16.89	2.86
Perceived convenient of physical setting of ART services	3.40	3.86	3.38	1.326
Perceived convenient of opening hours	4.32	3.99	4.18	0.94

The 10^{th}, 25^{th}, 50^{th} and 75^{th} percentile of each factors and items were also calculated considering perception score of clients. As shown in table 6 below 10% of clients were response less than or equal to 16 on perceived technical competence of health providers of the maximum of 20 score or greater than 90% of respondents response greater than 16. On the other hand 50% of clients were response from strongly disagree to agree (score less than or equal to four) on perceived privacy during examination (Table 6).

Table 6: Clients' perception scores by quartiles on process quality of ART service in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia, March 2011(N=314)

Factors	Mean	Std. Deviation	10^{th} Percentile	25^{th} Percentile	50^{th} Percentile	75^{th} Percentile
Perceived technical competence	18.03	2.3	16.00	17.00	19.00	20.00
Perceived availability of basic resources	20.9	2.9	17.50	20.00	21.00	23.00
Perceived client provider interaction	16.8	3	12.00	16.00	17.00	19.00
Perceived privacy during examination	4	1.1	2.00	4.00	4.00	5.00
Perceived confidentiality of medical record	4.03	1.1	2.00	4.00	4.00	5.00
Perception and knowledge of clients on ARV drugs	16.9	2.9	12.00	16.00	17.00	19.00
Perceived convenient of physical setting of ART services	3.40	1.3	1.00	2.00	4.00	4.00
Perceived convenient of opening hours	4.2	.94	3.00	4.00	4.00	5.00

Record Review

Total of one hundred fifty seven records of clients participated in consultation session; eighty eight and sixty nine records from Saint Lukas Hospital and Woliso health center respectively. Results from record review shows greater than 95% of records were complete /contain basic information like facility name , patient cord number, unique ART number, patient address, date of HIV confirmed, eligible date for ARV, why eligible for ARV, eligible and ready date for ARV, services fee, follow up date, months on ART, and TB screening, WHO clinical stage, Functional status of clients , weight, initial CD4 count, Dispense doses, Hgb if on AZT and next visit date were filled on all reviewed records. But TB prophylaxis, Cotrimoxazole adherence, and ARV adherence pattern were filled on follow up record only for 142 (90.4%), 141 (89.8%), and 143 (91.1%) respectively (Table7).

Table 7: Completeness of clients follow up record form in Woliso town health facilities, South West Shoa Zone, Central Ethiopia, March, 2011.(N=157)

Items		No	Percent	Items		No	Percent
Facility name	yes	156	100	Tb screening	yes	153	97.5
	no	0	.0		no	4	2.5
Date confirmed HIV	yes	152	96.8	TB prophylaxis	yes	142	90.4
	no	5	3.2		no	15	9.6
Eligible date	yes	153	97.5	Cotrimoxazole adherence	yes	141	89.8
	no	4	2.5		no	16	10.2
Why eligible	yes	156	99.4	ARV adherence	yes	143	91.1
	no	1	.6		no	14	8.9
Eligible and ready date	yes	152	97.4	Hemoglobin level if on AZT	yes	15	9.6
	no	4	2.6		no	19	12.1
pay/fee	fee	157	100		not on AZT	123	78.3
	pay	-	-	Next visit date filled	yes	149	94.9
Schedule/unscheduled	yes	148	94.3		no	8	5.1
	no	9	5.7	Follow up date	yes	153	97.5
					no	4	2.5

Result of Consultation Session

Client provider interaction process were observed during consultation session to determine provider process of provision of ART services for those on follow up schedule clients. A total of one hundred fifty seven (157) cases, sixty nine from Woliso health center and eighty eight from Saint Lukas Hospital were observed during consultation session/ follow up appointment. It was assessed by using observational checklist during those clients currently on ART received follow up treatment. Results shows that one hundred thirty nine (88.5%) clients were well received by health providers , one hundred forty eight (94.3%) was their weight taken and record on client follow up form, one hundred forty five (92.4%) were asked brief history of past and present illness, one hundred twenty (76.4%) were assessed previous month adherence to ARV drugs , one hundred nineteen (75.8%) counseled on importance of safe sex, seventy one (45.8%) counseled on disclosure of HIV to someone else, one hundred thirty two (84.1%) were asked about Tb symptoms. The average time taken to manage cases was found to be 8.3 minutes with SD±2.05. (Table 8)

Table 8: Providers process of ART service provision during follow up schedule in Woliso Town Health Facilities, South West Shoa Zone, Centera Ethiopia, March, 2011. (N=157)

Items	Response	No	percent	Items	Response	No	percent
Weight taken and record	yes	148	94.3	Send sputum for smear (if productive)	Yes	17	10.8
	No	9	5.7		No	7	4.5
Brief history of the client taken	yes	145	92.4		not illegible	133	84.7
	No	12	7.6	Counseled on family planning	Yes	97	61.8
Adherence to medication assessed	Yes	120	76.4		No	60	38.2
	No	37	23.6	Treat OI	Yes	145	92.4
Counseled on safer sex	yes	119	75.8		No	12	7.6
	No	38	24.2				
counseled on disclosure	Yes	73	46.5				
	No	84	53.5	Give Cotrimoxazole prophylaxis	yes	140	89.2
Ask complete review of symptoms	Yes	147	93.6		No	17	10.8
	No	10	6.4	Support adherence	Yes	126	80.3
Ask about TB symptoms	Yes	133	84.7		No	31	19.7
	No	24	15.3	Provide advice/treatment for side effect	yes	103	65.6
					No	54	34.4
Refer or consult for a higher level of care if needed	Yes	10	6.4	Staging decided and filled	Yes	152	96.8
	No	6	3.8		No	5	3.2
	Not illegible	141	89.8	Functional status of the client assessed and filled	Yes	155	98.7
Instruct on how to take medication	Yes	108	68.8		No	2	1.3
	No	49	31.2	TB status filled	Yes	148	94.3
Appointment given considering client convenience	Yes	112	71.3		No	9	5.7
	No	45	28.7	If the client is on ZDV/AZT hemoglobin checked	Yes	31	19.7
Mean of Consultation hours	8.3 minute with ±2.05SD				No	18	11.5
					Not on AZT	108	68.8

Overall Satisfaction of Client on ART Services

The mean overall satisfaction level of client on perceived quality of ART service was found to be 12.92 (4-15) with standard deviation of 2. On the other hand 10% of respondents were responces avaregely less than or equal to 10 perception score or greater than 90% of respondents were score above uncertain. (Table 9)

Table 9: Perception score of clients on overall satisfaction on quality of ART service in Woliso Town health facilities, South West Shoa Zone, Central Ethiopia, March 2011(N=314).

Factor	Mean	Std. Deviation	10^{th} Percentile	25^{th} Percentile	50^{th} Percentile	75^{th} Percentile
Overall satisfaction of clients	12.92	2	10	12	13	14

Predictors of Overall Satisfaction of Clients on ART services

Multiple linear regressions with stepwise methods were carried out to identify predicators of overall satisfaction of clients on quality of ART services. Table 10 below shows the regression estimates and the relative effect of each predictor variable on overall satisfaction of clients on ART services on process of ART provision. Only variables which were found statistically significant association with overall satisfaction of clients were displayed in the table10. Perceived technical competence, perceived availability of basic resources for ART provision, perceived confidentiality of medical record, and perception and knowledge of clients on ARV drugs were found to be the main predictors of overall clients' satisfaction on quality of ART services with the presence of all independent variables in the regression equation. For instance, as a unit increase perceived technical competence of health providers averagely overall satisfaction of clients on quality of ART services increases by 0.127 with (95%CI: 0.28-0.226). (Table 10)

Table 10: Multiple Linear Regression Result of the main Predictors of overall satisfaction of clients on quality of ART services at Woliso town health facility, South West Shoa Zone, Central Ethiopia, March 2011(N=314)

Variables	**Regression Coefficient (β)**	**95% CI**	**P-value**
Perception and knowledge of clients on ARV drugs	.192	.120-.265	0.000
Perceived availability of basic resources	.125	.048-.201	0.001
Perceived technical competence	.127	.028-.226	0.012
Confidentiality of medical record	.222	.026-.419	0.027

When each variable treated by using linear regression model the overall satisfaction of clients on quality of ART service significantly associated with type of health facility or being treated at Saint Lukas Hospital 0.525(95%CI:0.078-0.971), merchants were less likely satisfied on quality of ART services 0.61(95%CL:-1.118--0.102) compared to farmer, perceived client provider interaction 0.21(95%CL:0.139-0.282), perceived privacy during physical examination 0.389 (95%CL:0.184-0.594), perceived convenience of opening hours 0.603(95%CL:0.376-0.83) were independently predictors of overall clients satisfaction. There was also positive significantly association between overall satisfaction and adherence to ARV drugs. As a unit increases adherence to ARV drugs overall satisfaction of clients on ART service averagely increases by 1.377 (95% CI: 0.516-2.239) at P-value 0.002.

Adherence to ARV Drugs

The median month of respondent on ART was found to be 22 months. The mean initial and recent weight of participants was 52.9 and 53.9 with standard deviation of± 8.2, and ±8.1 respectively. Initial CD4 count was available for all respondents with mean and standard deviation 138.3 (26-256) and ±53.2 respectively. Recent CD4 count was available only for two hundred seventy five (87.6%) respondents. The average of recent CD4 count was 279 (80-760) with standard deviation of± 98.8, almost doubled after initiation of ARV drugs. Six types of highly active antiretroviral treatment (HAART) were used for treatment of HIV/AIDS cases (Figure 3). More clients (34.4%) in this study were treated with Stavudine, Lamivudine, and Nevirapine based combination regimen. Majority of the respondents (82.5%) were took two pills per day and nearly three third (73.6%) were taking twice per day. Self reported adherence level

shows 303(96.5), 300(95.5%), 283(90.1%), and 266(84.7%) were adhered or not misses their prescribed doses in previous day, past three days, past seven day, and last thirteen days respectively. (Table 11)

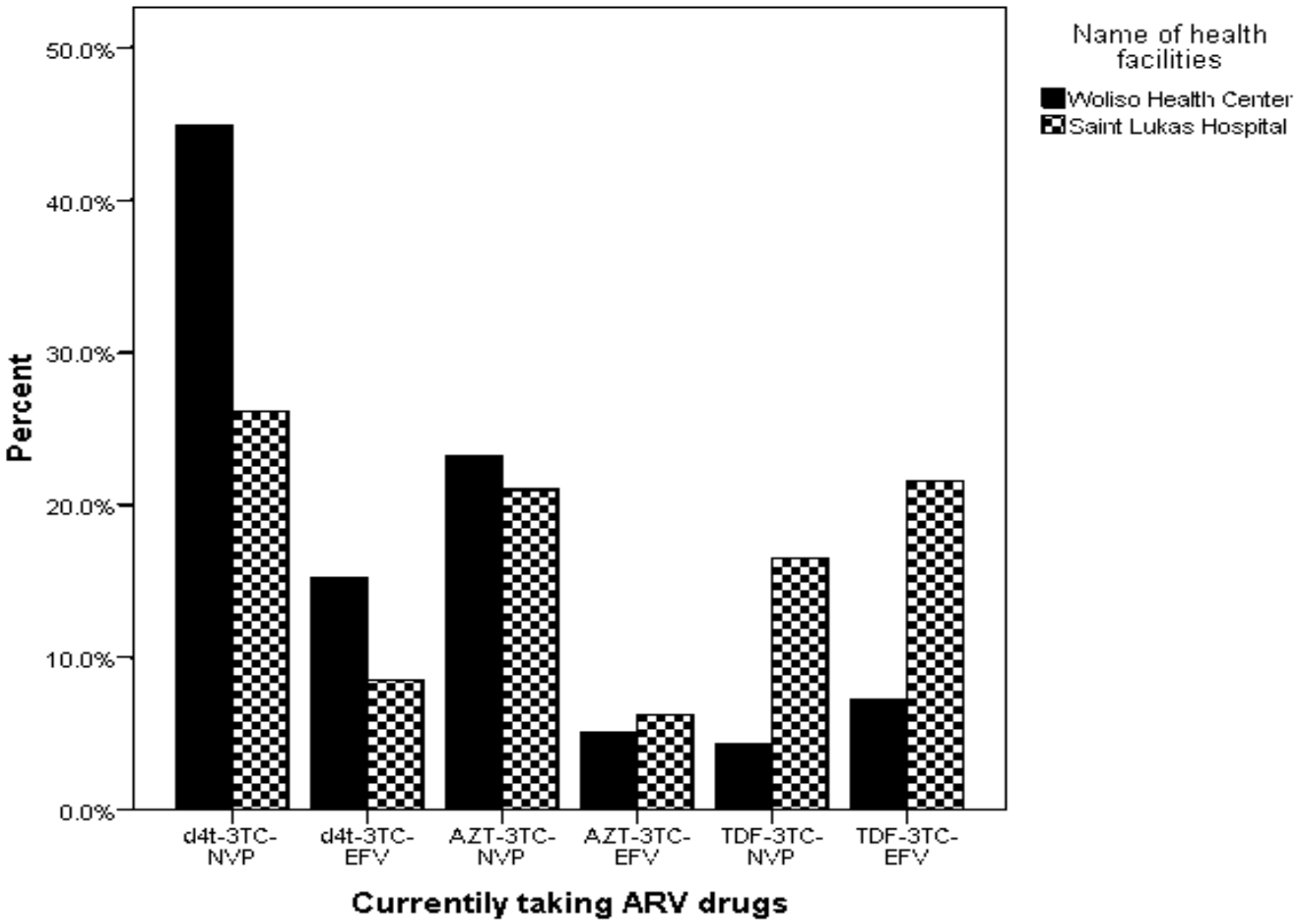

Figure 3: Currently taking ARV drugs in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia, March 2011 (N=314)

Table 11: Client adherence to ARV drugs by self report at Woliso Health Facilities, in South West Shoa Zone, Central Ethiopia, March 2011. (N=314)

Description	**Adherence to ARV Drugs No (%)**	**Non-adherence to ARV Drugs No (%)**	**Total**
Previous day	303(96.5%)	11 (3.5%)	314(100%)
Past three days	300 (95.5%)	14 (4.5%)	314(100%)
Past seven days	283 (90.1%)	31 (9.9%)	314(100%)
past seven day at 95%	292(93%)	22(7%)	314(100%)
past one month	266(84.7%)	48 (15.3%)	314(100%)

Prevalence rate of adherence by self report at 95% requirement identified by this study was 93% in past seven day and 90.1% in past seven day at 100% requirement.

