ANTIRETROVIRAL TREATMENT ADHERENCE AND ITS ASSOCIATED FACTORS AMONG PEOPLE LIVING WITH HIV ON HIGHLY ACTIVE ANTIRETROVIRAL THERAPY IN ADAMA HOSPITAL, EAST SHOA, ETHIOPIA, 2014.

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ABSTRACT

BACK GROUND: Globally, HIV/AIDS has created enormous challenges to human beings. Effective HIV/AIDS care requires antiretroviral therapy as a treatment option, where adherence to ART is crucial to ensure viral suppression, decrease the risk of disease progression and emergence of drug resistant viral strains. Likewise, it is common in all groups of treated individuals lack of strict adherence to ART is considered to be one of the key challenges to AIDS care worldwide.

OBJECTIVES: Is to determine the degree of antiretroviral treatment adherence and its associated factors among people living with human immune deficiency virus who were on highly active antiretroviral therapy in Adama hospital.

METHODS: A cross sectional study on 407 people living with human immune deficiency viruson highly active antiretroviral therapy and follow up in Adama Hospital was carried out using both quantitative and qualitative method. Using a structured and pre-tested questionnaire, data on drug adherence and other variables were collected through patient's self report, clinical records review and in-depth interview . Data on drug adherence were collected by using patient self report about the number of doses skipped in past seven days. The independent predictors of adherence were also assessed using multivariate logistic regression model; so that the variables that had $p<0.25$, in the bivariate logistic regression were selected for inclusion in multivariate logistic regression model. The significance level was measured using 95% CIs of adjusted and crude odds ratios for which, $\boldsymbol{P}$ <0.05 were considered significant.

RESULTS: The overall prevalence of highly active antiretroviral therapy adherence was 93.6% in the past one week(seven days) duration from the day before interview. In this study history of active substance use (AOR= 6.964,CI=1.912-25.366), having emotional /practical support (AOR=0.251,CI=0.072-0.869), trusting and feeling the health care providers treating you are capable (AOR=0.295,CI=0.090–0.968) and having access to reliable pharmacy any time you want (AOR=0.191,CI=0.037-0.985) were significantly associated with antiretroviral therapy adherence in multivariate analysis

CONCLUSIONS AND RECOMMENDATIONS: The prevalence of antiretroviral therapy adherence in this study was higher than most studies done in developed countries and Ethiopia. To get the intended benefits, selecting a simple and tolerable antiretroviral regimen that matches the patient's lifestyle, creating supportive environment and availing quality health service are the most important step toward optimizing adherence.

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LIST OF ABBREVIATIONS

AIDS-Acquired Immunodeficiency syndrome.

ART-Anti Retroviral Therapy

ARV-Antiretroviral drugs

HAART-Highly Active AntiRetroviral Therapy

HIV-Human Immune deficiency Virus

MOH-Ministry Of Health

PLHIV-People Living With HIV

EPDS- Edinburgh Postnatal Depression Scale

RAPS4- Remorse (R), Amnesia (A), Performance (P),and Starter drinking behavior (S)

CHAPTER ONE: INTRODUCTION

1.1 Background information

World wide HIV/AIDS have created an enormous challenge on the survival of man kind. The virus has infected close to 70 million individuals and over 30millions have already died. More than 66% of the 40 million people living with HIV/AIDS are in Sub-Saharan Africa,where AIDS is the leading cause of death(1).

In Ethiopia in 2014; over 711,446 people in the country are living with the virus, nearly there are 16,849 new HIV infections and about 30,378 annual AIDS deaths. There are also 443,121 people who are in need of antiretroviral therapy(ART) service in Ethiopia(2). According to the 2011 EDHS 1.5% of adults aged 15-49yrs are infected with HIV.

ART is delivered as a part of a comprehensive care which includes: voluntary counseling and testing(VCT), the diagnosis and treatment of sexually transmitted diseases(STDs), Tuberculosis(TB), opportunistic infections(OIs) and the prevention of mother to child transmission(PMTCT) as well as the treatment of pregnant women.

ART changes a uniformly fatal disease to a manageable chronic illness. Successful use of ART suppresses HIV viral replication, consequently slowing down disease progression, improving immunity and delaying mortality. Even if ART is not a cure,it prolongs and enhance quality of life of people living with HIV/AIDS.Once ART is started it has to be taken lifelong with more than 95% adherence rate(3,4).The experience of developed nations have proven that ART reduces disease burden and dependence, increases well being and productivity and restores hope of individuals living with HIV/AIDS.ART requires $\geq$ 95% adherence level(missing no more than one dose per month) to maximize health benefits and to avoid the emergence of drug resistant HIV strains(3,4,5).

In our case Adama Hospital is located 100 kms away from capital city Addis Ababa in Oromia region.Since the hospital is referral Hospital, it has been serving all referral medical cases including ART service for about 5.5 million catchment population.In Adama Hospital ART unit about 10,703 PLHIV were ever enrolled in chronic care of ART unit, among this only 6,688 patients were on highly active retroviral treatment indicating that there is adherence problem.

1.2 Statement of the problem

Now a days HIV/AIDS is a world wide problem and millions of life were being died due to HIV/AIDS through out the world. Million of people are living with HIV virus even today.It is globally acceptable that HIV/AIDS and its related problems are not only health problem but also it is holistic problem. To day ART drugs which can effectively suppresses human immunodeficiency virus (HIV)replication, reduce morality and improves the life of people living with HIV are on function. The current treatment for human immunodeficiency virus (HIV) infection requires strict adherence to the medication regimens to be most effective. Patient must take $\geq$ 95 percent of the prescribed doses to gain the intended benefits and to over come problems related to non adherence(3).

According to D.L. Paterson's research, the viral load test indicated that the medicines were not working effectively in 22% of patients who took 95% or more of the protease inhibitor doses, 61% of those who took 80% to 95% of the doses, and 80% in those who took less than 80% of the doses as prescribed. Patients who took 95% or more of the doses as prescribed had fewer days in the hospital, HIV-related infections and deaths than did patients who took protease inhibitors less often. This implies taking 95% or more of protease inhibitor doses as prescribed appears to be related to favorable outcomes for patients with HIV infection.(3)

Non adherence to ART allows for inconsistent drug levels, persistent viral replication and increasing the likelihood of the formation of viral variants resistant to the currently used medication.Low adherence rate is also associated with higher hospitalization rates, productivity loss, disease progression and death(3,6).

Adherence to antiretroviral treatment is complicated and dynamic because of that it is influenced by internal and external factors that include:patient level factors(psychological/depression,substance and alcohol abuse,educational status, in come, age, gender and prier and/or current medical comorbidities),community level factors (lack of knowledge, awareness, stigma and discrimination and social support), medication related barriers(pill burden,dose frequency,side effects and dietary restriction or requirements) and health care system related factors(access to health service/distance,provider relation ship and support services)(6).It is common in all groups of treated individuals lack of strict adherence to ART is considered to be one of the key challenges to AIDS care world wide.With out access to antiretroviral therapy, people living with HIV/AIDS can not attain the fullest

possible physical and mental health. So to achieve this goal there should be continuous assessment of factors associated to ART adherence and improved strategies are needed to help patients take anti-HIV medications as prescribed.

Possible barriers to adherence should be identified and discussed with the patient before the patient starts the treatment to attain the highest possible adherence level and health benefits.

In Adama Hospital ART unit about 10,703 were enrolled in chronic care of ART unit, among this only 6,688 patients were actively taking their treatment meaning on highly active retroviral treatment. From the patients ever enrolled in ART, 448 patients were reported as deaths and the remaining 3,567 patients were reported as lost during proposal writing/planning. From the total patients on HAART 177 adult patients were on second line antiretroviral treatment. This large number of lost patients and 177 patients on second line antiretroviraltreatment indicate that there was adherence problem and first line antiretroviral treatment resistant strains of HIV among PLHIV who were on HAART in Adama Hospital.

This study assessed the factors associated to adherence and at the end all concerned bodies will be informed about all factors that are associated with poor ART adherence to play their role in tackling those obstacles.The result obtained from the study will also help health planners in designingappropriate strategies for revamping the program in the community and health sectors to improve the adherence rate of PLHIV using ART,which in turn can improve their health status, productivity and also can prevent the emergence of drug resistant strains of HIV.

CHAPTER TWO:

1.1 Literature review

AIDS is one of the most serious public health and development challenges in sub-saharan Africa.The future course of AIDS epidemic in Ethiopia depends on a number of factors including HIV/AIDS related knowledge,social stigmatization,risk behavior modification,access to high quality services for STIs, provision and up take HIV counseling and testing and access to ART(1).Antiretroviral adherence among HIV-infected patients has become critical in the treatment of HIV.It is increasingly clear that the therapeutic benefits of highly active antiretroviral therapy(HAART) are strongly dependent on stringent patient adherence to these regimens. Most study noted that adherence to HAART must exceed 95% to limit viral replication effectively(3,4). An innovative and culturally sound strategy for enhancing adherence to ART is highly recommended because of the life long nature of the therapy.The use of antiretroviral in the USA (United States of America) has decreased AIDS related morbidity and mortality by up to 90% and significantly affected the trajectory of the epidemic(7).

The antiretroviral drugs have been associated with undesirable side effects that have made the regimens difficult to tolerate and made some patients to have low adherence rate(8).

Non adherence to ART allows for inconsistent drug levels, persistent viral replication and increasing the likelihood of the formation of viral variants resistant to the currently used medications.Low adherence rate is also associated with higher hospitalization rates, productivity loss, disease progression and death(3,6).

Recently, two studies were performed in Addis Ababa in three civil hospitals and two defense hospitals. The levels of adherence reported were 81.2% in three civil hospitals and 82.8% in two defense hospitals (9). In the study done at two hospital of oromia region state, it was found 83.0 % and in the study performed at southern region(Yirgalem hospital) the adherence rate was 74.2%%(10). In the recently done research in Bishoftu Hospital the overall adherence was measured using self-report & pill count, 95.4% of the participants were adhered to their prescribed antiretroviral therapy by taking≥ 95% of their prescribed antiretroviral therapy during the past three days before the days of interview(11).

Even though antiretroviral adherence among HIV-infected patients has become critical in the treatment of HIV,measurement of antiretroviral adherence is limited by the lack of a "goldstandard measurement" thus making evaluation of adherence an imperfect science. The

most frequently applied methodology in the measurement of adherence is patient self-report. In addition to potential overestimation of actual adherence, self-reported adherence is limited in that data may only reflect short-term or mean adherence(12).

2.1.1 Patient level factors

According to studies done in HIwot Fana Hospital and Jugal Hospitalthe main reasons for non adherence were forgetting,travellingand being busy doing other things(13).

In study done in Bishoftu Hospital, diversity of obstacle to treatment adherence reported from the respondents were; being too busy, simply forget and run out of pills which are the most frequently reported reasons in other study done in Yirgalem Hospital(10). This study showed that substance use and having children under their care are significantly associated with poor ART adherence(11). On other hand according to research done in Yirgalem Hospital adherence knowledge is significantly related toART adherence(10).

A prospective study undertaken on a total of 400 HIV infected person in Jimma Hospital showed that depression and the use of memory aids were found to be predictor of adherence(14).

According to research done on ART Adherence and its determinants among PLHIV currently on HAART at two Hospitals in Oromiya Regional State; independent positive predictors of HAART adherence reported were a perception about personal susceptibility to non adherence threats, ability to adhere in future,had no history of active substance use, positive beliefs on the efficacy of HAART, had no depressed feelings in the last one month and had no child under their responsibility(15).

2.1.2 community level factors

The level of knowledge, awareness, stigma and discrimination in the community is very much related to adherence of PLHIV to ART.These factors affect patients' ability to access and benefit from needed support and to function as healthy and productive members of the society. Research done in Bishoftu Hospital showed that having no adequate social support is significantly associated with non adherence(11). Similarly research done in jimma Hospital showed that adherence was common in those patients who have a social support(14). Satisfaction with social support was more likely to be associated with adherence according to research done in Yirgalem Hospital(10).

2.1.3 Medication related factors

These powerful therapeutic agents(ARVs) have been associated with undesirable side effects and drug-drug interaction that have made the regimens difficult to tolerate. Pill burden and frequency of doses are also factors that contribute to non adherence in PLHIV currently on HAART. Research done in Bishoftu Hospital showed that having medication adverse effect symptoms is significantly associated with non adherence(11). A comparative cross sectional survey carried out at Yirgalem Hospital indicates that that medication adverse effect and schedual fitting to daily routine were more likely to be associated with adherence(10).

According to research done in two Hospitals of Oromiya Regional State independent medication related positive predictors of HAART adherence were not using other drugs along with ARVs and no ARVs side effects(15).

2.1.4 Health care system related factors

It is obvious that health care system play significant role in mantaining good adherence of PLHIV currently on HAART to ART in the way health inistitutions deliver medical care and support services,make their services accessed(economically,culturally,geographically) and handle the relation ship with in care providers and their clients.Some researches done in our country also showed the significance of these factors with ART adherence.According to research done on ART Adherence and its determinants among PLHIV on HAART at two Hospitals in Oromiya Regional State, an access to reliable pharmacy any time was found to be positive predictor of HAARTadherence(15). Patient residency far(more than 45 Kms) is significantly associated with non adherence according to research done in Bishoftu Hospital(11).Research done in Yirgalem Hospital also showed that non-adherence was common among patients who lived more than 47 km away(10).

2.2. Conceptual Framework

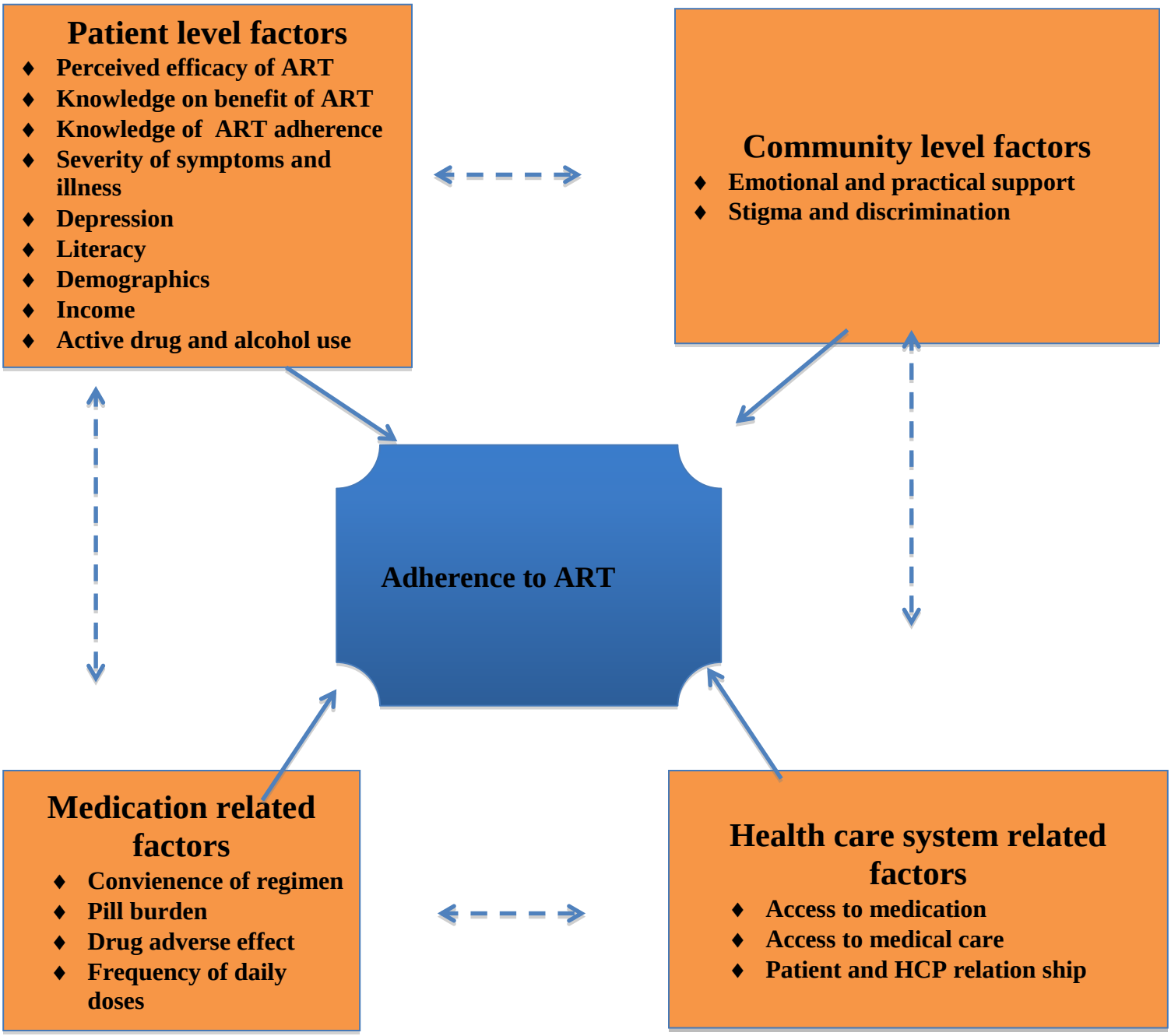

Figure 1: Assumed Conceptual Framework On The Assessment Of ART Adherence And Its Associated Factors Among PLHIV In Adama Hospital,East Shoa, Ethiopia, 2014(adapted from related literature (11)).

