LIVED EXPERIENCES OF POOR FOOD CONSUMPTION AMONG ART CLIENTS IN BUTAJIRA TOWN, GURAGHAE DISTRICT, ETHIOPIA.

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A RESEARCH REPORT SUBMITTED TO DEPARTMENT OF HEALTH EDUCATION AND BEHAVIORAL SCIENCE, COLLEGE OF HEALTH SCIENCES, JIMMA UNIVERSITY; IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS OF PUBLIC HEALTH IN HEALTH EDUCATION AND PROMOTION.

MAY, 2016

JIMMA, ETHEOPIA

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Abstract

Background: Both AIDS and malnutrition are important killers in sub-Saharan Africa. WHO indicated that poor food consumption and food insecurity may disturb individual's nutritional state and also affects adherence to antiretroviral drugs thus hindering management of the disease.

Objective: The purpose of this study is to explore poor food consumption and adherence experiences of ART clients in Guraghae District of Butajira Town, 2015 G.C.

Method: Phenomenological qualitative approach was used to explore lived experiences of ten poor food consumers of ART clients who have small composite score of food consumption. Criteria based sampling method was used to select the sample. Data was collected using interview guide, and ethical principles of voluntary participation and confidentiality was considered throughout the study. Field note and recorder was used and prolonged engagement was kept all over data collection. Data collection was terminated when saturation reached and analyze was supported by Atlas.ti software version 7. Data was broken down into discrete parts, closely examined and compared for similarities and differences

Result: Most of the participants' perception about balance diet was misunderstood. Majority of the participants believed that their food consumption condition became poor as a result of lack of asset, low level income, illness, large family size, food consumption increment due to ART, loss of partner and insufficient support. All of the participants mentioned that food scarcity is their main problem that worsens the illness condition, side effect of ART, emotional behavior and forget-ness of the participants which then lead them to non- adherence of ART. Attempts such as searching sources of food, fixing to less preferred and cheap food, skipping meal and using their more time on work were used by the participants as copying mechanism.

Conclusion: Households of the participants were low income and their family size was large in relative to their income. Mostly they were sicken and lost their fixed asset including their home for their survival. Majority of them were windowed, faced difficulty to survive their household burden. The supports were not consistent and sufficient to overcome the food scarcity condition of the clients. Their food scarcity worsens their illness condition, side effect of ART, emotional behavior and forget-ness of the participants which then lead them to non- adherence of ART. Their copying mechanisms such as searching food, skipping meal and giving their children for source of income were not safe for their healthy life.

Keywords: Food scarcity, Poor food consumption, and ART adherence

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Treatment
CD_4	Cluster of Differentiation 4
FANTA	Food and Nutrition Technical Assistance Project
FAO	Food and Agriculture Organization of the United Nations
FCS	Food Consumption Score
HIV	Human Immunodeficiency Virus
NGO	Non-governmental organization
PLHIV	People Living with HIV
SNNPR	Southern Nations Nationalities and Peoples Region
UNAIDS	United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

1.1 Background

Currently HIV has become the second biggest cause of death for adolescents globally and the number one cause in Africa (1). UNAIDS estimated that 35 million people were living with HIV in the world at the end of 2013. The highest number of people living with HIV was in sub-Saharan Africa - 24.7 million. In Africa nearly half of all adolescents living with HIV are in just six countries: South Africa (15%), Nigeria (8%), Tanzania (7%), Kenya (7%), Ethiopia (7%), and India (6%). In Ethiopia, the Prevalence of HIV is 1.25%. Higher HIV prevalence is in urban areas (3.3%) than rural (0.5%). A total of 722,747 (146,495 children) are estimated to be living with HIV: 279,987 are male and 442,760 (61.3%) are female (2).