The clients were also asked open ended and structured questions to pick the major reasons or barriers for their skipping a dose of ARV drugs. The major reason to non adherence to prescribed medication were found to be 23 (47.9%) busy with other things, 22(45.8%) had no food to took with medication, 14 (29.17%) away from home, and 11(22.9%) fear of stigma and discrimination respectively (Table12).

Table 12: Barrier or Reason to non adherence to prescribed ARV Drugs in Woliso Town Health Facilities, South West Shoa Zone, Central Ethiopia,March 2011 (N=314)

Reason to non adherence to prescribed ARV drugs	**Frequency**	**Percent**
Busy with other things	23	. 47.9
No food to take with medication	22	45.8
Away from home	14	29.17
Fear of stigma and discrimination	11	22.9
Simply forget	10	20.8
Fear of medication side effect	10	20.8
Felt depressed	9	18.7
Drunk alcohol at specified	9	18.7
Transportation problem to got ART clinic	8	16.7
Too many pills to take	7	14.6
lost my pills	7	14.6
Felt sick	6	12.5
I were took Holy water	6	12.5
Non availability of ARV drugs from ART clinic	5	10.4
Not fully understand the regime and requirement	4	8.3
Run out of pills	4	8.3
Lack of confidentiality on the centers	4	8.3
Lack of confidentiality on the centers	4	8.3
Bothered by my dreams	3	6.2
Felt good	2	4.2
Poor adherence counseling	1	2

Predictors of Adherence to ARV Drugs

Multiple binary logistic regressions with forward likelihood regression model were used to identify predictors of adherence to ARV drugs. Only the main variables significantly associated with adherence to ARV drugs after entering all independent variables together in regression model were displayed. (Table13).

Perceived technical competence, and perceived convenient of opening hours were found to be the main significantly predictors of adherence to ART services after adjusted with other independent variables. For a unit increase perceived technical competence of health providers the odd of adherence to ARV drugs is 1.231 (95%CI: 1.044-1.451) times higher than non-adherence to ARV drugs at p-value 0.014. As a unit increases perceived convenient of opening hour's, the odd of adherence to ARV drug is 1.709 (95%CI: 1.156-2.527) times higher than non-adherance to ARV drugs at p-value 0.007.

Binary logistic regression was carried out after dichotomized adherence rate in to adherence and non-adherence. Clients who receive their prescribed medication >95% was considered as adherence and those took below 95% was considered as non-adherence to ARV drugs,then adherence to ARV drugs considered as outcome variable and no-adherence to ARV drugs as reference variable. Finally perceived availability of basic resources [OR,1.209, 95% CI,1.073-1.363], perceived client provider interaction [OR,1.162, 95% CI,1.029-1.312], perceived privacy during physical examination [OR,1.496 ,95% CI,1.062-2.108], perceived confidentiality of medical record [OR,1.621, 95% CI,1.15-2.283], and Merchant [OR,0.378 95% CI,0.157-0.913] were significantly associated to adherence to ART services . (Table14)

Table 13: Multiple binary Logistic regression Result of predictors of Adherence to ARV drugs at Woliso Town health facilities, Soulth West Shoa Zone, Central Ethiopia, March, 2011(N=314)

Predictors of Adherence to ARV drugs	**P-value**	**Adjusted Odd Ratio**	**95.% CI**
Perceived technical competence (N=314)	0.014	1.231	1.044-1.451
Perceived convenient of opening hours (N=314)	0.007	1.709	1.156-2.527

Table 14: Binary Logistic regression Result of predictors of Adherence to ARV drugs at Woliso Town health facilities, South West Shoa Zone, Central Ethiopia, March, 2011 (N=314)

Predictors of Adherence to ARV drugs	**P-value**	**Crude Odd Ratio**	**95.% CI**
Perceived availability of basic resources	0.002	1.209	1.073-1.363
perceived client provider interaction	0.015	1.162	1.029-1.312
Perceived privacy during physical examination (N=314)	0.021	1.496	1.062-2.108
Perceived confidentiality of medical record	0.006	1.621	1.15-2.283
Merchant	0.031	0.378	0.157-0.913
Farmer	**1**		

Qualitative Result

Socio-demographic characteristic of Respondents

A total of fifteen participants were interviewed. From Saint Lukas Hospital Medical director, one health officer and one BSc nurse from ART clinic, two adherence supporter, and three clients on follow up during study period, and from Woliso health center head of health center, one health officer, one diploma nurse, two adherence supporter, and three clients on ART during data collection period was included in the study. From Woliso town one key informant/ head of Association of PLWHA ('Abdi Weqayo') were interviewed.

The major findings were narrated under three theme area focusing on the objective of the study; availability of resources and process of service provision, reason of clients' dissatisfaction and non-adherence to ARV drugs and outcome of ART services.

Availability of resources and Process of service provision

Almost all respondents explained that ARV drugs are available during their appointment session. Responses from health providers and head of health facilities showed even if, there were occasionally shortage of ARV drug encountered, but we never send our clients without ARV drugs, or else we bring and give from other nearby health facility. But there is shortage of prescribed medication for opportunity infection, and our clients were sometimes obliged to buy outside of our facility. Shortage of human power, examination and counseling room in Woliso health center and absent of waiting area in Saint Lukas Hospital were major problem identified.

In Woliso health center due to shortage of health provider only one provider was assigned for provision of ART services. One health provider stated "…I can't talk about quality of care here, despite of about quantity how many client get service whatever it is. More better to feel heartfelt of our clients, b/c I was normalized due to shortage of arrangement. As you see I am treating client with this narrow room in the presence of data clerk and adherence supporter, since they are non health professional, uncomfortable especially during physical examination. And I am alone assigned in these clinics; averagely about 35 clients visit daily our clinic (12 for refill ARV drugs and 23 for different problem). Work overload and restless decrease our service quality of care…" Other health provider from Saint Lukas Hospital stated "Lack of waiting area decrease some extent satisfaction of client's on our service, we were discussed these issue on meeting repeatedly, it have been promised to construct within few month"

Shortage of training session for ART service and lack of training on some comprehensive chronic HIV care were the main issue raised from health providers. One health provider stated from Saint Lukas Hospital" I am serving in this ART clinic for two years, but still I haven't took training on HIV palliative care, and PMTCT services, even I didn't satisfied on other training due to short session…**'.**

Table 15: Reason of Client Satisfaction and Non-adherence to ARV drugs in Woliso health facilities, South West Shoa Zone, Central Ethiopia, March 2011.

Reason of client Dissatisfaction	
Woliso Health Center	**Saint Lukas Hospital**
Absence of OI drugs, long waiting time during laboratory investigation, impoliteness of some staff, lack of privacy during examination, integration of follow up card with general services which increases waiting time	absence of OI drugs, long waiting time during laboratory investigation for CD4, impoliteness of some staff, and inconvenient of waiting area (absence) , integration of chronic service (DM, HTN and Chronic HIV care) with different color of clients follow up card,
Reason to Non-adherence to ARV drugs	
Forgetfulness, lack of nutrition, holy water, spiritual prayer, use of addictive substances, fear of disclosure, , fear of stigma and discrimination, fear of jobless while they disclose , less awareness on consequence of non-adherence were the main reason identified both from providers and clients.	

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47year old key informant and six year ARV drug user from Woliso Town said" …I would like to bless both health facilities for their continuum care for us. From my experience and on behalf of other I know the heartfelt of clients on quality of ART service in both facilities. In Woliso Health center shortage of OI drugs, mixing of follow up card with other general services , inadequate health education on side effect of medication and when to change drug regime, no distribution of different leaflet during follow up, and re-minding about nature of HIV/AIDS and ARV drugs were neglected most of the time. On the other hand in Saint Lukas hospital inconvenient of

waiting area, shortage of OI drugs, and integration of chronic disease services with ART service with different color follow up card makes clients dissatisfaction"

"…I am trusted on treatment throughout the month while I am reminded and re-informed about ARV drugs during my appointment but it was often neglected especially for long time users "a 44 years old man from Woliso health centers.

Outcome of ART services

All health providers explained about the outcome of the service as; almost for all clients their quality of life was in place and become healthier and productive after begun of ARV drugs. Especially those who were adherence to their prescribed medication were gain weight, healthier and their CD4 count dramatically increases within six months. Interviewed clients also expressed as ART change there life and bring out from economic crisis due to treatment cost.

A 34 years woman adherence supporter stated "It was four years ago, I was admitted to hospital and treated for different disease for two months and, there was no difference seen on my health, and finally I was counseled for HIV test and told me, then within two week after I had ARV drugs I was returned to my home, my child and husband also immediately tested and now we all are taking ARV drugs and till now we are healthy and can do any work as others, and I am teaching others . ART change my life and my family, so I never shay forever to talk and educate other about it. "

42 years old man said "I know my HIV status 18years ago and on ART for six years I am educating people where ever I gone about HIV/AIDS, positive living is nothing, most people depressed or hopelessness by fearing disclosure. Stigma and discrimination is a matter of lack of self confidence on self. I never bother due to living with the virus I am healthier plus good educator"

*"*One of our main challenges is how to know whether our clients adhered to ARV drugs or not. Most people report as they took their medication timely, but we can judge from CD4 failure and clinical symptoms as they didn't adhered to their ARV drugs." a 24 years old health provider from saint Lukas hospital

"I know many clients come on holiday and weekend by losing their ARV drugs by different reason, but they have no opportunity to refill because the service is non functional out of service ours. Imagine the chance they have..." 26 years old female adherence supporter.

All clients and health providers were explained even though good outcome of ARV drugs, there were a number of clients lost to follow up after they had started ARV drugs. Majority of clients didn't give real address during start medication which is very difficult to get them after they lost.

A 47 years old man stated" ...we are losing two things**.** 'Generation and Economy**'** Those who lost to follow up from treatment distributing newly resisted virus to other which is the second burden and economically crisis for individuals and nations. So, it should take into consideration during starting the regime. Any person illegible for ARV treatment should have his/her own person who can took responsibility and sign for her/him.*"*

Chapter 7

Discussion

This study tried to assess quality of ART service in terms of structure, process and outcome using Donabedian Quality Model. Using the combination of both quantitative and qualitative data collection methods and carried out factor analysis for reliability of instruments would be considered as strenghth of the study. The possible limitation of the study might be social desirability bias, providers might show goodness behavior during observation, the clients might feel ashamed to report specific instance of non-adherence, and lack of gold standard for assessment of adherence to ARV drugs.

Structure

Structures/input requirements for ART service provision were assessed using checklist according to minimum package requirement for provision of ART services in Ethiopia. Majority of the package fulfilled according to guideline but shortage of some IO drugs, shortage of examination and private counseling room, and adherence counselor nurse, clinical chemistry auto analyses and hematology auto analyses, Otoscope and reflex hammer and lack of waiting area were gaps existed. Having at least minimum structural requirements were the first step to enhance qualified process to get expected outcome. Different challenges exist within each health facility due to different gaps exists.

It could be trangulated with indepth interview" we are obligated only to assign one health provider for provision of ART service due to shortage of staff and room, even we assigned data clerk and case manager in examination room; imagine how discomfort both for clients and health provider, since we are breaking privacy and confidentiality". The finding was comparable with study in India 2009 shortage of staff [38], and South Africa study 2008 less positive picture of clients on the service was due to shortage of human resource [20]. It also consistence with study done in Amhara Region in 2009 shortage of human resource [40] and shortage of OI and ARV drugs[37] was reason for patient dissatisfaction on the services.

*"*You overwork like this without even a break because there are too many people all yet I am alone. Averagely about 35 clients visit per day for different problem "indepth interview from Woliso health Center

" My daily head ach is lack of waiting area for clients, since ART room is in front of general outpatient diagnosis services most clients fear stigma and discrimination and not want to seen by

other, they stand far apart in other clients until they called with us*".* It indicates that shortage of arrangement influence indirectly quality of services.

Process of ART Service provision

One fourth (24.2%) of study subjects were never disclose their HIV status to someone else. Fear of stigma and discrimination were reason of non disclosure of their HIV status to someone else during in-depth interview. From providers perspective there were weak counseling behavior seen during observation session. It was found that only 45.8% clients were counseled on importance of disclosure. This might be due to work overload or negligence of service providers.

About three fourth (73.2%) and one fourth (24.5%) of study subjects were spent less than 30 and 31-60minute in waiting area to met health provider respectively. Which was consistence with study in India in 2010 waiting time to met health provider was 30minute, [37] but long waiting time (82.6%) study in Addis Ababa in 2009 [39]. This might be due to difference in availability of resources for process of provision of ART services and client overload.

Health information provided during follow up period on nature of HIV/AIDS and ARV drugs are crucial to remained clients on the importance of continuous and lifelong follow up of the treatment. Of clients included in exit interview health information's were given on benefit of ARV drugs for (89.8%), side effect of ARV drugs for (81.8%), and treatment is lifelong for (88.2%) and the importance of adherence to ARV treatment for (88.9%) clients during their follow up period which were inconsistence with guideline all clients have to be counseled and updated always during their appointment period. Results from observation consultation session shows only 76.4%, 75.8% and 68.8% were assessed previous month adherence, counseled on safer sex, and instructed /remind how to take ARV medication respectively. This indicated that there were gaps exist on provision of information on nature of HIV/AIDS and ARV drugs during follow up period. It was also supplemented by in-depth interview "…I am trusted on treatment throughout the month while I am reminded and re-informed about ARV drugs during my appointment but it was neglected for long time ARV users" one ARV drug user. Study done at Addis Ababa Hospital in 2009 shows lack of description about ARV drugs (45.2%) during appointment [39], WHO 2000, inadequate information resources were among major reason of client dissatisfaction on service provided [30].