2.3. Significance of the study

Globally, HIV/AIDS has created an enormous challenges to human beings. It has now become the leading cause of death in many developing countries especially in the sub-Sahara Africa where Ethiopia is one of the seriously affected countries by HIV/AIDS epidemic. The use of antiretroviral therapy has decreased AIDS related morbidity and mortality by up to 90% and significantly affected the trajectory of the epidemic(7).

Effective HIV/AIDS care requires antiretroviral therapy as a treatment option, where adherence to ART is crucial to ensure viral suppression, decrease the risk of disease progression and drug resistance. Like wise, it is common in all groups of treated individuals lack of strict adherence to ART is considered to be one of the key challenges to AIDS care world wide(16). Taking HAART regimens is not an easy task since it is a lifetime treatment. Since adherence changes over time because of that people get better, side effects of drugs, treatment fatigue and clients may look for alternative treatment; periodically researches should be done. The main objective of this research was to assess the degree of antiretroviral treatment adherence and its associated factors among PLHIV who were on HAART in Adama hospital.

It is hoped that the findings generated from this study will make several contributions to both knowledge and understanding about associated factors of ART adherence and be useful in developing interventions that will take into consideration the problems faced by people taking ARV treatment at Adama hospital. It is expected that this study will be made available to health planners such as and hoped that this will lead to better designed, better directed and more culturally sensitive intervention programs to deal with factors associated with adherence. In addition findings will assist the Regional Health bureau and Adama hospital in efforts to develop a scheme for rational use of ART and also serve as a resource for research teams developing new protocols.

CHAPTER THREE: OBJECTIVES OF THE STUDY

3.1 General objective

- To determine the level of antiretroviral treatment adherence and its associated factors among PLHIV who were on HAART in Adama hospital.

3.2 Specific Objectives

- To determine the level of antiretroviral treatment adherence among PLHIV who were on HAART in Adama hospital.
- To assess antiretroviral therapy adherence associated factors among PLHIV who were on HAART in Adama hospital.

CHAPTER FOUR: METHODS AND MATERIALS

4.1 Study Area and periods

The study site is Adama Hospital,located in Adama town which 100 kms far from Addis Ababa to the east in Oromia region.Since the hospital is referral Hospital, it has been serving all referral medical case including ART management service for about 5.5 million catchment population.It also has been serving as Teaching Hospital for private Health Colleges. There were about 10,703 who were ever enrolled in chronic care of ART unit, among this 6,688 patientswereon highly active retroviral treatment.The study was done from April to May 2014.

4.2 Study design

The study design was a facility based cross sectional study design using both qualitative and quantitative methods.

4.3 Source population

All PLHIVtreated or being treated with highly active antiretroviral therapy(HAART) in Adama Hospital.

4.4 Study population

HIV infected people who were on highly active antiretroviral therapy(HAART)during the study period in AdamaHospital.

4.5 Eligibility criteria

4.5.1 Inclusion criteria

All PLHIV who wereon HAART and follow upin Adama Hospital ART unit during the study period in Adama Hospital.

4.5.2 Exclusion criteria

All adults who were unable to hear,critically sick, aged <18 years and mentally disabled were excluded from the study.

4.6.Sample size determination and sampling procedure

4.6.1 Sample size determination

Study shows typical adherence rates for medications prescribed over long period of time are approximately 50-75%(17). Since there was no study done specifically in the hospital recently, the sample size was determined by assuming stabilized adherence prevalence rate to be 50%, giving any particular out come to be with in 5% marginal error and 95% confidence interval of certainty(alpha = 0.05).

Where

n = Sample size

Z $\alpha/2$ = critical value 1.96

P = stabilized adherence prevalence rate 50%

d = precision (marginal error) = 0.05

Thus the sample size was

$$n = \frac{z^2 \times p(1-P)}{(d)^2}$$

$$n = \frac{(1.96)^2 \times 0.5\ (1-0.5)}{0.05^2}$$

n= 384

Non - response rate 10% = 39+384

Total = 423

4.6.2 Sampling procedure

A total of 966 PLHIV who were on HAART and follow up in ART unit of Adama Hospital during the study period wereincluded in the sampling frame. Finally, using the systematic random sampling system of those coming for follow up of ART ever 2nd ART clients were involved in the study .

For the qualitative study, using purposive sampling technique 10knowledgeable informants who were case managers and adherence supporters and on HAART were selected for in depth interview. Since they have been working to support PLHIV to be adherent they are more knowledgeable than the patients because they have the opportunity to know factors associated with ART adherence from other patients experiences and from their own experiences. They also have better knowledge of ART than other patients. So they can give us better and detailed explanation of factors associated with ART that can't be assessed in detail by quantitative study.

- **SAMPLING PROCEDURE**

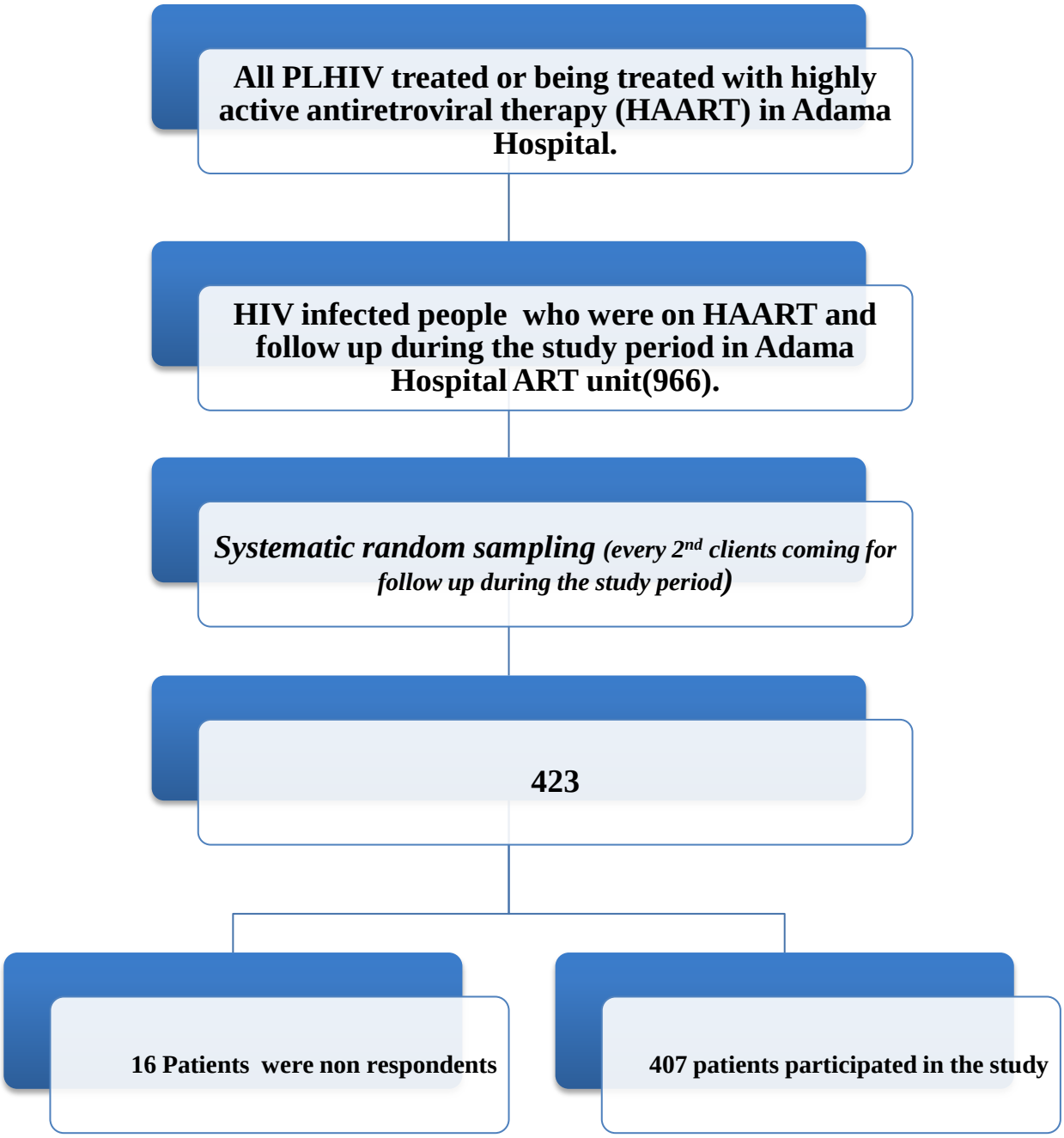

Figure 2 Diagramatic presentation of sampling procedure

4.7 Study Variables

4.7.*1 Dependent variable*

- **Adherence to ART**

4.7.*2 Independent variables*

- **Patient level factors**

Age, Sex, Religion, Ethnicity, Marital status, Educational level, Occupation, Monthly income, Substance Abuse(chat and drugs), Depression, Alcoholism, Knowledge on the importance of adherence, Belief in efficacy of medication, Knowledge on the benefit and eligiblility of ART, Severity of symptoms or illness andKeeping clinical appointment.

- **Community level factors**

Emotional and/ practical support, Stigma and discrimination.

- **Medication related factors**

Medication adverse effect, Convenience of regimen, Pill burden and Frequency of daily doses.

- **Health care system related factors**

Access to medication, Access to medical care and Patient and HCP relation ship.

4.8 Methods of data collection

A structured interviewer administered questionnaire was used to elicit the following information: socio-demographic data including history of substance use, health status,knowledge and attitudes towards the regimen,social support and psychological variables,medication and health care system related factors, patient providers relationship and reasons for skipping doses. Clinical records were reviewed; to assess adverse reactions to ARV, amount of CD4 count and the duration of ART. Data on drug adherence were collected by using patient self report about the number of doses skipped on the previous day, three days and the past seven days. Since there might be high recall bias, it is not recommended to use more than the past seven days(18). In depth interview guide wasused for the qualitative study. In depth interview was carried out by taking note. Two registered Nurses who can perfectly speak Amharic and Afan Oromoand one HO for supervision were recruited from

Adama Hospital. Training was given for 2 days on procedures, techniques and way of collecting data. The questionnaire was adapted from related literatures and with slight modification in line with the objective of this particular study(11). It was translated to Amharic and Afan Oromo then back to English to check for the consistency and pretested on 20 PLHIV were on HAART(5% of the total sample size) by involving the data collectors, supervisor and the principal investigator.

4.9 Data quality assurance and Data Analysis

4.9.*1 Data quality assurance*

To assure the quality of the data, properly designed data collection instruments was used.Two day training was given for data collectors and supervisor. The interview was conducted in place where the interviewee feels free to respond and alone with the respondent. There was spot checking of the data collectors to give timely correction. The questionnaires were collected by supervisor and the principal investigator at daily base after a thorough check ups to manage problem encountered and were reviewed and checked for completeness and consistence. For in depth interview, since data analysis was done daily basis; the final number of study subjects was limited by checking for redundant information and saturation of ideas produced from the interviewees. There was note taking to transcribe it word by word and.

4.9.2 Data Analysis

Data analysis was based on four concepts, patient level,health care system related,community level and medication related factors related to antiretroviral therapy adherence. The raw data collected waschecked for consistency, edited, coded and entered in to EPI-Data Version 3.1 and exported to SPSS version 16.0 software package for analysis. Descriptive andsummary statistics wasused to describe the study population in relation to relevant variables.Comparison of PLHIV currently on HAART who were adherent($\geq$95% level of adherence) and non adherent(< 95%level of adherence) to their antiretroviral medications was carried out on various variables affecting adherence to HAART.

Bivariate analysis was used to asses the relationships of independent variables with the dependent variable.After computing bivariate analysis the criteria for selection of variables possible for inclusion in multivariate analysis was based on P-value less than 0.25. Then

multiple logistic regression was computed to identify predictor variables of the dependent variable and variables with P-value less than 0.05 were considered as statistically significant. The strength of association was measured using 95% confidence intervals of Odds Ratios.

Depression was assessed byEdinburgh Postnatal Depression Scale(EPDS) consisting 10 items/questions http://psychology.tools.com/epds/. Each item was scored from 0 to 3. Depression scores range from 0 to 30, with a cutoff score of 11 or higher was considered as depressed(19,20).Knowledge related to adherence was calculated as having good knowledge if the respondents answer all the questions correctly.Alcoholism was assessed by RAPS4 alcohol screening test anda client with a "yes" answer to at least one of the four questions of alcohol screening test was considered as alcoholic(21). The level of adherence was assessed by patient self report andcalculatedby dividing the total number of the prescribed doses taken by the total number of doses prescribed for the past seven days. The total ARVs that the individual reportedly taken divided by the total number of ARVs prescribed for him/her. Patients having ≥95%level of adherence were considered as adherent to their antiretroviral treatment(3,18).

4.10 Ethical consideration

Ethical clearance was obtained from Jimma university, College of public health and Adama Hospital was notified before conducting the study. Informed consent had obtained from each study subject prior to the interview after explaining the purpose of the study. Confidentiality of the information was assured and privacy of the respondent was maintained.

4.11 Dissemination of study findings

A formal report will be submitted to the Hospital, the city council, Jimma University and Oromia Health Bureau. In addition this study report will be published to make several contributions to both knowledge and understanding about associated factors of ART adherence

4.12 Operational Definitions

Good antiretroviral treatment adherence practice(Adherent):- PLHIV on HAART reportedly taken ≥95% of the prescribed ARV medication as their agreement with health care provider.

Poor antiretroviral treatment adherence practice(Adherent):- PLHIV on HAART reportedly taken < 95% of the prescribed ARV medication as their agreement with health care provider.

Antiretroviral treatment adherence status of individual study subject:- is calculated by dividing the total number of the prescribed doses taken by the total number of doses prescribed for the past seven days. The total ARVs that the individual reportedly taken divided by the total number of ARVs prescribed for him/her.

Antiretroviral drugs(ARVs):- substance used to kill or inhibit the replication of retroviruses such as HIV.

Patient and physician Relation ship:- is providing patients with what they need and helping them want it.

Severity of symptoms or illness:- will be assessed by asking the respondents whether they had symptoms of some common(eight) stage 3 and 4 OIs they can face.A patient with at least one of the listed OIs is considered as seriously ill because this indicate that there is serious immune deficiency.

Depression:- will be defined by usingEdinburgh Postnatal Depression Scale(EPDS).It is a 10 item self-rating scale with cumulative scores ranging from 0 to 30. Patients having a cumulative score ≥11 is considered as depressed.

Alcoholism:- is defined by using RAPS4 alcohol screening test consisting 4 questions with Yes or No answers.The name is given for the tool depending on the questions included (Remorse (R), Amnesia (A), Performance (P), and Starter drinking behavior (S)) in the tool. A client with a "yes" answer to at least one of the four questions suggesting that your drinking is harmful to your health and well-being and may adversely affect your work and those around you will be considered as alcoholic and a client with "no" answer to all four questions will be considered as not alcoholic.

Access to medical care:-is distance of the patient residence from the study hospital measured in kilometres;distance <45 Km will be considered as good access to medical care.

Knowledge onimportanceofadherence, eligibility and benefits of ART:- is a theoretical or practical understanding of importance of adherence, eligibility and benefits of ART.Knowledge related to adherence is calculated as having good knowledge if the respondents answer all of the questions correctly.

Highly active antiretroviral therapy(HAART):- the name given to treatment regimens meant to aggressively suppress viral replication and progress of HIV disease. The usual HAART regimen combines three or more different drugs.

Opportunistic infection:- is the term applied to infections with bacteria, viruses, fungi or protozoa to which individuals with a normal immune system are not usually susceptible.

Protease inhibitor (PI):- is antiviral drug that act by inhibiting the virus protease enzyme, there by preventing viral replication.

Resistance:- is reduction in a pathogen's sensitivity to antiretroviral drug.

Side effects:- the action or effect of a drug other than those desired.

Immunosuppression:- is a state of the body in which the immune system is suppressed or damaged so that it can no longer defend the body against infections and diseases.

Disease progression:- is when disease gets worsen.

Belief in efficacy of medication:- is the perception of the patient on the ability of the medication(ARVs) to produce the desired or intended result.

Keeping clinical appointment:- ability of the patient to come to the health care facility on time, based on their agreement with health care provider.

Stigma and discrimination:- is a mark of disgrace associated with a patient's HIV/AIDS status and the unjust or prejudicial treatment of PLHIVs by the community.

Emotional and practical support:- is helping PLHIVs based on their emotion and by actual doing in the area they deserve.

Convenience of regimen:- is a state of being able to proceed with the medication regimen (taking the drugs appropriately)with a little effort or difficulty.

Pill burden:- is a hardship,anxiety or distress that a patient can face because of the number of drugs he/she should take.

Frequency of daily doses:- is a rate at which the drug is repeated in a single day.

CHAPTER FIVE: RESULT

5.1.1 Socio-demographic characteristics of quantitative study

Four hundred twenty three eligible respondents (non- response rate included) were selected from Adama hospital to be the part of the study. The response rate was 96.2 % while(3.8%)16 respondents were non respondents. A total of 407 clients, of which 230 (56.5%) female and 177(43.5 %) male participated in the study. The mean age of the respondents is 37.07 with standard deviation of 8.87. The majority, 236(58 %) of the participants were married, 70(17.2 %) were unmarried,55(13.5%) were divorced, 46(11.3%) were widowed/widower and separated.