Food and Agriculture Organization of the United Nations (FAO) recent estimates indicate that, globally, around one in eight people are likely to have suffered from chronic hunger, not having enough food for an active and healthy life. The vast majority of hungry people, about 827 million, live in developing regions. While sub-Saharan Africa has the highest prevalence of undernourishment about 222.7 million people (24.8%). In Ethiopia some 2.7 million people are facing Crisis and Emergency food security conditions (3).

Maintaining adequate food consumption and nutrient intake levels and meeting the special nutritional needs to cope up with the HIV/AIDS and the ART are critical for PLWHA to achieve the full benefit of such a treatment (4, 5). Adherence is defined as taking medications or interventions correctly according to prescription. There are different methods for assessing adherence and the level of adherence is specific not only to places and patient groups but also to the method of adherence measurement used (6). One of the key targets in the declaration of the 2011 United Nations General Assembly Special Session (UNGASS) on HIV/AIDS was to increase access to antiretroviral therapy to get 15 million people on life-saving treatment by 2015 (7).

Reviews of pharmacy records as well as pill counts can provide valuable information about adherence. Qualitative evaluations of adherence can more effectively identify barriers to optimal medication taking but can be more difficult and time-consuming for health-care providers as well as children and/or their caregivers. These evaluations focus on obtaining descriptions of impediments to adherence or problems encountered. Furthermore, the assessment of adherence can be complicated by diverging reports between children and caregivers, as well as by the limited availability of information when the caregivers bringing children to clinics are not the ones responsible for supervising ART administration (8).

In addition to the assessment of adherence, ongoing support for adherence is a vital component of successful treatment. Practical aids can be helpful, including the use of calendars, pillboxes, blister packs and labeled syringes. Directly observed therapy (DOT) and the use of treatment buddies or partners have been successful in some settings, but such strategies have not been widely studied in the paediatric population. Community and psychological support can be critical for caregivers as well as children and peer support groups may be particularly beneficial for mothers with young children on ART. Adherence may vary with time: families may have periods when adherence is excellent and other periods when it fails, often because of changing life circumstances. Adherence may also suffer as the child responds to therapy, health improves and the impetus to take daily medication decreases (9).

1.2. Statement of the problem

ART regimens require 70-90% adherence in order to be effective. Lack of adherence results in: inadequate suppression of the virus and viral replication, low potency of the antiretroviral regimens, and pharmacokinetic interactions causing inadequate drug delivery (4, 5). Poor food consumption may disturb individual's nutritional state and also affects adherence to antiretroviral drugs thus hindering management of the disease (10).

Lack of access to food may lead to inadequate dietary diversity and insufficient consumption of micronutrients. It is important to realize that poor food consumption can lead to malnutrition and, if prolonged, even death. Malnourishment in adults can lead to poor productive capacity and frequent sickness; these have severe economic effects on the household, leading to poor food access (3).

PLHIVs have additional energy requirements due to HIV, opportunistic infections, nutrient mal absorption, and altered metabolism. When asymptomatic (WHO stage 1), HIV-positive adults need to increase energy intake by 10 percent over the level of energy intake recommended for healthy non-HIV-infected persons of the same age, sex, and physical activity level. In the presence of symptoms (WHO stage 2 and above), HIV-positive adults need to increase energy intake by 20 to 30 percent over the level of energy intake recommended for healthy non-HIV-infected persons of the same age, sex, and physical activity level (11, 12).

Micronutrient deficiencies are common in areas where HIV is prevalent. PLHIVs often suffer from micronutrient deficiencies, which potentially compromise their immune function and, in turn, their ability to fight infection (11). Lack of sufficient food in the diet has negative effects on HIV by impacting ability to take antiretroviral medications in a number of ways, including causing symptoms of nausea while taking medications on an empty stomach. Adequate dietary intake and absorption are therefore essential for achieving the full benefits of ART (12). The combined impacts of poor food consumption and HIV/ AIDS place further strain on limited household resources and affect family members, struggling to meet household food needs (13).