Meeting clients' expectation especially for lifelong chronic care service like ART services would brought satisfaction and trust on health a facilities which are the indicator of quality of care. The

overall mean score level of client's satisfaction on provision of quality of ART services at study area was found to be 12.92 (86.1%) from client perspectives. Greater than 90% of respondents score their perception as agree to strongly agree on quality of ART services since the mean of 10^{th} percentile was less than or equal to ten which is above uncertain score .The score distribution of overall mean score level of client's satisfaction was skewed towards upper tail of the distribution reflected in the mean score level of 12.92(86.1%) on scale with the a maximum score of 15, indicating the clients expressed positive view of overall quality of care. Less than study done in Burkina Faso more than 96% of respondents were very satisfied with over all service received [60], and comparable with study done in Spanish society of Hospital pharmacy 50.2±7.8. However, higher than study done in Amhara region average client satisfaction were 3.9(78%) [54].This study found that perceived technical competence (β=0.127. P-value<0.012), perceived availability of basic resources (β=0.125, P-value<0.001), perceived confidentiality of medical record (β=0.22, P-value<0.027), and perception and knowledge of clients on ARV drugs (β=0.192, P-value<0.000) were the main predictors of overall satisfaction when treated with multiple linear regression. Studies also shows that clinical and interpersonnel skill was the main factors for client satisfaction [33,36]. On the other way being merchant (β=-0.610, P-value<0.019), perceived client provider interaction (β=0.21 .p-value<0.000), perceived privacy during physical examination (β=0.389, p-value<0.001), and perceived convenience of opening hours (β=0.603, P-value<0.001) were significantly associated with overall satisfaction of clients when linearly treated in the absence of other variables. Study indicated that low competence of counselor affects client satisfaction on the services. [20,30,37]. It was also consistence with in-depth interview result absence of OI drugs, impoliteness of some staff, inconvenient of waiting area, and difference in color of follow up card , and inadequate information on side effect of drugs were the major reason of client dissatisfaction.

Adherence

Adherence to ARV drugs in the last week was found that 93%, greater than 89% adhere >95% using self report in Guatemala city in Central America2010 [49], consistence with 92.4% complied with >95% in past seven day in Amhara region 2009 [40], but higher 79%than with study done in Papua New Guinea (in Pacific Islands) by Kelly A et in 2010 [48], Botswana 60% [59], national wide 78.8% in 2006 [53], in Addis Ababa 81.2% in 2006 [55] in Yirgalem Hospital adherence to ARV drugs weeks before survey was 74.2% in 2008 [56] . Less than study done in North West Ethiopia 97.7% patients adhered to prescribed ARV drugs in previous week in 2009 [54]. Even if, adherence rate was below guideline (95%), it was found that higher than others finding in developed and developing countries. This might be due to free distribution of ARV drugs and available OI drugs in both health facilities, and CD4 machine also available in Saint Lukas Hospital.

The main reason to non-adherence to prescribed ARV drugs in study area were being busy with other things (47.9%), has no food took with medication (45.8%), away from home (29.17%), fear of stigma and discrimination (22.9%), simply forget(20.8%), and fear of medication side effects (20.8%). It was also supplemented with in-depth interview from providers and clients perspective lack of food, fear of stigma and discrimination, simply forgotten, being busy with different things and transportation problem due to low socio-economic status were the main reason identified to non-adherence to ARV drugs. It also steak with other study forgetfulness, leaving medication at home, unable to travel clinic due to lack of transportation and being away from home were reason identified [49, 56,59]. Multiple binary logistic regression result shows perceived technical competence of health providers [OR, 1.285, 95%CI, 1.078-1.531], and perceived convenient of opening hours [OR, 1.561, 95%CI, 1.062-2.293] were the main positive predictors to adherence to ARV drugs. This indicates that the skill of health providers to diagnosis, treat, and provide health information about their problems influence adherence to ARV drugs. Clients, who were well diagnosed, took appropriate treatment with health information about the problem and drugs they took were more likely adhered to ARV drugs than others. Clients value convenience of opening hours of ART clinic during follow up period. Those clients perceived as opening hours of clinic convenient were 1.561 time adhered to their ARV drugs compared to those non-adhered. More probably those non-adhered to ARV drugs due to

inconvenient of opening hours might due to fear of stigma and discrimination during their appointment, and those non-disclosed their HIV status to someone else. It also supported by in-depth interview" Many clients come on holy day and weekend by losing their pills by different reason, but they have no chance to get…, it is better to open ART service for 24 hours as emergency case. … "a 30 years old woman adherence supporter

When associated variable were not adjusted with other variables or crude ratio at 95% CI, perceived availability of basic resources [OR ,1.209, 95% CI , 1.073-1.363], perceived client provider interaction [OR, 1.162, 95% CI , 1.029-1.312], perceived privacy during physical examination [OR, 1.496 ,95% CI, 1.062-2.108], perceived confidentiality of medical record [OR, 1.621, 95% CI, 1.15-2.283], and being Merchant [OR, 0.378 95% CI, 0.157-0.913] compared to farmer were significantly associated to adherence to ART services. This study shows that perceived technical competence was found to be the main positive predictors of overall satisfaction of clients and adherence to ARV drugs. Clients perceive high level of technical competence of health providers were more adhere to their prescribed medication compared with others. This indicated that client's value competent health provider to satisfy on service received and adhered to their medication. So, technical and communication skill of health providers influence the quality of care. It also supported by other study [30, 37, 52]. Surprisingly merchant were less likely satisfied on service provision and adhered to their prescribed medication as compared to farmers. It might be merchants are more likely prone to away from home and busy with other things. Supported by qualitative and quantitative finding being busy with others thing was reason of non-adherence.

Chapter 8

Conclusion and Recommendation

Conclusion

- Even though majority of structural requirement for provision of ART service according to guideline were available, there were different gaps exists within both health facilities. Shortages and unseparate examination and counseling room, absence of nutritional support, shortage of some OI drugs, none assigned adherence nurses, Otoscope and reflex hammer, clinical chemistry auto analyses and reagent hematology auto analyzer in Woliso Health Center as guideline. Shortage of some OI drugs, absence of nutritional support, absence of waiting area, reflex hammer in Saint Lukas Hospital as guideline.
- This study indicated that greater than 90% or above 10^{th} percentiles of clients was satisfied/ score satisfaction as agree and strongly agree on quality of ART service provided for them. Which indicates that majority of clients was satisfied on ART services.
- Perceived technical competence of health providers, perception and knowledge of clients on ARV drugs, perceived confidentiality of medical record, and perceived availability of basic resources for provision of ART services were the main predictors of overall satisfaction of clients on ART services.
- Adherence to prescribed dose also as indicator of outcome of ART services in this study was below standard or guideline (93%) at 95% with seven day self report adherence rate but higher when compared with other studies.
- The main factors influence adherence to prescribed doses were perceived technical competence of health providers, and perceived convenient of opening hours of service. The main reason of non-adherence to ARV drugs were forgetfulness, busy with other things, and lack of food/ nutritional support.
- Quality of ART service in Woliso town is satisfactory since client overall satisfaction and adherence to ART service as indicator of quality of ART service found to be high (above 90%).

Recommendation

For Woliso Health Center

- Especial attention should be given on examination and adherence counseling room by separating and increasing the number of class as guideline
- Should assign adherence nurses for ART clinic

For Saint Lukas Hospital

- Waiting area should be built for clients
- Even though ART services is integrated with others chronic cases follow up card should be uniform for all clients to reduce stigma, and discrimination

For Both Health Facility

- Health providers should re- educate and remind clients about HIV/AIDS and ARV drugs during appointment period
- Educate staff at all levels about the connection between patient satisfaction and the quality of care. Staff must understand that the connection is direct (Satisfaction, information exchange and adherence to ARV drugs)
- Basic resources for provision of ART services(OI, drugs, ARV drugs, Laboratory service, trained human power, emergency service) should continuously avail for clients during their appointment
- Confidentiality of medical record/information and privacy during physical examination should be considerable in every process of ART provision
- Health providers should always remind clients on importance of adherence to ARV drugs and its consequences during appointment period
- Health Facilities should work with religion leaders since holly water and prayer were some of reason to non-adherence
- Health facilities should work with PLWHA association and built linkage in continuous way
- Since forgetfulness were the main reason of non-adherence health education should given on base of their appointment on technique to remind time to take medication/adequate

counseling on personal habituating mechanisms to adhere to treatment such as memory aids and alarms, radio, support to disclose to whom with live to solve forgetting of taking medication

For Zonal Health Department and Woreda Health Office

- Special attention should be given for ART service during integration supervision of health facilities undertaken

For Regional Health Bureau and Federal Ministry of Health

- Adequate training should be given for health providers before engaged in ART provision.
- Refreshment training for those has been engaged in provision of the service.
- Ministry of Health and other stake holds or NGOs should identify gaps and work on nutritional support for those economically poor clients especially for elders and orphan children

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Annexes 1:- RESOURCE INVENTORY TOOL

Checklist for Assessment of Minimum Package Requirement (structural)for Provision of Antiretroviral Treatment Service

Name of health facility _____ Responsible person_____ Date_____

Table 16 A. Human resource availability inventory tool

S. No	ART team members	Number available	Trained on ART	Currently working on ART	Remark
1	MD [GP]				
2	HO				
3	Nurse				
4	Pharmacy personnel				
5	Laboratory personnel				
6	Data Clerk				
7	Case Manager				
8	Others				

Table 17B. Infrastructure availability inventory tools

S. No	Type	Available	Number	Currently Functional	Remark
1	Examination Room				
2	Private counseling room				
3	On site pharmacy storage				
4	Pharmacy secured storage space				
5	pharmacy Confidential counseling room				
6	Specimen collection area and laboratory				
7	others				

Table 18C. Equipment /exam tools and supplies availability inventory tools

No	Type/Item	yes	No	If, yes how many	
1	Otoscope				
2	stethoscope				
3	ophthalmoscope				
4	BP cuff				
5	Reflex hammer				
6	Refrigerator (in pharmacy)				

Table 19D. Management information system in ART clinic

No	Items	Yes	No	Functional	Remark
1	Logbook				
2	Recording Format				
3	Reporting Format				
4	Special ART drug prescription				
5	lockable file cabinet				

Table 20 E. Management Information system available in ART pharmacy

No	Items	Yes	No	Functional	Remark
1	lockable drawer				
2	bin card				
3	stock card				
4	receiving voucher				
5	Models				
6	prescription form				
7	registration book				
8	report form				
9	Referral services (Referral slip and feedback form)				

Table 21 F. Management information system in Laboratory

No	Items	Yes	No	Functional	Remark
1	log book				
2	reporting format				

Table 23**G. Availability of the required reagents and supplies for laboratory checklist**

No	Laboratory test	Currently available Yes/No		A reagent or supply on frequent shortage	Length time in shortage of the drugs in weeks	Remark
		Yes	No			
1	Sterilizing equipment					
2	Microscope					
3	Refrigerator					
4	Centrifuge					
5	HIV Test Kits					
6	IP supplies					
7	Reagents Hematology auto analyzer					
8	Clinical chemistry auto analyzer					
9	$CD^{+}4$ machine					

Table 24H. Availability Comprehensive HIV Services checklists

No	Type of Services	Yes	No	Currently Functioning	Remark
1	Voluntary Counseling and Testing Services(VCT)				
2	Provider Initiative HIV Counseling and Testing (PIHCT)				
3	Prevention of Mother to child transmission				
4	Palliative care				
5	Opportunistic Infection(OI) Treatment services				
6	Sexual Transmission Infection(STI) Prevention and Rx services				
7	Nutritional Support				

Table 25 I. Availability of Manual and Guideline checklist

No	Type	yes	No	On use in ART clinic	Remark
1	Guideline for implementation of ART in Ethiopia				
2	Guideline for the use of ART in Ethiopia				
3	Palliative care Manual				
4	OI Treatment pocket book				

Table 26. ARV and OI drug availability checklist

No	ARV Drugs for Adults	Available on date of assessment		Number of occasions with stock out of drug during last six months	Cumulative period of drug stock out during the past six months
		yes	No		
1	stavudine –Lamivudine-Nevarapine (D4T-3TC-NvP)				
2	Zidovudine-lamivudine-Nevarapine (AZT-3TC-NVP)				
3	Tedinovir-lamivudine (TDF-3TC)				
4	Stavudine-Lamivudine (D4T-3TC)				
5	Efenviranz (EFV 600mg)				
6	Efenviraz (EFV 200mg)				
7	Nevarapine 200mg				
8	lamivudine 150mg				
9	Abacavir -300mg				
10	Didinovir -250mg				
11	Didinovir-400mg				
12	Lupinavir-250mg				
OI Drugs for Adults					
1	Cotrimoxazole -480mg				
2	Isozonide				
3	pyridoxine				
4	Fansider				
5	Folic acid				
6	Fluconazole				
7	Acyclovir				
8	Multivit				

Checklist for Completeness of ART Follow-Up For

Name of Health Facility_____ID No_____Data collector_____

A. Completeness ART Follow-Up Form						
No	**Basic Information seen**			**Available**	**Not Available**	**Remark**
1	Facility name					
2	Patient card NO					
3	Unique ART No					
4	Address					
5	Date confirmed HIV					
6	Type of test					
7	Eligible date					
8	Why eligible					
9	Eligible and ready date					
10	pay/free					
11	schedule/ unscheduled					
12	Follow up date					
13	Months on ART					
14	Weight	***Initial***				
		Current				
15	Functional status	***Initial***				
		Current				
16	WHO staging	***Initial***				
		Current				
17	TB screen					
18	TB Prophylaxis / Treatment					
19	Cotrimoxazole adherence /dispensed dose					
20	ARV adherence/dispensed dose/side effect/ reason for change					
21	CD4/mm^3	***Initial***				
		Current				
22	Hgb					
23	Next visit date					

****Write the initial and current weight, functional status, WHO stage and CD4 counts of Clients from reviewed record if available in space provided in table.***

Checklist for Observation of Consultation /Case Management session of Adult chronic HIV care with Health Workers

Observation of consultation with_____ (Medical Doctor, Health Officer, Nurse,)
Name of facility_____ Date_____
Observer name _____signiture_____
Background information on informant
Age_____in years Sex. 1. Male 2. Female

S.No	ACTIVITY	1=YES 2=NO	1=YES 2=NO	1=YES 2=NO	1=YES 2=NO	1=YES 2=NO
	CASE NO					
1	Was the patient well received?					
2	Weight taken and recorded on the follow up form					
3	Brief history of the patient taken					
4	Adherence to medication assessed					
5	Counseled on safer sex/condoms					
6	Counselor on disclosure					
7	Encouraged partner and children testing					
8	Provide education on nutritional support					
10	Ask complete review of symptoms					
11	Ask about TB symptoms					
12	Send sputum for smear (if productive cough)					
13	Review pregnancy status					
14	Counsel on Family Planning					
15	Treat OIs					
16	Give ART					
17	Give CTX prophylaxis if eligible					
18	Support adherence					
19	Provide advice/treatment for side effects					
20	Refer or consult for a higher level of care if needed					
21	Instruct on how to take medications					
22	Appoint made to the patient taking into consideration the patient's convenience					
23	Staging decided and filled					
24	Functional status of the patient assessed and filled					
25	TB status (filled)					
26	If the patient is on ZDV/AZT Hemoglobin checked					
26	Time taken (write average time for managing a case					

INFORMED CONSENT

JIMMA UNIVERSITY, COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCE, DEPARTEMENT OF HEALTH PLANNING AND HEALTH SERVICE MANAGEMENT, QUESTIONNAIRE FOR ASSESSING OF QUALITY OF ART SERVICE AT HEALTH FACILITIES PROVIDING ART IN WOLISO TOWN, OROMIA REGION, CENTERAL ETHIOPIA

INFORMED VERBAL CONSENT FORM BEFORE CONDUCTING THE COMPLETING QUESTIONNAIRE (GUIDELINE FOR RESPONDENTS)

Hello. My name is _____ and I am from Jimma University College of Medicine and public Health Department of health Service Management. We are working for an investigator doing his thesis for the partial fulfillment of master's degree in Health Service Management. We are doing a survey to find out about the services provided at this clinic. The information from the survey will be used to improve the quality of services in this and other clinics. The clinic has given us permission to do the survey and we are asking all clients on ART at least for three months who visit the clinic during our stay to participate. We would like your permission to observe your visit with the clinic staff and to ask you a few questions about the visit/service afterwards.