Concerning educational status 142(34.9%) attended elementary school,110(27%) attended high school,77(18.9 %) were able to read and write,50(12.3%) were illiterate and 28(6.91%)of the participants were diploma and above. The largest proportion, 195(47.9 %) of the participants had income $\leq$ 500 ETB per month and 150(36.9%) and62(15.2%) had income between 500-990 and > 990 ETB per monthrespectively.

From the total sample 109(26.8 %) of the participants were unemployed, 150(36.9%) were private employees, 35(8.6%) were government employees and 33(8.1%), 3(0.7%) and 77(18.9%) were merchant, student and others (private work, pensioned.) respectively. Sociodemographic data is summarized in table 1 below.

Table 1: Socio-demographic characteristics of PLHIV involved in the quantitative study, Adama hospital, East Shoa, Ethiopia, 2014.

Variables	Response category	Number	Percent (%)
Sex	Male	177	43.5
	Female	230	56.5
Age	18-24 years	19	4.7
	25-45 years	316	77.6
	25-46 years	72	17.7
Marital status	Unmarried	70	17.2
	Married	236	58.0
	Divorced	55	13.5
	widowed/er/separated	46	11.3
Literacy	Illiterate	50	12.3
	Read and write	77	18.9
	Elementary	142	34.9
	High school	110	27.0
	Diploma or above	28	6.9
Monthly income	≤ 499 ETB	195	47.9
	500-990ETB	150	36.9
	<990ETB	62	15.2
Working situation	Government employee	35	8.6
	Unemployed	109	26.8
	Merchant	33	8.1
	Student	3	0.7
	Private employed	150	36.9
	Other*	77	18.9

others* private work, pensioned

5.1.2 Socio-demographic characteristics of in-depth interview participants

A total of 10 individual in-depth interviews were carried out. Four men and six women their age ranging from 28 to 44 years of age, with an average age of 35.6 years were involved in the in-depth interview sessions of the study. Two single, seven married and one was widower in marital status. All participants were actively engaged on activities of daily living and earn a monthly income that ranges from 750-840 ETB and they had an educational status that ranges from Grade 7 to grade 12. Concerning their role in ART unit, three of the participants were case managers and the rest seven participants were adherence supporters. (see below in table 2)

Table 2: Socio-demographic characteristics of the respondents participated in the in-depth interview at Adama hospital, East Shoa, Ethiopia 2014.

Respondents	Age	Sex	Educational status	Marital status	Income in ETB	Working situation	Role in ART unit
R1	41	F	12	Married	750	Working	Adherence supporter
R2	32	F	11	Married	750	Working	Adherence supporter
R3	36	F	12	Married	840	Working	Case manager
R4	39	M	12	Single	840	Working	Case manager
R5	35	M	10	Married	750	Working	Adherence supporter
R6	44	F	7	Widower	750	Working	Adherence supporter
R7	29	F	12	Single	750	Working	Adherence supporter
R8	28	M	12	Married	840	Working	Case manager
R9	34	M	10	Married	750	Working	Adherence supporter
R10	38	F	8	Married	750	Working	Adherence supporter

5.2 Patient level factors

As to history of active substance use, 49(12%) of the participants had history of active substance use and by using Edinburg Postal Depression Scale (EPDS≥11),47(11.5%) of the participants were found to be depressed. From the total sample 388(95.3%) of the participants believe in self efficacy of the regimens,401(98.5%) of the participants were confident enough to adhere in the future to their ARV and 360(92.4%) participants had disclosed their HIV Status.

Concerning knowledge on ART benefits, ART eligibility and importance of adherence: only 67(16.5%) participants had satisfactory knowledge on ART benefits, 230(56.5%) participants had satisfactory knowledge on ART eligibility and 400(98.3%) participants had satisfactory knowledge on importance of ART adherence(see table 3).

Table 3: Patient level factors of PLHIV involved in the study, Adama hospital, East Shoa, Ethiopia, 2014

Variables	Response category	Number	Percent (%)
History of active substance	Yes	49	12.0
	No	358	88.0
Have you disclosed your HIV states	Yes	376	92.4
	No	31	7.6
Depression	Yes	47	11.5
	No	360	88.5
Knowledge on ART benefits	Satisfactory	67	16.5
	Unsatisfactory	340	83.4
Knowledge on ART eligibility	Satisfactory	230	56.5
	Unsatisfactory	177	43.5
Knowledge on ART importance	Satisfactory	400	98.3
	Unsatisfactory	7	1.7
Perceive self efficacy	Yes	388	95.3
	No	19	4.7
Confident to adhere in the future	Yes	401	98.5
	No	6	1.5

5.3 Community level factors

A total of 333(81.8%) respondents reported that they have emotional or practical support and also claimed that that they were satisfied with the support they obtained.Mojority of the participants, 284 (69.8%) reported that they were valued for their skills/ ability by others of which, 271 (95.4%) claimed that they were satisfied with the way people valued their skills/ ability and 13(4.6%) reported that they were not satisfied with the way people value their skills/ability. From the total participants,120 (29.5%) of the participants faced stigma and discrimination because of their HIV status. (see table 4 below)

Table 4: Community level factors of PLHIV involved in the study, Adama hospital, East Shoa, Ethiopia, 2014

Variables	Response category	Number	Percent (%)
Emotion /practical support	Yes	333	81.8
	No	74	18.2
Are you satisfied with their support	Yes	333	81.8
	No	0	0
Values for your skills abilities	Yes	284	69.8
	No	123	30.2
Satisfied with the way people valued your skills/ abilities	Yes	271	66.6
	No	13	3.2
Faced stigma and discrimination	Yes	120	29.5
	No	287	70.5

5.4 Medication related factors

From the total respondents 157(38.6%) reported that they took their medication dose in specified time per day and 250(61.4%) claimed that they were not taking their medication in specified time per day; of which, 136(54.4%) respondents delay < 30 minutes,103(41.2%) delay 30-90 minutes, 7(2.8%)delay 91-119 minutes and 4(1.6%)delay ≥120 minutes.The largest proportion of the total respondents 268(65.8%) use watch bell, 3(0.7%) use pillbox,1(0.2%) use written schedules as memory aids and 135(33.2%) of the participants did not use any memory aids for taking medication.One hundred seventy two (42.3%) respondents had side effects of the ART medication and 26 (6.4%) respondents were taking other medications with their ART medication.(see table 5 below)

Table 5: Medication related factors of PLHIV involved in the study Adama hospital, East Shoa, Ethiopia, 2014.

Variables	Response category	Number	Percent (%)
Taking dose in specified time/day	Yes	157	38.6
	No	250	61.4
How many minutes do you delay	< 30 min.	136	33.4
	30-90 min.	103	25.3
	> 90 min.	11	2.7
Memory aids used	Pill box/written schedle	4	0.9
	Watch bell	268	65.8
	Don't have	135	33.2
Having side effect	Yes	172	42.3
	No	235	57.7
Taking other medications with ARV	Yes	26	6.4
	No	381	93.6

5.5 Health care system related factors

Majority of the participants, 319(78.4%) trust and feel the health care providers treating them were capableand more than 9 in 10 of the participants,394(96.8%) of the participants reported that they have open communication with the HCP treating them. The largest proportion of the participants 323 (79.4%) live in a place less than 45 KMs far from the ART unit,84(20.7%) live in aplace greater than 45 KMs far from the ART unit.Three hundred ninety (95.8%) respondents reported that they have access to reliable pharmacy any time. The majority, 386(94.84%) reported that they obtained the education or assistance they need during their visit to ART unit, 5(1.23%) reported that they did not and 16(3.93%) of the participants can not differentiate. (see table 6 below for summary)

Table 6: Health care system related factors of PLHIV involved in the study Adama hospital, East Shoa, Ethiopia, 2014

Variables	Response category	Number	Percent (%)
Satisfied with clinicians services	Yes	319	78.4
	No	8	2
	Not sure	80	19.7
Trust and feel the HCPs treating you are capable	Yes	319	78.4
	No	88	21.7
Have open communication with HCP treating me	Yes	394	96.8
	No	1	0.2
	Not sure	12	2.9
Access to reliable pharmacy any time	Yes	390	95.8
	No	17	4.1
Obtaining the education or assistance they need during their visit to ART unit	Yes	386	94.8
	No	5	1.2
	Not sure	16	3.9

5.6 HAART Adherence Practice

The assessment of adherence to HAART in PLHIV who were on HAART in Adama hospital ART unit during the past one weekwas measured using self report method. As shown in figure 3, according to cued recall for the previous seven days, 26(6.4%)of the participants reportedly taken <95% of their antiretroviral medications(non-adhered), where as, 381(93.6%) of them reportedly taken ≥ 95% of their prescribed ARV drugs(adhered) of the past seven days duration. (see table 7 below for reasons of skipping doses)

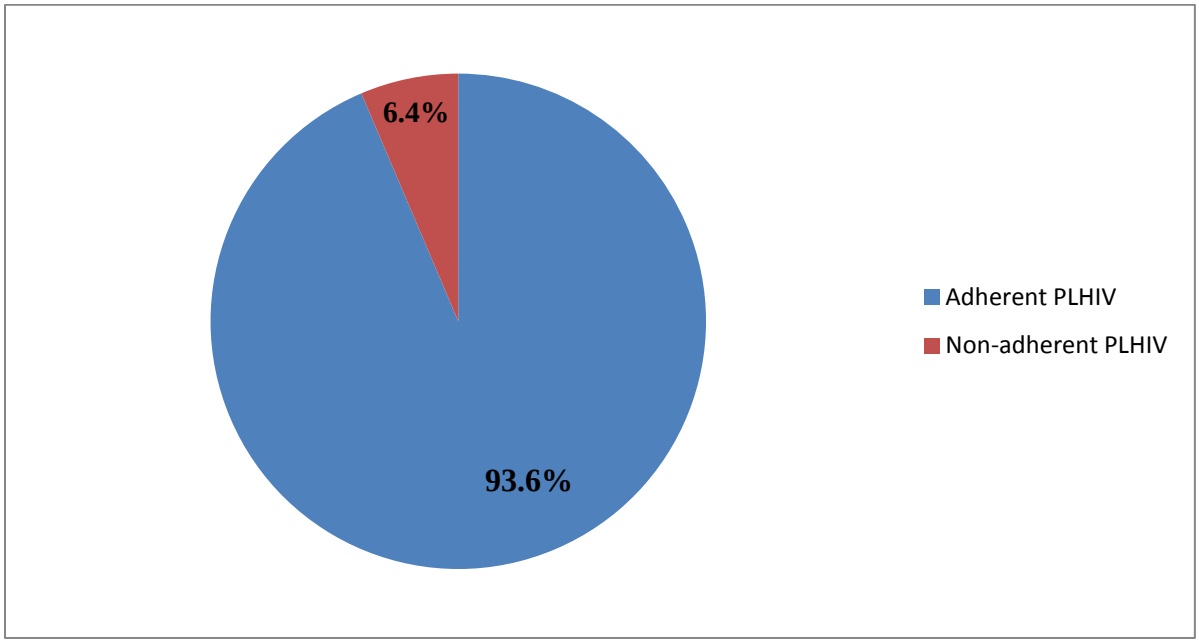

Figure 3 Patient Adherence by Self-report of PLHIV involved in the study, Adama Hospital, East Shoa, Ethiopia, 2014.

Table 7: Reasons for missing doses/non-adherence among the study participants, AdamaHospital, East Shoa, Ethiopia, 2014.

Variables	Number	Percent (%)
Being away from Home	99	24.3
Were too busy	62	15.2
Simply forget	197	48.4
Too many pills to take	3	0.7
Wanted to avoid side effects	2	0.5
Did not want others to notice me taking ARV	12	2.9
Had a change in daily routine	5	1.2
Felt asleep	4	1.0
Felt sick	5	1.2
Felt depressed or overwhelmed	10	2.5
Bad problem of taking meal at specified time	4	1.0
Run out of pills	2	0.5
Felt good	2	0.5
Taking medication reminded my HIV	2	0.5

5.7 Factors associated with adherence

Sex, literacy, history of active substance use, source of information about ART, getting clinical benefits, depression, knowledge of ART eligiblility, feeling comfortable when taking ARV in front of others than before, the most likely way to become infected with HIV, having any emotional or practical support,being valued for their skills or ability by others,being satisfied with the way people value for their skills/ability, stigma and discrimination, being confident enough to adhere to ARV medication in the future, knowledge on the consequences of non adherence, knowledge on the severity of consequences of non adherence, taking medication in specified time per day, using memory aids to take medication, what they do when side effects occur, satisfaction with the clinicians service, trusting and feeling the HCPs treating you are capable, obtaining the education or assistance you need during your visit,access to reliable pharmacy any time you want, having child under your care, satisfaction in the scheduling appointment of treatment unit and satisfaction in confidentiality of the treatment unit were variables found to be candidates for multivariate analysis;by using the criteria, variables with P- value less than 0.25 in bivariate

analysis to be candidates of multivariate analysis. See(table 8) for variables significantly associated with ART adherence by having P value less than 0.05 in bivariate analysis.

Table 8: Summary of factors associated with adherence in bivariate analysis, Adama Hospital, East Shoa, Ethiopia, 2014.

Variables	Response category	Crude OR	95% CI	P value
Sex	**Male**	**3.142**	**1.33-7.404**	**0.009**
	Female	-	-	-
Literacy	Illiterate	0.294	0.064-1.337	0.113
	Read and write	**0.061**	**0.007-0.545**	**0.012**
	Elementary	0.311	0.096-1.012	0.052
	High school	0.361	0.108-1.204	0.361
	Diploma or above	-	-	-
History of Active substance use?	**Yes**	**9.583**	**4.129-22.241**	**0.000**
	No	-	-	-
From where did you get the information about ARV ?	**HCP**	**.149**	**0.042-.531**	**0.003**
	Mass Media	**0.147**	**0.037-0.589**	**0.007**
	Others	-	-	-
Clinical benefit gained after starting ART.	Improved quality of life	0.128	0.010-1.667	0.117
	weight gain	0.833	0.087-7.986	0.874
	Reduced fever	0.833	0.061-11.416	0.891
	Reduce frequency of diarrhea	1.00	0.091-11.028	1.00
	More than one benefit	0.190	0.020-1.826	0.150
	No benefit at all	-		
Depression	**Yes**	**3.897**	**1.590-9.551**	**0.003**
	No	-	-	-
Knowledge of ART Eligibility	Yes	0.542	0.243-1.212	0.136
	No	-	-	-

Variables	Response category	Crude OR	95% CI	P value
Feeling comfortable when taking ARV in front of others than before.	**Yes**	**0.426**	**0.190-0.953**	**0.038**
	No	-	-	-
The most likely way to become infected with HIV	**sexual intercourse**	**0.235**	**0.061-0.909**	**0.036**
	Blood transfusion	0.339	0.071-1.613	0.174
	Others	-	-	-
Emotional/ practical support	**Yes**	**o.270**	**0.119-0.616**	**0.002**
	No	-		
Being valued for your skills or abilities by others.	**Yes**	**5.585**	**1.299-24.012**	**0.021**
	No	-	-	-
Satisfaction with the way people valued your skills or abilities.	**Yes**	**0.121**	**0.036-0.405**	**0.001**
	No	-	-	-
Facing Stigma and discrimination because of your HIV status.	Yes	1.830	0.815-4.110	0.143
	No	-	-	-
Being confident enough to adhere to ARV in the future.	**Yes**	**0.061**	**0.012-0.318**	**0.001**
	No	-	-	-
Knowledge of the consequence of non adherence.	**Yes**	**0.032**	**0.003-0.361**	**0.005**
	No	-	-	-
Knowledge of the severity of the consequences to non adherence.	**Yes**	**0.014**	**0.002-0.135**	**0.000**
	No	-	-	-
Taking dose in a specified time per day.	Yes	0.567	0.233-1.382	0.212
	No	-	-	-
Memory aids used	**Watch bell**	**0.2**	**0.085-0.473**	**0.000**
	Don’t have	-	-	-

Variables	Response category	Crude OR	95% CI	P value
What did you do when you had side effect?	**Immediately report to clinician**	**0.234**	**0.086-0.635**	**0.004**
	With held until the date of appointment and stopping	-	-	-
Satisfaction with the clinicians service	**Yes**	**0.241**	**0.105-0.551**	**0.001**
	No	0.810	0.091-7.185	0.850
	Not sure	-	-	-
Trust and feel the HCPs treating you are capable	**Yes**	**0.245**	**0.109-0.55**	**0.001**
	No	-	-	-
Obtaining the education or assistance you need during your visits	**Yes**	**0.114**	**0.036-0.361**	**0.000**
	No	1.467	0.184-11.718	0.718
	Not sure	-	-	-
Access to reliable pharmacy any time you want	**Yes**	**0.137**	**0.044-0.424**	**0.001**
	No	-	-	-
Have a child under your care	Yes	0.538	0.217-1.333	0.180
	No and not sure	-	-	-
Satisfaction in the scheduling appointments of the treatment unit	**Yes**	**0.084**	**0.013-0.533**	**0.009**
	No	0.9	0.091-8.899	0.928
	Not sure	-	-	-
Satisfaction with confidenciality of ART unit	**Yes**	**0.153**	**0.028-0.831**	**0.030**
	Not sure	-	-	-

NB:-Variables written in bold were variables significantly associated with ART adherence (P value <0.05) and response category with - are reference categories .