According to Butajira Town of Health Office second quarter report of 2015, currently there are 412 PLHIVs in the Town and 305 PLHVs are on ART. Although there are intervention plans by

government and NGO to support PLHIV clients, still 327 PLHIV clients are registered as they need food support. Instead of devoting to use their potential and creating their own sustainable work, most of them have been waiting support from other bodies. This shows that how much this group of the society is affected by food problem. Obviously their food consumption condition became poor; in which their adherence to ART drug also influenced. So describing their poor food consumption and adherence experiences of ART clients will have great outcome to alleviate the problem.

1.3. Significance of the Study

Even though there are increasing numbers of interventions to address poor food consumption and adherence problems in high HIV/ AIDS prevalence settings, there is little empirical evidence about the effectiveness of such programs in improving nutrition and sustainable access to food by targeted populations.

Moreover there is no sufficient exploration research done on poor food consumption and adherence specific to ART clients in the Ethiopia and study area context. Describing poor food consumption and adherence experiences and exploring coping mechanisms will benefit in defining strategies to allow the early identification of people at risk and to recommend appropriate intervention to the study population. Then after ART clients can get the chance to secure their sustainable food, to adhere the treatment. In addition the finding of the research will be used by other investigator as initiative for further study.

CHAPTER TWO: LITRATURE REVIEW

The study on a pilot randomized trial of nutritional supplements in food insecure patients receiving ART in Zambia show that food insecurity occurs more often in PLHIV as the majority of HIV infections occur in the most productive section of the population **(**14). Although Ethiopia has come a long way in reducing poverty and food insecurity, widespread poverty and food insecurity still persist. The country is prone to drought, which has serious implications on food security as most of the agriculture is dependent on rain. More importantly, structural factors such as land degradation, population pressure, undeveloped farm technology, low levels of household assets and limited opportunities to diversify income make millions of Ethiopians vulnerable to food insecurity (15).

A Cross sectional study done on Assessment of Adult Nutritional Status and Associated Factors among ART Users in East Wollega Zone of Ethiopia shows income and poverty (due to unemployment, low wages, or lack of education) can lead to household poor food consumption, inadequate care, "unhealthy household environment, and lack of health services. People of low socioeconomic status are most vulnerable to food insecurity since purchasing power serves as a main determinant of the ability-to-afford nutritional food sources. The probable reason may be; presence of opportunistic infection, lack of dietary counseling and the difference of study period and difference in the study population (16).

A study on barriers to nutrition management among PLHIV on Antiretroviral Therapy show that PLHIV emphasized their limited financial and physical access to food as a barrier to following nutrition recommendations received from healthcare providers (17). A study on impact of nutrition and fish supplementation on the response to ART shows that body building nutrients such as proteins, vitamins and minerals are expensive and hence usually deficient in the regular diet of the poor. Understandably, HIV/AIDS affected households are worse off due to the vicious cycle of low productivity due to ill health or care giving, causing poor production, leading to poor food consumption and increased vulnerability to disease and infection, which in turn leads to lower productivity again (18).

Insufficient dietary intake of food, mal absorption, diarrhea, impaired storage of nutrients and altered metabolism are ways that HIV infection can escalate malnutrition, which in turn prevents the body from fighting off infection and increases risk to further infection (19). An explorative qualitative study on Food Insecurity among HIV Sero-Positive Patients in South Africa showed that most of the participants do not even know what a well- balanced diet is and types of food that they are supposed to eat (20).

According to a cross sectional study on food insecurity and associated factors among HIV-infected individuals receiving highly active antiretroviral therapy in Jimma zone Southwest Ethiopia, three variables were found to be predictors of food insecurity status of PLWHA. Individuals with educational level of elementary or lesser were 3.10 times more likely to be food insecure than those who had higher educational status. Average family monthly income was the other predictor of food insecurity; families earning less than 100 USD were 13.1 times more likely to be food insecure and individuals with low food diversity were 2.18 times more likely to be food insecure than those who had high food diversity (21).