Your participation is extremely important, but it is entirely voluntary. You do not have to be observed, nor do you have to answer any questions if you do not want to. You will not be denied any services if you decide not to participate. If you agree to participate in the survey, you can change your mind at any time during the visit or the interview. I will not write down your name and everything you tell me will be kept strictly confidential. During your visit, I will be sitting a little apart from you and the clinic staff and I will review your follow up card to have some information. There are no risks or direct benefits to you from participating in the survey but your participation will contribute to improving services in this and other clinics. We will ask you questions in a place where other people or conditions couldn't interfere after observation/you got services.

Do I have your permission to continue?" 1. Yes 2. No

CONSENT FORM

I have heard the information sheet above and clearly understood the purpose and anticipated benefit of the research. I hereby need to assure with my signature below that I without any coercion or forceful act by the research team, have decided to voluntarily participate in the study to contribute my part in the effort being made for the betterment of ART service.

Questionnaire No. _____

Signature _____

Date_____

Data collector's

Name _____

Signature _____

Supervisor's

Name _____

Signature_____

Health Provider if Observational

Profession _____

signature_____

Annex II: Exit Interview Questionnaire

A structured questionnaire prepared to assess quality of ART service providing in Woliso Town Health Facilities. Each page will be filled by data collectors according to the patient's response, which is obtained by interviewing the patient. In circle on the answers or Put (X) sign on the space provided in tables

Code No_____Data_____Health Facility_____

A. Background information of study subjects

No	Item	category					skip
101	Sex of the respondents	1.Male	2.female				
102	Age in years_____						
103	Place of residence	1.rural	2. Urban				
104	Ethnic group	1.Oromo	2.Amhara	3.Gurage	4.Tigre	5.Others	
105	Marital status	1. Single	2.Married	3.Divorced	4.Widowed	5.Separated	
106	Religion	1.Orthodox	2.Muslim	3.Protestant	4.Catholic	5.Others	
107	Educational status	1. Illiterate	2.Read and write	3. Primary	4.Secondary	5.Tertiary	
108	Monthly income----------ETB						
109	Working situation	1.Employed	2.un employed	3.Marchent	4. Farmer	5. Others	
110	Whom do you live with?	1. Live alone	2. Family	3. Parents	4.Unstable	5. No answer	
111	Active substance use	1. Yes	2. No				
112	If yes Q111, what?	1. Alcohol	2.Cigarette	3. Khat	4. Others specify		
113	Family size _____						
114	For how money months, did you take ARV? _____month						
115	Is there anyone else who knows about your HIV status?			1. Yes	2. No	3. I don' know	
116	If 'Yes Q115'who	1.Partne	2.Offspring	3.Parent	4.Brother/sist	5. Relative	

	knows about your HIV status?	r			er	6. Friend 7. Other (Specify)---------	
117	Who told you for the first time about the ART services in this health facility?	1.Health professional	2.massmedia	3.PLWHA association	4. friends	5.Relative 6. other--	
118	Do you know any other health facility that provides ART Services?	1.Yes	2. I don't know				
119	How long did it take to you to arrive at this Health facility?						
120	How long did you wait before seeing health provider/s	1.No wait	2.Less than ½ hr	3. Half to one hour	4. 1 hour and above 88. Don't know		

B. The following Questions are used to assess information provided to clients by health providers about HIV/AIDS and ARV during their Visiting day.

S.No	**Discretion**	Yes	No	Skip
121	**Did health information about HIV/AIDS and ARV drugs given to you today? If, yes what?**			
121.1	AIDS has no cure			
122.2	Benefit of ART drugs			
123.3	Treatment has side effects			
124.4	Treatment is life long			
125.5	Adherence to treatment is crucial			
126.6	Practicing safe sex while on treatment is important			

C. **The following questions are used to assess client satisfaction on process on ART services. Each questions will be answered with satisfaction score *1=strongly disagree, 2=Disagree, 3=neither agree/nor disagree, 4=Agree, 5= strongly agree NA=Not answer***

S/N	**CLIENT SATISFACTION ON ART SERVICES**	**SATISFACTION SCORE**					
I	**Question to assess client perception of technical competency**	strongly disagree	Disagree	Neutral	Agree	Strongly agree	NA
127	The health provider made appropriate diagnosis and give me correct treatment.						
128	Health workers describe me the benefit of ART						
129	Health provider address health information about HIV/AIDS						
130	Health provider address information about ARV medication						
II	**Question to assess accessibility or Accommodation**	1	2	3	4	5	
131	ARV drugs are always available in this clinic						
132	OI drugs are always available in this clinic						
133	Laboratory facilities are always available when needed in this clinic.						
134	health providers always available during my appointment day/visit						
135	The examination rooms maintain both my privacy and confidentiality						
136	Medical care is ealy assessed during emergency time.						
137	ART rooms are always clean.						
138	Physical setting of ART clinic are convenient						
139	I can access ART easily when I need						
140	Facility opening hour/schedule hour of this facility is convenient						
141	Waiting time before consultation is short						
III	**Question to Assess Client Provider Interaction**	1	2	3	4	5	
142	The health workers are caring, concerned and respectful.						
143	Health Workers are let me to talk						
144	Health worker was attentive and listened to my problem						
145	I wait in examination room only for short time						
146	language used during consultation were clear						
147	Health provider keep my privacy during consultation						
148	The health providers keep confidentiality of my medical information including my HIV status.						
IV	**Client perception and Knowledge on ARV**						

149	ARV have to be taken for the rest of life						
150	Some antiretroviral have to be taken on an empty stomach and others may be taken with food						
151	The time at which the medication is taken will influence its effectiveness.						
152	Missing doses and/or taking them late or incorrectly will determine if the treatment works						
153	For my medicine to work best, I should not miss a dose, nor take it late or incorrectly.						
154	Drug resistance develops when my antiretroviral are missed and/or taken late or incorrectly						
Question Used to Assess the Overall client satisfaction on ART services							
155	I am totally satisfied to ART service						
156	I will encourage others whom I know to come to use ART service in this health facility						
157	All arrangements for ART services are adequate						
158	I will come back to this center for ART service with happiness						
159	I am planning to take my referral to other place health facility due to inadequacy of care here.						

D. The following Questions are used to assess adherence to ART drugs.

129. You are current taking the following drugs at the frequency and doses listed

Name of ARV drugs	Number of pills per dose	doses per day

	Questions and filters	**Coding categories**			**code**
130	Did you miss taking any of your ART drugs				
130.1	Yesterday?	1.Yes	2.No	88. I don't know	
130.2	In the last 3 days	1.yes	2.No	88. I don't know	
130.3	In the last 7 days?	1.Yes	2.No	88. I don't know	
130.4	In the past 30 days	1.Yes	2.No	88. I don't know	
131	How many doses did you missed taking				
131.1	Yesterday?				

132.2	In the last 3 days?		
133.3	In the last 7 days?		
134.4	In the past 30 days?		
132	During the past 7 days on how many days have you missed taking all doses?	1. None 2. One Day 3. Two Day 4. Three Day 5. Four Days 6. five Days 7. Six Days **8.** Seven Days	
133			

No	Questions and filters	coding categories		skip
	Questions used to assess reasons or major problem to non adherence to prescribed medication	yes	No	
133.1	I had no food to take with medication			
133.2	I were away from home			
133.3	I were busy with other things			
133.4	I were simply forgot			
133.5	I had too many pills to take			
133.6	I fear of medication side effect			
133.7	I fear of stigma and discrimination			
133.8	I lack of confidentiality on the centers			
133.9	I non-availability of ARV drugs			
133.10	I were felt sick or ill			
133.11	I were felt depressed /overwhelmed			
133.12	I were run out of pills			
133.13	I were felt good			
133.14	I were drunk alcohol at specified times			
133.15	I were not fully understanding the regimen and its requirements?			
133.16	Transportation problems getting to the clinic			
133.17	I were lost my pills			
133.18	I were took Holy water			
133.19	Because of poor adherence counseling			
133.20	Bothered by my dreams?			
133.21	others			

Guideline for In-depth interview

Guidelines for In-depth interviews on quality of ART services with health workers (medical doctors, Health Officer, nurses) in Woliso Town Health facilities

Name of facility_____ Name interviewer_____

Interview number_____ ___ Date_____

1	sex	M/F
2	Age	Years
3	Profession	
4	Role in ARV programme	
5	Involved in programme	

1. What specific training have you received for this job in relation to ARV programme? Tell me about the training (Details)
2. Do you think this training has been sufficient? (Details)I
3. How do you explain the availability of resources (Drugs, Material and Equipment, Guidelines, Infrastructure) required for provision of ART services at this health facility?
4. Are the drugs you prescribe always available? (If not, give details – how often, reason, what do you do about it)
5. How do you think your patients do, generally speaking, in terms of adherence to ART drugs?
6. What do you use to determine adherence (probe: appointments, refills?)
7. From your experience what do you think affect adherence?
8. What are the main challenges you face in supporting your patients to adhere to ARV drugs (especially for longer term users)?
9. What are the main challenges you and your colleagues face more generally in your work? (if necessary, prompt re workload, stress, burnout)
10. Is there anything you would like to see done differently in this facility? If yes, what?

Guideline for In-depth interview with ARV users/clients on quality of ART services in Woliso Town Health Facility

Name of the interviewer:_____ Interview number_____
Name of health facility _____ Date:_____

Socio demographic information on informant

1	Sex	M/F
2	Age	Years
3	Educational level	
4	Occupation	
5	Distance from health facility	

6) How would you describe your health since you started treatment?

7). what do you think the quality of service you receive at this clinic?

8). How do you find clinical setting of the clinic?

9) .How do you explain convenience of waiting time and during consultation and emergency time?

10) What do you perceive as the biggest problem regarding taking ARV treatment?

11) What do you think could be done to improve this?

Do you have additional idea?

Thank you for your time and co-operation

Guideline for In-depth interview with Head of health facility / Medical Director in Woliso Town health Facilities

Name of interviewer_____

Place of interview_____

Date of interview_____

Officer Interviewed_____

1. When did the facility start providing ART?
2. Number of workers & type of staff involved in ART?
3. Number of staff trained & type of training?
4. There had been times in the past when your patients had their ARV supply rationed because of inadequate stock, what do you know about this?
5. What mechanisms do you have to ensure availability and sustenance of ARV supply?
6. What strategies have you in place to ensure patients receiving ARVs adhere well enough to their treatment?
7. Do you think there are opportunities for improvement in your programme, if yes probe?
8. What efforts have been made to improve quality of ART services?
9. What challenges and opportunities are there in different perspective (provider, client and facility) to provide ART services?
10. Average client daily got the services 1. New_____2. Repeat_____
11. Did HIV/AIDS committee avail in this health facility? If, yes are their functional? How often they meet each other?
12. How do you explain the reporting system of ART activities? Was the previous month activities reported ? Shall we see it?
13. Is there supervision from Zone or Region or other concerned bodies timely on these services? How frequent they come for supervision?

    If you have additional idea or suggestion

    Thank you!

AnnexIII : Afan Oromo Translated Questionnaire

Uunkaa Waliigaltee Tajaajilamtoota Tajaajila Argatanii

Jimmaa Universiitii, Kooleejii Madikaalaa fi Saayinsii Fayyaa Hawaasaa, Dipaartimantii Tajaajila Fayyaa Manaajimantii, Gaaffillee Qulqullina kenninsa Tajaajila Qorcha Farra HIV/AIDS Magaala Walisoo Keessatti kennumu Qorachuuf Qinda'an

A. Foormii Tajaajilamaan Odeeffannoo Kennun Dura Heyyamaama Ta'uu Isanii Ibsu

Akkam bultaan/ooltan. Maqaan koo_____jedhama. Kanan dhufee Yuniversiitii Jimmaa Kooleejii Leenjii Yaalumsaa fi Fayyaa Hawaasaa Euguu irraa yemmu ta'uu barumsaa digrii lammaffaa Bulchiinsaa Tajaajila Fayyaatiin barachaa kan jiruu fi eebbaf kan ta'uu qo'annoo gagessa jirra. Kanaaf nuutis odeeffanno muraasa kenninsa tajaajilaa fayyaa kutaa farra qorcha HIV/AIDS keessatti kennamu ilaalchisee isin gaafachuun barbaada. Qabiyyen odeeffanno itti quufinsa/gammadu kenninsa tajaajila yaala qorcha farra HIV/AIDS fi haala fudhanna qorcha farra HIV/AIDS ta.a. Deebii isin nuuf kennitan irratti hundaa'udhan qulqullina kenninsa tajaajila qorcha farra HIV/AIDS maal akka fakkatufi rakko adeemsa kenninsa tajaajila waliin walqabatee maal akka ta,ee addaan baafachuuf nu fayyada.

