

# **Addis Ababa University**

## **School of Graduate Studies**

**An Assessment of health information exchange  
between Clinicians and People Living with HIV/AIDS  
on Anti- retroviral therapy at Public hospitals  
in Addis Ababa**

**By**  
**Mekdes Assefa**

**A Thesis submitted to the School of Graduate Studies of Addis  
Ababa University in partial fulfillment of the requirements for the  
Degree of Masters of Science in Health Informatics**

**Addis Ababa, Ethiopia**

**May 2009**

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## **ABSTRACT**

**Background** *Good quality of clinician-patient health information exchange promotes patient's knowledge and understanding, health outcomes, adherence to treatment plan, clinician and patient satisfaction and patient's trust on clinicians.*

**Objective** *The main objective is to assess health information exchange between clinicians and PLWHA attending ART clinics at public hospitals in Addis Ababa.*

**Method** *A cross sectional survey using quantitative and qualitative methods was utilized.*

**Result** *400 & 24 patients in the structured & in-depth interview respectively and 20 clinicians were involved in the study. The median communication score was 78%. Patients have assigned highest ratings for communication elements such as explanation on adherence (87.4%), talking understandably (87.2%), being greeted (80.8%), treated with respect (81%), & shown concern (80.2%). Involvement in decision making (54.8%) and explanation on availability of support and resources (50%) were rated low. Patients self reported better health status ( $P<0.0001$ ), higher educational status ( $P<0.0001$ ), longer duration of clinician patient relationship ( $P=0.006$ ), lesser access to health information ( $p=0.019$ ) longer visit length ( $P=0.019$ ) & increased number of patients clinicians saw on daily basis ( $P<0.0001$ ) were found significantly associated with better communication scores. Like wise better self reported health status ( $P<0.0001$ ), longer duration of clinician patient relationship ( $P=0.002$ ), increased number of patients clinicians saw on daily basis ( $P<0.0001$ ) & older clinicians' age ( $P=0.027$ ) were associated with better comprehension of health information. Better Health status ( $P<0.0001$ ), longer visit length ( $P<0.0001$ ), longer duration of clinician patient relationship ( $P<0.0001$ ), longer clinicians' experience in care of patients on ART ( $P=0.029$ ) & increased number of patients clinicians saw on daily basis ( $P<0.0001$ ) were observed to be associated with patients' increased satisfaction with clinical communication. Clinicians' attitude on information exchange had no associated with communication variables studied.*

**Conclusion** *Small proportion of patients have perceived the clinical communication to be close to the optimal score (100). However, majority of patients have reported being satisfied with and comprehending information provided during their clinical encounter. Clinician-patient health information exchange was observed to be enhanced when patients report better state of health, happens to know clinicians over long period of time and cared by clinicians who see large number of patients on daily basis. Moreover patients were observed to be satisfied and rated the clinical communication higher when they are allowed to spend longer time during visits and have higher educational status respectively.*

## TABLE OF CONTENTS

<b>List of contents</b>	<b>Pages</b>
<b>ACKNOWLEDGEMENT</b> .....	i
<b>ABSTRACT</b> .....	ii
<b>TABLE OF CONTENTS</b> .....	iii
<b>LIST OF TABLES</b> .....	iv
<b>LIST OF FIGURES</b> .....	v
<b>ACRONYM</b> .....	vi
<b>I. INTRODUCTION</b>	
1.1 Background .....	1
1.2 Statement of the problem.....	3
1.3 Significance of the study.....	4
<b>II. LITERATURE REVIEW</b> .....	5
<b>III. OBJECTIVES OF THE STUDY</b> .....	9
<b>IV. Methods and Materials</b>	
4.1 Study design and period .....	10
4.2 Study area .....	10
4.3 Study population	
4.3.1 Source population.....	10
4.3.2 Study subjects.....	10
4.3.3 Sample size.....	11
4.3.4 Sampling procedure.....	11
4.4 Data collection	
4.4.1 Data collection tools .....	12
4.4.2 Data collection Procedure .....	12
4.4.3 Data quality assurance .....	13
4.4.4 Study variables	
Dependent variables.....	14
Independent variable.....	14
4.4.5 Operational definition.....	14
4.5 Data processing and analysis.....	15
4.6 Ethical consideration .....	16
4.7 Dissemination of results .....	16
<b>V. RESULT</b> .....	17
<b>VI. DISCUSSION</b> .....	38
<b>VII. STRENGTH AND LIMITATION OF THE STUDY</b> .....	42
<b>VIII. CONCLUSION</b> .....	43
<b>IX. RECOMMENDATIONS</b> .....	44
<b>X. REFERENCES</b> .....	45
<b>XI. ANNEXES</b>	
11.1 Reliability test of constructs .....	48
11.2 Schematic diagram of the sampling procedure .....	49
11.3 questionnaires English version .....	50
Amharic version .....	61

## LIST OF TABLES

Table 1	Socio demographic characteristics of clinicians and patients in the structured interview .....	18
Table 2	Visit characteristics of clinical encounters of HIV patients .....	20
Table 3	HIV patients' access to health information and self reported health status ... ..	21
Table 4	Patient rated scores to the 20 communication elements .....	22
Table 5	Bivariate analysis between patient, visit and clinicians' characteristics and patients' perception of clinical communication .....	24
Table 6.	Multiple regression analysis of patient, visit and clinicians' characteristics predicting patients' perception of clinical communication .....	24
Table 7	Out comes of clinical communication .....	25
Table 8	Bivariate analysis between patient, visit and clinicians' characteristics and patients' comprehension of health information .....	26
Table 9.	Multiple regression analysis of patient, visit and clinicians' characteristics predicting patients' comprehension of health information.....	27
Table 10	Bivariate analysis between patient, visit and clinicians' characteristics and patients' satisfaction with health information exchange .....	28
Table 11	Multiple regression analysis of patient and visit characteristics predicting patients' satisfaction with health information exchange .....	29
Table 12	Socio demographic characteristics of patients in the in-depth interview .....	30
Table 13	Reliability test of constructs in patients' and clinicians' questionnaire .....	48

## **LIST OF FIGURES**

Fig. 1 Conceptual model of health information exchange between patients and clinicians....	8
Fig. 2 Patients' perception of clinical communication .....	22
Fig. 3 Schematic diagram of sampling procedure.....	49

## **ACRONYMS**

**AA** Addis Ababa

**AACAHB** Addis Ababa City Administration health Bureau

**AIDS** Acquired Immunodeficiency Syndrome

**ART** Antiretroviral Therapy

**ARV** Antiretroviral

**HIV** Human Immunodeficiency Virus

**HAART** Highly active anti retroviral therapy

**JHU** John Hopkins University

**PLWHA** People living with HIV/AIDS

**WHO** World Health Organization

## **I. INTRODUCTION**

### **1.1. BACKGROUND**

Clinician-patient communication is a two way verbal and nonverbal sharing of health information between a clinician and a patient. It initially focuses on building a therapeutic relationship and gathering information from patients. The latter part is centered on sharing information with respect to laboratory tests, diagnosis, treatment plan and prognosis.<sup>1,2</sup>

The approaches with which clinicians communicate with patients vary from clinician centered (biomedical) to that of patient-centered. Clinician centered approach is too narrow that focuses on identification and treatment of a medical problems. Whereas patient-centered approach requires care to be centered on the patient, information about patient care preferences and priority to be obtained, patients to be educated about their disease and involved in decision making so that they become active participants in their own care and promote adherence to long term treatment.<sup>3, 4, 5</sup> Moreover, patient-centered approach facilitates patient disclosure of detailed information, enhances patient-clinician communication and is most satisfying to patients.<sup>3, 6</sup> Effective communication is a means to implement patient-centered approach in providing medical care and to the reduction of conflicts between clinician-patient relationships.<sup>7</sup>

There exist many clinical communication models which provide framework for clinical interview.<sup>3, 8</sup> The American Academy on Physician and Patient identified three interdependent and essential functions of the clinical interview : information gathering, relationship building, and patient education.<sup>3</sup> According to the Kalamazoo consensus statement, which is based up on a review and synthesis of five currently applicable models of clinician patient communication, the tasks are extended to seven essential elements; building a relationship (fundamental task), opening the discussion, gathering information, understanding the patient's perspective, sharing information, reaching agreement on problems and plans and providing closure.<sup>8</sup>

Essential elements of communication as identified on the Kalamazoo consensus statement are the basis of the current study. The relationship building task involves use of patient centered approach to care that focuses on eliciting patient's illness experiences, awareness of factors that influence patient -clinician relationship and considering active participation of the patient in clinical decision making. The second task is conducting open discussion which is to do with allowing patient to complete his/her opening statement, eliciting all concerns and maintaining personal connection. The third, involves active listening using questions appropriately and structure clarify and summarize information. Task number four deals with exploration of contextual factors, expectations and acknowledgement and response to patient's ideas about his/her health and illness. Sharing information is the fifth task that involves using understandable language, checking for understanding and encouraging questioning. Encouraging patient to participate in decisions, checking for willingness and ability to follow plan and identification and mobilization of supports are activities under the sixth task. Finally closure will be provided, where patients will be asked about other issues, agreement will be affirmed with the treatment plan and follow-up will be discussed<sup>8</sup>

A survey conducted to ascertain patient's impression of a clinician's communication has also identified communication skills such as careful listening, explaining understandably, respecting what a patient says and improving the patient's perception of time to enhance patient's perception of clinical communication.<sup>2</sup>

## 1.2 STATEMENT OF THE PROBLEM

Communication is an integral part and most frequently performed intervention during patient care.<sup>10</sup> Starting from obtaining patient's medical history to conveying a treatment plan, the clinicians relationship with his/her patient is built on effective communication.<sup>6</sup> Strengthening this relationship between clinicians and patients with chronic disease particularly with HIV/AIDS is a main concern.<sup>10, 11</sup> Nevertheless, there exists variation with clinicians abilities and skills in communicating with their patients and so do patients' need for level of detail of information.<sup>12</sup>

The way clinicians and patients interact, their values, attitudes, ideas and feelings are indicated to have influence on their communication.<sup>8, 13, 14</sup> The complex nature of health information is also believed to have an impact.<sup>9</sup> Nonetheless, clinicians are made responsible to enhance patient's acquisition and comprehension of health information in order to facilitate successful implementation of treatment plan despite the stated difficulties.<sup>1, 10</sup>

Good quality clinician-patient communication promotes diagnostic accuracy,<sup>1</sup> patient's knowledge and understanding, health outcomes(emotional health, symptom resolution, function and pain control) clinician and patient satisfaction, adherence to treatment,<sup>9, 10, 15</sup> patient's trust in clinicians,<sup>15</sup> patient's participation in shared decision making concerning their own health<sup>16</sup> and it reduces medical errors.<sup>14</sup> Effective clinician-patient communication is becoming extremely desirable lately as a result of access of patients to considerable amount of variable quality of information outside the clinical encounter about their health problem and management approaches.<sup>3, 9</sup> This makes clinicians responsible to clarify patients' perception and enroll them in the management process to improve compliance and outcome.<sup>3</sup>

Miscommunication, lack of communication and unsatisfactory communication are problems observed during clinical encounters<sup>17, 18</sup> with increased frequency in developing

countries.<sup>18</sup> Moreover the importance given to clinical communication is often less<sup>7</sup> and the area is not sufficiently investigated with incorporation of patients' perspective.<sup>1</sup>

### **1.3. RATIONALE OF THE STUDY**

HIV/AIDS has imposed huge health, social and economic problem to individuals affected, the community and the nation at large. Realizing this fact, this study has tried to focus on clinician-patient communication bearing in mind non compliance to treatment plan due to lack of communication or unsatisfactory communication has significant impact on individuals suffering and the overall HIV/AIDS prevention and control strategy of the country.

In the Ethiopian context, though researches on HAART adherence have assessed clinician patient communication in addition to other variables affecting adherence, to the knowledge of the researcher none have been found to examine the area in depth. Thus the present study has intended to assess HIV patient's perception of health information they have exchanged with clinicians during their clinical encounter which would serve as a base line information to help program coordinators and others involved in the service provision to notice the situation and look for sound strategies that would enhance communication and as a result improve patient's health outcome, adherence to HAART, comprehension of information provided and satisfaction with the exchange process.