After entering all candidate variablesinto multivariate logistic regression model by using forward step wise entry method history of active substance use (AOR= 6.964,CI=1.912-25.366, P=0.003), having emotional /practical support (AOR=0.251,CI=0.072-0.869, P=0.029), trusting and feeling the health care providers treating you are capable (AOR=0.295,CI=0.090–0.968,P=0.044) and having access to reliable pharmacy any time

you want (AOR=0.191,CI=0.037-0.985, P=0.048) were independent predictors of HAART adherence. (See table 9 below)

This study indicated that: the odds of non adherence among PLHIV who had history of active substance use was 6.964 times higher than those who did not have history of active substance use; PLHIV who had emotional/practical support were 74.9% less likely to be non adherent than those who do not have emotional /practical support; PLHIVs who trust and feel the health care providers treating them are capable were 70.5% less likely to be non adherent than those who do not trust and feel the health care providers treating them are capable and PLHIV who had access to reliable pharmacy any time they want were 80.9% less likely to be non adherent than those who did not have access to reliable pharmacy any time they want.

Table 9 Summary of factors associated with adherence in multivariate analysis, Adama Hospital, East Shoa, Ethiopia, 2014.

Variables		HAART adherent Yes	No	Crude OR,95 %cl for exp(B)	adjusted OR ,95% cl for Exp(B)
History of active substance use	Yes	36	13	9.583(4.129-22.241)	6.964(1.912-25.366)
	No*	345	13		
Having emotional or practical support (social support)	Yes	318	15	0.270(0.119-0.616)	0.251(0.072-0.869)
	No*	63	11		
Trust and feel the health care providers treating you are capable.	Yes	306	13	0.245(0.109-0.55)	0.295(0.090-0.968)
	No*	75	13		
Having access to reliable pharmacy any time you want.	Yes	369	21	0.137(0.044-0.424)	0.191(0.037-0.985)
	No*	12	5		

NB:NSR is to say not sure and response categories with * are references.

5.8 Findings of in-depth interview

Major themes identified include: -

1. Factors that influence ART adherence practice and
2. Change in quality of life because of ART.

1. Factors that influence ART adherence practice

From whom/where did you heard/obtain the information about ARV, after how long of diagnosis you decide to start ARV, what were the factors that influence your decision making, describe your understanding of your treatment plan, describe your daily routine when taking ARV including have you experienced any problems like side effects, access, interaction with other medications, dosing schedules, whom do they consult in case of treatment problems, do you have access any time you want advice/support for your problems, how do describe your relationship with health care providers and how convenient is the treatment unit location/service for you. Three of the participants heard or obtained information about ART from mass media and the rest seven obtained information from HCP diagnosed them. The 3 participants heard from mass media got enough knowledge about ART after they have diagnosed from the orientation given by the health professionals because of that the knowledge they had was not sufficient.

Majority of them were diagnosed with HIV, after they developed some HIV/ AIDS related problems or at the advanced stage of HIV progression. The knowledge they had doesn't imply them to undertake VCT and then initiate ART early, it was for their deteriorating health status or because they had a health problem and then went to health personnel who suggested them to undertake HIV test. After they had some time, almost all initiated antiretroviral therapy by their own decision, where as one adherence supporter was by family decision. She started after two years because of the relationship that perceived to be lost in the family and within the communities, her doubts about their self efficacy to adhere to treatment, her doubts about ART efficacy, problem of acceptance she had when diagnosis and she preferred to use of holly water by going to "Gedamm".

With regards to their understanding and whether the treatment schedule fit their daily routine than previous, all of the participants stated that they have sufficient understanding of their treatment plan and the treatment schedule fit their daily routine and does take the prescribed medication in a specified time. One of the female adherence supporters said that "when I

took the drugs the drugs are too many that they irritate my stomach and I immediately started vomiting, she also stated that after the ARV regimen is changed to a single combined fixed dose the pills burden is reduced to only one drug that it is very convenient and suitable to take.

One case manager aged 39 said " I was near to stop taking my ARVs because of the drugs adverse influence especially because of that my physical appearance was changed. Even the pills are too many to take at regular time and I fade up to take it. But currently he said that the pills burden is reduced to only one drug that it is very convenient, suitable to take and the side effects are also manageable and small after the ARV regimen was changed to a single combined fixed dose ."

According to the participants report, medication side effects such as headaches, GIT related health problems (vomiting, nausea, diarrhea, gastritis, loss of appetite), weakness and bad dreams /night mares were identified as having a significant impact on adherence.

Regarding to whom do they consult in case of treatment problems; all reported that they consult their health care provider when treatment related problems occur, because of that they trust the health care providers treating them are capable to solve their problems. One female 29 years aged adherence supporter also reported that she sometimes consult her peers additionally to HCPs treating her.

When they are asked about having access any time they want advice or support for their problem, all of the respondents reported that they have access any time. R3 said "Even though we were given enough support and time to discuss our problem with our doctors, sometimes other PLHIV on HAART should spent long waiting time because of that the HCPs are busy and there are a lots of PLHIV on treatment to be seen by them."

Majority of them also resported that they got treatment support which played a significant role in their adherence from families, friends, relatives and some local NGO's.

Concerning the treatment unit convenience, all reported that the treatment unit is convenient for them.

2. Change in quality of life because of ART

The question raised under these thematic areas was whether starting ART changed the quality of their life. Almost all of them claimed that initiating ART had dramatic improvement in their health status, their productivity. One of 44 years female old respondents said that " before I started ART, I was in ill health almost on a bed for a long

time. She also said I cannot walk out for work to win daily bread. My life dream and vision had been collapsed and I was desperate in life and wish to die. Even I had poor appetite and started to have opportunistic infection. But within six months after initiation of ART I had got to gain weight, my general healthy had been recovered and all opportunistic infection stopped. I got out of bed and started working to win daily bread and started to generate in-come. My attitude has been changed for life and my dream come true to live longer."

The other case manager also explained that "Before I started ART, my general healthy has come deteriorating, had weight loss, unable to feed, very weak and spent most of my time on bed. I had developed rash all over face and bodies. But after ART initiation my body started functioning, I became strong to work, I also got out of bed and able to help myself. Even the rash disappeared. Finally he said I have regained hope for life." Other respondents also claimed that "we were almost approached to death before we started ART. We were having different type of opportunistic infection, we can't generate in-come, we are helpless and hopeless even we had been admitted to hospital many times. But after initiation of ART, we have got dramatic improvement in our health condition and we all got out of bed and like others we were able to do and live quality life as other people live. They all claimed that we have got time to live long and educate their children at schooling and also said we are able to live longer to fulfill life dream and vision."

CHAPTER SIX: DISCUSSION

In this study the overall prevalence of HAART adherence was 93.6%, which means 381of the sample taken ≥ 95% of their prescribed ARV doses in the past one week(seven days) before the actual day of interview.

The adherence level reported in this study is consistent with findings of a cross-sectional study of 1-month adherence among patients in Soweto, South Africa was >95% for 88%, 90–95% for 9% and, <90% for 3% (22) and a cross sectional study done in Bishoftu hospital found the adherence level to be 95.4% (11).

Due to greatly simplified treatment regimens the adherence level in this study is much higher than the findings of other studies conducted in most developing countries including Ethiopia(23). From studies done in Ethiopia the adherence rate is much higher in this study than the value reported, 81.2% in three civil hospitals and 82.8% in defense hospitals of Addis Ababa (9). In the study done at two hospital of Oromia (Jimma and Adama) region was found 83.0%(15)and in the study performed at southern region the adherence rate was found 74.2%% (10), which are less than the value reported in this study.

This higher level of adherence might be because of that many currently available ARV regimens are much easier to take and better tolerated than older regimens as the guidelines for adults and adolescents which was stated on October 6, 2005 has made treatment regimens greatly simplified in recent year and bring forth a fixed dose antiretroviral drugs combined in to a single to improve adherence and avoid resistance.

Characteristics of one or more components of the prescribed regimen can affect adherence(6). Simple, once daily regimens, including those with low pill burden, without a food requirement, and few side effects or toxicities, are associated with higher levels of adherence(23). Studies have shown that patients taking oncedailyregimens have higher rates of adherence than those taking twice-daily dosing regimens.(24,25,26,27)

From this, we can infer that adherence in those client using a fixed dose combined to a single drugs currently is better than those client previously using combined dose (cocktail type) antiretroviral therapy, for pill burdens may be associated with decreased adherence (28).

Similarly, subjects participated in the in-depth interview of this study reported that the currently changed single combined fixed dose has reduced the regimens side effect and the side effect is minimal and manageable. They also claimed that single combined fixed dose is

suitable, simple to take and has now reduced the pill burden that led them to treatment fatigue and decreased adherence.

In this study, HAART adherence was assessed through patient's self-report method. Although self-reporting method considered overestimating medication adherence rate, some authors suggested that self-report has the potential to be one of the most accurate measures of behavioral adherence, because only the patient that can report actual behavior (29), and this method has frequently been employed in antiretroviral researchs (30,31), due to its practicality, low cost,readiness to obtain the desired information, and to identify patients at risk for non-adherence(32). Studies have also indicated that self-reports correlate well with both viral load and clinical outcomes(33,34).

In this study, diversity of obstacle to treatment adherence were reported from the respondents; 197(48.4%) simply forget, 99(24.3%) being away from home and 62(15.2%) being too busy. This is almost the same with other studies conducted in Ethiopia, which is most frequently cited reasons for non adherence are; simple forgetting, being away from home or being busy. (10,11).

In this study history of active substance use (AOR= 6.964,CI=1.912-25.366, P=0.003), having emotional /practical support (AOR=0.251,CI=0.072-0.869, P=0.029), trusting and feeling the health care providers treating you are capable (AOR=0.295,CI=0.090–0.968,P=0.044) and having access to reliable pharmacy any time you want (AOR=0.191,CI=0.037-0.985, P=0.048) were significantly associated with ART adherence in multivariate analysis .

In agreement with these findings, some studies also suggested that adherence to HAART tends to increase with participants who: are free of active substance use(11, 15,24), having emotional/practical support(11,14,35) andhaving access to reliable pharmacy any time you want (15). Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents also stated that inconsistant access to medication to be one of the factors associted to poor adherence. In line with this finding majority of in-depth interview participants also resported that they got treatment support which played a significant role in their adherence from families, friends, relatives and some local NGO's.

Trusting and feeling the health care providers treating you are capable is also significantly associated with adherence in this study. In line with finding of this study, a recently done study, found that excellent adherersreported having a great degree of respect fortheir primary

care providers. In addition, theywere comfortable sharing personal informationand trusted their providers' clinical recommendations.By comparison, suboptimal adhererswere less likely to trust their providers and weremore likely to be suspicious of their providers' intentions(36)

The reason behind this might be because of that in clinicalpractice, providing care in warm and supportivesettings, in which patients feel comfortableand are cared for by knowledgeable, culturallycompetent providers may help improve adherence. By communicating openlyand effectively with patients, physicians canhelp improve patient satisfaction and trust, which, in turn,should help improve adherence and, ultimately,outcome(40). A patient-provider relationship that enhances patient trust through non-judgmental and supportive care and use of motivational strategies can positively influence medication adherence. (23). . This finding is also consistant with the finding of in-depth interview of this study,in which all subjects participated reported that they consult their health care provider when treatment related problems occur; because of that they think they can solve their problems, indicating that they trust and feel the health care providers treating them are capable.

This study did not indicated depression to have association with adherence in multivariate analysis. This is probable because of that a very low proportion of clients (11.5%) had scored above or equal to 11 on the Edinburgh Postnatal Depression Scale(EPDS).

Even though this study did not indicated, data of many studies.suggested that additional barriers to adherence include psychiatric disorders, such as depressionand using of memory aids (14),adherence knowledge,schedule fitting to daily routine and treatment side effects(10), having children under their care(11,15), a perception about personal susceptibility to non adherence threats, ability to adhere in future and positive beliefs on the efficacy of HAART(15) were factors associated with ART adherence.But in this study, depression, using memory aids and ability to adhere in future were s significantly associated with adherence in bivariate analysis.

The study is limited because that cross- sectional study design used could not allow inferring causality. In addition using self-reporting to assess HAART adherence is considered to overestimate medication adherence rate and prone to recall bias.

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

This study found an overall prevalence of HAART adherence by self report, 93.6% of the sample taken > 95% of their prescribed ARV doses in the past one week(seven days) duration from the day before interview.

From diversity of obstacle to treatment adherence; Simply forget, being away from home and being too busy were the most frequently reported reasons for skipping doses from the respondents in this study.

In addition history of active substance use, feeling the health care providers treating you are capable, having emotional /practical support andhaving access to reliable pharmacy any time you want were significantly associated with ART adherence in multivariate analysis.

Based on the results of this study it would be important to recommend Adama Hospital and other stake holders that:

- Counseling by trained professionals & integration of medical, substance use, and mentalhealth treatment.
- Improve availability and continuity of providers over time.
- Use of a multidisciplinary team approach/peer support.
- Starting when patients are ready,
- Treating substance abuse and depression before initiating ART,
- Simplifying the regimen and tailoring it to the patient's lifestyle,
- Management of drug side effects and increasing support, , ,
- Patient motivation and education,
- Minimizing the pill burden,
- Availing medications and refills,
- To under take longitudinal and experimental studies, with Varity of assessment methods to characterize and provide stronger evidence on HAART adherence and its determinants.

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Annex

Questionnaire In English for cross sectional study

Questionnaire to determine the degree of antiretroviral treatment adherence and its associated factors among PLHIV who are currently on HAART in Adama hospital.

PART 1- SECTION 1: In depth interview guide

Introduction: well come to interview

My name is ----------and I come from_____

I am here to discuss the antiretroviral treatment adherence and its associated factors. There is no right or wrong answers; all comments both positive and negative are most important. I would like to have many options and views. I would like this to be open interview, so feel free to express your opinion honestly and openly. I would like to confirm that all your comments are confidential and used for research purpose only. Your name will not be recorded to protect your confidentiality. Are you willing to participate in the interview? Y/N

Thank you for your willingness.

Questions and instructions for the interview

1. From whom/where did you heard/obtain the information about ARV?
2. After how long of diagnosis you decide to start ARV?
3. What were the factors that influence your decision making?
4. Describe your understanding of your treatment plan?
5. Describe your daily routine when taking ARV. Have you experienced any problems like side effects, access, interaction with other medications, dosing schedules?
6. Whom do you consult in case of treatment problems?
7. Do you have access any time you want advice/support for your problems?
8. How do describe your relation ship with health care providers?
9. How convenient is the treatment unit location/service for you?
10. Did taking ARV treatment change the quality of your life? If so,in what ways?

Part 1- Section 2:Introduction

Information sheet & consent form that certify respondents agreements beforeinterview.

I am ----------working as a data collector in this study that assess determinants of antiretroviral therapy adherence in the ART unit inAdama hospital.

The study is run by JU.

On this questionnaire your name will not be written, all your answers will be kept completely confidential.

The answers you give will be used to plan ways to help other people who must take pills on a difficultSchedule. Please do the best you can to answer all the questions. You do not have to answer, if you donot wish to answer a question, even you may end this interview any time you want. Do you agree toparticipate in this study? _____. Thank you for helping in this important study.

Date of Interview_____ Hospital ID_____

Study ID _____

Interviewer Name----------

Supervisor----------

PART 1- SECTION 3:Adherence Assessment

- **Patient Interview**

Ask questions about number of doses skipped & unmet restrictions, i.e. like food required with drug, time schedule, with empty stomach . . . etc

Name of the ARV drugs that the patient is taking _____

ARV drugs frequency/administration /number of daily doses_____

Number of doses skipped; Yesterday, _____

In the past three days, _____

In the past seven days, _____

How closely did you follow specific schedule in the past 7 days?

1.Never 2.Sometimes. 3.About half of the time4.Most of the time 5.All of the time.

How often did you follow special instruction?

1.Never 2.Sometimes 3.About half of the time4.Most of the time 5.All of the time.

- **Pill Count**

For patients who brought their pills, count the pills remaining in the pill bottle& calculate the difference between actual & exacted number of pills remaining.