Hirmaachuu diduudhaf,akkasumas jalqabdanii addan kuttanii dhiisudhaaf mirgaa guutuu qabdu.Garuu gutummaan gututti akka hirmaatani isin jajabeessa sababinni isaas yaadinni isin asitti nuuf kennitan isin qofa osoo hin ta'in tajaajilamtoota tajaajila akka keessan barbaadanifi carraa odeeffanno kennu kana hin argannefillee waan fayyaduuf. Dhabbata Fayyaa kana keessatti qulqullina galmee keesanii fi odeeffanno biraa faayila fi kaardii keesan irraa ni barbaanna.

Odeeffannon isin nuuf kennitan icitiini isaa kan sirritti egamuu fi namoonni qorannoo gageessan qoftii kan ittifayyadamaniifi, namoota birootii gongummaa kan dabarfamee hin kenneminne ta'uu isaa waadaa kan isinii gallu yemmuu ta'uu iddoo namoonni biroo yaada kenyaa addan kutuu hin dandenyeetii isin gaafanna. Wantii nuti isin hubachiifinnu qoranno kana irratti hirmaachuu keessan tajaajila yaala iddoo kamituu argatan irratti midhaa kan hin qabinnee fi fayyidaa dhaabbata kamiyyuu irra argattan kan hin tuqinne ta'uu isaa fi fooyya'insa qulqullina kenninsa tajaajila qorcha farra HIV/AIDS tiif cicoolee gudda kan gummachuu ta'uu isaa isin beekifinna. Dabalatanis galmeen keessaniifi yeroo ogeessi tajaajila yaala isinii kennu qulqullina kenninsaa ilaaluf wantti tokko tokko waan ilaalamuuf kanaafis ayyama isin gaafanna.

Odeeffanno qabxii armaan olii irratii isiniif ibsamee irratti nuuf lachuuf yeroo fudhataniif baay'ee isin galateeffanna.

Gaafii isinii gaafachuu heyyamaa argadhee jiraa itti fufuu?

1. Eeyyen 2. lakkii

Uunkaa Waliigaltee

Ibsaa armaan olitti naaf kenname sirritti hubadhee, kaayyoo fi faayidaa qorannicha baree barbaachisumma isaatti amanee gaafiin gaafatamuuf odeeffannoo kennuuf dirqamaa tokko malee ayyamaa kootiin kanaan qorannoo keessatti hirmaadhe yemmuu ta'uu fooyya'insa tajaajila kenninsa qorcha farra HIV keessatti godhamuuf gumaacha gama kootin kanan godhee ta'uu isaa mallattoo kootinan mirkannessa**.**

Lakki ART caardii_____

Mallattoo_____

Guyyaa_____

Maqaa nama Ragaa funaanuu_____

Mallattoo_____

Maqaa Supervaayizaraa_____

Mallattoo_____

A. Odeeffanno Waliigala Tajaajilamaa

Gaafilee armaan gadiitif deebii tajaajilamaan deebisuu irratti marsii
Lakk_____Guyyaa_____

Lakk.	Gaafilee	Qorannoo		
101	Saala	1. Dhira 2. Dhala		
102	Umuri	-------		
103	Iddo Jireenyaa	1. Baadiyyaa	2. Magaala	
104	Saba	1.Oromo	2.Amharaa	3. Guraagee
		Tigree	5.kan birraa	
105	Haala fuudha fi heerumaa	1. Qeenxee	2.Kan Fudhee	
		3.Kan hiike /tte	4.Kan abban mana irra du'e	
		5.Iddo garagara kan jiraatan		
106	Amantaa	1.Ortodoksii	2. Muusilima	
		3. Pritestantii	4. Kaatolikii	5. kan biroo
107	Sadarkaa barumsaa	1.Kan hin baranne	2.Bareessuu fi dubbisuu qofa kan danda,u	
		3.Sadarkaa 1ffaaa	4.Sadarkaa 2ffaaa	5.Diplomaa fi isaa oli
108	Galii ji'aan argatan_____			
109	Haala hojii	1.Hojjata mootummaa	2.Kan hin qacaraminnee	
		3. Daldaalaa	4. qotee bulaa 5. Kan biroo	
110	Eenyyuu waliin jiraachaa jirtaa?	1.Koppaa	2.Maatii koo waliin	3.Abbaa fi haadha koo waliin

		4.Iddoo murta'aa hin qabuu	**5.Deebisuuf ayyamama kan hin taane**
111	**Wantoota nama addochan yk macheessan ni fayyadamttu?**	**1.Eyyeen 2.Lakkii**	
112	**Eeyyeen yoo ta,ee gaafii 111faan maali?**	**1. Dhugaati alkoolii**	**2. Tanboo/sigaaraa**
		3. Caatii	**4.kan biro**
113	**Baay'ina maatii_____**		
114	**Erga qorchaa farra HIV/AIDS fudhachuu jalqabdanii ji'a meeqa ta'e?_____**		
115	**Akka vaayirasii HIV waliin jirachaa jirtu namni beeku jiraa?**	**1. Eeyyeen 2. Hin jiruu 3. Hin beeku**	
116	**Eeyyen yoo ta'e "Gaafiin Lakk. 115"enyutu beeka ?**	**1.Namootan waliin hojii hijjadhu**	**2. Ijoollee koo**
		3.Abbaa fi haarme koo	**4.Firoota koo**
		5.Hiriyoota koo	**6.kan biro**
117	**Yeroo duraatif tajaajilli farra qorcha HIV/AIDS Dhabata fayya kanatti laatamuu isaa eessa dhageessan?**	**1.Ogeessota fayyaa**	**2.Miidi'a adda addaa**
		3.Waldaa namoota HIV/AIDS waliin jiraatanii	
		4.Firaa ko irraa	**5.Hiriyoota koo irraa** **6.Kan biro**
118	**Dhaabata fayyaa biroo tajaajila qorcha farra HIV/AIDS kennan ni beekitu?**	**1. eeyyen**	**2.Hin Beeku**
119	**Buufata Fayyaa ga'uuf yeroo hangamii isinitt fudhata?**	**1.Sa'aa walakaa gadii**	**2.Sa'aa walakkaa hanga tokkoo**
		3. Sa'aa tokko hanga lamaa	**4.Sa'aa lamaa oli**
		88. Hin beeku	
120	**Ogeessa fayyaa isiin yaalu argachuuf dhaabata fayyaa geessanii sa'aa meeqa turtu?**	**1. ommaa hin turuu(battalatti)** **2. Sa'aa walakaa gadii** **3. Sa'aa walakaa hanga tokko** **4. Sa'aa tokko fi isaa ol** **5. 88. Hin beeku**	

B. Gaafileen armaan gadii odeeffannon waa'ee Dhukkubaa HIV/AIDS fi Qorcha farra HIV/AIDS Ogeessi fayyaa tajaajilamaadha kennuu isaa qorachuuf kan qopha'aniidha.

	Gaafilee Odeeffanno tajaajilamaadhaaf kenname Qorachuuf qopha'anii	**1.Eeyye**	**2.Lakkii**
121	**Guyyaa har'aa ogeessa fayyatiin odeeffannon waa'ee HIV/IADS fi Qorcah farra HIV/AIDS isinii kennemeera? Eyyen yoo ta'ee maali?**		
121.1	**AIDSin dhibee fayyuu hin danda'aminneedha**		
122.2	**Waa'ee faayidaa qorcha farra HIV**		
123.3	**Miidhaa qorchaa farra HIV/AIDS fudhachuu**		
124.4	**Qorchi Farra HIV umrii guutuu fudhatama**		
125.5	**Bu'aa qorchaa osoo addan hin kutin fudhachuu**		
126.6	**Barbaachisumma waliqunnamtii saala ofi eeganno qabuu yeroo qorcha fudhachaa jiran gochuu**		

Gaafilee Itti quufinsa tajaajilamtootaa tajaajila kenninsa qorcha farra HIV/AIDS irratti qaban qorachuuf qopha'an. Sadarkaa itti quufinsa tajaajilamaa adeemsa kenninsa tajaajila qorcha farra HIV/AIDS irratti qabu haala sadarkaa ittiquufinsaa ibsanii mallattoo *"X" kaa'i*

1=Gonkumaa itti walii hin galuu ,2=Itti walii hin galuu 3=Wantiin beekuu hin jiru 4,=Ittin walii gala, 5=Baay'een itti walii galaa DH= Deebii hin laanne

S/N	Qabxiilee Gaafilee	Sadarkaa itti quufinsaa					
I	**Ilaalcha tajaajilamaan qulqullina ga'uumsa yaalaa/tajaajila kennamaa jiru irratti qabu**	**1**	**2**	**3**	**4**	**5**	**DH**
127	**Ogeessi fayyaa qorannoo fi yaalumsa sirrii dhibee koof ta'u naaf kennan**						
128	**Ogeessi fayyaa waa'ee fayyida qorchaa farra HIV/AIDS sirritti naaf ibsaniru**						
129	**Ogeessi fayyaa barumsa fayyaa waa'ee dhibee HIV/AIDS ilaalchisee naaf kennaniiru**						
130	**Ogeessi fayy aa barumasa waa'ee qorcha farra HIV/AIDS naa barsiisaniru**						
II	**Haala Mija'a Jiru Tajaajilaa Qorcha Farra HIV/AIDS Argachuu Ilaalchisee**	**1**	**2**	**3**	**4**	**5**	
131	**Qorchii Farra dhibee HIV/AIDS naaf ajajame yeroo hundaa Dhabata fayyaa kanaa ni argama**						
132	**Qorchi dhibee HIV/AIDS walqatee dhufuu naaf ajajame yeroo hunda dhaabata fayyaa kanaa nan argadha**						
133	**Tajaajila Labooratoorii yeroo barbaachisa ta'ee naaf ajajamu Dhaabata fayyaa kanaa nan argadha**						
134	**Ogeessi fayyaa na yaalu guyyaa beellama kiyyaa yeroo hunda nan argadha**						
135	**Kutaan qorannoo dhuunfumma fi iccitii koo yeroo hunda naaf eega**						
136	**Yeroo balaan tasaa na qunnaame tajaajila yaala dhaabata fayyaa kanaa argachuun hin ulfaatu.**						
137	**Kutaan tajaajilli kenninsa yaalumsaa qorcha farraa HIV /AIDS itti kennamu yeroo hunda qulqulluudha.**						
138	**Haalli taa'umsa kutaa kenninsa tajaajila qorcha farra HIV/AIDS mija'aadha**						
139	**Yeroon barbaadetti tajaajila kenninsa qorcha farra HIV/AIDS dhiyeenyatti haala salphaadhanan argadha**						
140	**sa'aan tajaajilli qorcha farra HIV/AIDS itti kennamu mija'aadha**						
141	**Tajaajila yaalumsaa argachuuf sa'aatiin dhaabata fayyaa kana turu xiqqoodha**						
IV	**Walitti Dhufeenyaa Tajaajilamaa fi Ogeessa Fayyaa**	**1**	**2**	**3**	**4**	**5**	
142	**Ogeessi fayyaa kunnunsi, ilaalchi fi kabajinni namaa qaban gaariidha.**						
143	**Ogeessi fayyaa yaalumsa naaf kennan yaada koo akkan ibsadhuu na jabeessu**						
144	**Ogeessi fayyaa rakkinna koo erga sirritti na dhageeffatee gargaarsa barbachisaa naaf kenna.**						
145	**Kutaa qorannoo keessa sa'aa gabaabadha qofan tura**						
146	**Qooqinni ogeessi fayyaa ifaa fi haala salphaadhan kan namaa galuudha**						
147	**Yeroo tajaajilli qorannoo isiinii kennamu dhuunfumman keessan isinii eegama**						

148	**Ogeessi fayyaa sadarkaa dhibee koo HIV dabalate iccitiin qabuu mara naaf eega**						
V	**Ilaalcha fi Beekumsaa Tajaajilamtootin Qorcha Farra HIV irratti qaban**						
149	**Qorchii farraa HIV umurii guutuu fudhatama.**						
150	**Qorch farra HIV tokko tokko garaa duwwatti kan fudhataman yemmuu ta'uu, tokko tokkoo immoo nyaata waliin fudhataman**						
151	**yeroon qorchaii itti fudhatamuu bu'aa qabeessummaa isaa ni miidha ykn tolcha**						
152	**Qorchi hanga fudhatamu qabu yoo fudhatamu baate ykn sa'aa malee yoo fudhatame ykn dogongoran hangaa fudhatamuu qabuu oli ykn gadii yoo fudhatamee akkataa qorchii itti hojjatu miidha.**						
153	**Qorchi akka sirritti hojjatu yoo barbaadame, hangan fudhatamuu qabu gonkumaa dagachuu ykn turanii sa'a malee fudhachuu ykn dogongoraan hanga ajajamee oli ykn gadii fudhachuu hin barbaachisu.**						
154	**Qorcha farra HIV fudhachuu yoo dagatame ykn sa'a malee yoon fudhatame ykn hanga ajajamee oli ykn gadii yoon kan fudhatamu ta'e vaayirasii HIV waliin walbara.**						

	Waliigala Ittiquufinsa Tajaajilamaa Kenninsa Tajaajila Farra Qorcha HIV Irratti						
155	**Walumaagalatti kenninsa tajaajila qorcha farra HIV tti gammadeera**						
156	**Namootan biro beekuu dhufanii akka dhaabbata fayyaa kanatti tajaajilaman nan jajabeessa**						
157	**Gurmaa'inni tajaajila kenninsa qorcha dhibee farra HIV ga'adha.**						
158	**Dhabata fayyaa kanatti tajaajilamuuf yeroon dhufuu gamachuudhanan dhufa**						
159	**Sababa kenninsi tajaajila yaala asitti kennamu quubsa hin taaneef rifaraalii fudhadhee iddoo birootti tajaajilamuf karoorfadheen jira.**						