## II. LITERATURE REVIEW

Quality and timely exchange of health information is required to ensure patient safety, quality of care and evidence based clinical practice.<sup>9, 17</sup> Improvements in the quality of care starts from improving communication between health care providers and patients.<sup>14</sup> Communication skills are identified as core competency that health care professionals are expected to demonstrate.<sup>9</sup>

Communications which promote clinician patient agreement lead to better outcomes. The outcomes can be short-term, intermediate or long term. Increased patient's knowledge, understanding and satisfaction are short term.<sup>9, 16</sup> Intermediate outcomes include changes such as better compliance to treatment plans, trust on clinicians, continued use of health care services and confidence in helping themselves, which result from short term outcomes. Long-term outcomes involve resolution of symptoms, improved physical and functional status, and better quality of life.<sup>19</sup> Short term outcomes are easy to establish effectiveness of communication strategies.<sup>9</sup> Communication and information have increasingly been considered important in helping people through alleviating emotional instabilities they experience with diagnosis of life threatening illnesses.<sup>20</sup> It is also indicated as a single most important predictor of patient adherence to treatment plan.<sup>7</sup>

The reason for and depth with which patients seek information during the clinical encounter however is observed to vary from the need for active participation in the care process to that of maintenance of trust and hope. Similarly, the extent with which health information is provided is determined by health professional attitude towards provision of detailed information, visit length and professional knowledge of patient's condition, options and outcomes.<sup>21</sup>

Patients are found to be more satisfied with and develop trust on clinicians whenever they found their questions addressed and concerns clarified.<sup>22</sup> Providing patients with sufficient information about their health problem is believed to be an enabling condition to their

preference for making shared decision concerning their health.<sup>21</sup> Informed patients were observed to involve themselves in their own care and make wiser decisions.<sup>16</sup> In contrast, in a study that assessed information seeking behavior of breast cancer patients, seeking information for the purpose of maintenance of hope and trust was observed to take the precedence. Patients in this study were observed to value interpersonal relationship and prefer to be directed about their treatment rather than given choices.<sup>23</sup>

What is more, patient's need for more health information is reflected in the effort they make to obtain it in addition to the one offered by health professional during the routine clinical encounters.<sup>22</sup> Health information access outside the clinical encounter is recognized to be essential condition for better understanding of disease problems patients are concerned with.<sup>23</sup>

Effective clinical communication, is important in the management of HIV infection with Highly Active Anti Retroviral Therapy (HAART) where drug toxicity, adherence to treatment and emerging viral resistance are serious problems.<sup>24, 25</sup> The benefit of HAART will be maximized when clinicians and patients communicate effectively to deal with barriers that prevent excellent medication adherence.<sup>25</sup> One study has revealed that good quality clinician-patient relationship promotes adherence to antiretroviral medications whereas less quality relationship impends it.<sup>11</sup>

Age, sex, educational status, language, visit length, clinician's communication skill & attitude are among the many factors that influence clinical communication. Moreover, patient's perception of communication pattern of clinicians is determined by their prior expectation of the encounter.<sup>26</sup> An observational study of physician-patient communication during out patient palliative treatment visits has discovered that female patients and patients with high level of education tend to receive more information.<sup>12</sup> Longer visit length, longer duration of physician patient relationship and less advanced disease stage were showed to be associated with better communication in a cross sectional survey of physicians and HIV/AIDS patients.<sup>25</sup> Similarly, low educational level, patient perception

of increased language barrier and physician's attitude to health information delivery are identified as predictors of patients' comprehension of health information.<sup>1</sup> Moreover patient's tendency of requesting information has observed to impact the extent to which they get informed about their situation.<sup>27</sup>

Perceived time pressure from clinician's and patient's side is also found to decrease amount of information exchanged during clinical consultation.<sup>12, 20</sup> Studies have indicated that during clinical interview only 2% of patients will get opportunity to complete story of their illness. Whereas, majority will be allowed for only 18 seconds before they get interrupted.<sup>7</sup> To the other side, patient's expressed concern about taking up too much of their doctors' time is also observed to be among the reasons for seeking limited information during clinic consultations.<sup>20</sup>

Lately, health care provider-patient communication is receiving attention as a result of increasing evidence on lack of patient adherence to treatment plan, patient dissatisfaction, poorer self reported health and increasing patient expectation for quality and safety from health care.<sup>5</sup>

Patient surveys are identified to be feasible options for studying health care provider-patient communication.<sup>28</sup> This is partly due to the fact that only patients are able to tell whether they have understood health information delivered to them or the delivery is satisfactory.<sup>1</sup> In addition, it is indicated that patient's perception and behavior plays a role in determining the effectiveness of health information communicated. As a result, information delivery which is perceived effective to one patient might be the opposite to the other.<sup>29</sup> Makoul G. and his colleagues have argued that the scale development processes in surveys conducted so far are found to be unclear and the items are also irrelevant. In response to this, they have developed a 15 item valid and reliable Communication Assessment Tool (CAT) for measuring patient's perception of clinician's performance in the area of interpersonal communication soon after a medical encounter.<sup>28</sup>

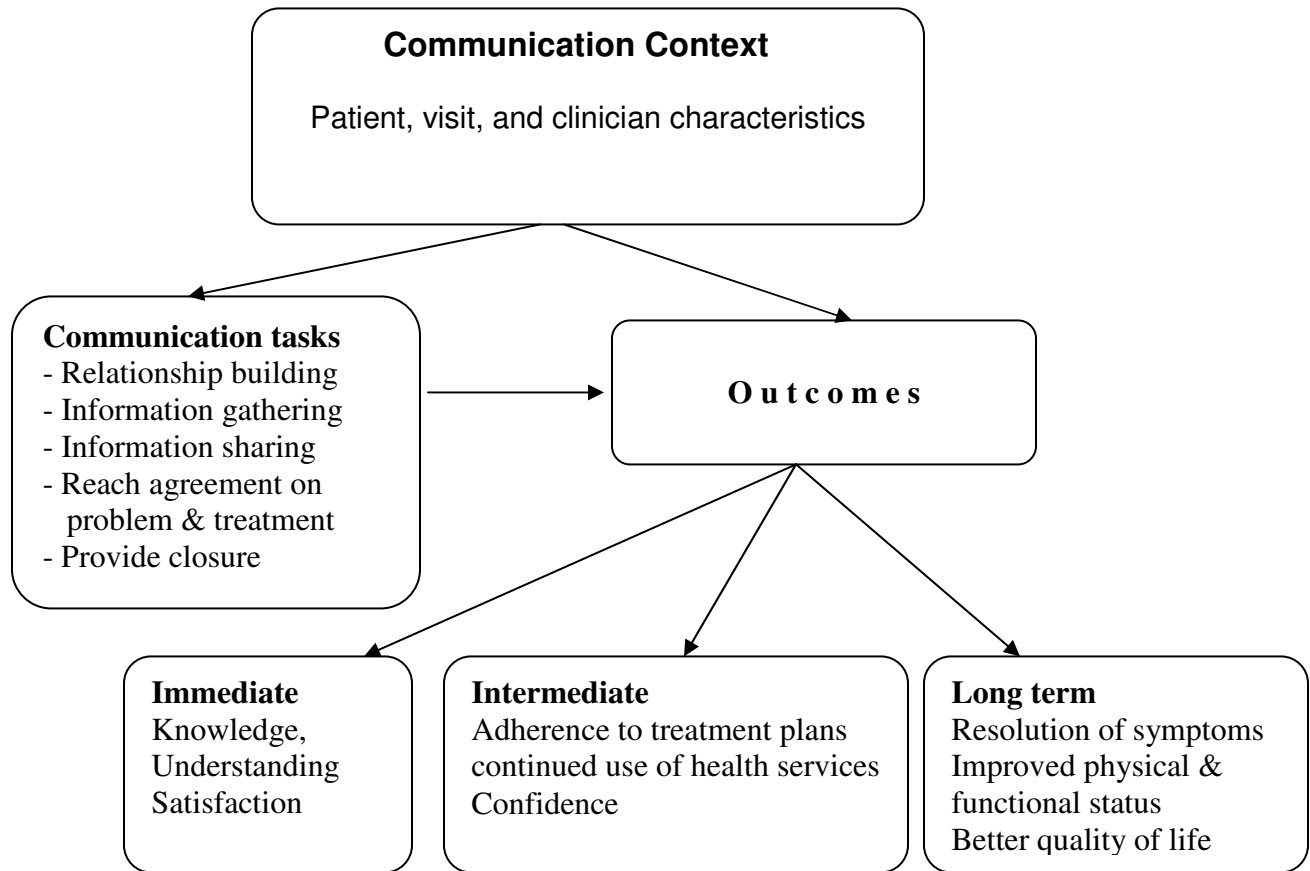


Fig 1 Conceptual model of clinician-patient health information exchange

### **III. OBJECTIVES OF THE STUDY**

#### **General objective**

To assess health information exchange between clinicians and PLWHA on ART attending ART clinics at seven public hospitals in Addis Ababa.

#### **Specific Objectives**

- Assess patients' perception of the clinical communication they had with clinicians.
- Assess short-term outcomes of clinical communication
- Assess factors that predict patients' perception and outcomes of health information exchange.

## **IV. METHODS AND MATERIALS**

**4.1 Study design and period-** a cross sectional survey using quantitative and qualitative methods was utilized to elicit the required information between April and May 2009.

### **4.2 Study area**

The study was conducted in ART clinics of seven Public hospitals (Zewditu Memorial Hospital, Black Lion Hospital, Rasdesta Hospital, Yekatit 12 Hospital, St Petros specialized Tuberculosis Hospital, St Paulos Hospital and Minilik Hospital) in Addis Ababa, capital city of Ethiopia. The clinics provide ART service to variable number of patients, ranging from 1500 to 8902. ART at each facility was started at different points in time, from 1995 to 1998 E.C. The service is provided by team of professionals (Physicians, nurses, Laboratory technicians and Pharmacists), their number being variable across the hospitals. There also are supporting staff such as Data clerks and Expert patients. Data clerks are responsible to manage the service data. The Expert patients are PLWHA, who were trained and assigned by nongovernmental organizations (JHU and WHO) to support the service in the area of adherence counseling, patient education on healthy living and defaulter tracing.

### **4.3 Study Population**

#### **4.3.1 Source population**

- All PLWHA who are on ART visiting Public hospitals in Addis Ababa
- All clinicians working in ART clinics of Public hospitals in Addis Ababa

#### **4.3.2 Study subjects**

- Consecutive series of PLWHA who are on ART and visited the ART clinics during the study period
- All clinicians working in ART clinics of the seven hospitals

### **Inclusion criteria**

- Patients 18 years of age & above
- Patients who are on ART
- Clinicians involved in the examination and treatment of patients

### **Exclusion criteria**

- Patients on Pre ART treatment
- Patients who were seriously ill or demented
- Clinicians involved in administrative or other activities

### **4.3.3 Sample size**

- Twenty clinicians from the seven hospitals were included.
- As has been recommended <sup>28</sup> 20 patients per participating clinician, that adds up to a total of 400 patients were enrolled in the post encounter structured interview.
- Six purposively selected patients from each of the four randomly selected hospitals totaled 24 patients were included in the in-depth interview.

### **4.3.4 Sampling procedure**

All except one public hospital in Addis Ababa were included in the study. Consecutive series of patients who were on ART and under the care of the participating clinicians and all clinicians actually involved in care of patients receiving ART in ART clinics of selected hospital were enrolled. Purposively selected patients from the four randomly selected hospitals were enrolled in the in-depth interview.

## 4.4 Data collection

### 4.4.1 Data collection tools

- Data on patients were collected by:
  - ✓ An interviewer administered structured Amharic version questionnaire. Their perception of the clinical communication was assessed by using a 20 item measure with five point response scale (5 = excellent, 4= very good, 3= good, 2= fair and 1= poor). The instrument is adapted from the Communication Assessment Tool (CAT) developed by Makoul G. et.al.<sup>28</sup> In-order to incorporate issues related to HIV/AIDS, items on provision of information on diagnostic tests, drug side effects/ benefits, adherence, substance use, sexuality, nutrition and availability of support services were added to the original CAT. Patients' comprehension of health information and satisfaction with the exchange process were assessed using likert scale (5=extremely agree, 4=agree, 3=disagree, 2=extremely disagree and 1=uncertain)
  - ✓ A semi structured Amharic version questionnaire constructed on predetermined areas of emphasis that were organized from review of literature on clinician patient communication.
- Data on clinicians were collected by using self administered structured questionnaire. Clinicians attitude towards information provision was assessed by using a 9 items measure with five point response scale (5 = extremely important , 4= important, 3= less important, 2= not at all important and 1= uncertain)

### 4.4.2 Data collection Procedure

- Initially Clinicians were approached and provided with the self administered questionnaires then once filled out were collected by the data collectors.
- Patients included in the structured interview were approached daily in the waiting room following the routine clinical encounter and questionnaires were administered for those who have volunteered to respond.