Number of pills remaining _____

Number of pills dispensed last time _____

Expected number of pills remaining _____

PART 2- Section 1: Socio demographic characteristics

No	Questions	Coding Categories	Code
1	Sex of respondent	1.Male2.Female	
2	Age in years	----------	
3	Ethnic groups	1.Amara 2.Oromo3.Tiger 4.Other Specify ----------	
4	Marital status	1.Ummarried 2.Married 3.Divorced 4.Separated 5.Widowed/Widower	
5	Religions	1.Orthodox 2.Catholic 3.Protestant 4.Muslim 5.Other specify ----------	
6	Literacy	1.Illiterate 2.Read&write 3.Elementary 4.High school 5.Diploma or above	
7	Monthly income (in birr)		
8	Working situation	1.Government employee 2.Unemployed 3.Merchant4.Student 6.Private employee 6.Other specify ----------	
9	Do you have history of Active substance use?	1.Yes 2.No	
10	If yes to Question 9,which substance do you use?	1.Kcatt 2.Cigarette 3.Alcohol 4.Iv drugs 5.Other	

Alcoholism screening

S.N	Questions	Coding Categories	code
11.1	Have you had a feeling of guilt or remorse after drinking?	1.Yes 2.No	
11.2	Has a friend or a family member ever told you about things you said or did while you were drinking that you could not remember?	1.Yes 2.No	
11.3	Have you failed to do what was normally expected of you because of drinking?	1.Yes 2.No	
11.4	Do you sometimes take a drink when you first get up in the morning?	1.Yes 2.No	

Section 2: Health Status

No	Questions	Coding Categories	Code
1	When did you hear about ART ?	1.Before my illness, 2.After my illness 3.During my illness 4.Recently	
2	From where did you get the information about ARV ?	1.Health care professionals 2.Mass Media 3.Others specify ----------	
3	Are you committed/convinced before starting ART ?	1.Yes2.No	
4	Were you aware of the benefit of ART	1.Yes2.No	
5	After you had started ART, what clinical benefit did you get ?	1.Improved quality of life 2.weight gain 3.Reduced fever 4.Reduction of hospitalization 5.Reduce frequency of diarrhea 6.No benefit at all	
6	Do you know the importance of adherence before you start ART ?	1.Yes 2.No	
7	How long have you been on ART ?	----------	
8	What benefits does it give you (additional to answer of Q 5)	----------	
9	What was your CD4 count (write the date)?	Initial ---------- Recent ----------	
10	Have you disclosed your HIV status to your family and relatives ?	1.Yes 2.No	
11	If yes to the above question, to whom ?	1.wife 2.family members 3.friends 4.Other specificity	
12	Have you had any symptoms in the past four weeks/1 months while on ART?	1.Yes 2.No	

13	If yes to question 12,which one was very serious ?	1.Candidiasis (mouth sore) 2.Herpes simplex with mucocutaneous ulcer 3.HIV Associated dementia 4.weight loss 5.chronic diarrhea >days 6.Fatigue & fever 7.Chronic cough, night sweating, fever 8.Chest pain &fever, cough,dyspnea	
14	Do you have history of admission during the last one month ?	1.Yes 2.No	
15	Do you have history of admission during the one year ?	1.Yes 2.No	
16	How long have you been admitted to hospital for management & follow up for the last one years ?	1.I have been in hospital for----- days. 2.I have been admitted -----times in a year.	

Section 3: Edinburgh Postnatal Depression Scale

Please select the answer that comes closest to how you have felt **in the past 7 days**:

No	Questions	Coding Categories	Code
1	I have been able to laugh and see the funny side of things	A. As much as I always could B. Not quite so much now C. Definitely not so much now D. Not at all	
2	I have looked forward with enjoyment to things.	A. As much as I ever did B. Rather less than I used to C. Definitely less than I used to D. Hardly at all	
3	I have blamed myself unnecessarily when things went wrong.	A. Yes, most of the time B. Yes, some of the time C. Not very often D. No, never	
4	I have been anxious or worried for no good reason.	A. No not at all B. Hardly ever C. Yes, sometimes D. Yes, very often	

5	I have felt scared or panicky for no very good reason.	A.Yes, quite a lot B.Yes, sometimes C.No, not much D.No, not at all	
6	Things have been getting on top of me.	A.Yes, most of the time I haven't been able to cope at all B.Yes, sometimes I haven't been coping as well as usual C.No, most of the time I have coped quite well D. No, I have been coping as well as ever	
7	I have been so unhappy that I have had difficulty sleeping.	A. Yes, most of the time B. Yes, sometimes C.Not very often D.No, not at all	
8	I have felt sad or miserable.	A.Yes, most of the time B.Yes, sometimes C.Not very often D.No, not at all	
9	I have been so unhappy that I have been crying.	A.Yes, most of the time B.Yes, quite often C.Only occasionally D.No, never	
10	The thought of harming myself has occurred to me.	A.Yes, quite often B.Sometimes C.Hardly ever D.Never	

Section 4: Knowledge and Attitudes towards the regimen

S.N	Questions	Coding Categories	Code
1	When taking ART, AIDS will be delayed .	1.yes 2 No	
2	When taking ART,an HIV infected person will be cured from AIDS.	1.yes 2 No	
3	When taking ART, it can happen that one may get sick from the Rx itself.	1.yes 2 No	
4	When taking, ART the person will live longer than when s/he is not taking.	1.yes 2 No	
5	All HIV infected persons can take ART.	1.yes 2 No	
6	Only when the body's defense systemextremely low (very low WBC) is a person should take ART.	1. Yes 2. No	
7	When one takes ART, it has to betaken at specific time.	1. Yes 2. No	
8	When one takes ART, the daily doses should not be escaped.	1. Yes 2. No	
9	You need to take pills the rest of yourlife to delay AIDS.	1. Yes 2. No	
10	Were you convinced beforestating ART?	1.Yes 2.No3.Not sure	
11	Do you believe in Self Efficacy of theregimens ?	1. Yes/No Doubt 2.Yes but Doubtful 3.No 4. Not Sure	
12	What do you suggest about a fixed dose combined to a single drugs?	----------	
13	Do you feel comfortable when taking ART in front of others than before?	1.Yes 2.No3.Not sure	
14	What is/are the most likely way you become infected with HIV?	1.sexual intercourse 2.shared needle3. Blood transfusion4.Don't know 5.Otherspecify----------	

Section 5: social support and psychological variables

No	Questions	Coding Categories	Code
1	With whom do you live ?	1.Live alone 2.My family 3.My parents 4.unstable	
2	Do you have any emotional & practical support ?	1.Yes 2.No	
3	If yes to Question 2,whom support you?	1.Family 2.Friends 3.peer 4.Community 5.Other	
4	What kind of support or care do you get from the above people?	1.Material/financial 2.Information/advice 3.Other specify ----------	
5	Are you satisfied with their help?	1.Yes 2.No	
6	Are you valued for your skills or abilities by others?	1.Yes 2.No	
7	Are you satisfied with the way people value for your skills or abilities ?	1.Yes 2.No	
8	Have you ever faced Stigma and discrimination because of your HIV status?	1.Yes 2.No	
9	Are you confident enough in the ability to adhere to ARV medication in the future?	1.Yes 2.No	
10	Do you know the consequence of non adherence?	1.Yes 2.No	
11	If yes to question no 10, mention some of them ?	_____	
12	Do you know the severity of the consequences to non adherence?	1.Yes 2.No	
13	Doyou think ART benefits you ?	1.Yes 2.No	
14	Have you ever thought about your susceptibility to have the consequence of non adherence for in case of missing or skipping any ARV doses ?	1.Yes 2.No	

Section 6: Medication related factors

No	Questions	Coding Categories	Code
1	Are you taking a fixed dose combinedto a single drugs currently ?	1.Yes 2.No	
2	Does the Rx schedule fit you daily routine than the previous?	1.Yes 2.No 3.Not sure	
3	Do you take your dose in a specified time per day ?	1.Yes 2.No	
4	If No to question no 3 how much minutes do you delays from the specified minutes?	1.<30minutes 2.30-89minutes 3.≥90 minutes 4.91-119minutes 5. ≥119minutes	
5	What types of schedules or memory aids do you use in order to take medication?	1.pill box 2.written schedules 3.watch bell 4.Don't have	
6	Have you ever had any side effect ofART after the current regimens?	1.Yes 2.No	
7	Specify the side effect.	1.Nausea, vomiting and GI intolerance 2.Headach 3. Anemia 4.Diarrhea 5. Depression 6.rash 7. other specify----------	
8	What did you do when you had side effect ?	1.Immediately report to clinician 2.Immediately stopped taking pill 3.With held until the date of appointment 4.Dropped out permanently	
9	Are you taking any other medicationnow with your ARV?	1.Yes 2.No	
10	What is the drug?	_____	

Section 7: Patient Providers Relationship

No	Question	Coding category	Code
1	Are you satisfied with the clinicians service ?	1.Yes 2.No 3.Notsure	
2	Do you trust and feel the health care providers treating you are capable?	1.Yes 2.No 3.Notsure	
3	Do you have open communication withHCP treating you?	1.Yes 2.No 3.Notsure	
4	How frequent do you visit your doctor?	1.every month 2.every 2 month 3.every 3 month 4.Variable	
5	Do you obtain the education or assistantyou need during your visits?	1.Yes 2.No 3.Notsure	

Section 8: Health care system and Clinical Setting

No	Question	Coding category	Code
1	How far is your residence from theART unit you are attending?	1.<45KM 2.>45KM3.Notsure	
2	Do you have access to reliablepharmacy any time you want?	1.Yes 2.No 3.Notsure	
3	At present do you have a child underyour care?	1.Yes 2.No 3.Notsure	
4	Are you satisfied by the improvements you obtain from yourtreatment?	1.Yes 2.No 3.Notsure	
5	Are you satisfied in the schedulingappointments of thetreatment unit?	1.Yes 2.No 3.Notsure	
6	Are you satisfied in theconfidentiality of the treatment unit?	1.Yes 2.No 3.Notsure	

Section 9: Reasons for skipping doses

NB:- More than on answers is possible

S.N	Reason for skipping doses	Tick
1	Being away from home	
2	Were too busy	
3	Simply forgot	
4	Too many pills to take	
5	Wanted to avoid side effects	
6	Did not want others to notice me taking the medication	
7	Had a change in daily routine	
8	Felt like the drug was harmful	
9	Felt asleep	
10	Felt sick	
11	Felt depressed/overwhelmed	
12	Bad problem of taking meal at specified time (meals, empty stomached---)	
13	Ran out of pills	
14	Felt good	
15	Taking medication reminded my HIV	
16	Confused about the dosage	
17	I thought the medication had no value	
18	People told me the medicine is not good	

Questionnaire In Afan Oromo For Cross Sectional Study

Unka Gaaffilee

Gaaffilee Sadarkaa Qoricha Farra HIV/AIDS Haalaan Fudhachuu Fi Sababoota Isaan Wal Qabatan Namoota Vaayirasii HIV Waliin Jiraatan Yaalii HIV/AIDS Irra Jiran Keessatti Ittiin Adda Ba'u.

Kutaa 1- Boqonnaa 1: Qajeelchituu Gaaffii Fi Deebii

Seensa: Baga nagaan gara gaaffii fi deebii dhuftan

Maqaan koo _____jedhama. Kanan dhfe _____ irraa ti.

Kanan dhufeef sadarkaa qoricha HIV/AIDS haalaan fudhachuu fi sababoota isaan wal qabatan namoota vaayirasii HIV waliin jiraatan yaalii HIV/AIDS irra jiran ikeessatti jiru irratti mariachuufi.marii keenya keessatti deebiin sirrii fi sirrii hin taane hin jiru, yaadni keessan hundu kan sirrii ta'es , kan sirrii hin taanees qorannoo keenyaaf baay'ee barbaachisaa dha. Yaadaaf ilaalcha bal'aa argachuuf , mariin keenya marii banaa akka ta'u jechaa, iftoominaa fi amanamumman yaada keessan akka ibsitan isin gaafadha.Yaadni keessan hundi kan dhoksaan qabamuuf qorannoo kanaaf qofa kan Oolu dha. Maqaan keessan Eenyummaa keessan dhoksaan qabuuf akka tolutti hin galmaa'u. Gaaffii fi deebii kana irratti hirmaachuuf fedha qabduu? _____. Qorannoo kana irratti hirmaachuu keessaniif guddaa galatoomaa.

Gaaffilee fi qajeelfama gaaffii fi deebii

1. Wa'ee yaalii farra HIV/AIDS Eessaa dhageessan?
2. Eega qoratamtanii of bartanii hangam turtanii yaalamuuf murteessitan?
3. Murteessuuf sababootni dhiibbaa isin irratti geessissan maal fa'i?
4. Hubannoo isin karoora yaalii keessan irratti qabdan naaf ibsaa.
5. Oolmaa guyyaa guyyaa keeessan yeroo qoricha farra HIV/AIDS fudhattanii naaf ibsaa. Rakkooleen kanneen akka rakkoo cinaa qoricha farra HIV/AIDS, qoricha/yaalii yeroo

barbaaddanitti argachuu dhabuu, rakkoo qorichi farra HIV/AIDS qoricha biroon wal makee fidu, baay'ina YKN hanga qorichaa fudhatamuu qabu fi KKF wal qabate isin quunnamee beekaa?

6. Rakkinni yaaliin wal qabate yoo isin quunnamee Eenyuun mari'attu?
7. Gorsa/gargaarsa rakkooo keessaniif yeroo barbaaddanitti argachuu ni dandeessuu?
8. Ogeeyyii fayyaa isin yaalaa jiran waliin walitti dhufeenya keessan akkamitti ibsitu?
9. Bakki yaaliiYKN tajaajilli itti isiif kennamu hangam isinitti tolaa dha /mijataa dha?
10. Qorichi farra HIV/AIDS fudhachuun jiruuf jireenya keessan fooyyessee jiraa? Yoo ta'e karaa kamiin?

Kutaa 1- Boqonnaa 2: Unka walii galtee fi hubannoon waa'ee qorannichaa ittin kennamu

Ani maqaan koo _____ kan ta'e qorannoo sadarkaa qoricha farra HIV/AIDS haalaan fudhachuu fi sababoota isaan wal qabatan irratti Hospitaala Adaamaa keessatti godhamu keessatti ragaa funaanaa ta'een hojjedha. Qorannon kun yunivarsitii Jimmaatiin gaggeeffama.

Ragaan keessan dhoksaan akka eegamuuf unka gaaffii kana irratti maqaan keessan hin barreeffamu.

Deebii isin deebiftan kamiyyuu namoota yalii farra HIV/AIDS haalaan fudhachuu hin dandeenye, akka isaan danda'aniif gargaaruuf wanta godhamuu qabu karoorsuuf kan Oolu dha. Kana hubachuun gaaffilee hunda deebisuuf hanga isiiniif danda'ame akka yaaltan jechaa, gaaffii deebisuu hin barbaannee deebisuu dhiisuu fi yeroo barbaaddanitti gaaffii fi deebii kana dhiisuu yookaan addaan kutuu ni dandeessu. Qorannoo kana irratti hirmaachuuf fedha qabduu? _____. Qorannoo barbaachisaa kana irratti himaachuu keessaniif galatoomaa.

Guyyaa gaaffiif deebii_____

Lakk. Addaa Hospitaalichaaa_____

Lakk. Addaa qorannichaa_____

Maqaa gaaafataaa_____

Maqaa to'ataa_____

Kutaa 1- Boqonnaa 3:Sakatta'insa Sadarkaa Qoricha Farra HIV /AIDS Haalaan Fudhachuu

Gaaffii hirmaataaf

Baay'ina qoricha farra HIV/AIDS (doses) utuu hin fudhatamiin hafe fi qajeelfama addaa/dhorkaa utuu hin raawwatamiin hafe kan akka nyaata qoricha waliin barbaachisuu, sagantaa/yeroo qorichi itti fudhatamu, garaa qullaatti qorsa fudhachuu fi KKF gaafadhaa.

- Maqaa qoricha farra HIV/AIDS dhukkubsatichi fudhataa jiru_____
- Guyyaa tokko keessatti yeroo meeqa fudhattu, qoricha meeqa fudhattu? _____
- Baay'ina qoricha farra HIV/AIDS

  Kaleessa utuu hin fudhatamiin hafe_____

  Guyyaa sadan darban keessatti utuu hin fudhatamiin hafe_____

  Guyyaa torban darban keessatti utuu hin fudhatamiin hafe_____

➢ Guyyaa torban darban keessatti qoricha farra HIV/AIDS keessan yeroo ka'ameefitti hangam hordoftanii jirtu?

1. homaa hin hordofne 2.Yeroo tokko tokkon hordofe 3.Walakkaan hordofe
4.Yeroo baay'een hordofe 5.Yeroo hundumaan hordofe

➢ Guyyaa torban darban keessatti qajeelfama addaa/dhorkaa isiiniif kenname hangam hordofaa/raawwachaa turtan?

1. homaa hin hordofne 2.Yeroo tokko tokkon hordofe 3.Walakkaan hordofe
4.Yeroo baay'een hordofe 5.Yeroo hundumaan hordofe

QORICHA LAKKAA'UU

Namoota qoricha isaanii fidanii dhufaniif, qoricha saanduqa qorichaa isaanii keessatti hafe lakkaa'iitii garaagarummaa baay'ina qoricha hafuu qabuu fi yeroo lakkooftu argite herregi.