A study on HIV/AIDS and food and nutrition security: Interactions and response in America show that the inability to afford nutritionally adequate and safe foods is fairly common among people living with HIV, and is a barrier that has become recognized as an important cause of worse health outcomes among HIV-positive individuals (22).

A study in Uganda on poor food consumption as a barrier to sustained ART adherence show that poor food consumption was common and an important barrier to accessing medical care and ARV adherence. Five mechanisms emerged for how food insecurity can contribute to ARV non-adherence and treatment interruptions or to postponing ARV initiation: 1) ARVs increased appetite and led to intolerable hunger in the absence of food; 2) Side effects of ARVs were exacerbated in the absence of food; 3) Participants believed they should skip doses or not start on ARVs at all if they could not afford the added nutritional burden; 4) Competing demands between costs of food and medical expenses led people either to default from treatment, or to give up food and wages to get medications; 5) While working for food for long days in the fields, participants sometimes forgot medication doses. Despite these obstacles, many participants still reported high ARV adherence and exceptional motivation to continue therapy. In sub- Saharan

Africa, adherences to ARVs are not sustainable in the presence of widespread poverty and food insecurity. Therefore the link between food insecurity and poor ARV outcomes further heightens the importance of addressing lack of food as part of comprehensive care among HIV-infected individuals. A study also find out as those HIV-infected participants described defaulting from treatment when food was scarce because they could not tolerate the increased hunger they experienced on ART. In addition, some individuals were reluctant to initiate ART in the first place, for fear of experiencing hunger without access to an adequate diet (23).

A study on a pilot randomized trial of nutritional supplements in food insecure patients receiving ART in Zambia show that about (39.0%) of the respondents were malnourished from those interrupted ART treatment. But from those not interrupted treatment, (24.5%) were malnourished. This shows interrupting treatment had a significant effect on the nutritional status of the study subject **(**14). This study is also supported by a manual on Nutrition and HIV/AIDS for healthcare workers in the Caribbean is that in some PLHIV, starting antiretroviral therapy may result in increased appetite (24).

A qualitative study in Kenya on social determinants, lived experiences, and consequences of household food insecurity among persons living with HIV/AIDS show that PLHIV have complained that taking pills on an empty stomach led to headaches, stomach pain, dizziness, shivers or tremors, loss of energy, fainting, sweating, and rapid heartbeat. This mechanism of worsened ART side effects in the absence of food contributing to ART non-adherence has been reported in a variety of settings (25).

Study in Zambia on A pilot randomized trial of nutritional supplements in food insecure patients receiving ART found that interventions using supplements or food at time of ART commencement may improve treatment outcomes and providing food support to food insecure patients' increased ART adherence by 40% and increased weight during the first 6 months of treatment **(**14).

A Study on Review of Evidence; Linkages between Livelihood, Food Security, Economic Strengthening, and HIV-Related Outcomes show that food insecurity, hunger, and the need to earn money are barriers to care and treatment of PLHIV are supported by more rigorous methods that quantify the strength of these associations. These provide sufficient evidence to suggest that

food security and economic strengthening interventions linked with HIV/AIDS treatment care and support services may improve the health outcomes of PLHIV and household food security for PLHIV (26).

A study in urban areas of Uganda on poor food consumption status in households of people living with HIV/AIDS, 95% of households reported that they sometimes or often had to eat less preferred foods, 62% reported that sometimes or often all household members had to skip meals, and 22% reported that sometimes or often all household members did not eat for an entire day (27).

CHAPTER THREE: OBJECTIVE

General Objective:

To explore lived experience of ART clients' poor food consumption and ART drug adherence in Butajira Town of Guraghae District, Ethiopia, 2016.

Specific Objective:

- To describe poor food consumption experience of ART clients in Guraghae District of Butajira Town.
- To explain effect of poor food consumption on ART drug adherence experience of ART clients in Butajira Town.
- To explore coping mechanisms of poor food consumption by ART clients in Guraghae District of Butajira Town.