- Patients in the in-depth interview were similarly approached in the waiting room and those who were found to be willing were taken to rooms, in which the clinicians temporarily permitted us to conduct the interview. Audio taping as per patient's permission and field note taking were techniques used to obtain data in the in-depth interview. Each interview lasted 25-40 minutes.
- Expert patients from each facility were recruited and trained to collect the structured post visit patient data.
- In-depth interviewing was conducted by the principal investigator at selected sites in succession.
- All the tools were pre-tested on patients and clinicians found in ART clinic in Gandhi Hospital.

#### **4.4.3 Data Quality assurances**

The quality of the data was assured by:

- Using a tested communication assessment tool with some modifications made based up on review of literatures on messages to be communicated in clinical encounter with PLWHA on ART.
- Translating the English post visit patient questionnaire into Amharic and then back to English to check inconsistency problems before data collection.
- Training data collectors on the data collection tool and other issues such as obtaining informed consent, maintaining neutrality, confidentiality and privacy.
- Pre-testing the tools on 40 patients and 2 clinicians in Gandhi Hospital, which was not part of the actual study.
- The questionnaires were checked for their completeness and consistency by the principal investigator at the end of each data collection day.

#### 4.4.4 Study Variables

##### Dependent Variables

- Patient's perception of clinical communication.
- Patient's self reported comprehension of health information provided by clinicians.
- Patient's satisfaction with health information exchange with clinicians.

##### Independent Variables

- Patient characteristics
  - Socio-demography (age, sex, educational status)
  - Access to health information (general or AIDS related) outside the clinical encounter
  - Self rated health status
- Visit characteristics
  - Duration of taking ART
  - Duration of relation ship with the clinician
  - Visit length
- Clinician characteristics
  - Socio-demography (age, sex, profession)
  - Length of clinical experience in care of PLWHA on ART
  - Average number of patient's seen per day
  - Attitude on health information delivery

#### 4.4.5 Operational Definition

- **Health information exchange:** - health information patients have exchanged with clinicians with regard to their illness, diagnostic tests, treatment and prognosis.
- **Clinician** :- a physician or a specially trained nurse who are responsible for examining and managing patient's problems in ART clinics

- **Visit length:** - the time a clinician spent with a patient at a single encounter.
- **Duration of clinician-patient relationship :** - the length of time during which the patient was seeing (visiting) the clinician
- **Duration of treatment with ART:** - the length of time a patient has been on ART.

#### **4.5 Data processing and analysis**

The Quantitative data collected were entered to computer and cleaned on daily basis. Analysis was done by using SPSS 15.0 version statistical software. Tables and figures were used to present data. Frequencies, measures of central tendency and variation were obtained. In the bivariate analysis, associations between the dependent and independent variables were assessed by using spearman correlation and groups were compared using Mann-Whitney U and Kruscal-Wallis tests. Finally multiple regression analysis was employed to assess predictors of the out come variables. Analyses were done at 95% confidence interval for which  $P < 0.05$  be considered significant.

Patients' perception of the general clinical communication they had with clinicians was reflected on the summary scores of the 20 communication items. The summary measures were computed out of 100 by adding scores of all the 20 items. The overall scale reliability was high (Cronbach's alpha = 0.94). Summary scores of each the 20 communication items were obtained first by transforming individual patient's response to each item to 100 and later obtaining the mean percentage score for each item. Internal consistencies of constructs are shown on table 13 (appendix I). Clinicians' attitude on health information exchange was assessed by using summary score of the 9 items which was computed out of 100. The overall scale reliability was found to be 0.77 (Table 13, appendix I). In the multivariable analyses all the dependent variables were treated as continuous variables.

Analysis of the Qualitative data was carried out by coding the data on a daily basis. Then patterns were identified as well as compared and further examined to discover recurrent patterns and saturation of ideas. Then core categories were identified and interpreted.

#### **4.6 Ethical consideration**

Approval of the research plan was received from Addis Ababa University, Medical faculty, Institute of Review Board (IRB) and Addis Ababa City Administration Health Bureau ethical clearance committee. Official letter of cooperation was written to the respective hospital Administrations, and permission to conduct the study was secured accordingly. Verbal consents from both study subjects (clinicians and patients) were sought after clear explanation about the purpose of the study. Anonymity of study subjects was maintained to insure confidentiality of information obtained. Privacy of respondents was also maintained during the interview.

The study will serve as base line information to let health care providers, patients, program coordinators and policy makers to become aware of the current practice on clinical communication. Moreover, it will help program coordinators and policy makers to look for sound strategies that would enhance communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction.

#### **4.7 Dissemination of results**

Study findings were communicated to AAU, SPH as partial fulfillment of MSC in health informatics, and all potential stakeholders. In addition, findings will be presented on annual conferences and possibly be published in peer review journals.

## **V. RESULT**

### **5.1 Structured interview**

#### **5.1.1 Socio-demographic characteristics**

In the structured post visit interview 400 patients from ART clinics of public hospitals were included. In addition, 20 clinicians from similar sites, who were involved in the examination and treatment of patients during the data collection period, have filled out the self administered questionnaire intended for them.

Majority of patients (88.5%) were found in the age group of 18-44 years. The mean age was  $35.6 \pm 8.3$  years (range 18-65). Two hundred forty nine (62.3%) patients were female and 53.4% had secondary and college/university level education (Table 1).

The median age of participation clinicians was 39 years (range 23-53). Fourteen of the clinicians were females, 11 were nurses and 10 of them have four and more years of experience in the care of patients receiving ART. The mean year of experience was  $3.8 \pm 2.1$  years (range 0.6-9). The median number of patients the clinicians saw on daily basis was 30 (range 20-65) (Table 1).

Table 1. Socio-Demographic characteristics of patients and clinicians at ART clinics of seven public hospitals in Addis Ababa, May 2009

<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>	
<b>Patients (n=400)</b>			
<b>Age</b>	<b>18-24</b>	20	5.0
	<b>25-31</b>	118	29.6
	<b>32-38</b>	135	33.9
	<b>39-44</b>	82	20.6
	<b>≥45</b>	43	10.8
<b>Sex</b>	<b>Male</b>	151	37.8
	<b>Female</b>	249	62.3
<b>Educational status</b>			
	<b>Not educated</b>	24	6.0
	<b>only read and write</b>	63	15.8
	<b>Primary education</b>	99	24.8
	<b>Secondary education</b>	168	42.1
	<b>College/University</b>	45	11.3
<b>Clinicians (n=20)</b>			
<b>Age</b>	<b>23-28</b>	4	
	<b>29-34</b>	3	
	<b>35-40</b>	6	
	<b>41-46</b>	4	
	<b>≥47</b>	3	
<b>Sex</b>	<b>Male</b>	6	
	<b>Female</b>	14	
<b>Professional category</b>			
	<b>General Practitioner</b>	8	
	<b>Health Officer</b>	1	
	<b>Nurse</b>	11	
<b>Experience (in years)</b>			
	<b>&lt;1</b>	2	
	<b>1-1.9</b>	1	
	<b>2-2.9</b>	3	
	<b>3-3.9</b>	4	
	<b>≥ 4</b>	10	
<b>Average No of patients seen / day</b>			
	<b>≤ 20</b>	4	
	<b>21-40</b>	11	
	<b>41-60</b>	4	
	<b>≥ 61</b>	1	

### **5.1.2 Visit characteristics**

As shown in table 2, 277 (69.4%) patients have reported taking ART for 24 and less months, out of which 167 (60.3%) were found to take for 0.5 to 12 months. The median duration of ART treatment was found to be 24 months (range 0.50-72). Two hundred twenty nine (57.5%) patients had been seeing the clinicians, who were caring for them during the data collection period, for 12 and less months, among which 112(48.9%) have stated the relationship to be 6 and less months old. The median duration of clinician patient relationship was 12 months (range 0.03-84). Proportion of patients who reported having been visiting the clinicians for 6 and less months was greater than those who have been claimed to take ART for the specified period. Similarly the proportion of patients who have been on ART for three and more years was more than those who have reported knowing clinicians for the mentioned time period.

The amount of time patients have reported to spend with clinicians during their encounter was observed to range from 5 to 60 minutes, where the median visit length being 10 minutes. Two hundred twenty nine (74.8%) patients have reported spending 5 to 10 minutes (Table 2).

Table 2 Visit characteristics of clinical encounters between of clinicians and patients at ART clinics of seven public hospitals in Addis Ababa, May 2009

<i>Variables</i>	<i>Frequency</i>	<i>Percent</i>
<b>Treatment Duration (in months) (n=399)</b>		
0 - 6	54	13.5
7 -12	113	28.3
13 -18	13	3.3
19 -24	97	24.3
25 -30	7	1.8
31 -35	2	0.5
≥36	113	28.3
<b>Duration of clinician-patient relationship (in months) (n=398)</b>		
0-6	112	28.1
7-12	117	29.4
13-18	11	2.8
19-24	82	20.6
25-30	10	2.5
31 -35	1	0.3
≥36	65	16.3
<b>Visit length (in minutes) (n=400)</b>		
5-10	229	74.8
11-15	67	16.8
16-20	26	6.5
>21	8	2.0

### 5.1.3 Health status and health information source of patients

As indicated in table 3, 328 (82%) patients have acknowledged external source as additional means of getting informed on HIV/AIDS and other related health issues on top of what they get during their clinical consultation. Two hundred seventy seven (69.3%) patients have reported of being in a better state of health.

Table 3. Self reported health status and access to health information of HIV patients at seven public hospitals in Addis Ababa, May 2009 (n= 400)

<i>Variables</i>	<i>Frequency</i>	<i>Percent</i>
<b>Health information access</b>		
Yes	328	82
No	72	18
<b>Health status</b>		
Excellent	69	17.25
Very good	112	28
Good	96	24
Fair	88	22
Poor	35	8.75

### 5.1.4 Patients' perception of and clinicians' attitude on clinical communication

Patients' perceptions of the communication they had with clinicians during their encounter were demonstrated by using summary measures of, all the 20 items on communication (fig. 2) and each communication element (Table 4). The mean and median scores were observed to be  $77.12\% \pm 14.12$  and 78.0 respectively (range 39-100) (fig. 2). One hundred nineteen (29.8%) patients have rated the clinical communication with in the range 71-80%, followed by 91(22.8%) patients who thought it to be above 90%. Highest ratings were for explained (reminded) me about adherence (87.4%), talked in terms I could understand (87.2%), discussed the next step (83.6%), treated me with respect (81%), greeted me in a way that made me comfortable (80.8%) and showed care and support (80.2%). Involved me in decision as much as I wanted (54.8%) and identified and enlists resources and supports (50%) were the lowest ratings observed (Table 4).

Fifteen clinicians have been found to attach importance to all items expected from clinical communication. Four others have considered eight of the items to be important. Only one clinician has attached importance to seven of the items. Only two items, such as involving patients in the clinical decision making process and responding to patients' perception about their illness were considered as less important by three and two clinicians respectively.