- Baay'ina qoricha saanduqa qorichaa isaanii keessaatti argamu_____
- Baay'ina qoricha yero darbe kennameef_____
- Baay'ina qoricha hin hafa jedhamee Eegamu_____

Kutaa 2- Boqonnaa 1: Haala Hawaasummaa

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Saala	1.Dhiira 2.Dhalaa	
2	Umurii waggaan	_____	
3	Qomoo	1.Amaaraa 2.Oromoo 3.Tigiree 4.Kan biroo yoo ta'e haa ibsamu_____	
4	Haala gaa'ilaa	1.hin fuune/hin eerumne 2.Gaa'ila qaba 3.wal hiikneerra 4.Bakka adda addaa jiraanna 4.Abbaan/Haati manaa kan jalaa du'e	
5	Amantaa	1.Ortodoksii 2.Kaatolikii 3.Protestaantii 4.Musiliima 5.Kan biroo yoo ta'e haa ibsamu_____	
6	Sadarkaa barnootaa	1.Kan hin baranne 2.Barreessuuf dubbisuu kan danda'u 3.Sadarkaa 1 ffaa 4.Sadarkaa 2ffaa 5.Dippiloomaaf isaa ol	
7	Galii ji'anii giddu galaan birriin		
8	Haala hojii	1.Hojjetaa mootummaa 2.Kan hojii hin qabne 3.Daldalaa 4.Barataa 5.Hojjetaa mana dhuunfaa 6. Kan biroo yoo ta'e haa ibsamu_____	
9	Wantoota araada/suusii nama qabsiisan amma ni fayyadamtaa?	1.Eeyyee 2.Lakki	
10	Yoo ni fayyadamta ta'e isa kami?	1.Caatii 2.Sigaaraa 3.Alkoolii 4.Qoricha hidda dhiigaan fudhatamu 5. Kan biroo yoo ta'e haa ibsamu_____	

11	**CALALLII ARAADA DHUGAATII**		
Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
11.1	Yaadni balleessaa dalaguu/gaabbii sitti dhaga'amee beekaa?	1.Eeyyee 2.Lakki	
11.2	Wanta ati utuu dhugaa jirtuu jette/goote, kan ati hin yaadanne, michuun kee YKN miseensi maatii kee sitti himee beekaa?	1.Eeyyee 2.Lakki	
11.3	Wanta ati utuu hin dhugiin narraa eegama jettee amantu sababa dhugaatiin utuu hin raawwatiin haftee beektaa?	1.Eeyyee 2.Lakki	
11.4	Yeroo baay'ee yeroo irribaa kaatu dhugaatii ni dhugdaa?	1.Eeyyee 2.Lakki	

Kutaa 2- Boqonnaa 2: Haala Fayyummaa Dhukkubsatichaa

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Waa'eee yaalii dhukkuba HIV/AIDS(ART) yoom dhageesse?	1.Utuu hin dhukkubsatiin dura 2.Eegan dhukkubsadhee booda 3.Yeroo na dhukkubaa jirutti 4.dhihoo	
2	Waa'ee yaalii dhukkuba HIV/AIDS(ART) eessaa dhageesse?	1.Ogeeyyii fayyaarraa 2.Miidiyaarraa 3. Kan biroo yoo ta'e haa ibsamu_____	
3	Itti amanuun of kenniteeti kan yaalii jalqabde?	1.Eeyee 2.Lakki	
4	Waa'ee faayidaa yaalii dhukkuba HIV/AIDS(ART) ni quba qabdaa?	1.Eeyee 2.Lakki	
5	Eega yaalii jalqabdee faayidaa fayyaan wal qabate ati argatte maali?	1.Jiruuf jireenyi koo fooyya'e (quality of life) 2.Ulfinni qaama koo dabale 3.Ho'inni	

		qaamaa hir'ate 4.yeroon mana yaalaa ciisu hir'ate 5.Garaa kaasaan hir'ate 6.Faayidaa tokkolle hin arganne	
6	Utuu yaaalii hin jalqabiin barbaachisummaa qoricha farra HIV/AIDS haalaan fudhachuu ni beektaa?	1.Eeyee 2.Lakki	
7	Hangam yalii kanarra turte?	_____	
8	Faayidaa gaaffii lakk. 5ffaaf deebiftee ala faayidaa ati yaalii kana irraa argatte maali?	_____	
9	Baay'inni CD4 kee hangami?	Kan yeroo jalqabaa_____ Kan yeroo dhihoo_____	
10	Waa'ee sadarkaa HIV kee nama itti himte qabdaa?	1.Eeyee 2.Lakki	
11	Yoo himte ta'e Eenyutti himte?	1.Haadha warraa 2.Miseensa maatii 3.Michuu(friends) 4.Kan biroo yoo ta'e haa ibsamu_____	
12	Utuu yaalii irra jirtuuji'a darbe keessatti mallattoon dkukkubaa sirratti mul'ate jiraa?	1.Eeyee 2.Lakki	
13	Yoo sirratti mul'ateera ta'e kamtu sitti hammaate?	1.Madaa afaan keessaa(mouth sore) 2. Herpes simplex madaa gogaa waliin 3.Waa yaadachuu dadhabuu (dementia) HIV n wal qabate 4.Hir'ina qaamaa 5.garaa kaasaa ji'a tokko ol ture 6.Dadhabii fi Ho'ina qaamaa 7.qufaa ture, dafqa halkanii, ho'ina qaamaa	

		8. Dhukkubbii laphee fi ho'ina qaamaa,qufaa, dyspnea	
14	Ji'a darbe keessatti mana yaalaa ciisteettaa?	1.Eeyee 2.Lakki	
15	Waggaa darbe kana keessatti mana yaalaa ciisteettaa?	1.Eeyee 2.Lakki	
16	Waggaa darbe kana keessatti gargaarsaaf mana yaalaa ciisteetta yoo ta'e yeroo meeqaa fi hangamiif mana yaalaa turte/ciiste?	1.Guyyaa_____tiifan mana yaalaa ture 2.Waggaa keessatti yeroo _____mana yaalaa ciiseera.	

Kutaa 2- Boqonnaa 3: Sakatta'insa Diphinaa "Edinburgh Postnatal Depression Scale"

Filannoowwan ka'aman keessaa guyyaa torban(7) darbe keessatti hanga isinitti dhaga'ame kan ibsuu danda'u filadhaa

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Kolfuu nan danda'a akkasumas wantota gamma isanii baacoo qabu arguu nan danda'a.	A. Hammuman kannaan dura godhu B. Amma hamman kanaan dura godhu hin ga'u C. Hamma kanaan duraarraa baayyee gad bu'aadha D. Gonkuma iyyuu hin godhu	
2	Wantota gammachuu fi bashannanaaanin ilaala.	A. Hammuman kannaan dura godhu B. Amma hamman kanaan dura godhuu gadi C. Amma hamman kanaan dura godhuu baayyee gadi D. Gochuuf baayyee natti ulfaata	
3	Yeroo waantotni badan/dogoggoraman haala hin barbaachifneenin of ceepha'a.	A. Eeyyee, yeroo baayyee B. Eeyyee yeroo tokko tokko C. Yeroo muraasa D. Lakki, takkumayyuu	
4	Sababa ga'aa tokko maleen of	A. Lakki, cirummayyuu	

	dhiphisa.	B. Baayyee yeroo muraasa C. Eeyyee yeroo tokko tokko D. Eeyyee yeroo baayyee	
5	Sababa ga'aa tokko maleen sodaadhee cinqama.	A.Eeyyee yeroo baayyee B.Eeyyee yeroo tokko tokko C.Lakki hin baayyatu D.Lakki tasumayyuu	
6	Waantotni natti ulfaata ykn humna koo ol natti ta'u.	A.Eeyyee, yeroo baayyee dandamachuu natti ulfaata B.Eeyyee, yeroo tokko tokko akka duraatti dandamachuun natti ulfaata C.Lakki, yeroo baayyee haara gaariinin dandamadha D. Lakki, akkuma duraaniittin dandamadha	
7	Rafuun waan na rakkisuuf baayyeen aara.	A. Eeyyee, yeroo baayyee B. Eeyyee, yeroo tokko tokko C.Yeroo baayyee miti D.Lakki gonkumaayyuu	
8	Gaddi natti dhaga'ama.	A. Eeyyee, yeroo baayyee B. Eeyyee, yeroo tokko tokko C.Yeroo baayyee miti D.Lakki gonkumaayyuu	
9	Waanan boyaa ooluuf nan aara.	A.Eeyyee, yeroo baayyee B.Eeyye, deddebiin C.Darbee darbee D.Lakki, gonkumaa	
10	Of miidhuuf yaadeen ture	A.Eeyyee yeroo baayyee B.Al tokko tokko C. Yeroo nattammaatu D. Gonkumaa	

Kutaa 2- Boqonnaa 4: Beekumsaa Fi Ilaalcha Yaalichaaf Dhukkubsatichi Qabu

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Yeroo qoricha farra HIV /AIDS fudhannu AIDSn dafee nu hin mudatu/quunnamu.	1.Eeyyee 2.Lakki	
2	Yeroo qoricha farra HIV/AIDS fudhannu,namni vaayirasiin HIV dhiiga isaa keessa jiru AIDS irraa ni fayya.	1.Eeyyee 2.Lakki	
3	Yeroo qoricha farra HIV/AIDS fudhannu, dhukkubbiin yaalii fudhannu mataa isaa irraa kan ka'e nu mudachuu danda'a.	1.Eeyyee 2.Lakki	
4	Yeroo qoricha farra HIV/AIDS fudhannu, namni vaayirasiin HIV dhiiga isaa keessa jiru isa utuu hin yaalamiin jiraaturra yeroo dheeraa jiraata.	1.Eeyyee 2.Lakki	
5	namni vaayirasiin HIV dhiiga isaa keessa jiru kamiyyuu qoricha farra HIV/AIDS fudhachuu ni danda'a.	1.Eeyyee 2.Lakki	
6	Yeroo humni ittisaa qaama isaa gadi bu'u(baay'inni dhiiga adii isaa gadi bu'u) qofa kan qorichi farra HIV/AIDS fudhatamuu qabu.	1.Eeyyee 2.Lakki	
7	Yeroo namni tokko qoricha farra HIV/AIDS fudhatu ,yeroo ka'amefitti fudhachuu qaba.	1.Eeyyee 2.Lakki	
8	Yeroo namni tokko qoricha farra HIV/AIDS fudhatu,qorichi guyyaatti fudhatamuu qabu utuu hin fudhatamiin hafuu hin qabu.	1.Eeyyee 2.Lakki	
9	AIDSn dafee akka nu hin mudannef/quunnamneef qorichi farra HIV/AIDS umurii guutuu fudhatamuu qaba.	1.Eeyyee 2.Lakki	
10	Yaalii jalqabuun dura akka ati itti amantuu of kennitu godhameeraa?	1.Eeyyee 2.Lakki 3.Shakkin qaba	
11	Dandeettii bu'aa barbaadame fiduu qorichi farra	1.Eeyyee/shakkii tokko	

	HIV/AIDS tti ni amantaa?	malee 2.Gutuu guutuutti ta'uu baatullee,Eeyyee 3.Lakki 4.Nan shakka	
12	Waa'ee qoricha farra HIV/AIDs walitti makamee iddoo tokkotti qophaa'e amma jiru(fixed dose combined to a single drug)maal jetta?	_____ _____	
13	Sodaa tokko malee nama duratti qoricha farra HIV/AIDs ni dandeessaa kan duraan sodaatturra?	1.Eeyyee 2.Lakki 3.Shakkin qaba	
14	Karaa ati vaayirasii HIV n faalame jettee aman tu inni guddan kami?	1.wal quunnamtii saalaa 2.Waan qara qabu nama biroo waliin fayyadamuun 3.Dhiiga namaa fudhachuun 4.Hin beeku 5. Kan biroo yoo jiraate haa ibsamu_____ ___	

Kutaa 2- Boqonnaa 5: Deggersa Hawaasaa Fi Wantoota Xiinsammuun Wal Qabatan

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Eenyu waliin jiraatta?	1.Kophaa 2.Maatii waliin 3.Abbaaf haadha koo waliin 4.Tasgabba'aa miti	
2	Deggersa xiinsammuu fi gargaarsa gochaanii qabdaa?	1.Eeyyee 2.Lakki	
3	Yoo qabaatte Eenyutu si gargaara?	1.Maatii 2. Michuu 3.Hiriyaa(umuriin walitti dhihoo) 4.Hawaasa 5.Yoo kan biroo ta'e haa ibsamu_____	
4	Namoota gaaffii 3ffaa irratti ibsite irraa gargaarsa akkamii argatta?	1.Meeshaan/Qarshiin 2.Yaada/Gorsaa 3. Yoo kan biroo ta'e haa ibsamu_____	
5	Gargaarsa isaan siif godhanitti quufteettaa?	1.Eeyyee 2.Lakki	
6	Gocha keen yookaan dandeettii keen namoonni biroo si tilmaamanii beekuu?	1.Eeyyee 2.Lakki	
7	Tilmaama YKN ilaalcha namootni gocha keef YKN dandeettii keef qabanitti quufteettaa?	1.Eeyyee 2.Lakki	
8	Qooddii fi miidhaan sababa HIVn dhiiga kee keessa jiruf sirra ga'ee beekaa?	1.Eeyyee 2.Lakki	
9	Qoricha farra HIV/AIDS gara fuulduraatti haalaan(yeroo ka'ameefitti) fudhachuu akka dandeessu ofitti ni amantaa?	1.Eeyyee 2.Lakki	

10	Qoricha farra HIV/AIDS haalaan (yeroo ka'ameefitti) fudhachuu dhiisuun miidhaa inni fidu ni beektaa?	1.Eeyyee 2.Lakki	
11	Yoo beekta ta'e muraasa natti himi.	1.Eeyyee 2.Lakki	
12	Qoricha farra HIV/AIDS haalaan (yeroo ka'ameefitti) fudhachuu dhiisuun miidhaa hangam cimaa ta'e inni fiduu danda'u(severity)ni beektaa?	1.Eeyyee 2.Lakki	
13	Yaaliin farra HIV/AIDS na fayyada jettee amantaa?	1.Eeyyee 2.Lakki	
14	Miidhaa qoricha farra HIV/AIDS haalaan (yeroo ka'ameefitti) fudhachuu dhiisuun dhufuuf hangam akka saaxilamuu dandeessu yaaddee beektaa?	1.Eeyyee 2.Lakki	

Kutaa 2- Boqonnaa 6: Gaafilee Qoricha Farra HIV/AIDSn Wal Qabatan

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Qoricha walitti makamee iddoo tokkotti qophaa'ee fudhataa jirtaa?	1.Eeyyee 2.Lakki	
2	Sagantaan qoricha farra HIV/AIDS itti fudhattu jiruuf jireenya guyyaa guyyaa keen wal siif simeeraa?	1.Eeyyee 2.Lakki 3.Shakkiin qaba	
3	Qoricha farra HIV/AIDS kee yeroo ka'ameefitti fudhataa jirtaa?	1.Eeyyee 2.Lakki	
4	Yoo yeroo ka'ameefitti fudhataa hin jirtu ta'e hangam guyyaafattee fudhatta?	1. Daqiiqaa 30 gadi 2. Daqiiqaa30-89 3. Daqiiqaa 90-119	

		4. Daqiiqaa 91-119 5. Daqiiqaa 119 fi isaa ol	
5	Mala YKN wanta yaadachuuf nama gargaaru kamitti fayyadamta qoricha kee yerootti fudhachuuf.	1.saanduqa qorichaa 2.Sagantaa barreeffamaa 3.Iyya bilbilaa 4.Homaayuu hin fayyadamu	
6	Miidhaan cinaa qoricha farra HIV/AIDS amma fudhataa jirtu eega fudhachuu jalqabdee miidhaan cinaa qoricha farra HIV/AIDS si mudatee beekaa?	1.Eeyyee 2.Lakki	
7	Miidhaan cinaa qoricha farra HIV/AIDS kamtu si mudate?	1.Ol ol nama jechuu(Nausea),Balaqqama fi jeeqama garaa keessaa(GI intolerance) 2.Mataa bowwuu 3.Hir'ina dhiigaa 3.Garaa kaasaa 4.Dhiphina(Depression) 5.Shiftoo qaamaa(Rash) 6.Yoo kan biroo ta'e haa ibsamu_____	
8	Yeroo miidhaan cinaa qoricha farra HIV/AIDS si mudate tarkaanfii maalii fudhatte?	1.Hatattamaan ogeessa fayyaan mariadha 2.Hatattamaan qoricha fudhachuu dhaaba 3.Hanga yeroo beellama kootti hin qoricha hin fudhadhu 4.Lamuu qoricha hin fudhadhu	
9	Qoricha biroo qoricha farra HIV/AIDS waliin fudhataa jirtaa?	1.Eeyyee 2.Lakki	
10	Qorichichi maali dha.	_____	

Kutaa 2- Boqonnaa 7: Walitti Dhufeenya Dhukkubsataa Fi Ogeessa Fayyaa

Lakk.	Gaaffilee	Filannoo deebii	Lakk. icitii
1	Walitti dhufeenya ogeeyyii fayyaa wliin qabdutti quufteettaa?	1.Eeyyee 2.Lakki 3.shakkiin qaba	
2	Dandeettii Ogeessi fayyaa si yaalaa jiru qabutti ni amantaa?	1.Eeyyee 2.Lakki 3.shakkiin qaba	
3	Marii /walitti dhufeeny banaa ta'e Ogeessa fayyaa si yaalaa jiru waliin qabdaa?	1.Eeyyee 2.Lakki 3.shakkiin qaba	
4	Ogeessa fayyaa si yaalaa jiru yeroo hangamiin deddebitee mari'atta/dubbista?	1.ji'a ji'an 2.Ji'a lamaan 3.Ji'a sadiin 4.Yeroo murta'aa hin qabu	
5	Beekumsaa fi gargaarsa barbaaddu yeroo deddeebii keetti argatteettaa?	1.Eeyyee 2.Lakki 3.shakkiin qaba	