CHAPTER FOUR: METHDOLOGY

4.1 Study area and period:

The study area is Butajira town of Guraghae zone in SNNP region. For administrative purpose the town is divided in to two sub city and five kebele. It is located 135 km south of Addis Ababa and 48 km to the west of Zeway town in the Rift Valley. The town has latitude of 08°09′N and longitude of 38°22′E, and an elevation of 2000 to 2400 meters above sea level. It has an annual rainfall of 900 to 1400mm. The area of the town is 1854.24 Hectares. It is surrounded by Meskan woreda. It was part of former Meskan Mareko woreda. Based on the 2007 Census conducted by the CSA, this town has a total population of 48,609 of whom 24, 625 are men and 23,984 women.

Butajira is one of 15 towns of Guraghae Zone with electrical power; telephone and postal service are on place. The town has one governmental general hospital, one private general hospital, one private ophthalmic hospital, one government health center; twelve private medium clinics, two governmental pharmacies, and five private pharmacies that are providing services to the communities. Drinkable water is provided by 4 boreholes. The town has a weekly large market on Friday.

The main wet season occurs between June and October, with the remaining months predominantly dry. Day-time temperatures are typically between 20-30 oC, with night-time temperatures falling close to freezing at higher altitudes. The lowland areas are drought prone and have been affected during the main droughts in Ethiopia. The study was conducted from November /2015 – February/2016 G.C.

4.2 Study Design

The study design was phenomenological qualitative approach. The purpose of phenomenological qualitative studies is to describe particular phenomena, or the appearance of things, as lived experience and find meaning or used in cases about which there is little knowledge available (28). The experiences of poor food consumption and adherence among ART clients who are on ART at Butajira town were explored. Researcher describes and documented lived experiences of the participants.

4.3 Source and Study populations

Source of population was ART clients of Butajira Town. Study population was ART clients whose food consumption is poor.

4.4 Sample size and Sampling technique

At minimum ten ART clients whose food consumption is poor were selected to participate in the study. ART clients whose food consumption is poor were assessed using food consumption score template, the most commonly used food consumption indicator to assess the quantity and/or quality of people's diets (6) .I.e. Households of ART clients were asked to recall the foods that they consumed in the previous seven days. Each item was given a score of 0 to 7, depending on the number of days on which it was consumed. For each food group weight was assigned, reflecting its nutrient density. Then the household FCS was calculated for each household by multiplying each food group frequency by each food group weight, and the scores summed into one composite score. The household score was compared with pre-established thresholds that indicate the status of the household's food consumption.

According to WFP, composite score of 0 to 21 for household's food consumption is poor food consumption (29)**.** Therefore ART clients in which their household's food consumption score are 0 to 21 were considered as study population. Information about source of food was considered together with their consumption score. The source of food indicator is not reflective of quantities, but is useful for describing the relative importance of specific sources (such as own production, purchased in stores, gifts from friends, etc.) in the population. The research was conducted at their home.

Since the aim is to understand and describe a particular Phenomenon from the perspective of those who experienced more, the sample of the study population were selected using criterion sampling; those whose households' composite score is low.

4.5 Data collection techniques

Investigator was considered as human instrument. Socio-demographic data was collected using closed-ended questionnaire. Lived experiences of poor food consumption and adherence data were collected using open ended interview method and recorded in the form of field notes.

Mobile records (audio) were used to collect data. Discussions were preceded in a relaxed and conversational manner with probe. Data collection was terminated when saturation reached.

4.6 Data processing and analysis:

Data was transcribed and imported to the ATLAS.ti 7.1 version software. The analysis started early at the time of data collection and all data were interpreted. Analyze of data was supported by ATLAS.ti 7.1 version software using Open Coding method whereby data was broken down into discrete parts, closely examined and compared for similarities and differences. I.e., themes and sub themes were developed from the data.