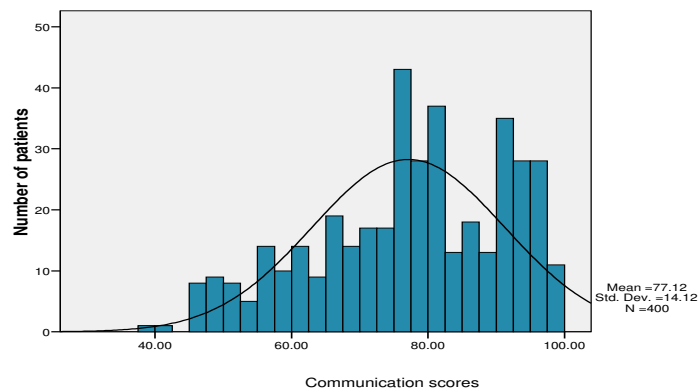


Fig 2. HIV patients' ratings of clinical communication at public hospitals in Addis Ababa, May 2009

Table 4. HIV patients' ratings of the 20 elements of clinical communication at public hospitals in Addis Ababa, May 2009

<i>Communication elements</i>	<i>Mean percentage score</i>
Greeted me in a way that made me comfortable	80.8
Treated me with respect	81.0
Showed care and concern	80.2
Understood my main health concerns	78.2
Let me talk without interruption	79.4
Paid attention to me	79.6
Permit me to express my perceptions about my illness	78.2
Explained about my illness	74.6
Explained about reasons for diagnostic testes ordered	73.0
Explained about benefits and side effects of drugs	79.4
Explained (reminded) me about the need for adherence	87.4
Explained about problems with alcohol use	77.4
Explained about nutrition	74.2
Explained about sexuality	79.6
Talked in terms I could understand	87.2
Checked to be sure I understood everything	79.0
Encouraged me to ask question	74.4
Identified and enlists resources and support	50.0
Involve me in decision as much as I wanted	54.8
Discussed next steps	83.6

In the bivariate analysis duration of clinician-patient relationship ( $r = 0.120$ ,  $P < 0.01$ ), clinicians' age ( $r = 0.119$ ,  $P < 0.05$ ) and number of patients seen per day ( $r = 0.409$ ,  $P < 0.01$ ) were found to be significantly associated with communication scores. Similarly, patients' perception of the clinical communication have been recognized to differ by their self reported health status ( $\chi^2 = 61.4$ ,  $df = 4$ ,  $P < 0.0001$ ), educational status ( $\chi^2 = 26$ ,  $df = 4$ ,  $P < 0.0001$ ) and access to health information outside the clinical encounter ( $Z = -4$ ,  $P < 0.0001$ ). None of the other variables like patients' age, patients' and clinicians' sex, duration of treatment with ART, visit length, number of patients clinicians saw on daily

basis, length of experience clinicians have in care of patients on ART and attitudes of clinicians on clinical communication were found related (Table 5).

In the stepwise multiple regression model, better health status, higher educational status, longer duration of clinician patient relationship, longer visit length and increased number of patients clinicians saw on daily basis were significantly associated with higher communication scores. Although not significant in the bivariate analysis, visit length was significant in this model. Better access to health information outside the clinical encounter was found to be associated with lower communication scores (Table 6).

Table 5. Bivariate analysis of patients' perception of clinical communication with patient, visit and clinicians' characteristics and at ART clinics of seven hospitals in Addis Ababa. May 2009

<b>Variables</b>	<b>Correlation coefficient</b>	<b>P value</b>	
Patients' age	-0.028	0.582	
Visit length	0.052	0.300	
Duration of treatment with ART	0.020	0.684	
Duration of clinician patient relationship	0.120	0.016	
Clinicians' age	0.119	0.017	
Number of patients seen per day	0.409	0.000	
Clinicians' experience	-0.001	0.824	
Attitude on information provision	-0.097	0.053	
	<b>Z</b>	<b>P value</b>	
Patients' sex	-1.744	0.081	
Patients' access to health information	-3.995	0.000	
Clinicians' sex	-1.171	0.242	
	<b>X<sup>2</sup></b>	<b>df</b>	<b>P value</b>
Educational status	26.02	4	0.000
Health status	61.41	4	0.000

Table 6. Stepwise multiple regression analysis of patient, visit and clinicians' characteristics predicting patients' perception of clinical communication at ART clinics of seven public hospitals in Addis Ababa. May 2009

<b>Patient characteristics</b>	<b>Beta</b>	<b>t</b>	<b>P value</b>
Constant		17.827	0.000
Health status	0.315	6.771	0.000
Educational status	0.171	3.665	0.000
Duration of clinician patient relationship	0.126	2.791	0.006
Patients' access to health information	- 0.111	-2.358	0.019
Visit length	0.106	2.351	0.019
<b>Clinicians' Characteristics</b>			
Constant		37.642	0.000
Number of patients seen per day	0.463	10.425	0.000

### 5.1.5 Outcomes of clinical communication

Three hundred seventy one (92.8 %) patients have reported comprehending information they have been provided with during their encounter with clinicians while 5 (1.3%) were uncertain of their understanding of the information delivered to them. Likewise 339 (84.8%) patients have claimed to be satisfied with the information exchange process and only a single patient has reported uncertainty (Table 7).

Table 7. Out comes of clinical communication as expressed by patients presented at ART clinics of seven public hospitals in Addis Ababa. May 2009 (n= 400)

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Comprehension</b>		
Uncertain	5	1.3
Not comprehend	24	6.0
Comprehend	371	92.8
<b>Satisfaction</b>		
Uncertain	1	0.3
Not satisfied	60	15.0
Satisfied	399	84.8

### **5.1.5.1 Patients' self reported Comprehension of health information**

As showed in table 8, duration of clinician patient relationship ( $r=0.178$ ,  $P<0.01$ ), clinicians' age ( $r = 0.205$ ,  $P<0.01$ ), and number of patients seen per day ( $r =0.364$ ,  $P<0.01$ ) were found to be associated with comprehension of clinical information. Patients' comprehension of the clinical communication was also noticed to differ by patients' sex ( $Z=-2.4$ ,  $P=0.014$ ), access to health information ( $Z=-2.4$ ,  $P=0.015$ ), educational status ( $\chi^2=12$ ,  $df =4$ ,  $P=0.017$ ), self reported health status ( $\chi^2=32$ ,  $df=4$ ,  $P<0.0001$ ), and clinicians' sex ( $Z=-2.3$ ,  $P=0.020$ ). The remaining variables such as patients' age, visit length, duration of treatment with ART, clinicians' experience in care of patients on ART and clinicians' attitude on clinical communication were not associated with patients' comprehension of health information.

The stepwise multiple regression analysis showed better health status and longer duration of clinician patient relationship, increased number of patients clinicians saw on daily basis and older clinicians' age to be significantly associated with patients' self reported comprehension of health information (Table 9).

Table 8. Bivariate analysis of patients' comprehension of health information with patient, visit and clinicians' characteristics in ART clinics of seven hospitals in Addis Ababa, May 2009

<b>Variables</b>	<b>Correlation coefficient</b>		<b>P value</b>
Patients' age	0.009		0.852
Visit length	0.020		0.685
Duration of treatment with ART	0.062		0.217
Duration of clinician patient relationship	0.178		0.000
Clinicians' age	0.205		0.000
Number of patients seen per day	0.364		0.000
Clinicians' experience	0.028		0.583
Attitude on information provision	- 0.053		0.288
	<b>Z</b>		<b>P value</b>
Patients' sex	-2.448		0.014
Patients' access to health information	-2.432		0.015
Clinicians' sex	-2.322		0.020
	<b>X<sup>2</sup></b>	<b>df</b>	<b>P value</b>
Educational status	12	4	0.017
Health status	32.05	4	0.000

Table 9. Stepwise multiple regression analysis of patient, visit and clinicians' characteristics predicting patients' comprehension of health information at ART clinics of seven public hospitals in Addis Ababa. May 2009

Patient characteristics	Beta	t	P value
Constant		36.029	0.000
Health status	0.239	4.924	0.000
Duration of clinician patient relationship	0.148	3.043	0.002
Clinicians' Characteristics			
Constant		21.795	0.000
Number of patients seen per day	0.352	7.217	0.000
Clinicians' age	0.108	2.222	0.027

### 5.1.5.2 Patients' satisfaction with the process of clinical communication

In the bivariate analysis visit length ( $r = 0.206$ ,  $P < 0.01$ ), duration of clinician patient relationship ( $r = 0.205$ ,  $P < 0.01$ ), clinicians' age ( $r = 0.228$ ,  $P < 0.0001$ ), number of patients seen per day ( $r = 0.423$ ,  $P < 0.0001$ ), clinicians' length of experience in care of patients on ART ( $r = 0.165$ ,  $P = 0.001$ ) and their attitude on clinical communication ( $r = -0.115$ ,  $P = 0.002$ ) were significantly associated with patients' satisfaction with health information they have exchanged with clinicians. Patients' satisfaction with clinical communication was observed to vary by their sex ( $Z = 2.5$ ,  $P = 0.012$ ), access to health information outside the clinical encounter ( $Z = 2.4$ ,  $P = 0.015$ ), health status ( $\chi^2 = 25.7$ ,  $df = 4$ ,  $P < 0.0001$ ), and clinicians' sex ( $Z = -4.2$ ,  $P < 0.0001$ ). None of the remaining variables such as patients' age, duration of treatment with ART and educational status were found significant (Table 10).

The stepwise multiple regression model has showed that better health status, longer visit length and longer duration of clinician patient relationship as predictors of patients' increased satisfaction with the clinical communication they had. However, patients with long treatment duration and male patients were found to be less satisfied (Table 11).

Table 10. Bivariate analysis of patients' satisfaction with clinical communication with patient, visit and clinicians' characteristics at ART clinics of seven public hospitals in Addis Ababa, May 2009

<b>Variables</b>	<b>Correlation coefficient</b>	<b>P value</b>	
Patients' age	-0.003	0.945	
Visit length	0.206	0.000	
Duration of treatment with ART	-0.003	0.516	
Duration of clinician patient relationship	0.205	0.000	
Clinicians' age	0.228	0.000	
Number of patients seen per day	0.423	0.000	
Clinicians' experience	0.165	0.001	
Attitude on information provision	-0.155	0.002	
	<b>Z</b>	<b>P value</b>	
Patients' sex	-2.519	0.012	
Patients' access to health information	-2.430	0.015	
Clinicians' sex	-4.196	0.000	
	<b><math>\chi^2</math></b>	<b>df</b>	<b>P value</b>
Educational status	2.828	4	0.587
Health status	25.658	4	0.000

Table 11. Step wise multiple regression analysis of patient, visit and clinicians' characteristics predicting patients' satisfaction with clinical communication at ART clinics of seven public hospitals in Addis Ababa. May 2009

<b>Patient characteristics</b>	<b>Beta</b>	<b>t</b>	<b>P value</b>
Constant		27.023	0.000
Health status	0.223	4.751	0.000
Visit length	0.196	4.172	0.000
Duration of clinician patient relationship	0.148	3.043	0.002
Duration of treatment with ART	-0.137	-2.336	0.020
Patients' sex	-0.100	-2.123	0.034
<b>Clinicians' Characteristics</b>			
Constant		21.795	0.000
Number of patients seen per day	0.425	9.435	0.000
Clinicians' experience	0.099	2.193	0.029

## 5.2 In-depth interview

### 5.2.1 Characteristics of patients

Twenty-four patients have completed the in-depth interview conducted. Out of them 16 were females and 11 had secondary educations. Their mean age was  $36.8 \pm 8.2$  years. (Range 23-58). Fourteen patients reported of taking ART for less than 24 months. The median duration of treatment with ART was 24 month (range 24-60). Twelve patients have known the clinician, who cared for them during the data collection period, for less than 6 months. The median duration of clinician patient-relationship was 7 months (range 0.03-36) (Table 12).

Table 12. Characteristics of HIV patients involved in the in-depth interview at ART clinics of seven public hospitals in Addis Ababa, May 2009 (n=24)

<i>Variables</i>	<i>Frequency</i>	
<b>Age</b>	<b>23 - 28</b>	3
	<b>29 - 34</b>	9
	<b>35 - 40</b>	7
	<b>&gt; 40</b>	5
<b>Sex</b>	<b>Male</b>	8
	<b>Female</b>	16
<b>Educational Status</b>	<b>Illiterate</b>	5
	<b>Only read and write</b>	1
	<b>Primary</b>	3
	<b>Secondary</b>	11
<b>Treatment duration with ART</b>	<b>College/ University</b>	4
	<b>0 - 6</b>	4
	<b>7 - 12</b>	4
	<b>13 - 18</b>	1
	<b>19 - 24</b>	5
	<b>25 - 30</b>	1
<b>Duration of clinician patient relationship</b>	<b>31 - 35</b>	4
	<b><math>\geq 36</math></b>	6
	<b>0 - 6</b>	12
	<b>7 - 12</b>	4
	<b>13 - 18</b>	2
	<b>19 - 24</b>	2
	<b><math>\geq 25</math></b>	4

Analysis was organized around five core categories: building relationship, information gathering, information provision, response to clinical information exchange and factors influencing clinical information exchange.

### **5.2.1 Building relationship**

The manner with which clinicians approach patients and develop relationship with them was found to be satisfying for most patients. Patients have acknowledged the caring attitude and willingness to help displayed by clinicians. A 44 years old male patient stated that "He treats me with respect and concern, from what I heard, it is because of his willingness to help others that he devoted his time to work here in addition to his responsibilities in his assignment area". The relationship between patients and clinicians was also seen as too strong. "She treats me just like a mom" and " we have developed a brotherly relationship" were what a 34 years old female and 58 years old male patients have stated respectively.