Kutaa 2- Boqonnaa 8: Haala Dhaabbata Fayyaa Fi Tajaajila Fayya

Lakk.	Gaaffilee	Filannoo Deebii	Lakk. Icitii
1	Dhabbata fayyaa itti yaalamaa jirtu irraa manni/bakki jireenyaa kee hangam fagaata?	1.km 45 gadi 2.km 45 ol 3.sirriitti hin beeku	
2	Mana qorichaa yeroo barbaaddetti argachuu fi qaqqabuu dandeessaa?	1.eeyyee 2.lakki 3.shakkiin qaba	
3	Yeroo ammaatti daa'ima of jalaa qabdaa?	1.eeyyee 2.lakki 3.shakkiin qaba	
4	Fooyya'insa/faayidaa yaalii farra hiv/aids irraa argattetti quufteettaa?	1.eeyyee 2.lakki 3.shakkiin qaba	
5	Beellama dhaabbata fayyaa kee waliin qabdutti quufteettaa?	1.eeyyee 2.lakki 3.shakkiin qaba	
6	Haala dhaabbati fayyaa ati itti yaalamtu dhoksaa/kophummaa kee itti sii eegutti quufteettaa?	1.eeyyee 2.lakki 3.shakkiin qaba	

Kutaa 2- Boqonnaa 9: Sababii Qoricha Yeroo Ka'ameefitti Utuu Hin Fudhatiin Hafe

HUB: Filannoo tokkoo ol deebisuun ni danda'ama

Lakk.	Sababa qoricha utuu hin fudhatiin hafef	Mallattoo godhi
1	Mana irraa fagaachuun	
2	Hojiin muddamuun	
3	Irraanfachuun	
4	Qorichi an fudhadhu waan natti baay'ateef	
5	Miidhaa cinaa qoricha farra HIV/AIDS sodaadhee/jalaa ba'uuf	
6	Namootni biroo yeroon qoricha farra HIV/AIDS fudhadhu akka na hin argineef	
7	Jiruuf jireenyi koo jijjiiramee(daily routine)	
8	Qorichi farra HIV/AIDS waan nama miidhu natti fakkaata	
9	Irribi na dagee	
10	Dhukkubsadhee	
11	Gaddi natti dhaga'amee (Depressed)	
12	Rakkina nyaata yeroo murtaa'etti fudhachuu dhabuu	
13	Qoricha fudhachuu jibba	
14	Wayyoon/Fayyummaan natti dhaga'amee	
15	Qoricha fudhachuun akkan vaayirasii HIV waliin jiru na yaadachiisa	
16	Hangam(Dose) akkan fudhadhu dagachuun	
17	Qorichichi akka na hin gargaarretti yaadee	
18	Qorichichi akka gaarii hin taane namoonni natti himani	

Questionnaire In Amharic For Cross Sectional Study

የቃለ መጠየቅ ቅፅ

የፀረ ኤች አይቪ መድሐኒት በተገቢው ሁኔታ መወሰድናከርሱ ጋር በተያያዘ ሁኔታ ከቫይረሱ ጋር የሚኖሩ ሰዎች የHIV AIDS ህክምና ላይ ያሉ ሰዎች ምንደረጃ ላይ እንዳሉ ለይቶ የሚያሳየን መጠይቅ፡፡

ምዕራፍ 1 ክፍል 1፡ የጥያቄ መልስ መጊቢያ

መግቢያ እንኳን ወደ ጥያቄና መልስ በደህና መጡ

ስሜ ---------- ይባላል፡፡ የመጣሁት ---------- ነው፡፡

የመጣሁት የኤች አይቪ ኤድስ የመድሐኒቱ የአወሳሰድ ደረጃ በተገቢው ሆኔታ መወሰዱንና ከአወሳሰዱ ጋር ተያይዞ ከቫይረሱ ጋር የሚኖር ሰዎች የኤች አይቪ ኤድስ የህክምና አገልግሎት ውስጥ ስላለው ሁኔታ ለመመካከር ነው፡፡

በውይይታችን ውስጥ ትክክለኛ ወይንም ትክክል ያልሆነ መልስ የለም፡፡ የርሰዋ ሃሳብ ሁሉ ትክክል የሆነው ትክክል ያልሆነውም ለምናደርገው ምርመራ በጣም አስፈላጊ ነው፡፡

ሰፋ ያለ ሐሳብዎንም አመለካከትዎን በማግኘት ውይይታችን ክፍት ይሁን ዘንድ በግልጽና በታማኝነት ሐሳብዎን እንዲገልፁልን እንጠይቃለን፡፡ እርሰዎ የሚሰጡን ሐሳብ ሁሉ በሚስጢር የሚያዝና ለዚህ ምርምር ብቻ የሚውል ይሆናል፡፡

የርሰዎን ማንነት ለመደበቅ ሲባል ስምዎ አይመዘገብም፡፡ በዚህ ጥያቄና መልስ ለመሳተፍ የርሰዎ በጎ ፍቃድዎ ነውን ? አዎ/ አይደለም ------- በዚህ ምርምር ላይ ለመሳተፍ ፍቃደኛ በመሆኖ እጅግ አመሰግናለሁ፡፡

2/ ጥያቄዎትን የጥያቄና መልስ መመሪያ

1. ስለፀረኤች አይቪ ኤድስ ህክምና በተመ፤ልክት የት ሰሙ ?
2. ተመርምረው እራስዎን ካወቁ በኃላ ምንያህል ቆይተው የህክምናው ተጠቃሚ ለመሆን ወሰኑ ?
3. ለመወሰን አዳጋች የሆነበት ምክንያቶች እነማን ናቸው ?
4. በህክምናዎ እቅድ ላይ ያለዎትን እዉቀት ቢያብራሩልኝ ?
5. የፀረኤች አይቪ ኤድስ መድሐኒት ሲወሰድ የየቀኑ ዉሎዎ ምን እንደሚመስል ቢያብራሩልኝ ?ተጓዳኝ የሆኑ የፀረኤች አይቪ ኤድስ ችግሮች ሕክምና ፈልገው ያጡበት የፀረ ኤች አይቪ ኤድስ መድሐኒት ጋር ተያይዞ የሚወጡ ችግሮች በብዛት ወይም ምንያህል መድሐኒት እንደሚወሰድ እና የመሳሰሉት ችግሮች አጋጥምዎት ያውቃሉ ?
6. ከህክምናው ጋር ተያይዞ ችግር ቢያጋጥምዎ ከማን ጋር ይማከራሉ ?
7. ለሚያጋጥምዎት ችግር ምክር /እርዳታ ባስፈለግዎ ጊዜ አግኝተው ያውቃሉ ?
8. ከጤና ባለሙያ ጋር ያለዎት ግኑኝነት ምን ይመስላል ?አብራሩልኝ
9. የህክምና አገልግሎት የሚሰጥበት ለርስዎ ምንያህል ተመችቶታል ?
10. የፀረ ኤች አይቪ ኤድስ መድሐኒት መጠቀም በኑሮዎና በስራዎ ላይ ያሻሽለው ነገር አለ ? ካለ በምን መልሱ ?

<u>የቃለ መጠየቅ ቅፅ</u>

<u>የፀረ ኤች አይቪ መድሐኒት በተገቢው ሁኔታ መወሰድናከርሱ ጋር በተያያዘ ሁኔታ ከቫይረሱ ጋር የሚኖሩ ሰዎች የHIV AIDS ህክምና ላይ ያሉ ሰዎች ምንደረጃ ላይ እንዳሉ ለይቶ የሚያሳየን መጠይቅ፡፡</u>

ምዕራፍ 1 ክፍል 2 ምርምር የሚሠጥበት የውል በግቢያና የግንዛቤ ቅፅ

እኔ ስሜ ---------- የተባልኩኝ የፀረኤች አይቪ ኤድስ መድሐኒት ምርመራ በተገቢው ሁኔታ ለመውሰድ እና ከርሱ ጋር ተያይዞ ያሉትን ምክንያቶች በአዳማ ሆስፒታል ውስጥ የመረጃ ሰብሳቢ ሆኜ እሰራለሁ፡፡ ይህ ምርመራ በጅማ ዩኒ. የሚካሄድ ነው፡፡

በዚህ የጥያቄ ቅፅ ላይ ስማችሁ አይመዘገብም ፣ ወረዳችሁም በሚስጢር የሚጠበቅ ነው፡፡ እናንተ የምትመልሱት የትኛውም መልስ የፀረኤች አይቪ ኤድስ በተገቢው ሁኔታ መውሰድ ያልቻሉትን ፣ እነርሱ እንዲችሉ ለማገዝ መደረግ ያለበትን ሁሉ ለማቀድ እንዲያስችል ወይንም እንዲውል ነው፡፡ ይህን በመገናዘብ የሚጠይቁትን ጥያቄዎች ሁሉ ለመመለስ የተቻሎትን ሁሉ እንዲያደርጉ ፣ መመለስ የማይፈልጉትን ጥያቄ በመተው እንዲሁም ጥያቄና መልሱን በፈለጉት ሰዓት ማቋረጥ እንደሚችሉ አረጋግጥልዎታለሁ፡፡ በዚህ ምርምር ላይ ለመሳተፍ ፍቃደኛ ኖት ? ----------

በዚህ ውስጥ በሆነ ምርምር ላይ ለመሣተፍ ፍቃደኛ በመሆኖ በጣም አመሰግናለሁ፡፡

- የጥያቄና መልስ ቀን ----------
- የሆስፒታሉ መለያ ቁጥር ----------
- የምርምሩ መለያ ቁጥር ----------
- የጠያቂው ስም ----------
- የተቆጣጣሪ ስም ----------

ምዕራፍ 1 ክፍል 3 የፀረ ኤች አይቪ ኤድስ መድሐኒት በተገቢውና ደረጃውን በጠበቀ መልኩ መውሰድን መፈተሽ (መገምገም)

<u>የተሳታፊ ጥያቄ</u>

የፀረ ኤች አይቪ ኤድስ መድሐኒት በብዛት ሳይወስዱ የቀሩና የተለየ መመሪያ /ክልክል የሆነ መመሪያ ሰይፈፀም የቀረ እንደ ከመድሐኒቱ ጋር የሚያስፈልግ ምግብ ፣ መድሐኒቱ በሚወሰድበት ጊዜ በባዶ ሆድ መድሐኒት መውሰድና የመሳሰሉትን ጠይቅ፡፡

- ህመምተኛው የሚወስደው የፀረ ኤች አይቪ ኤድስ መድሐኒት ስመ ----------
- በቀን ምን ያህል ጊዜ ይወስዳሉ ፣ ስንት መድሐኒት ይወስዳሉ ? ----------
- የፀረ ኤች አይቪ ኤድስ መድኃኒት ብዛት ----------
    1. ትናንት ሳይወስዱ ☐ቀረው ብዛት----------
    2. ባለፉት 3 ቀናት ሳይወስድ ☐ቀረው ብዛት ----------
    3. ባለፈው ሳምንት ውስጥ ሳይወስድ ☐ቀረው ብዛት----------

ያስቀመጡትን የፀረ ኤች አይቪ ኤድስ መድሐኒት ባለፈው ሳምንት ውስጥ ምን ያህል ጊዜ ተከታትለዉታል ?

1. ምንም አልተከታተልኩም
2. አንድ አንድ ጊዜ እከታተላለሁ
3. በክፊል እከታተላለሁ
4. ብዙውን ጊዜ እከታተላለሁ
5. ሁልጊ ጊዜ እከታተላለሁ

መድሐኒት ቆጠራ፡- መድሐኒታቸውን ይዘው የመጡ ሰዎች በመድሐኒት እቃቸው ዉስጥ ያለውን መድሐኒት ቁጠራና የሚቀረውን የመድሐኒት ልዩነት ብዛት በምትቆጥርበት ጊዜ ያየኽዉን አስላ …

- በመድሐኒት እቃቸው ውስጥ ያለው የመድሐኒት ብዛት ----------
- ባለፈው ጊዜ የወሰዱት መድሐኒት ብዛት ----------
- ይቀራል ተብለው የሚታሰበው የመድሐኒት ብዛት ----------

ምዕራፍ 2 ክፍል 1 የበሽተኛው መረጃ (Socio demographic characteristics)

ተ.ቁ	ጥያቄ	ምርጫ	የምስጥር ቁጥር
101	ፆታ	1.ወንድ 2.ሴት	
102	ዕድሜ በዓ/ምህረት		
103	ብሔረሰብ	1.አማራ 2.ኦሮሞ 3.ትግሬ 4.ሌላ ከሆነ ይግለፁ	
104	የትዳር ሁኔታ	1.ያለገባ/ች/ 2.ያገባ/ች/ 3.የፈታ/ች/ 4 የተለያየ ቦታ የሚኖሩ 5. የሞተበት/ባት	
105	እምነት	1.ኦርቶዶክስ 2.ካቶሊክ 3.ፕሮትንታስት 4.ሙስልም 5.ሌላ ከሆነ ይግለጽ	
106	የት/ደረጃ	1.ያልተማረ 2.መጻፊና ማንበብ 3.መለስተኛ ት/ቤት(1ኛደረጃ) 4.ከፍተኛደረጃ 5.ዲፕሎማና ከዚያ በላይ	
107	ወርሀዊ ገቢ በብር		
108	የሥራ ሁኔታ	1.የመንግስት ሠራተኛ 2.ሥራ የሌለው/ት/ 3.ነጋዴ 4.ተማሪ 5. የግል ተቀጣሪ 6.ሌላ ከሆነ ይግለጹ	
109	ሱስ የሚያስዙ ንጥረ ነገሮችን ይጠቀማሉ	1.አዎ 2.አይደለም	
110	የሚጠቀሙ ከሆነ የትኛው ንጥረ ነገር	1.ጫት 2.ስጋራ 3.አልኮል 4.በደም ሥር የምወሰድ አደንዛዥ እፅ 5.ሌላ ካለ ይግለጹ	
111.1	ከጠጡ በኃላ የጥፋተኝነት ወይም የፀፀት ስሜት ተሰምቶት ያቃሉ ?	1.አዎ 2. አይደለም	
111.2	እርሶ የማያስታዉሱት ስጠጡ ያረጉትን ወይም የተናገሩትን ጓደኛ (የቤተሰብ አባል) ነግሮት ያውቃል ?	1.አዎ 2. አይደለም	
111.3	ማድረግ የምገባዎትን በመጠጥ ምክንያት ሳያረጉ የቀሩት አለ ?	1.አዎ 2. አይደለም	

111.4	ሟዋች ከእንቅልፎች ስነሱ መጠጥ ይጠጣሉ ?	1.አዎ 2. አይደለም	

ምዕራፍ 2 ክፍል 2 የበሽተኛው የጤና ሁኔታ

ተ.ቁ	ጥያቄ	መልስ	የምስጢርና ቁጥር
201	መቼ ነው ስለ ፀረ ኤች አይቪ ኤድስ ሕክምና (ART) የሰሙት ?	1. ከመታመሜ በፊት 2.ከታመምኩ ቦኃላ 3. ያመመኝ ጊዜ 4. በቅርብ	
202	ስለ ፀረ ኤች አይቪ ኤድስ ሕክምና (ART) ከየት አገኙ ?	1. ከጤና ባለሙያ 2.ከመገናኛ በዙሃን 3. ሌላ ከሆነ ይግለጽ	
203	ፅረ ኤች አይቪ ኤድስ ሕክምና በመጀመርዎ በፊት እንዲያምኑበት ተደርገዋል ?	1.አዎ 2. አይደለም	
204	ስለ ፀረ ኤች አይቪ አድስ ሕክምና ጥቅም ያዉቁ ነበር	1 አዎ 2. አይደለም	
205	የፀረ-ኤች አይቪ ኤድስ ሕክምና ካገኙ ቦኃላ ምን ዓይነት ጥቅም አገኙ ?	1. የኑሮ ሁኔታ መሻሻል 2. የክብደት መጨመር 3. የትኩሳት መቀነስ 4. ሆስፒታል የሚተኙበትን ጊዜ መቀነስ 5. የተቅማጥ መቀነስ 6. ምንም ዓይነት ጥቅም አላገኘሁም	
206	የፀረ ኤች አይቪ ኤድስ መድኃንት በአግባቡ መውሰድን አስፈላጊነት ሕክምና ሳይጀምሩ በፊት ያውቁ ነበር	1.አዎ 2. አይደለም	
207	ፀረ-ኤችአይቪኤድስ በሕክምና (ART) ላይ ስንት ጊዜ ቆዩ ?		
208	ለ205ኛ ጥያቄ ከመለሱት ውጭ በተጨማሪ ያገኙት ጥቅም ካለ ይጠቀስ		
209	የCD4 ብዛት (ቁጥር) ስንት ነው	የመጀመሪያ ----------	