Gaafilee Qorchi farra HIV/AIDS Tajaajilamaaf Ajajame Seeran Fudhachuu Isaanii Qorachuuf kan qophaa'e

160. Yeroo amma qorcha armaan gadii guyyatti yeroo meeqa fi meeqa meeqa akka fudhatan nu ibsitu

Maqaa Qorchaa	Baayina kiniina yeroo tokko fudhatamu	Guyyaatti yeroo meeqa fudhatama

	Gaafilee Hangaa fi Doozii qoracha Ajaajame Qorachuuf qophaa'an	**Koodiii**	**Irra darbuu**
161	**Qorcha farra HIV/AIDS kamiyyuu liqimsuu dagateertaa?**		

161.1	**Kaleessaa?**	**1.Eeyyen 2.Lakkii 88. Hin Beeku**		
161.2	**Guyyaa sadeen darban?**	**1.Eeyyen 2. lakkii 88. Hin beeku**		
161.3	**Guyyaa turban darbaan?**	**1. Eeyyen 2. lakkii 88. hin beekuu**		
161.4	**Guyyaa soddomman darban?**	**1.Eeyyen 2.Lakkii 88.Hin beeku**		
162	**Doosii meeqa osoo hin fudhatin haftan?**			
162.1	**kaleessa?**			
162.2	**Guyyaa sadeen darbaan ?**			
162.3	**Guyyaa torbaan darban?**			
162.4	**Guyyaa soddoomman darban?**			
163	**Guyyaa turban darban keessatti yeroo meeqaaf qorchaa osoo hin fudhatin haftani?**	**1. Hin jiru**	**2.Guyya tokko**	
		3.Guyya lamaa	**4.Guyyaa sadii**	
		5.Guyyaa afur	**6.Guyyaa shan**	
		7.Guyyaa ja'a	**8.Guyyaa torba**	

Lakk	**Gaafilee cuunfaman**	**Koodii**		**irraa darbuu**
164	**Sababinni ykn rakkoon qorcha farra HIV/AIDS akka hin fudhanne isin godhee maalii?**	**Eeyyen**	**Lakkii**	
164.1	**Nyaata qorcha wajiin fudhuu waanan hin qabineef**			
164.2	**Mana irraa fagaaadhee waanan deemef**			
164.3	**Wanta birootiin qabamee waanan irranfadheef**			
164.4	**Nan hirranfadhee**			
164.5	**Kiniinin baay'ee waanan fudhachaa waanan jiruuf**			
164.6	**Midhaa qorchii namatti fiduu sodaadheen**			
164.7	**loogii fi qooddii sodaadheen**			
164.8	**Dhabban Fayyaa icitii naaf hin eeguu jedhee waan yaadeef**			
164.9	**Qorcha waanan dhabeef**			
164.10	**Dhukkubini waan natti dhaga'ameef**			
164.11	**Gammachuun waan natti hin dhaga'aminnef**			
164.12	**Qorcha malee manaa waanan ba'eef**			
164.13	**Fayyumman waan natti dhaga'ameef**			
164.14	**yeroo murta'eef dhugaatii alkoolii waanan fudhadheef**			
164.15	**Barbachisummaanifi akaakuun qorcha farra HIV/AIDS waan naaf hingalleef**			
164.16	**Sababa rakkoo geejjibaatiin kilinikaa dhaquu waanan dadhabeef**			
164.17	**Qorchii na jalaa waan badeef**			
164.18	**'Tsabal' fudhachaa waanan jiruuf**			
164.19	**Goorsi ga'aa fayyida qorcha irratti waan naaf hin kennaminnef**			
164.20	**Abijuudhan waanan jeeqameef**			
164.21	**Kan biro_____**			

Qajeelfama qorannoo qulqullina kenninsa tajaajila qorcha farra HIV/AIDS Dhaabbilee fayyaa Magaala Walisoo keessatti tajaajila kennan keesaa ogeessota fayyaa(Akiima, Qondaala fayyaa, Narsii) irraa odeeffannoo guuruuf qopha'e.

Maqaa Dhabata Fayyaa_____Maqaa nama odeeffannoo guuruu

Lakk.Gaafii_____Guyyaa_____

1	Saala	M/F
2	umurii	Years
3	Ogummaa	
4	Ga'ee hoji Sagantaa Tajaajiala Kenninsa Qorcha Farraa HIV/AIDS kessatti	
5	Sagantaa keessaatti hirmaatan	

1. Kenninsa sagantaa tajaajila qorcha farra HIV ilaalchisee leenjii maal irratti fudahatan? Wa'ee leenjichaa gad-fageenyaa naaf ibsaa.
2. Leenjii fudhatan kun ga'aadha jettanii ni yaaduu?(ga-fageenyaa ibsuu yaala)
3. Dhabata fayyaa kana keessatti qabeenyi kenninsa tajaajila qorcha farra HIV tii oolan (Qorcha, meeshalee biro fi medikaalaa, qajeelfamoota adda addaa, kutaalee ga,aa) akka kennamu yeroo hunda tajaajilamaadhaf ni argamaa?
4. Qorchi isin tajaajilamadhaaf ajajjan dhabata fayyaa kan akeessatti yeroo hunda ni argama?(Lakkii yoo ta'ee ,maaliif, yeroo ammamiitiif, sababinni,waa,ee kana gama keessaniin furuuf maal gootan?
5. Walumaagalatti haala fudhanna qorcha farra HIV ilaalchise, tajaajilamtoonni akkataa ajajameefitiin fudhachaa jiru jettanii ni yaaduu?
6. Tajaajilamtoonni qorcha isaanii haala qajeelfamaatiin fudhachuu isaanii baruuf maal fayyadamtu?
7. Muuxannoo hojii keessan irraa ka'uudhaan tajaajilamtoonni qorcha farra ajajameef seeran hin fudhanne wanti dhorkuu maal jettaniiti yaadu?
8. Tajaajilamtoonni qorcha farra HIV fudhatan osoo hin dagatanii akka fudhatan yemmu gargaartan rakkoon isin muudatu maal faadha? (keessayyuu tajaajilamtoota yeroo baay'ee fudhachaa turan)
9. Isinis ta'ee ogeessota tajaajila qorcha farra HIV kennan hojii keessan irratti hudhaa guddaa nutti ta'ee jettan yaadan maalfaadha?
10. Wantti adda ta'e dhabbata fayyaa kana kessatti hojjatamuu qaba jettanii yaaduu jira? Eyyeen yoo ta'ee , maali?

Qajeelfama Tajaajilamtoota Qorcha Farra HIV Fayyadaman irraa waa'ee qulqullina kenninsa tajaajila yaala irratti odeeffannoo /ragaa guuruuf qophaa'e

Maqaa nama raga funaanuu_____lakk. gaafii_____

Maqaa Dhabata fayyaa_____Guyyaaa_____

Hubachiisa;-walii galteen barreffamaa uunkaan waliigaltaa odeeffannoo osoo hin guuriin dura tajaajilamaa waliin ergaa bu'aan qoranno ibsameefi dura hayyamamaa ta'uu isaanii ni mallatta'a

Ragaa hawaas dinagdee tajaajilamaa

1	Saala	Dhiira/Dhalaa
2	Umurii	waggadhaan
3	Sadarkaa Barumsaa	
4	Hojii	
5	Fageenyaa Dhabata Fayyaa Irraa	

6. Eega qorcha farra HIV jalqabdanii fayyaa keessan akkamiin ibsituu?

7. Waa'ee qulqullina kenninsa tajaajila yaalaa kutaa qorcha farra HIV keessatti kennamuu akkamiinn ilaaltu?

8. Haala teessummaa kutaa kenninsa tajaajila qorcha farra HIV akkamiin ilaaltu?

9. Sa'aa hojii, tajaajila yaala argachuuf eeggatan, ogeessa isinii yaalu waliin turtaniifi tajaajila balaa tasaa dhabata fayya kanatti kennamu argachuuf gootan mijaa'ina isaa akkamiin ibsitu?

10. Qorcha farra HIV yeroo fudhattan dhabata fayyaa kanaa akka rakkoo cimaatti wantti isin qunnamuu bal'inaan ibsaa.

11. Hanqinoota dhabbata fayyaa kana keessa jiru furuuf wantii hojjatuu qaba jettani ibsa.

Yaada biroo kan qabduu ?

Sa'aa fi qindoomina keessaniif galatoomaa!!

Qajeelfama qorannoo qulqullina kenninsa tajaajila qorcha farra HIV/AIDS Dhaabbilee fayyaa Magaala Walisoo keessatti tajaajila kennan keesaa Ittigaafatamaa Buufata fayyaa ykn Madikaal Daayirektarii irraa odeeffannoo guuruuf qopha'e.

Maqaa Dhabata Fayyaa_____Maqaa nama odeeffannoo guuruu_____

Lakk.Gaafii_____Guyyaa_____

Ga'ee Hojii ogeessa gaafatamee_____

1. Dhabanni fayyaa kun kenninsa tajaajila farra qorcha HIV/AIDS yoom kennuu jalqabe?
2. Baay'ina Ogeessa fi gosa ogummaa isaaniitiin ogeessota tajaajila qorcha farra dhibee HIV/AIDS kennan nuuf ibsaa
3. Baay,ina ogeessota leenjii kenninsa tajaajila qorcha farra HIV/AIDS irratti fudhatanii fi gosa leenjii fudhatan nuuf ibsa
4. Hir'ina ykn hanqina qorcha farra HIV/AIDS kusaa qorchaa keessa dhabamun kan ka'ee yeroo tajaajilamaan qorcha farra HIV/AIDS osoo hin kennaminiif hafee jiraa? yoo jiraate rakkoon isaa maal jettanii yaadu?
5. Toofta maal fayyaadamtuu qorchi dhibee farra HIV/AIDS akka kuusaa qorchaa keessaa hin dhabaminnee fi kenninsi tajaajila adda hin cinnee?
6. Tooftan isini fayyadamtan maali, tajaajilamtoonni qorcha farra dhibee HIV/AIDS akkaataa isaanii ajaajametti yaalumsa isaanii akka addan hin kunnee?
7. Kenninsa tajaajila qorcha farra dhibee HIV/AIDS sirritti akka fooyyi'isitan carraan addaa ta'e argatan ni jira? Eeyyen yoo ta'ee maaliffaadha?
8. Kenninsa tajaajila qorcha farra dhibee HIV /AIDS qulqullina fi iiti fufiinsa qabu kennuf sochii maaltu godhamee jira?
9. Rakkowwaniifi carraan gaariin dhaabata kana keessaa jiran kenninsa tajaajila qorcha farra dhibee HIV/AIDS kennuf (gamaa Ogeessatiin, tajaajilamaatiin,fi dhaabata fayyaatiin) jiruu maali faadha? Yaada kan biro yoo qabaatan kenninsa tajaajila qorcha farra dhibee HIV/AIDS irratti nuuf ibsa
10. Guyyatti baay'ina tajaajilamaa tajaajilamu Haara'a_____Beellama_____
11. Koreen kenninsa tajaajila farra qorcha HIV/AIDS Dhabata fayyaa kana jiraa? Yoo jiraate tajaajila kennaa jira? Yeroo meeqa meeqan walga'uu?
12. Gabaafinni haala kamiin godhamaa jira? Batii darbee keessaa godhamee jiraa? Haftee gabaasa nuu agarsiisu ni dandeessuu?
13. Zoonii ykn naannoo irraa dhufanii haala kenninsa tajaajila farra qorcha HIV/AIDS ni hordofuu? yeroo meeqa meeqan ?
    Yaada dabalataa yoo qabaatan nuuf ibsa

አማሪክ ትረንስለትድ እንስትሩመንት

ስምምነት ቅፅ

□ንደምን አ□ር□/□ል□/ሽ ? ስሜ ---------- ይባላል ። የመጣነው ከጅማ ዩኒቨርሲቲ የህክምናና የህብረተሰብ ጤና ተቋም ከስነ ጤና አመራር ክፍል ስሆን ለሁለተኛ ድግሪ የሚሆን ጥናት በፀረ ኤች አይቪ ኤድስ መድሃኒት ህክምና አገልግሎት ላይ የህክምና አገልግሎት ጥረት ላይ ጥናት / ምርምር ለማካሄድ ፍቃድ ከሚመለከተው አካልና ከጤና ተቋም □ላ□ ጸ□ኘነው ስለሆን ከ□ርሶ መረ□ ከመሰብሰባችን በፊት ተገቢዉን መረጃ ለመስጠት ፍቃደኛ መሆኖትን እየጠየቅንወት የእርሶ ተሳትፎ በዚህ ጥናት ዉስጥ በጣም አስፈላጊና ለህክምና አገልግሎት መሻሻል ትልቅ ሚና ያለዉና ሌሎችም ለዚህ ጥናት □□ል ጸላ□ኑት ተጠቃሚዎችም የሚጠቅም ስለሆነ በማንኛ□ ም ሰዓት ካልፈለጉ ማቋረደጥ ወይም ያልፈለጉትን መረጃ አለምስጠት ወይም ሙሉ በሙሉ ያለመሳተፍ መብቶ □ተ□በቀ ሲሆን በተቻለ መጠን ግን ሙሉ በሙሉ እንዲሳተፉ እናበረታታችዋለን።

ከ□ርሶ የምናገኘዉ መረጃ በሚስጥር የሚጠበቅና ለማንኛዉም ሰዉ የህክምና ባለሙያን ጨምሮ አሳልፎ የማይሰጥና በጥናቱ ላይ በመሳሰተፋቸዉ ቀጥታና □ቅምም ሆነ ጉዳት የሌለዉ መሆኑን እየገለፅንሎት ተሳትፉአችሁ ለጸረ-ኤችአይቪ ኤድስ መዳኒት ህክምና አገልግሎት የበኩሎትን ተሳትፎ/አስተዋጽኦ ያደረጉ መሆኑን ከልባችን ምስጋና እያቀረብን መረጃ ለመስጠት የሚወስደዉ ጊዜ ሀጸ(20) □ቂቃ እና ከዛ በታች መሆኑን እንገልጻለን።