However, it has also been indicated that there exists variation among clinicians with the way they relate with patients. This has been shown in the statement of a 28 year old female patient. "The way they treated me is not similar. Though it was a one time experience, I once was deeply disappointed with the way I was approached, that made me ask for referral back to the hospital that sends me here for it was too far from where I lived". A similar incident was reported by a 35 years old male patient as "disappointing and nerve-racking". Being approached and treated as a person and a caring attitude are what were valued according to the description of the 28 years old female patient "I was once healthy just like anybody else, even now I don't feel I am different unless they treated me like one. Therefore, above all services offered to me I would like to be treated with respect and love"

The gap in establishing relationship with patients is reported to be frequently observed when new clinicians are temporarily assigned in the ART clinic. This concern is shared by

some patients among whom the statement of a 44 year old male patient is read as "Most of the temporarily assigned clinicians are not that much willing to help. They didn't have the patience to listen to our complaints; they also show us less regard."

### **5.2.3 Information Gathering**

A sense of "Being heard and understood" pervade in most of the narratives. Frequent references were made on the clinician's quality of attentive listening and understanding of concerns presented by patients. However, the extent with which health complaints get communicated was found to be influenced by a number of factors such as the way clinicians approach patients, patient's thought of clinicians, personality characteristics of patients and the way clinicians react to what has been complained by patients

Some patients linked clinician's behavior of asking patients many questions about their complaints to clinician's willingness to listen and help. "I felt heard; he asked me several questions about my problem....." is an account of a 58 years old patient with this regard. Patients have also appreciated clinicians who prompt and encourage them to tell all complaints they have other than the one they have volunteered to report. This was illustrated by the response of a 34 years old female patient "I feel she understands my feelings, for she encourages me to tell all my concerns; what I felt inside". This open expression of concerns was observed to expand from mere health complaints to that of family and social matters. A 30 years old female patient describes this as "I tell her what ever worries I have, about my family, my neighbors ....."

Permitting patients to present their complaints without putting any restriction on the amount of time they have to use was also valued by most of the patients. "He listens to me despite the time I consume to present my problems" was a report of a 44 years old male patient. Though there exists a feeling of "being heard and understood", the speed with which clinicians conduct interviews affect the extent to which patients' complaints get communicated. A 32 years old female patient has expressed this concern as "Though he

listens and understands the complaints I expressed, he is always in a hurry while asking me about my problems. This makes me forget to tell some of my problems and regret later for not mentioning them."

In contrast to the mentioned concern, two patients have reported to having been influenced by the thought of clinicians who according to them spend an extended amount of time with each and every patient and who may be tired in the process. As a result, they limit their complaints to those which they feel are more important, so as to complete the clinical interview with in short time. A 36 year old female patient expressed this concern as "when I enter the examination room, I am always prepared to shortly describe my major concern and spare him from being bored, though I haven't observed such a sign throughout the 3 years of my treatment period I have spent with him."

At some instances, personality characteristics of patients were noticed to influence the clinical communication. A 31 years old female patient stated that "I will tell him whatever problem I experience without hesitating and the thought of what would happen or how will he respond". Nonetheless, two patients expressed that they often be reserved communicating their complaints. Fear of undergoing diagnostic investigations or prescribed with drugs which might not be freely available in the hospital or expensive were the concerns mentioned by a 36 years old female patient who as a result preferred to "Keep silent and visit the hospital only to collect the antiretroviral drugs".

The second reason mentioned why patients declined from expressing their problems to clinicians was developing an illness which probably associated with failure to attend to clinician's advice. This was expressed as a point at which clinicians get disappointed and display their anger towards their patients. The report of a 34 year old female patient reveals this worry "I won't tell them if I develop illness around genital area, they always associate such kind of illness with unsafe sexual practices and as if I failed to implement their advice. As a result they will get offended". The third reason for not telling complaints was unpleasant earlier experiences such as the lack of feedback to reported concerns. "I

won't tell them my problems unless they get unbearable, for I didn't have any explanations, even a word to the complaints I kept telling to two of the clinicians who were examining me" was the report of a 34 years old female patient.

Similarly, the tendency of paying less attention was reported to influence patients desire to tell what is bothering them. "I once encountered a clinician who gave less importance to problems I complained and even barely heard me," was the report of a 33 years old female patient, similarly a behavior of "disregarding and rejecting what has been complained" was reported by a 36 years old female patient.

#### **5.2.4 Information Provision**

Clinician's advice and education was found indispensable to the care and treatment process as expressed by majority of patients "if it was not for her advice besides the treatment, I wouldn't be here today" was the response of a 40 years old female patient.

Most patients have given their accounts for being provided with advices related to nutrition (what shall and shall not be eaten) and adherence (the requirement of strict drug taking behavior). A 34 years old female patient has stated this condition as "She always kept telling me to take my medicine without interrupting it"

A portion of narratives have revealed that patients were also informed on safe sexual practices, benefits and side effects of drugs (ART and Bactrim) they have been prescribed with and the risk of taking alcohol and smoking cigarette. Providing information related to meaning and reasons of laboratory investigations and explanations on problems patients have complained were reported by some patients.

Communications of laboratory test results, as being good or not good and in terms of numbers if CD<sub>4</sub> count is involved was stated by most of patients, except in some sporadic cases where it was ignored as expressed by three patients. "If the lab test is on CD<sub>4</sub>, he will

tell me the count but if it is on other conditions he will simply tell me the result as good or not good" replied a 44 years old male patient. However, the where and how about of obtaining support (social, moral or economic) is the least communicated message.

The depth with which information were communicated has been reported to vary across the treatment period of an individual patient. Most patients have stated that there exists a trend of providing much information during initiation of ART which through time fades away. According to them, the fact of being considered as knowledgeable after some time of treatment period was the possible reason for the observed condition.

Apart from the already mentioned areas on which information was conveyed by clinicians, Strength and hope are what were stated to be communicated. A 30 years old female patient affirmed this as "She made me feel good, strong and healthy and encourages me not to loose hope". Some patients also mentioned to be intrigued with the manner in which messages were conveyed. The description of a 31 years old female patient reveals this issue "He counsels me using simple and easy to understand words and slowly so as to let me capture what he is saying".

Most patients have acknowledged that clinicians were willing to respond to each and every question raised and even encourage patients to ask whatever that comes to their mind. "She encourages me to ask whatever that was not clear to me. During initiation of the treatment many things were confusing as a result I was so inquisitive but she responded with out signs of boredom" was what a 31 years old female patient expressed with this respect. On top of this some patients have indicated that clinicians spend their time asking patients back the main points that has been already discussed on treatment plan. "She asks me to tell things that I have grasped from what she has taught me about my drugs" was the account of a 40 years old female patient gave

Few patients stated their strong beliefs on seeking answers from clinicians on any thing that seems confusing and vague. This was what they referred to be their responsibility as

care recipient. "If we ask, I believe we will get answers to anything. But our failure to do so will be considered as if we know everything. I won't wait till I am offered the opportunity to ask questions..... this is my principle" responded a 44 years old male patient. To the contrary two of the respondents have revealed their fear of asking questions despite receiving information which was volunteered by the clinicians. "I am fearful for asking questions in detail" was what a 36 years old female patient responded.

Moreover, patients' expectations of detail of explanation they can obtain from clinicians during the encounters also matters in the communication process. Some patients have disclosed that nothing much was communicated than telling them to endure when they were presented with complaints that worried them very much. "I didn't get enough information as I expected. There is lack of explanation on what the problem was, why it happens....." responded a 35 years old male patient. Furthermore, patient' complaint on lack of being informed was traced to their reservations on asking what they need.

Clues on involving patients in their own care were identified from three narratives "He said to me "Lets proceed with the new drug and look for resolution of your complaints", "I let him know when my gastric symptoms resolve, to prescribe me with the Bactrim tablets" and "He let me know each and every step he took in the management of my problems" were the response of a 44 years old male, 29 years old female and a 58 years old male patients. However, majority of patients have emphasized that the clinicians know everything about them and do have the expertise to take care of their problems. "I prefer to have what ever she chooses for me." was what a 28 years old female patient responded with this respect.

### **5.2.5 Outcomes of health information exchange**

The belief of "Having understood what has been said" has prevailed in all of the narratives. Clinician's use of simple, easy to understand words and expressions was believed to be the reason. Except some patients who showed reservations to extent of their satisfaction with the information exchange process, most reported to be satisfied. "I always feel relieved

after talking to him" and "I return back home after all my concerns are taken care of" were accounts of a 29 years old female and a 44 year old male patient to express their satisfaction. "She is delighted with the changes she witnessed in me" was the expression of a 34 years old female patient when she referred the extension of satisfaction to the clinician, which was an opinion shared by few other patients. However, few replied of being dissatisfied with the information exchange process. According to them the absence of explanation to complaints or questions they have raised, judgmental attitudes displayed by clinicians, clinicians' disregard to problems presented and having encounters with new clinicians at frequent intervals over their treatment periods were instances that made them dissatisfied. "I am not satisfied for what I have been provided was not in line with my expectations" was a response of a 36 years old female patient. "A clinician who has followed you up is the one who knows much about you. You don't have to tell him what he already knows, which is the case if you encounter new faces every time." was what a 44 years old male patient reported.

### **5.2.6 Factors influencing clinical information exchange**

Except three patients who reported to solely depend upon the clinical encounter, all have revealed to have access to sources of health information outside the clinical encounter. The use of other information source has been indicated to build their knowledge on HIV/AIDS and enhance their communication with clinicians. "I read magazines, leaflets, pamphlets, listen to radio and watch television programs prepared on HIV/AIDS and other related health issues and ask people to get as much information as I can. As time is passing by; I am becoming to consider myself as health care professional" is the response of a 32 years old female patient.

## VI. DISCUSSION

This study was designed to examine HIV patients' perception of clinical communication; self reported comprehension of health information delivered by clinicians and satisfaction with the information exchange process. The influence on the mentioned variables as a result of their interaction with multiple patient, visit and clinician characteristics has been identified.

Patients have rated the elements of clinical communication such as three of the relationship building items, explanation on adherence, understandability of the clinical information provided and discussion on next steps as high, whereas they perceived elements on involvement in decisions made concerning their health and identification and enlistment of support services available to PLWHA to be low. According to response of patients in the qualitative study, communications with respect to available support services or resources are rarely done. Comparable observation were reported in a study conducted to assess patients' perception on communication with a medical team in emergency department in USA, where patients have rated two of the relationship building items (being treated with respect and shown care and concern) high and involvement in decision making low.<sup>30</sup> Support services are recognized as promoters of patients compliance to treatment plan and other preventive measures, their absence therefore will impact the mentioned areas .<sup>31</sup>

Majority of patients both in the in-depth and structured interview have expressed their increased comprehension of health information provided by clinicians and satisfaction with the exchange process. Similar findings have also been witnessed in studies conducted among HIV patients, who claimed being satisfied with clinicians who provide care to them.<sup>11,31</sup>

In the in-depth interview, patients' report of dissatisfaction with clinical communication was related to clinicians' approach (indications of loosing interest, boredom and

conducting interviews in a hurry), seeing new professionals at every encounter, lack of feedback to expressed complaints and judgmental attitude of clinicians. Clinician-patient communication was also found to be influenced by patient factors such as patients' desire for detail of information, fear of asking questions, time pressure (keeping things to self because of time). These determinants were also observed in studies conducted among HIV<sup>11,31</sup> and cancer patients<sup>20,26</sup>.

Patients' self reported health status was significantly associated with their perception of the clinical communication, comprehension of health information provided and satisfaction in the process. It was noticed that patients who referred themselves to be in a good state of health have given higher scores to the information exchange process they had with clinicians and reported higher comprehension and satisfaction. Similar finding was reported by a study on clinical communication conducted among HIV patients in USA.<sup>25</sup> Physical impairment is a factor that forms barrier in clinician-patient communication, its absence therefore increases patients' interest, concentration and appreciation of the information they are provided with, even the way it is conveyed.<sup>9</sup>

As has been shown in similar studies,<sup>25</sup> longer duration of clinician patient relationship was found to have significant association with patients' assessment of clinical communication, comprehension of health information and satisfaction. Relationships patients with chronic disease establish with clinical care providers were believed to be one type of potential support to which many patients have continual access which is believed to positively influence patient outcomes.<sup>27,31</sup> The contribution of ongoing care is immense in the care of patients with HIV, among whom adherence to HAART and patients attendance to preventive measures was found critical.<sup>11,31</sup> However, having frequent encounter with new clinicians over treatment periods may not let patients to experience the benefits of an ongoing care<sup>31</sup>, which was a reason expressed by patients participated in the in-depth interview for their dissatisfaction with the clinical communication they had.