		የቅርብ ----------	
210	ለቤተሰቦት (ለዘመድዎት) ከኤች አይቪ ኤድስ ቫይረስ ጋር እንደሚኖር ነግረዋል(ART) (አሳውቀዋል)	1.አዎ 2. አይደለም	
211	ካሳወቁ ለማን ?	1. ለሚስት 2. ለቤተሰብ አባላት 3. ለጓደኛ 4. ሌላ ካለ ይጠቀስ	
212	ባለፉት አራት ሣምንታ (1 ወር) የፀረ-ኤች አይቪ ኤድስ (ART) ሕክምና ላይ እያሉ ታመው ያውቃሉ ?	1.አዎ 2. አይደለም	
213	ታመው ከሆኑ የትኛውን	1.የአፍ ቁስለት 2. Herpes simplex የቆዳ ቁስለት ያለው 3. ከኤች አይቪ ጋር ተያይዞ የማስታወስ ችሎታ መቀነስ 4. ክብደት መቀነስ 5. ከ30 ቀናት በላይ የቆየ ጠቅማጥ 6. ድካምና ትኩሳት 7. የቆየ ሳል (የማታ ላብ እና ትኩሳት) 8.የደረት ህመምና ትኩሳት ሳል፣የመተንፈስ ችግር (dyspnea)	
214	ባለፈው ወር (1ወር ውስጥ) ሆስፒታል ተኝተው ያውቃሉ ?	1.አዎ 2.አይደለም	
215	ባለፈው 1 ዓመት ሆስቲታል ተኝተው ያውቃሉ ?	1.አዎ 2.አይደለም	
216	ባለፈው 1 ዓመት ውስጥ ለህክምና እና ለክትትል ስንት ጊዜ ሆስፒታል ተኙ ?	1. ለ ---------- ቀናት ሆስፒታል ተኛሁ 2. ---------- ጊዜ ሆስፒታል ተኛሁ	

ምዕራፍ 2-ክፍል 3

ጭንቀት መፈተሻ

ከተቀመጡት አማራጮች ውስጥ ባለፉት ሰባት ቀናት ውስጥ ምን ያህል እነደተሰማዎት የሚገልፀውን ምረጡ

ተ.ቁ	ጥያቄ	ምርጫ	የምስጥር ቁጥር
301	መሣቅ እችላለሁ እንዲሁም ነገሮችን በሚያዝናኑ መልኩ ማየት እችላለሁ	ሀ. ከዚህ በፊት ሁሌ እንደማረገውን ለ. የድሮ ያህል አይደለም ሐ. በፍፁም የድሮን ያህል አይደለም መ. በፍፁም አልችልም	
302	ነገሮችን በሚያሰደስቱኝ መልኩ አያለሁ	ሀ. ድሮ እንደማረገው ለ. የድሮን ያህል አይደለም ሐ. በፍፁም የድሮን ያህል አይደለም መ. በፍፁም አልችልም	
303	ነገሮች ሲበላሹ ተገቢ ባልሆነ መልኩ ራሴን እወቅሳለሁ	ሀ. አዎ ብዙን ጊዜ ለ. አዎ፡ አንዳንድ ጊዜ ሐ. አይደለም መ. በጭራሽ	
304	በቂ ምክንያት ሣይኖረኝ አስባለሁ እጨነቃለሁ	ሀ. አይ በፍፁም ለ. የተወሰነ ጊዜ ሐ. አንዳንድ ጊዜ መ. ብዙ ጊዜ	

305	ያለ በቂ ምክንያት እፈራለሁ እሸበራለሁ	ሀ. አዎ ብዙ ጊዜ ለ.አዎ አንዳንድ ጊዜ ሐ. አይ አይበዛም መ. በጭራሽ	
306	ነገሮች ከአቅሜ በላይ እየሆኑ ነው	ሀ. አዎ ብዙን ጊዜ በጭራሽ መቋቋም አልችልም ለ. አዎ አንዳንድ ጊዜ እንደድሮ መቋቋም አልችልም ሐ. አይ ብዙ ጊዜ በደንብ እቋቋማለሁም መ. አይ ድሮ እንደማረገው በደንብ እቋቋማለሁ	
307	የእንቅልፍ ችግር ስላለብኝ ደስተኛ አይደለሁም	ሀ. አዎ ብዙን ጊዜ ለ. አዎ አንዳንዴ ሐ. አይ አይደጋገምም መ. አይ በፍፁም	
308	ሐዘን ተሠምቶኛል	ሀ.አዎ ብዙን ጊዜ ለ. አዎ አንዳንዴ ሐ. አይ አይደጋገምም መ. አይ በፍፁም	
309	በጣም በማዘን አለቅሣለሁ	ሀ. አዎ ብዙን ጊዜ ለ. አዎ አንዳንዴ ሐ. አልፎ አልፎ/ሣይበዛ መ.በጭራሽ	
310	ራሴን ለመጉዳት አስቤ አውቃለሁ	ሀ. አዎ ብዙን ጊዜ ለ. አንዳንድ ጊዜ ሐ. ችግር ውስጥ ሆኜ መ. በጭራሽ	

ምዕራፍ 2 ክፍል 4
ስለ መድሐኒቱ (ህክምና) ያላቸውን እውቀትና አመለካከት

ተ.ቁ	ጥያቄ	ምርጫ	የምስጥር ቁጥር
401	የፀረ ኤችአይቪ ኤድስ መድሓኒት መውሰድ የኤድስ በሽታን ያዘገያል	1/ አዎ 2/ አይደለም	
402	የፀረ- ኤች አይቪ ኤድስ መድሐኒት የሚወስድ ሰው ከኤድስ በሽታ ይድናል ?	1/ አዎ 2/ አይደለም	
403	የፀረ ኤች አይቪ ኤድስ መድሐኒት በሚወሰድበት ሠዓት በመድሐኒቱ ምክንያት ሊታመሙ ይችላሉ?	1/ አዎ 2/ አይደለም	
404	የፀረ- ኤች አይቪ ኤድስ መድሐኒት የሚወስድ ሰው ከማይወስድ ሰው ረጅም ጊዜ ይኖራሉ ?	1/ አዎ 2/ አይደለም	
405	ሁሉም የኤች አይ ቪ ያለበት የፀረ- ኤች አይ ቪ	1/ አዎ 2/ አይደለም	

	ኤድስ መድሐኒት መውሰድ ይችላል ?		
406	አንድ ሠው የፀረ- ኤች አይ ቪ ኤድስ መውሰድ ያለበት የሠውነቱ የመከላከል አቅም በጣም ሲወርድ ብቻ ነው ? (Very Law WBC)	1/ አዎ 2/ አይደለም	
407	የፀረ- ኤች አይቪ ኤድስ መድሐኒት የሚወሰድ ሠው በተወሠኑ ሠዓት መውሰድ ይኖርበታል ?	1/አዎ 2/ አይደለም	
408	የፀረ- ኤች አይቪ ኤድስ መድሐኒት ሲወሰድ የየቀኑ መጠን ሣይወሰድ መቅረት /መዘለል/ የለበትም	1/ አዎ 2/ አይደለም	
409	የኤድስን በሽታን ለማዘግየት እስከ ህይወት መጨረሻ መድሐኒታችንን መውሰድ አለብን	1/ አዎ 2/ አይደለም	
410	የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት ከመጀመርዎ በፊት እንዲያምኑ ተደርገዋል ?	1/ አዎ 2/ አይደለም	
411	የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት የሚጠበቀውን ለውጥ ያመጣል ብለው ያምናሉ?	1/ አዎ ያለጥርጥር 2/ አዎ ግን እጠረጥራለሁ 3/ አይደለም 4/ እርግጠኛ አይደለሁም	
412	በአንድ እንክብል ስለተዘጋጀው አዲሱ የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት ምን ሐሣብ አለዎት ?		
413	ከድሮ በተሻለ መልኩ ሠዎች ፊት ያለ ስጋት መድሐኒቱን ይወስዳሉ ?	1/ አዎ 2/ አይደለም	
414	በኤች አይ ቪ ቫይረስ የተያዙበት መንገድ ምንድነው ብለው ይገምታሉ ?	1/ ግብረ ስጋ ግኑኝነት 2/ስለታምነገር በጋራ በመጠቀም 3/ ደም በመውሰድ 4/ አላውቅም 5/ ሌላ ካለ ይጠቀስ	

ምዕራፍ 2 ክፍል 5
የማህበረሰብ ድጋፍ

ተ.ቁ	ጥያቄ	ምርጫ	የምስጥር ቁጥር
501	ከማን ጋር ነው የሚኖሩት	1/ ብቻዬን 2/ ከቤተሰቤ ጋር 3/ ከቤተሠቦቼ ጋር 4/ አልተረጋጋሁም	
502	የስነ ልቦናና የተግባር እርዳታ ያገኛሉ ?	1/ አዎ 2/ አይደለም	

503	የሚያገኙ ከሆነ ከየት ?	1/ ቤተሠብ 2/ ጓደኛ 3/ ከአቻ 4/ ከህብረተሠብ 5/ ሌላ	
504	ከነዚህ ሠዎች ምን አይነት እርዳታ እና እንክብካቤ ነው የሚያገኙት	1/ ቁሣቁስ/ብር 2/ መረጃ/ምክር 3/ ሌላ ካለ ይጠቀስ	
505	በእርዳታቸው ተደስተዋልን?	1/ አዎ 2/ አይደለም	
506	በችሎታዎ ወይም በሚያደርጉት በሌሎች ተመዝነው ያውቃሉ?	1/ አዎ 2/ አይደለም	
507	ሌሎች ለድርጊቶት /ለችሎታዎት ባላቸው ግምት ተደስተዋል?	1/ አዎ 2/ አይደለም	
508	ኤች አይቪ ቫይረስ በደምዎ ውስጥ ስላለ የደረሰብዎት አድሎና መገለል አለ?	1/ አዎ 2/ አይደለም	
509	ለወደፊት የፀረ- ኤች አይቪ ኤድስ መድሐኒቱን በአግባቡ እንደሚወስዱ ይተማመናሉ ?	1/ አዎ 2/ አይደለም	
510	መድሐኒት በአግባቡ አለመውሰድ የሚያመጣውን ጉዳት ያውቃሉ?	1/ አዎ 2/ አይደለም	
511	ለጥያቄ ቁጥር 510 መልስዎ አዎ ከሆነ ጥቅቶቹን ይግለፁ		
512	የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት በአግባቡ አለመውሰድ የሚያመጣው ጉዳት አስከፊነት ያውቃሉ?	1/ አዎ 2/ አይደለም	
513	የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት/ህክምና/ ጠቅሞኛል ብለው ያስባሉ?	1/ አዎ 2/ አይደለም	
514	የትኛው የፀረ- ኤች አይ ቪ ኤድስ መድሐኒት ሣይወስዱ በመቅረትም ፀረ- ኤች አይቪ ኤድስ መድሐኒት በአግባብ ባለመውሰድ ለሚከሠቱ ችግሮች ተጋላጭ ነኝ ብለው አስበው ያውቃሉ ?	1/ አዎ 2/ አይደለም	

ምዕራፍ 2- ክፍል 6

<u>ከመድሐኒት ጋር የተገኙት ጉዳዮች</u>:-

ተ.ቁ	ጥያቄዎች	ምርጫ	የሚስጥር

			ቁጥር
601	በአዲስ መልክ በአንድ እንክብል የተዘጋጀውን መድሐኒት ነው እየወሰዱ ያሉት ?	1/ አዎ 2/ አይደለም	
602	ጥያቄ፣ መልስዎ አዎ ከሆነ የመድሐኒት መውሰጃ ጊዜ ከበፊት በተሸለ መልኩ ከየቀን ዉሎዎት ጋራ ተስማምቶለታል ?	1/ አዎ 2/ አይደለም	
603	መድሓኒትዎን በየቀኑ በተቀመጠለት ሠዓት ነው የሚወስዱት ?	1/ አዎ 2/ አይደለም	
604	ለጥያቄ 3 መልሱ አይደለም ከሆነ ስንት ደቂቃ ዘግይተው ነው የሚወስዱት ?	1/ < 30 ደቂቃ 2/ 30-89 3/≥90ደቂቃ 4/91-119 ደቂቃ 5/≥120 ደቂቃ	
605	መድሐኒት የሚወስዱበትን ሠዓት ለማስታወስ ምን ይጠቅማሉ ?	1/ መድሐኒት ሣጥን (Pill Box) 2/ የተፃፈ መድሐኒት መውሰጃ ሠዓት 3/ የሠዓት ደውል 4/የለኝም	
606	የመድሐኒት የጎንዩሽ ችግር አጋጥሞት ያውቃል ?	1/ አዎ 2/ አይደለም	
607	ለጥያቄ 6 መልስዎ አዎ ከሆነ የትኛው ?	1/ማቅለሽለሽ ፣ ትዉከት፣ የሆድ መታወክ 2/ ራስ ምታ 3/ ደም ማነስ 4/ ታቅማጥ 5/ ጭንቀት 6/ የቆዳ ሽፊታ 7/ ሌላ ካለ ይጠቀስ	
608	የፀረ ኤች አይ ቪ ኤድስ መድሀኒቶች የጎንዮሽ ችግር ሲገጣምዎት ምድነው የሚያደርጉት?	1. ለሐኪሜ በፍትነት አሳውቃለሁ 2. መድሀኒት መውሰዱን ወዲያውኑ አቆማለሁ 3/ እስከሚቀጥለው ቀጠሮዬ መድሀኒቶቼን እወስዳለሁ 4. ላልመለስበት አቆማለሁ	
609	ከፀረ ኤች አይ ቪ ኤድስ መድሀኒት ጋር ሌላ መድሀኒት እየወሰዱ ነው?	1. አዎ 2. አይደለም	
610	አዎ ከሆነ ስሙን ይጥቀሱ		

ምዕራፍ 2- ክፍል 7 የበሽተኛው እና የጤና ባለሙያው ግኑኝነት

ተ.ቁ	ጥያቄዎች	ምርጫ	የሚስጥር ቁጥር
701	በህክምናው አገልግሎት ረክተዋል	1.አዎ 2.አይደለም 3.እርግጠኛ አይደለሁም	
702	በሚከታተሉህ ጤና ባለሙያዎች ችሎታ ትተማመናለህ	1.አዎ 2.አይደለም 3.እርግጠኛ አይደለሁም	
703	ከሚያክሞት ባለሙያ ጋር ግልፅ ውይይት አለዎት	1.አዎ 2.አይደለም 3.እርግጠኛ አይደለሁም	
704	ሐኪምዎን በየስንት ጊዜ ይጎብኛሉ	ሀ/በወር ለ/በሁለት ወር ሐ/በሦስት ወር መ/ ቋሚ ጊዜ የለኝም	
705	በክትትልዎ ጊዜ የሚፈልጉትን ትምህርት እና	1.አዎ 2.አይደለም 3.እርግጠኛ አይደለሁም	

	ድጋፍ ያገኛሉ		

ምዕራፍ - ክፍል 8-የጤና አገልግሎት አሠጣጥን በተመለከተ

ተ.ቁ	ጥያቄዎች	ምርጫ	የሚስጥር ቁጥር
801	መኖሪያዎት ከፀረ ኤች አይቭ ህክምና መስጫው ቦታ ምን ያህል ይርቃል	1. <45 ኪ.ሜ 2.> 45 ኪ.ሜ 3. እርግጠኛ አይደለሁም	
802	መድሓኒት ቤት በማንኛውም እና በፈለጉት ሠዓት ይገኛሉ	1/አዎ 2/አይደለም 3/እርግጠኛ አይደለሁም	
803	በአሁኑ ሠዓቱ በእርሶ የሚተዳደር ልጅ አለዎት	1/አዎ 2/አይደለም 3/እርግጠኛ አይደለሁም	
804	በህክምናዎ ለውጥ በማምጣትዎ ረክተዋል	1/አዎ 2/አይደለም 3/እርግጠኛ አይደለሁም	
805	በህክምና ጣቢያው ቀጠሮ አሠጣት ረክተዋል	1/አዎ 2/አይደለም 3/እርግጠኛ አይደለሁም	
806	የህክምና ጣቢያዉ ሚስጢር አጠባበቅ ረክተዋል	1/አዎ 2/አይደለም 3/እርግጠኛ አይደለሁም	

ክፍል 9 መድሓኒት ሣይወስዱ የቀሩበት ምክንያቶች ከአንድ በላይ መልስ መመለስ ይችላሉ

ተ.ቁ	መድሓኒት ሣይወስዱ የቀሩበት ምክንያቶች	ምልክት
901	ከመኖሪያዬ ርቄ ስለነበር	
902	ስራ በዝቶብኝ	
903	ረስቼው	
904	የምዉጣቸው እንክብሎቹ በዝተውብኝ	
905	የመድሓኒት ተጓዳኝ ችግሮችን ለማስወገድ	
906	ሠዎች ስውጥ እንዳያዩኝ	
907	የየቀን ዉሊዬ ተቀይሮብኝ	
908	መድሓኒቶቹ ጎጂ ናቸው ቢዬ ስለማስብ	
909	እንቅልፍ ስለሚጥለኝ	
910	ህመም ስለሚሰማኝ	
911	ስለሚደብረኝ	
912	ከአመጋገብ ጋር ተያይዞ ችግር ስለገጠመኝ ከምግብ ጋር /በባዶ ሆድ/	
913	ኪኒኖች ለመራቅ	
914	ስለተሻለኝ	
915	መድሐኒቶቹን መዋጥ ኤች አይቪ እንዳለብኝ ስለሚያስታዉሡኝ	
916	ስለ መጠጥ እርግጠኛ ስላልሆንኩ	

917	መድሓኒቶቹን ምንም ዋጋ የላቸውም ብዬ ስለማስብ	
918	ሠዎች መድሓኒቱ ጥሩ እንዳልሆነ ስለነገሩኝ	