መረጃዉን ለመስጠት ፍቃደኛ ነወት? 1) አዎ 2) አይደለም

ከላይ የተጠቀሰልኝን ሃሳብ በደንብ ሃዳምጬ የጥናቱን አላማ □ና ጥቅም ገብቶኝ አምኜበት ከምንም ግፍፊትና ጫና በራሴ ፍቃደኝነት በጥናቱ ውሥጥ ለመሳተፍ የወሰንኩ መሆኔን በፊርማዬ □ያረጋገጥኩ ለሚመ□ው ለጸረ ኤችአቪ ኤድስ መድሃኒት የህክምና አገልግለት ጥራት መሻሻያ ውስጥ የራሴን ድርሻ ያበረከትኩ መሆኔን □□ል□ለሁ ።

የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና መለያ ቁጥር ----------

□ርማ ---------- ቀን ----------

መረ□ ሰብሳቢ

ሥም ---------- □ርማ----------

ሱ□ር ቫጃ□ር

ሥም ---------- □ርማ----------

ኦብዘርቬሽናል ከሆነ የጤና ባለሞያ

ሥም ---------- □ርማ ----------

□ተ□ጸቂ መሠረታዊ መረጃዎች

ተ.ቁ	□ር□ር	የምርጫ አይነት					ይዘ ለል
101	□□	1.ወንድ	2.ሴት				
102	□□ሜ----------						
103	የተጠያቂ አድራሻ	1. □□ር	2. ከተማ				
104	ብሄር ፡	1. ኦሮሞ	2.አማራ	3. □ራ□	4. ትግሬ	5. ሌላ	
105	የጋብቻ ሁኔ□	1. ጸላ□ነ	2. ጸ□ነ	3.አግብቶ □□ታ/ች	4.የሞተችበ ት/ባት	5.ተለያቶ የሚኖሩ	
106	ሐይማኖት	1.ኦርቶዶክስ	2.ሙስሊ ም	3.ፕሮቴስ□ንት	4.ካቶሊክ	5. ሌላ	
107	የትምህርት ደርጃ	1.ጸልተማረ ች/ረ	2.ማንበብና መ□□ የምትችል/ ች	3.□መ□መሪጸ □ረ□	4.2ኛ □ረ□	5.□□ሎማ □ና ከዛ በላጁ	
108	□ወር □ቢ.----------						
109	የስራ መስክ/ሁኔ□	1.የጠቀጠረች/ረ	2.ጸልተቀ□ረ /ች	3. □ብሬ	4.ነጋዴ	5.ሌላ	
110	ከማን ጋር ነዉ የምትኖረዉ/ሪዉ	1. ለብቻ	2.ከትዳሰር አጋር ጋር	3.ከናት ካባት □ር	4.የተወሰነ ቦ□ የማይኖር	5.ለመመለስ □ቃ□ኛ ያልሆነ	
111	መ□□ ወጅም ሌሎች አደንዛዥር ነገሮችን ትጠቀማለህ/ች	1.አዎ	2.አልጠቀም ም				
112	ከሆነ ለጥያቄ 111 ምን ?	1. አልኮል	2. ሲ□ራ	3.ጫት	4. ሌላ		
113	የቤተሰብ ብዛት ----------						
114	□□ረ-ኤችአይቪ ኤድስ መድሀኒት መዉሰድ ከጀመርሽ/ክ ስንት ወር ሆነዋል/ሻ?-----						
115	ከኤችቪ ቫይረስ ጋር እንደምትኖሩ /ሪ □ሚጸዉቅ ሰው አለ ?			1) አዎ	2) □ለም	3)አላውቅም	
116	አዎን ከሆነ ማነው □ሚጸዉቀዉ ?	1)ወላጆቼ	2) ልጆቼ	3)የትዳር አጋር	4.ወንድሜ /እህቴ 6) ጓደኞቼ	5)ዘመቼ 7) ሌላ	
117	በዚህ ጤና ድረርጅት ውስጥ የፀረ ኤችቪ ኤድስ መድሃኒት አገልገሎት እንደሚሰጥ በመጀመሪያ ጊዜ ከማን የሰማከው /ሽዉ?	1.ከጤና ባለሞጸ-ች	2)ከሚድያ ር	3) ከተስፋጎ ማህበ	4)ከጓደኞቼ	5)ከዘመዶቼ 6.ሌላ	
118	ከዚህ ጤና ድርጅት ውጪ የፀረ ኤችአቪ ኤድስ መድሃኒት አገልግሎት የሚሰጥ ጤና ድርጅት □ቀወለህ /ሺ	1) አዎ	2)አላውቅ ም				
119	□ዚህ ጤና ድርጅት ለመድረስ ስንት ሰዓት ጁ□ፀ ብሃል / ብሻል?	1)ከግማሽ ሰዓት በታች	2) ከግማሽ □ስከ አንድ ሰዓት	3) ከአንድ □ስከ ሁለት ሰዓት	4)ከሁለት ሰዓት በየይ	5)አላውቅም	
120	የጤና ባለሞያን ለማግኘት ጤና ድርጅት ከደረሱ	1)ምንም አልቆይ	2)ከግማሽ ሰዓት	3) ከግማሽ □ስከ አንድ	4)ከአንድ ሰዓት በላጁ	5)አላቅም	

	በኃላ ምን ኃይል ጊዜ ጁቆጸለ?	ም	በታች	ሰዓት			

የሚከተሉ ጥያቄዎች የጤና ባለሞያ ለተጠቃሚ በቀጠሯዋቹ ግዜ ስለ ኤችአቪ ኤድስና ስለ ጸረ ኤችአቪ ኤድስ መድሃኒት የሚሰጠውን ትምህርት በመዳሰስ የተዘጋጀ ነው				
ተ.ቁ	ስለ ኤችአቪ ኤድስና ስለ ጸረ ኤችአቪ ኤድስ መድሃኒት የተሰጠ መረጃ	1) አዎ	2)አይደለም	Skip
121	ኤችአይቪ ኤድስ ፈውስ የሌለው በሽታ መሆኑ ተነግሮኛል			
122	ስለ ኤች አቪ ኤድስ በድሃኒት ጥቅም ተነግሮኛል			
123	ስለ ጸረ ኤች አቪ ኤድስ መድሃኒት የጎንዮሽ ጉዳት ተነግሮኛል			
124	የጸረ ኤችአቪ ኤድስ መድሃኒት እድሜ ልክ የሚወሰድ መሆኑን ተነግሮኛል			
125	የጸረ ኤችአቪ ኤድስ መድሃኒት በአግባቡ መውሰድ ያለው ጥቅም ተነግሮኛል			
126	የጸረ ኤችአቪ ኤድስ የሚወስድ ሠው በጥንቃቄ የተሟላ የግብረ ሥጋ ግንኙነት ማድረግ እንዳለበት ተነግሮኛል			

የሚከተሉት ጥያቄዎች የጸረ ኤችአቪ ኤድስ መድሃኒት አሰጣጥ ሂደት ላይ ተጠቃሚዎች መጥገባቸውንና አለመጥገባቸውን ለመዳሰስ የተዘጋጁ ሲሆኑ በአገልግሎቱ ላይ የመርካታቸውን መጠን እንደሚከተለው ይግለፀ

1. በጣም አልስማማም 2) አልስማማም 3) ለመመለስ ፍቃደኛ ያልሆነ

4) □ስማማለሁ 5) በ□ም □ስማማለሁ

ተ.ቁ	የጸረ ኤችአቪ ኤድስ መድሃኒት አሰጣጥ ሂደት ላይ የተጠቃመሚዎች እርካታ	የእርካታ መጠን					
I	**የጤና ባለሞያ ክኅሎትና እውቀት ለመዳሰስ የተዘጋጀ ጥያቄዎች**	**1**	**2**	**3**	**4**	**5**	**NA**
127	የጤና ባለሞያ ትክክለኛ ምርመራና ህክምና ሰቶኛል						
128	የጤና ባለሞያ የጸረ ኤችአቪ ኤድስ መድሃኒት ጥቅም በደንብ ገልያልኛል						
129	የጤና ባለሞያ ስለ ኤችአቪ ኤድስ በቂ ትምህርት ሰቶኛ						
130	የጤና ባለሞያ የጸረ ኤችአቪ ኤድስ መድሃኒት ትምህር□ዊ መረጃ አስተምሮኛል						
II	**የሚከተሉ ጥያቄዎች ስለ ጸረ ኤችአቪ ኤድስ መድሃኒት አቅርቦትና መኖር ጋር ተያይዞ ያለው ነገር ላይ የተጠቃሚዎችን □ርካ□ ለመ□ለስ □ዙ□□ግ ጥያቄዎች**	**1**	**2**	**3**	**4**	**5**	
131	□ታዘዘልኝን የጸረ ኤችአቪ ኤድስ መድሃት ሁል ጊዜ ከዚህ ጤና ድርጅት አገኛለሁ						
132	የተጓዳኝ በሽታ የታዘዘልንን መድሃኒት ሁል ጊዜ ከዚህ ጤና ተቋም አገኛለሀ						
133	ስፈላጊ ሆኖ ከታዘዘልኝ ሁል ጊዜ የላብራቶሪ ምርመራ ከዚህ ጤና ተቋም አገኛለሁ						
134	በቀጠሮዬ ቀን ሁል ጊዜ የሚመረምረኝን ጤና ባለሞያ አጥቼ አላውቅም						
135	ሌላ ሰው ማየት በማይችልበትና የግልሚስጥር ተጠብቆልኝ ነው ምርመራ የሚደረግልኝ						
136	በማንኛውም ሰዓት ድንገተኛ በሽታ ከደረሰብኝ ከዚህ ጤና ተቋም ህክምና አገልግሎት ይሰጠኛል						
137	የጸረ ኤችአቪ ኤድስ መድሃኒት አገልግሎት ክፍል ሁል ጊዜ ንፁህ ነው ::						
138	የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት						

	ክሊኒክ የተሰራበት ወይም የሚገኝበት ስፍራ ምቹ ነው ፡፤						
139	በማንናውም ሰዓት የጸረ ኤችአቪ ኤድስ ህክምና አገልግሎት ካስፈለገኝ ባቅራባዉ አገኛለዎኝ						
140	የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት የስራ ሰዓት ተስማሚ ነው						
141	ምርመራን ወይም ህክምናን ለማግኘት ጤናተቋም ውስጥ የምትቆየው ሰዓት አጭር ነው፡፡						
III	**የሚከተሉ ጥያቄዎች ተጠቃሚዎች በጤና ባለሞያ የሚሰጠውን አገልግሎት አቅርቦት ላይ የጤና ባለሞያ አቀራረብን ለመዳሰስ የተዘጋጀ ::**	**1**	**2**	**3**	**4**	**5**	
142	የጤና ባለሞያ አቀራረብ ፣ በትህትና □ና በጥሩ እንክብካቤ ህክምና ይሰጣል						
143	የጤና ባለሞያ ታካሚዊ ሃሳቡን እንዲሰጥ / □ንዲገልፅ ያገፋፋል						
144	የጤና ባለሞያው ሃሳብህን ስትገልፅ በደንብ ያዳምጣል						
145	ከጤና ባለሞያ ጋር በምርመራ ክፍል ውስጥ ትንሽ ጊዜ ነው □ያሚቆ□ው፡						
146	የጤና ባለሞያ ስንወያይ የሚጠቀመው ቋንቋ ግልፅ ነው						
147	በምርመራ ጊዜ የግል ገመና የተጠበቀ ነው ፡						
148	የጤና ባለሞያዎች የግል ሚስጥራን ይጠብቁልኛል						
IV	**የሚከተሉትን ጥያቄዎች የተጠቃሚዎች እይታና ግንዛቤ የጸረ ኤችአቪ ኤድስ መድሃኒት ላይ ያላቸውን በመ□ሰስ □ተ□□□**						
149	የጸረ ኤችአቪ ኤድስ መድሃኒት □□ሜ ል□ መወሰ□ አለበት						
150	አንዳንድ የጸረ ኤችአቪ ኤድስ መድሃኒት በባዶ ሆድ የሚወሰዱ ሲሆን አንዳንዶቹ ደግሞ ከምግብ ጋር መወሰድ አለባቸው ፡፤						
151	መድሃኒት በሰአቱ ካልተወሰደ የመዳኒት ሥራ ይዛባል						
152	መድሃኒት አለመውሰድ ወይም ቆይቶ መውሰድ ወይም በአግባቡ አለመውሰድ ህክምናን ያስተጓጉላል						
153	. መድሃኒቱ በደንብ እንዲሰራ ከተፈለገ በፍጹም አወሳሰዱን አለመርሳት ወይም ያለ ሠዓት አለመውሰድ ወይም አወሳሰዱን መሳሳት የለብንም ፡፤						
154	ምድሃኒቱን በአግባቡ አለመውሰድ መድሃኒቱ ከቫይረሱ □ር እንዲላመድ ያደርገዋል						
የሚከተሉት ጥያቄዎች የተጠቃሚዎችን አጠቃላ የጸረ ኤችአቪ ኤድስ ህክምና አገልግሎት ላይ ያላቸውን □ርካ□ ለመ□ሰስ □ተ□□□ ነው							
155	በአጠቃላይ የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት አሰጣጥ በጣም ጥሩ ነው						
156	ሌሎች ከኤች አቪ ኤድስ ጋር የሚኖሩትን ከዚህ ጤና ተቋዋም መቶ እንዲገለገሉ እመክራቸዋለሁኝ፡፡						
157	የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት ሚውሉ ነገሮች በዚህ ጤና ተቋም ውስጥ የተሟላ ነው ፡፡						

158	የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት ለማግኘት ተመልሼ ስመጣ □ስተኛ ሆኝ ነው የምመጣው ::						
159	በዚህ ጤና ተቋም በቂ የሆነ የጸረ ኤችአቪ ኤድስ መድኃኒት ኅክምና አገልግሎት ስለማይሰጥ ሪፈር ወስጄ ወደ ሌላ ህክምና ተቋም ለመሄ□ እያቀድኩኝ ነው ::						

የጸረ ኤችአቪ ኤድስ መድሃኒት ተጠቃሚዎች የ□ዘዘላቸውን መድሃኒት በአግባቡ □የተጠቀሙ መሆናቸውን ለመዳሰስ የተዘጋጀ ጥያቄዎች

160. **በአሁኑ ጊዜ □□ተሰ□ኝ ያለውን የጸረ ኤችአቪ ኤድስ መድሃኒት ስም ፣ በቀን ስንቱ □ንደሚወሰድና በቀን ሥንት እንክብል እንደሚወስዱደ ይንገሩን**