Patients' educational status was found to be significantly associated with communication scores. Those at higher educational level perceived the information exchange process better than those at lower level. This finding is similar with what was reported in an observational study in a palliative treatment service.<sup>12</sup> Patients with lower literacy level are more likely to have problems communicating with health care providers and have less understanding of health information.<sup>1, 33</sup>

Longer visit length was found to be associated with higher communication scores and patients' satisfaction with the exchange process. A study on clinician-patient communication has also identified visit length be associated with better communication.<sup>25</sup> Likewise, in a study done on shared decision making with patients, visit length was identified as one of the many factors that influence information sharing during clinical encounters.<sup>21</sup>

Health information access outside the clinical encounter was identified as promoter of clinical communication.<sup>23</sup> However; in the present study it was associated with low communication score. Patients who do report accessing health information gave low score to the communication they had with clinicians. The observed difference could be associated with patients' prior expectation from the clinical consultation<sup>26</sup> which also noticed from the in-depth interview results, where patients have expressed unmet expectations. Patients' who receive information outside the clinical consultations on issues related to their illness or management approaches expect clarifications and even more information on areas they are pre-informed. However, clinicians' failure to do so may cause patients to be displeased with what they are provided with.

Patients' gender was noticed to influence their communication with clinicians. In the present study male patients were observed to be dissatisfied with the information they are provided with. Similar observation was noted in physician-patient communication, where female patients were found as better communicators than their male counterparts.<sup>25</sup> This

was attributed to female patients' exposure to the health care system more often than males, which gave them better experience of interacting with health care providers.<sup>32</sup>

Treatment duration with HAART unlike the duration of clinician patient relationship was observed to negatively relate to patients satisfaction. This could result from factors related to treatment process (side effects of medication or health problems experienced), or number of clinicians patients encounter over their treatment period, which was identified to be a concern for patients participated in the in-depth interview.

Care provided for increased number of patients on daily basis was found to shorten visit length and as a result compromise clinical information exchange.<sup>25</sup> However what was observed in this study is different, here an increased number of patients clinicians saw on daily basis was observed to positively relate to patients' assessment of clinical communication, comprehension of health information and satisfaction with the exchange process. Clinicians who care for increased number of patients per day were scored high in communication; patients also reported increased comprehension and satisfaction. A report of increased satisfaction by patients who were attending a busy public clinic was similar finding with the current study.<sup>11</sup>

The possible explanation for the observed circumstance would be the long term relationship established between HIV patients and clinicians, which was identified earlier as a factor that positively influence clinician-patient communication. The other reason could be patients' knowledge of clinicians' reputation which instill trust and confidence which will made them maintain positive attitude despite the amount of time they spent with clinicians.<sup>21, 23</sup>

## **VII. STRENGTH AND LIMITATIONS OF THE STUDY**

### **Strengths**

- The study has adapted a valid and reliable tool (communication assessment tool) to assess patients' impression of the clinical communication.
- Both qualitative and quantitative methods were employed, which would help to identify factors which might be unnoticed if only quantitative method is used.
- The study can give base line information on the area which was not adequately investigated so far.

### **Limitations**

- Since the study has focused in public hospitals, it might not tell the situation in private for profit and NGO hospitals in the capital.
- Mere dependence on the report of patients may not provide a clear picture of the communication process that occurs during clinical encounters, which would have been the case if observational method is also utilized.
- Lack of prior studies conducted in local context limits comparability of the study.
- Random sampling was not used to select patients included in the study.
- Making clinicians' aware of the study area before collecting patient data may have introduced bias.

## VIII. CONCLUSION

- Small proportion of patients have rated the overall clinical communication close to the optimal score (100). Elements such as relationship building, sharing information on adherence, presentation of health information in understandable manner and discussion on the next step were rated high, whereas explanations on the availability of support resources and involving patients in the decision making process were the least scored elements.
- Majority of patients have replied comprehending and being satisfied with the clinical information exchange.
- Patients' perception of the clinical communication, comprehension of health information provided by clinicians and satisfaction with the information exchange process were observed to be enhanced when patients report better state of health, are cared by clinicians who saw increased number of patients on daily basis and happened to know clinicians over long period of time.
- Higher educational status of patients and longer visit length were observed to be predictors of higher patients' perception of clinical communication and satisfaction with the process.
- Though not identified as independent predictor of the studied outcome variables, health information access outside the clinical encounter was observed to positively contribute to patients' satisfaction with health information exchange process.
- Clinicians' characteristic, such as older clinicians' age and longer clinicians' experience in the care of patients on ART were observed to be positively associated with patients' better comprehension of health information and increased satisfaction with the exchange process respectively.
- Frequent encounters with new clinicians over treatment period, judgmental attitudes displayed by clinicians and insufficient and lack of feedback to patients' request for information were reported to be the reasons for patients' dissatisfaction with clinical communication.

## **IX. RECOMMENDATION**

- Clinicians should do their utmost towards strengthening the therapeutic relationship they had with HIV patients, since this influences patients' comprehension of health information and satisfaction with the exchange process.
- Program coordinators should find ways to let patients have encounter with the same care provider (team of providers) over a treatment period since this would enhance patients' satisfaction and perception of the clinician communication as effective.
- Both program coordinators and clinicians should work together in order to increase visit length which would give patients sufficient time to communicate and as a result contribute to their satisfaction and perception of the communication process as productive.
- Clinicians' understanding of factors, which are identified to facilitate or hinder their communication with patients, should be increased in order to establish mutually satisfying relationship.
- Clinical communication skills are believed to be acquired and mastered through training and practice. Therefore responsible bodies working in the area need to make arrangements to facilitate clinicians' acquisition of the necessary communication skills in order to ensure provision of quality care.
- The effort that The Government of Ethiopia and Nongovernmental organizations working in the area of HIV/AIDS put together in making health information accessible to HIV patients should be strengthened.
- The relationship between increased number of patients seen by clinicians and the reported better health information exchange should further be investigated.
- Additional studies are needed in the area of clinician-patient communication in order to increase the evidence base in the local context for establishment of sound communication strategies which contribute to provision of quality care.

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## ANNEXES

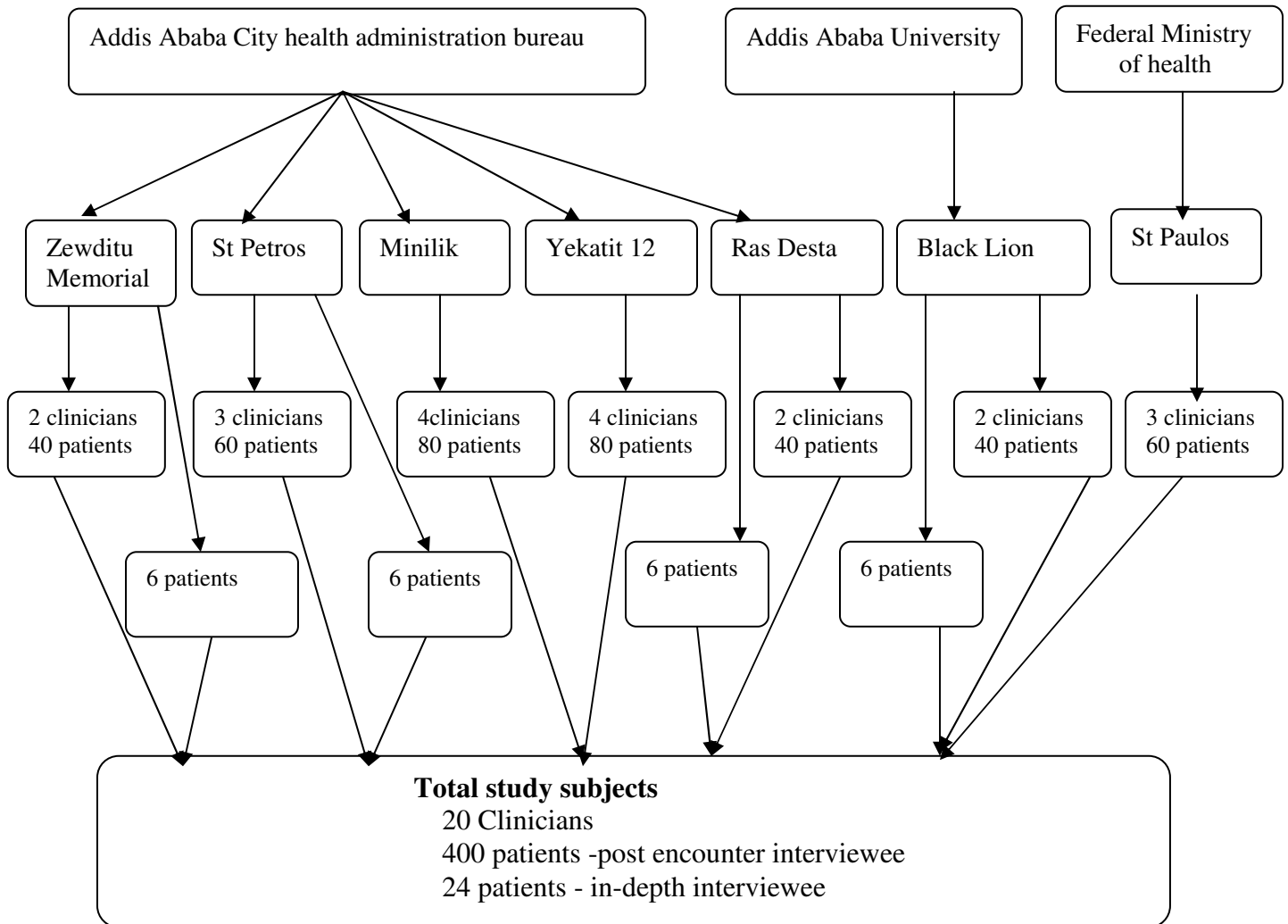
### Annex I

Table 13. Reliability test of items from patients' and clinicians questionnaires

<b>Construct</b>	<b>Number of items</b>	<b>Cronbach's alpha</b>
<b>Patients' Questionnaire</b>		
Relationship building	3	0.94
Information gathering	4	0.94
Information giving	10	0.90
Reach agreement on problems and plans	2	0.77
Providing closure	1	-
<b>Clinicians' questionnaire</b>		
Importance to information exchange	9	0.77

**Annex II**

**Schematic diagram of sampling procedure**



### **Annex III**

### **QUESTIONNAIRES**

**Addis Ababa University**  
**School of graduate studies**  
**Department of health informatics**

#### **In-Depth Interview Guide**

**Name of the hospital** \_\_\_\_\_

**Introduction:** Good Morning/Afternoon

This study is conducted by AAU, DHI to assess health information exchange between clinician and patients in ART clinics of public health institutions in Addis Ababa. It will help all stake holders to better understand how patients communicate with clinicians and what factors prevent them from communicating effectively. Moreover in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction.

You will be asked some questions about your communication with the clinician who treated you during your recent three month visits in this clinic including today's visit. There is no right or wrong answer. I would like to have many opinions and views.

All your answers will be kept completely confidential. No one else working in this facility or involved in this study will know what information you gave us.

You do not have to answer question that you do not want to answer; even you may end this interview any time you want too.

Are you willing to participate? 1. Yes → Go to the consent form

2. No → Stop

Thank you,

### **Consent Form**

I undersigned have been informed that this interview is part of the study that assesses health information exchange between clinicians and patients in ART clinics of public health institutions in Addis Ababa. I have been also told that the study will help all stakeholders to better understand how patients communicate with clinicians, what factors prevent them from communicating effectively and in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction. I am assured that confidentiality of my response is maintained. Therefore I have consented to participate in the study

Questions	Coding Categories	Code
Sex of respondent	1. Male                      2. Female	
Age(In complete years)	_____	
Educational status	1. Illiterate    2. read and write 3. Primary    4. Secondary    5. College / University	
Duration of treatment with ART	_____	
Duration of clinician patient communication	_____	

- o How do you describe your communication with health care providers in the ART clinic in terms of the relationship you build with them, the way they try to understand your problem and provide information?
- o Describe your understanding of health information provided by health care providers working in the ART clinic.
- o How do you describe your level of satisfaction with the way you exchange information with health care providers working in the ART clinic?
- o What factors do you think might affect patients' communication with health care providers in the ART clinic?
- o Do you have access to health information particularly related to HIV/AIDS outside the clinical encounter?

**Addis Ababa University**  
**School of graduate studies**  
**Department of health informatics**

**Post visit Patient Questionnaire**

**Name of the hospital** \_\_\_\_\_

<b>Checked by</b>	
<b>Supervisor's signature</b> _____	<b>Date</b> _____
<b>Investigators signature</b> _____	<b>Date</b> _____

**Introduction:**

Good Morning/Afternoon

This study is conducted by AAU, DHI to assess health information exchange between clinician and patients in ART clinics of public health institutions in Addis Ababa. It will help all stake holders to better understand how patients communicate with clinicians and what factors prevent them from communicating effectively. Moreover in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction.

You will be asked some questions about your communication with the clinician who treated you during your recent three month visits in this clinic including today's visit.

All your answers will be kept completely confidential. No one else working in this facility or involved in this study will know what information you gave us.

You do not have to answer question that you do not want to answer; even you may end this interview any time you want too.

Are you willing to participate? 1. Yes \_\_\_\_\_ → Go to the consent form

2.No \_\_\_\_\_ → Stop

Thank you,

**Consent Form**

I undersigned have been informed that this interview is part of the study that assesses health information exchange between clinicians and patients in ART clinics of public health institutions in Addis Ababa. I have been also told that the study will help all stake holders to better understand how patients communicate with clinicians, what factors prevent them from communicating effectively and in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction. I am assured that confidentiality of my response is maintained. Therefore I have consented to participate in the study

**Patient Id** \_\_\_\_\_

**Clinician's Id** \_\_\_\_\_

**Date of Interview** \_\_\_\_\_

**Section I: Socio-demographic characteristics**

No	Questions	Coding Categories	Code
101	Sex of respondent	1. Male                      2. Female	
102	Age(In complete years)	_____	
103	Educational status	1. Illiterate      2. read and write 3. Primary      4. Secondary      5. College / University.	

**Section II Elements of communication**

NO	Elements	Poor(1)	Fair (2)	Good(3)	Very good (4)	Excellent (5)
	<b>Establishing therapeutic relationship</b>					
201	Greeted me in a way that made me comfortable					
202	Treated me with respect					
203	Showed care and concern					
	<b>Gathering information</b>					
204	Understood my main health concerns					
205	Let me talk without interruption					
206	Paid attention to me (looked at me, listened carefully)					
207	Permit me to tell my ideas (perceptions) about my illness					
	<b>Giving information</b>					
208	Has explained about my illness					
209	Has explained about reasons for diagnostic tests ordered					
210	Has explained about the benefits and side effects of HAART and other prescribed drugs					
211	Has explained and reminded me about the need for adherence to HAART					
212	Told me about problems with alcohol and other substance use					
213	Has explained about nutrition					

214	Has explained about sexual life					
215	Talked in terms I could understand					
216	Checked to be sure I understood everything					
217	Encouraged me to ask question					
218	Involved me in decision as much as I wanted					
219	Identified and enlists resources and supports					
220	Discussed next step including my follow up					

**Section III. Clinical Visit characteristic**

<i>NO</i>	<i>Questions</i>	<i>Responses</i>
301	Visit length( in minutes)	
302	Duration of treatment with ART	
302	Duration of clinician patient relationship (in months)	

**Section IV,V,VI**

NO	QUESTIONS	uncertain	strongly	disagree	Agree	strongly agree
		(1)	disagree(2)	(3)	(4)	(5)
401	<b>Comprehension</b> I have understood health information provided by the clinician					
501	<b>Satisfaction</b> I am satisfied with the visits I had					
601	<b>Preference for Health decision</b> I would prefer my clinician to make health decision for me					

**Section VII Access to health information**

No	Question	Response	code
701	Do you have access to health information outside the clinical encounter	1. Yes 2. No	

**Section VIII health status**

No	Question	Response	code
801	How do you rate your health status during the recent three months period?	1. Poor 2. Fair 3. Good 4. Very good 5. Excellent	

**Addis Ababa University  
School of graduate studies  
Department of health informatics**

**Questionnaire for Clinicians**

**Name of the hospital** \_\_\_\_\_ **Date** \_\_\_\_\_

**Clinician ID** \_\_\_\_\_

<p><b>Checked by</b></p> <p><b>Supervisor's signature</b> _____ <b>Date</b> _____</p> <p><b>Investigators signature</b> _____ <b>Date</b> _____</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------

**Introduction:**

Good Morning/Afternoon

This study is conducted by AAU, DHI to assess health information exchange between clinician and patients in ART clinics of public health institutions in Addis Ababa. As it is well known clinical communication is a very important component of quality medical care.

The study will help all stake holders to better understand how patients communicate with clinicians and what factors prevent them from communicating effectively. Moreover in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction.

You will be asked some questions about the extent to which health information is communicated to patients. A sample of your patients will also be asked to provide feedback on health information they have exchanged with you on their most recent encounters with you.

All your answers will be kept completely confidential.

Thank you for your cooperation!

### **Consent Form**

I undersigned have been informed that this interview is part of the study that assesses health information exchange between clinicians and patients in ART clinics of public health institutions in Addis Ababa. I have been also told that the study will help all stakeholders to better understand how patients communicate with clinicians, what factors prevent them from communicating effectively and in the long run it would contribute to develop sound strategies that would enhance clinical communication thereby improve patients' health outcome, adherence to HAART, patient's comprehension of health information and patient's and health care provider's satisfaction. I am assured that confidentiality of my response is maintained. Therefore I have consented to participate in the study

**Section I: Socio-demographic characteristics**

<i>NO</i>	<i>Questions</i>	<i>Coding Categories</i>	<i>Code</i>
101	Sex of respondent	1. Male      2. Female	
102	Age(In complete years)		

**Clinician's Practice Characteristics**

	Questions	Coding categories	code
103	Professional category	1. General Practitioner    2. Specialist 3. Health officer            4. Nurse	
104	Length of clinical experience in care of HIV patient on HAART(in years)		
05	Average number of patients seen per day		

**Section II Attitude about health information exchange**

NO	Questions	Uncertain	Not at all	Less	Important	Extremely
		(1)	important	important	(4)	important
		(2)	(3)	(4)	(5)	(5)
201	Explain the reasons for medical tests ordered					
202	Explain the benefits and side effects of drugs					
203	Explain to patients about their illness					
204	Acknowledge and respond to patient's perception, ideas about their illness					
205	Involve patients in decision as much as they want					

**አዲስ አበባ ዩኒቨርሲቲ  
ድህረ ምረቃ ትምህርት ቤት  
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**ከህክምና በኋላ ለህመማን የሚቀርብ ጥልቅ ቃለ-መጠይቅ**

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መግቢያ

ጠፍ ይስጥልኝ እኔ ስሜ -----ይባላል

ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ የሚደረግ ነው፡፡ የጥናቱ አላማ በአዲስ አበባ ከተማ ፀረ HIV ህክምና አገልግሎት የሚሰጡ የመንግስት ሆስፒታሎች ወስጥ በህክምና ባለሙያዎችና ታካሚዎች መሀከል የሚደረገውን የጠፍ የሚገኝ ልወወጥ ሂደትን ለመገምገም ነው፡፡ ይህም ሁሉም ባለደርሻ አካላት ያለውን የሚገኝ ልወወጥ ሂደትና ሂደቱን ሊያበለፅጉ ወይም ሊገደቡ የሚችሉ ሁኔታዎችን በበለጠ እንዲረዱ ያግዛል፡፡ በተጨማሪም የጥናቱ ግኝት ለወደፊቱ በህመማን የጠፍ ሁኔታ ፣ ሚዲያ አረዳድ፣ መድሀኒት አወሳሰድና በመቻላቸው ግንኙነት ላይ ያለውን እርካታ ለማሻሻል፤ በመንግስት ተቋማት ወስጥ የተሻሉና ወጠታማ የሚገኝ ልወወጥ ስልቶችን ለመዘርጋት አስተዋፅዖ ይኖረዋል፡፡

በዚህ መሰረት በዚህ ሆስፒታል ወስጥ ያለውን የጠፍ ሚዲያ ልወወጥ ሂደት ለማወቅ ያስችል ዘንድ እርስዎ ህክምና ከሚደርግሎት የህክምና ባለሙያ ጋር ባለፉት ሶስት ወራት ጊዜ ወስጥ የዛሬውን ጨምሮ አድርገውት የነበረውን ወይይት ይዘት እጠይቅዎታለሁ፡፡

በቅድሚያ ግን ማንኛውም የሚጠየቅ ሚዲያ ሚስጥራዊነት የተጠበቀ መሆኑን ልንልፅልዎት እወዳለሁ፡፡ በዚህ የጠፍ ተቋም ወስጥም ሆነ በጥናቱ ላይ የሚሰጡ ሌላ ሰው እርስዎ የሰጡትን ሚዲያ አያወቅም፡፡ ለዚህም ሲባል በመጠይቁ ላይ ስምዎን ወይም የእርስዎ ማምነት ሊገልፅ የሚችል ማንኛውም ሚዲያ አይሞላም፡፡

የሚጠየቅ ማንኛውም አስተያየት ጠቃሚ ነው፡፡ ሰፊ ያለ አስተያየት መገኘታችን በጉዳዩ ላይ ያለን ግንዛቤ በእጅጉ እንዲጨምር ይረዳናል፡፡

ለመጣሰ ፈቃደኛ የማይሆኑበትን ጥያቄ እንዲያልፎት ሚግ ይችላሉ፡፡ ቃለ መጠይቁንም ቢሆን በማንኛውም ጊዜ ማቆም ይችላሉ፡፡

በቃለ-መጠይቁ ላይ ለመሳተፍ ፈቃደኛ ነዎት?

- 1. አዎ  $\longrightarrow$  ወደ ፈቃደኝነት ሚጋገጫ ቅፅ
- 2. አይደለም  $\longrightarrow$  አቁም

አመሰግናለሁ፡፡

**ፈቃደኝነት ሚጋገጫ ቅፅ**

እኔ በዚህ ቃለ-መጠይቅ ላይ እንደሳተፍ ስጠዎቅ ቃለ-መጠይቁ በአዲስ አበባ ከተማ ፀረ HIV ህክምና አገልግሎት የሚሰጡ የመንግስት ሆስፒታሎች ውስጥ በህክምና ባለሙያዎችና ታካሚዎች መሀከል የሚደረገውን የጠፍ የሚገኝ ልወወጥ ሂደትን ለመገምገም የሚከላከል ጥናት አካል እንደሆነ ተነግሮኛል፡፡ ጥናቱ ሁሉም ባለደርሻ አካላት ያለውን የሚገኝ ልወወጥ ሂደትና ሂደቱን ሊያበላሹ ወይም ሊገደቡ የሚችሉ ሁኔታዎችን በበለጠ እንዲረዱና ለወደፊቱም በህመማን የጠፍ ሁኔታ ፣ ሚገኝ አረዳድ፣ መድሀኒት አወሳሰድና በመያዣ ግንኙነት ላይ ያለውን እርካታ ለማሻሻል፤ በመንግስት ተቋማት ውስጥ የተሻሉና ወጠታማ የሚገኝ ልወወጥ ስልቶችን ለመዘርጋት አስተዋፅዖ እንደሚያረው ተብራርቶልኛል፡፡

እኔም የምሥጠውም ሚገኝ ሚኒስቴርነት እንደሚጠበቅ ተረጋግጦልኛል፡፡ በዚህም መሠረት በቃለ-መጠይቁ ላይ ለመሳተፍ ሙሉ ፈቃድኛ መሆኔን አረጋግጣለሁ፡፡

**የጥልቅ ቃለ መጠይቅ ጥያቄዎች**

የታ	1.ወንድ	2.ሴት	ኮድ
ዕድሜ			
የትምህርት ደረጃ	1. ያልተማረ 3. የመጀመሪያ ደረጃ 4. ሁለተኛ ደረጃ	2. ማንበብና መጻፍ 5. ኮሌጅ/ዩኒቨርሲቲ	
ፀረ HIV መድሃኒቶችን መወሰድ ከጀመሩ ምን ያህል ጊዜ ሆኖት? (በወራት)			
ከህክምና ባለሙያው ጋ የሚቀመጡት ጊዜ (በወራት)			

1. በ ART ከሊኒኩ ወስጥ ህክምና ከሰጡት ባለሙያ ጋ ያሉትን የመረጃ ልወወጥ ሂደት ሞያዊ ግንኙነት ከመፍጠር፣ ችግሮችን ለመረዳት ከሚደረገው ጥረት ፍ አስፈላጊውን መረጃ ከመስጠት አንፃር፣ እንዴት ይመለከቱታል?
2. በ ART ከሊኒኩ ወስጥ ህክምና የሰጡት ባለሙያ የሚሰጡትን ጠፍቶችን የተመለከተ መረጃ የአረዳድ ሁኔታዎች እንዴት ይገልፁታል?
3. በ ART ከሊኒኩ ወስጥ ህክምና ከሰጡት ባለሙያ ጋ ባሉት የመረጃ ልወወጥ ሂደት ላይ ያሉትን እርካታ ቢገልፁልን፡፡
4. በ ART ከሊኒኩ አገልግሎት አሰጣጥ ጠፍቶችን በተመለከተ በሚደረጉ ወሳኔዎች ላይ የመሳተፍ ሂደት ምን ይመስላል?
5. በ ART ከሊኒኩ ወስጥ ከህክምና ባለሙያዎች ጋ ያሉት የመረጃ ልወወጥ ሂደት ላይ ተፅዕኖ አላቸው የሚላቸው ነገሮች ካሉ ቢጠቁሙ፡፡
6. ከሆስፒታሉ ከሚገኙት ጠፍቶች የተመለከተ መረጃ ወጪ ከተለያዩ አወቃራት መረጃ ያገኛሉ?