የመዳኒቱ ሥም	□□ንክብሉ መጠን	በቀን ስንት ጊዜ እንደሚወሰድ

		የኮዲነጊ አይነት			የሚታለፍ
161	የጸረ ኤችአቪ ኤድስ መድሃኒቶች ሳይወሰዱ ቀርተው፡ ጸው፡ቃለ				
161.1	ትናንትና	1.አዎን	2)አይደለም	3) አላውቅም	
161.2	ካለፉት 3 ቀናት ውስጥ	1.አዎን	2)አይደለም	3) አላውቅም	
161.3	ካለፉት 7 ቀናት ውስጥ	1.አዎን	2)አይደለም	3) አላውቅም	
161.4	ላለፉት 30 ቀናት ውስጥ	1.አዎን	2)አይደለም	3) አላውቅም	
162	ስንት ጊዜ . የጸረ ኤችአቪ ኤድስ መድሃኒት ሳጭወስ□ ቀርተ□ል ?				
162.1	ትናንትና				
16.2	ካለፉት 3 ቀናት ውስጥ				
162.3	ካለፉት 7 ቀናት ውስጥ				
162.4	ላለፉት 30 ቀናት ውስጥ				
163	ባለፉት ሰባት ቀናት ውስት ለስንት ቀናት አቋረጡ ?	1. አላቋረጥኩም 2. አንድቀን 3. ሁለትቀን 4. ሶስት ቀን 5. አራት ቀን 6. አምስት ቀን 7. ስድስት ቀን 8. ሰባት ቀን			

ተ.ቁ	ጥያቀዎች	ኮዲንግ/coding		ዝለል
164	የጸረ ኤችአቪ ኤድስ መድሃኒቶን በጎግባቡ እነዳይወስዱ ከፍተኛ ተ□□ኖ ወይም ችግር የሆነቦት የትኛው ነው?	አዎን	አይደለም	
164.1	ከመድሃኒት □ር ምወሰስ□□ ምፅብ ሰለለሰኝ			
164.2	ከመኖሪያ ቤት ርቀሕ ሰለሀዲኩን			
164.3	ሥራ/ ሃሳብ ስለበዛብኝ			
164.4	መርሳት			
164.5	የመድሃኒት አይት ሲለበ□ክብኝ			
164.6	የመድሃኒት የጎንዮሽ ጉዳት በመፍራት			
164.7	ድሎና መገለልን በመፍራት			
164.8	የጤና ድርጅቶችን ሚስጥር ጠባቂነት በመፍራት			
164.9	የጸረ ኤችአቪ ኤድስ መድሃኒት ባለመኖሩ			
164.10	ሕመም ስለተሰማኝ መውሰድ አልቻልኩም			
164.11	ደብሮኝ ስለነበረ መውሰድ አልቻልኩም			
164.12	መድሃኒት ስላለቀብኝ			
164.13	ጤንነት ስለተሰማኝ			
164.14	መ□□ ስለ□□ሁ			
164.15	የመዳኒቱን አወሳሰድና ከመዳኒቱ ስወስድ መደረግ ያለበትን ጥንቃቄ በደንብ ስላልተረደሁ			
164.16	ጤና ተቋም ለመሄድ የትራንስፖርት ችግር ስላጋጠመኝ			
164.17	መ□ኃኒት ስለጠፋብኝ			
164.18	□ክል ስለምተቀም			
164.19	በጤና ባለሞያ በኩል ምክር በደንብ ስላልተሰጠኝ			
164.20	ያየሁት ህልም ግራ ስላጋባኝ			
164.21	ሌላ			

ሀ. በወሊሶ ከተማ ጤና ተቋም ውስጥ የሚሰ□ዉን የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት ጥረት ከተጠቃሚዎች መረጃ ለማግኘት መመሪያ

□□ጸቂዉ፡ ሥም ---------- □□ጸቂዉ፡ መለጸ ቁ□ር ----------

የጤና ድርጅት ሥም ---------- ቀን ----------

ማስ□ወሸ ----------

1. **□□ ወ/ሴ**
2. **□□ሜ----------**
3. **የትምህርት ደረጃ------**
4. **ሥራ ----------**
5. **ከመኖሪያ ቤት እስከ ጤና ድርጅት ያለው እርቀት ---------- ኪ. ሜ**
6. **የጸረ ኤችአቪ ኤድስ ከጀመሩ ወዲ ጤናዎት ምን ደረጃ ላይ ነው ያለወ?**
7. **የጸረ ኤችአቪ ኤድስ መድሃኒቱን የወሰዱበት ክሊኒክ የሕክምና አገልግሎት ጥራት እንዴት አዩት ?**
8. **የክሊኒኩን የህክምና አሰጣጥና አቀማመጥ እንዴት አዩት ?**
9. **. የጸረ ኤችአቪ ኤድስ መድሃኒት ለመውሰድ ክሊኒክ ከደረሱ በኃላ ሐኪምን ለማግኘት ለምን ያክል ጊዜ ይጠብቃሉ ?**
   - **ምርመራ ለምን ያክል ጊዜ ይወስዱቦ□ል ?**
   - **ለድንገተኛ አገልግሎት ከሄዱ ለምን ያክል ጊዜ ይቆያሉ ?**
10. **. የጸረ ኤችአቪ ኤድስ መድሃኒት አጠቃቀም ላይ ያለው አስቸጋሪ ነገር ምንድነው ብለው የሚያስቡት ?**
11. **ይህን ችግር ለመፍታት ምን መፍትሄ ቢደረግ ይሻላል ?**

ተጨማሪ ሃሳብ አሎት ?

አመሰግናለሁ !

ሰ. ወሲሶ ከተማ ከጤና ድርጅት ከህክምና ባለሙያ □ር □ሚ□ረፅ ቃለ ምልልሥ መመሪጸ

የጤና ድርጀቱ ሥም ---------- □□ጸቂዉ፡ ሥም ----------

□ዞ□ጸቂዉ፡ መለጸ ቁ□ር ---------- ቀን ----------

1	□□	ወ/ሌ
2	□□ሜ	
3	መጸ	
4	የጸረ ኤችአቪ ኤድስ በድሃት ሕክምና አገልግሎት ውሥጥ ጸለዉ፡ □ስራ □ርሻ	
5	የተሳተፈበት ፕሮግራም	

1. . የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት ውስጥ ልዩ የሆነ የወሰድከው ስልጠና አለ ? ሥለስልጠናው በዝርዝር ቢገልፁለኝ ?
2. ይህ ስልጠና በቂነው ብለው ያምናሉ ? (በዝርዝር)
3. . የጸረ ኤችአቪ ኤድስ መድሃኒት ህክምና አገልግሎት የሚውለው ንብረቶች (መዳኒት ፤ የህክምና መሳሪያዎችና ሌሎች ቁሳቁሶች መሰረተ ልማት) እንዴት ይገልፃሉ ?
4. ሁሌ □ሚታዘዘው መዳኒት ይገኛል ? (ከሌላ ምን ያደርጋሉ በዝርዝር ምክንያቱን ቢያስረዱኝ)
5. ተጠቃሚዎቹ . የጸረ ኤችአቪ ኤድስ መድሃት በትክክል ይጠቀማሉ በለው ያምናሉ ?
6. ሥለ መጠቀማቸው ለማወቅ ምን አይነት ዘዴ ይጠቀማሉ ? (ፍንጭ ፤ በቀጠሮ ፤ በመዝገብ ድጋሚ በማየት)
7. ከልምድ . የጸረ ኤችአቪ ኤድስ መድሃኒቱን በአግባቡ እንዳይጠቀሙ ተፅእኖ ሊያሳድር የሚችል ምንድነው ብለው ያስባሉ?
8. ተጠቃሚዎችን . የጸረ ኤችአቪ ኤድስ መድሃኒት እንዲወስዱ በሚገፋፉበት ጊዜ የሚገጥሞት ዋና ዋና ችግሮች ምንድናቸው ? (በተለይ ለረጅም ጊዜ ለሚወስዱት)
9. □ርሶና የስራ ባልደረቦት በስራቸው ያጋጠማችሁ ዋና ዋና ችግሮች ምን ምንድናቸው ?
10. ምዚህ የጤና ድርጅት ውሥጥ ለየት ያለ የሚሰሩት ሥራ አለ ወይ? ካለ ምንድን ነው ?
11. ተጨማሪ ሃሳብ ካሎት ይግለፁልን

ሐ. በወሊሶ ከተማ ከጤና ድርጅት ሃላፊ ወይም ሜዲካል ዳሬክትር ጋር □ሚ□ረፅ ቃለ ምልልሥ መመሪጸ

□□ጸቂው፡ ሥም ----------

ቦ□ ----------

ቀን ----------

□ዞ□ጸቂ የስራ ድርሻ ----------

1. ጤና ድርጅቱ የጸረ ኤችአቪ ኤድስ መድሃኒት መስጠት የጀመረው መቼ ነው?
2. በጸረ ኤችአቪ ኤድስ መድሃኒት ላይ የተሳተፉት የሰራተኞች ብዛት እና አይነት
3. በጸረ ኤችአቪ ኤድስ መድሃኒት ላይ የሰለጠኑ ባለያሞያዎች ብዛትና የወሰዱት የስልጠና አይነት
4. በለፉት ጊዜያት .የጸረ ኤችአቪ ኤድስ መድሃኒት አልቆባችሁ ተጠቃሚው መድሃኒታ ያጣበት ጊዜ አለ ?
5. በምን ዘዴ ነው መዳኒት አቅርቦት እንዳይቋረጥ ያደረጋችሁት ?
6. ተጠቃሚዎቹ መዳኒቱን እንዳቋረጡ የተጠቀማችሁት ስልት ምንድነው ?
7. በናንተ ፕሮግራም ውስጥ ለህክምና መሻሻያ ጥሩ አጋጣሚ ይኖራልን ? አዎን ካሉ ጹ□ቀሱ
8. . የጸረ ኤችአቪ ኤድስ መድሃኒት አገልግሎት ጥራት ለማሻሻል ምን ታደርጋላችሁ ?
9. በተለያዩ መልኩ (በአገልግሎት ሰጪ ፤ በተጠቃሚ እና በጤና ድርጅቱ) በኩል . በጸረ ኤችአቪ ኤድስ መድሃኒት አገልግሎት የሚያጋትሙ ችግሮች እና ጥሩ አጋጣሚ የሚሉት ምንድናቸው ?
10. በቀን የሚገለገለው ተጠቃሚ ብዛት በአማካይ ፤ አዲስ ---------- ነባር ----------
11. . የጸረ ኤችአቪ ኤድስ መድሃኒት አገልግሎት ኮሚቴ አለ ? ካለ አገልግሎት □□ስ□ ነው ወይ ? በስንት ጊዜ ይሰበሰባሉ ?
12. የሪፖርት አደራረግ ሂደት እንዴት ነው ? በለፈው ወር ሪፖርት ተደርጎዋል ? ከተደረገ ይ□ጹ?
13. ከዞን ወይም ከክልል ወይም ከሌላ አካል መጥቶ የህክምና ሂደትን ያያሉ ? በስንት □□ ? ምልክት ያደረጉት ይ□ጹ?

ተጨመሪ ሐሳብ ካሎት ይግለጡ

እናመሰግናለን

Clinical Service Minimum Package Requirement for Provision of ART services by level of facility

	Special/Referral Hospital	Regional/Zonal Hospital	District Hospital	Health Centre
Infrastructure	Examination room → One private counseling room			
Equipment and supplies	Exam Tools and supplies (otoscope, stethoscope, blood pressure cuff, reflex hammer) Supplies (infection prevention materials, tongue blade)			
Human Resources	1 MD trained on ART for special/referral hospital and 1 health officer for regional and district hospitals 2 ART trained nurses 1 data clerk			1 ART trained health officer and 1 ART trained nurse, or 2 post-basic ART trained nurses 1 data clerk
M&E/MIS	→ logbook Recording/reporting forms Special ART prescription			
Services	Comprehensive HIV services (VCT, PITC, PMTCT, TB, STI and OI Services, palliative care)			
Referral Systems	Referral slip, feedback forms			Referral slip and feedback forms

Source: Ethiopian Antiretroviral treatment guideline, 2007

Table 22: Pharmacy Service Minimum Package by level of facility

	Special/Referral Hospital	Regional/Zonal Hospital	District Hospital	Health Centre
Infrastructure	→ On-site pharmacy Secure storage space Private counseling room or space			
Equipment and supplies	→ Refrigerator			
Human Resources	2 ART trained pharmacy personnel			1 ART trained pharmacy personnel
M&E/MIS	Drug supply and management system (bin card, stock card, receiving voucher, models, prescription forms, registration book, report forms) Lockable drawer			

Source: Ethiopian Antiretroviral treatment guideline, 2007.

Table 23: Final constructed factors after factor analysis done.

Items loaded under factor	Factor	No of items	KMO	Total mean	Cronbach's Alpha
Health provider made appropriate diagnosis and treatment	Perceived technical competence of health providers	4	0.744	18.04	0.73
Health provider describe the benefit of taking ART					
Health provider address information about HIV/AIDS					
Health providers address information about ARV drugs					
ARV drugs are always available during appointment	Perceive availability of basic resource	5	0.82	20.76	0.804
OI Drugs are always available					
Laboratory facility is always available when needed					
Health providers are always available during appointment					
Medical care is easily available during emergency time					
Health workers are caring, concerned and respectful	Perceived client provider interaction	4	0.739	16.8	0.81
health workers are let me talk					
Health workers are attentive and listen to my problem					
Consultation language is clear					
The time ARV is taken will influence its effectiveness	Perception and knowledge of clients on ARV drugs	4	0.803	16.89	0.873
Missing doses/taking late or incorrectly will determine if the treatment works					
For medication to work best ,the dose should not missed or take it late or incorrectly					
Drug resistance develops when ARV are missed or taken late or incorrectly					
I am totally satisfied to ART service	Overall satisfaction of clients	3	0.702	12.92	0.797
Adequate arrangement of ART service					
Come back with happiness' for ART service in this facility					