**አዲስ አበባ ዩኒቨርሲቲ  
ድህረ ምረቃ ትምህርት ቤት  
ሄልዝ ኢንፎርሜሽን ሲፓርትመንት**

**ከህክምና በህዋላ ለህመማን የሚቀርብ ቃለ-መጠይቅ**

የሆስፒታሉ ስም-----

ያረጋገጠው ሰው የቅርብ ተቆጣጣሪ ስም----- ፊርማ----- ቀን----- ----- ጥናቱ ባለቤት ፊርማ----- ቀን-----
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መግቢያ  
 በጽ ይስጥልኝ እኔ ስሜ -----ይባላል

ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ የሚደረግ ነው፡፡ የጥናቱ አላማ በአዲስ አበባ ከተማ ፀረ HIV ህክምና አገልግሎት የሚሰጡ የመንግስት ሆስፒታሎች ወስጥ በህክምና ባለሙያዎችና ታካሚዎች መሃከል የሚደረገውን የጠፍ የሚጃ ልወወጥ ሂደትን ለመገምገም ነው፡፡ ይህም ሁሉም ባለደርሻ አካላት ያለውን የሚጃ ልወወጥ ሂደትና ሂደቱን ሊያበለፅጉ ወይም ሊገደቡ የሚችሉ ሁኔታዎችን በበለጠ እንዲረዱ ያግዛል፡፡ በተጨማሪም የጥናቱ ግኝት ለወደፊቱ በህመማን የጠፍ ሁኔታ ፣ ሚጃ አረዳድ፣ መድሀኒት አወሳሰድና በመቆየት ግንኙነት ላይ ያለውን እርካታ ለማሻሻል፣ በመንግስት ተቋማት ወስጥ የተሻሉና ወጠታማ የሚጃ ልወወጥ ስልቶችን ለመዘርጋት አስተዋፅዖ ይኖረዋል፡፡

በዚህ መሰረት በዚህ ሆስፒታል ወስጥ ያለውን የጠፍ የሚጃ ልወወጥ ሂደት ለማወቅ ያስችል ዘንድ እርስዎ ህክምና ከሚደርግሎት የህክምና ባለሙያ ጋር ባለፉት ሶስት ወራት ጊዜ ወስጥ የዛሬውን ጨምሮ አድርገውት የነበረውን ወይይት ይዘት እጠይቅዎታለሁ፡፡

በቅድሚያ ግን ማንኛውም የሚጠየቅ ሚጃ ማስጠራቂያነት የተጠበቀ መሆኑን ልገልፅልዎት እወዳለሁ፡፡ በዚህ የጠፍ ተቋም ወስጥም ሆነ በጥናቱ ላይ የሚሰጡ ሌላ ሰው እርስዎ የሰጡትን ሚጃ አያወቅም፡፡ ለዚህም ሲባል በመጠይቁ ላይ ስምዎን ወይም የእርስዎ ስምን ሊገልፅ የሚችል ማንኛውም ሚጃ አይሞላም፡፡

ለመላክ ፈቃደኛ የማይሆኑበትን ጥያቄ እንዲያልፍት ሚግ ይችላሉ፡፡ ቃለ መጠይቁንም ቢሆን በማንኛውም ጊዜ ማቆም ይችላሉ፡፡

- በቃለ-መጠይቁ ላይ ለመሳተፍ ፈቃደኛ ነዎት?
1. አዎ → ወደ ፈቃደኝነት ሚጋገግ ጫ ቅፅ
  2. አይደለም → አቁም

አመሰግናለሁ፡፡

**ፈቃደኝነት ማረጋገጫ ቅፅ**

እኔ በዚህ ቃለ-መጠይቅ ላይ እንደሳተፍ ስጠዎቅ ቃለ-መጠይቁ በአዲስ አበባ ከተማ ፀረ HIV ህክምና አገልግሎት የሚሰጡ የመንግስት ሆስፒታሎች ውስጥ በህክምና ባለሞያዎችና ታካሚዎች መካከል የሚደረገውን የጠፍ የሚገኝ ልወወጥ ሂደትን ለመገምገም የሚከላከሉ ጥናት አካል እንደሆነ ተነግሮኛል፡፡ ጥናቱ ሁሉም ባለደርሻ አካላት ያለውን የሚገኝ ልወወጥ ሂደትና ሂደቱን ሊያበላሹ ወይም ሊገደቡ የሚችሉ ሁኔታዎችን በበለጠ እንዲረዱና ለወደፊቱም በህመማት የጠፍ ሁኔታ ፣ ሚዲያ አረዳድ፣ መድሀኒት አወሳሰድና በመያዣ ግንኙነት ላይ ያለውን እርካታ ለማሻሻል፣ በመንግስት ተቋማት ውስጥ የተሻሉና ወጠታማ የሚገኝ ልወወጥ ስልቶችን ለመዘርጋት አስተዋፅዖ እንደሚያረው ተብራርቶልኛል፡፡

እኔም የምሥጠው ሚዲያ ሚኒስቴርነት እንደሚጠበቅ ተረጋግጦልኛል፡፡ በዚህም መሠረት በቃለ-መጠይቁ ላይ ለመሳተፍ ሙሉ ፈቃደኛ መሆኔን አረጋግጣለሁ፡፡

የታካሚው መ/ቁጥር..... . የህክምና ባለዎት መ/ቁጥር..... .

ቃለ-መጠይቁ የተካሄደበት ቀን..... .

ክፍል 1

ተ.ቁ	ጥያቄ	አማራጭ	ኮድ
101	የታካሚው	1.ወንድ 2.ሴት	
102	ዕድሜ		
103	የትምህርት ደረጃ	1. ያልተማረ 2. ማንበብና መጻፍ 3. የመጀመሪያ ደረጃ 4. ሁለተኛ ደረጃ 5. ኮሌጅ/ዩኒቨርሲቲ	

ክፍል 2 የሚገኝ ልወወጥ ክፍሎች

ተ.ቁ	በህክምና ባለሙያዎችና ታካሚዎች መካከል የሚፈጠር መደብ ግንኙነት	ዝቅትኛ (1)	ደህና (2)	ጥሩ (3)	በጥሩ (4)	እግር (5)
201	ወደ መመዘኛ መሪዎች ክፍል ስገባ በጥሩ ሁኔታ ተቀብሎታል/ላኛለች					
202	በአክብሮት አስተናግጦት/ኛለች					
203	ለረዳኝ/ልትረዳኝ ፍላጎት አሳይቷል/ታለች					
	<b>ሚገኝ አሰባሰብ</b>					
204	ዋናዎቹን የጠፍ ችግሮቹን (ሥጋቶቹን) ተረድቶታል/ታለች					
205	ያለመቆየት ሀሳቤን እንደገልፀ አድርጎታል/ኛለች					
206	መላ ትኩረቱን ሰጥቶ አዳምጦታል/ጠገኛለች					
207	ስለህመሙ ያለኝን አመለካከት እንደናገር አድል ሰጥቶኝ/ታኝ ነበር					
	<b>ሚገኝ አሰባሰብ</b>					
208	ስለ ህመሙ ሁኔታ ማብራሪያ ሰጥቶታል/ታለች					
209	የታዘዘልኝ የላቦራቶሪ ምርመራዎች ምንነትና ምክንያት አስረድቶታል/ታለች					
210	ስለታዘዘልኝ ፀረ HIV እና ሌሎች መድኃኒቶች ጥቅምና የጎንዮሽ ጉዳት ገለጻ አድርጎታል/ታለች					
211	ፀረ HIV መድኃኒቶች ሳይቆረጡ መወሰድ እንደሚገባቸው አስረድቶታል/ታለች (አስታወሶታል/ላኛለች)					
212	መጠጥና ሌሎች ሱስ ለያስይዙ የሚችሉ እያችን የመጠቀም ጉዳት አስረድቶታል/ታለች					
213	የአመጋገብ ሁኔታዬ ምን መሆን እንዳለበት አስረድቶታል/ታለች					
214	የመኖሪኝ የታወቀ ግንኙነት ምን መሆን እንዳለበት አስረድቶታል/ታለች					
215	በቀላሉ ልረዳው የምትለወጡ ቃላት/ቋንቋ በመጠቀም አስረድቶታል/ታለች					
216	የተነገረኝን ሁሉ መረዳቴን አረጋግጧል/ጠለች					

217	ጥያቄዎችን እንድጠይቅ አበረታቶኛል/ታኛለች				
	<b>በህክምና ሂደቱ ላይ ስምምነት</b>				
218	ጠፍቼን በተመለከተ በሚደረጉ ወሳኔዎች ላይ አንድሳተፍ አበረታቶኛል/ታኛለች				
219	እርዳታና ድጋፍ ላገኝባቸው የምችልባቸውን መንገዶች ጠቅሞኛል/ማኛለች				
	<b>መዝጊያ</b>				
220	በሚቀጥለው የህክምና ሂደት ላይ ተነጋግረናል				

ክፍል 3 የህክምና ቆይታ ሁኔታ

ተ.ቁ	ጥያቄ	
301	ከህክምና ባለሙያው ጋ የቆዩበት ጊዜ (በደቂቃ)	
302	ፀረ HIV መድኃኒቶችን መወሰድ ከጀመሩ ምን ያህል ጊዜ ሆኖት? (በወራት)	
302	ዕድሜክህክምና ባለሙያው ጋ የሚቀመጡበት ጊዜ (በወራት)	

ክፍል 4፣ 5፣ 6

ተ.ቁ	ጥያቄ	እርግጠኛ አይደለም (1)	በጣም አልስማማም (2)	አልስማማም (3)	አስማማለሁ (4)	በጣም አስማማለሁ (5)
401	<b>መረጃ አረዳድ</b> ጠፍቼን በተመለከተ የተሰጠኝን መረጃዎች በደንብ ተረድቻለሁ					
501	<b>በመረጃ አሰጣጥ ላይ እርካታ</b> በተሰጠኝ መረጃ ተደስቻለሁ					
601	<b>ወሳኔ አሰጣጥ ላይ ያለ ፍላጎት</b> ዋናዎቹን የጠፍ ችግሮቼን (ሥጋቶቼን) ተረድቶኛል/ታኛለች					

ክፍል 7 ምናም 8

	መረጃ የማግኘት ሁኔታ	አማራጭ	ኮድ
701	ከሆስፒታሉ ከሚገኙት ጠፍን የተመለከተ መረጃ ወጪ ከተለያዩ አወታራት መረጃ ያገኛሉ?	1. አዎ 2. አይደለም	
801	<b>የጠፍ ሁኔታ</b> ባለፉት ሶስት ወራት ጊዜ ውስጥ የዛሬውን ጠፍ የጠፍዎትን ሁኔታ እንዴት ይገልፁታል?	1. ዝቅተኛ 2. ደህና 3. ጥሩ 4. በጣም ጥሩ 5. እ.በ.ጥሩ	