4.7 Trustworthiness

Credibility was assured through keeping consistence of procedures and the neutrality of investigator about findings or decisions. Data collection sessions involved only those who are genuinely willing to take part and prepared to offer data freely (*Ensure honesty in participants*). The investigator was stayed in the field until data saturation occurs to gain adequate understanding of the situation *(Prolonged Engagement)*. A similar status colleague who is outside the context of the study and who has a general understanding of the nature of the study was invited to ensure real detachment of researcher *(Peer Debriefing).* Audio recorder and field note was used to accurately capture respondents' articulation to test the analysis and interpretation against the documents (*Referential adequacy)*. More over previous research findings and existing body of knowledge was examined for compatibility of the findings.

Sufficient and detail descriptions of data in context and report with precision was organized to allow judgments about transferability to be made by the reader *(Thick Description)*. Moreover purposively selected ART clients whose households' composite score of food consumption was very small as study population can maximize the range of specific information that was obtained from and about that context *(Purposive Sampling).*

As mentioned in the credibility part, full description of research methodology was provided to Advisors to ensure dependability and raw data was tape recorded during interview to guarantee conformability.

4.8. Operational definition

In this study poor food consumption among ART clients refers to ART clients who are unable to consume sufficient quantity and quality of food on a consistence basis, I.e. Patients having poor food consumption score, and not having sufficient resources to obtain appropriate food. Food scarcity refers to lack of access to food of sufficient quality and quantity to perform usual daily activities, which then lead to poor consumption of food to the clients.

4.9. Ethical Consideration

The proposal was presented to Department of Health Education and Behavioral Science, College of Public Health and Medical Sciences, Jimma University. Approval was granted from research Ethics Committee. Permission was taken from Guraghae district health department.

4.10. Informed consent

Participants were given full information about the purpose of the study using the language that they understood. Ethical principles of voluntary participation, informed consent, confidentiality was considered throughout the study.

4.11. Dissemination of finding

The study findings will be presented to Department of Health Education and Behavioral Sciences of Jimma University and to the respective officials as Guraghae Zone Health Department, Butajira Town Officials, NGOs working on PLHIVs and PLHIV association. Hard copy of the study report will be addressed to the relevant organization including Jimma University, Butajira health institution.

CHAPTER FIVE: RESULT

1. Socio Demographic characteristics of study participants

Socio-demographic data was collected using closed-ended questionnaire and ten ART clients whose household's food consumption is poor were interviewed. Out of ten participants eight of them are female. The mean ages of participants were 39, the mean numbers of participants' children were 3.3 and the mean income of participants was 398.80; which is so small and even can't cover the house rent cost of the client. Out of ten in-depth interviewed participants, eight (80%) participants had no education, one (10%) participant was completed primary school and one (10%) participant was educated secondary school. From the perspective of marital status, out of ten participants one of them was divorced, two of them were married and seven of them were widowed. Out of interviewed participants, half of them were Orthodox and half of others were protestant by religion. By ethnicity, six of them are gurage, two of them are Oromo, one is Amhara and the remaining one is Silte. By their Occupation, four of them were daily labor, four of them were trader, and two of them were employer.

Table-1: Socio Demographic characteristics of study participants

Code no	age	sex	Marital status	religion	Ethnic group	Educational status	Occupation	Income	Parity
p1	47	M	Married	protestant	Gurage	first cycle	Employer	688	4
p2	35	F	Married	Orthodox	Gurage	No Education	Daily labor	200	3
p3	35	F	Divorced	Orthodox	Gurage	No Education	Daily labor	400	5
p4	37	F	Widowed	protestant	Oromo	No Education	Trader	200	2
p5	45	F	widowed	Orthodox	Gurage	No Education	Daily labor	200	1
p6	30	F	widowed	protestant	Gurage	No Education	Employer	500	3
p7	40	F	widowed	protestant	Silte	No Education	Trader	300	7
p8	40	M	widowed	Orthodox	Gurage	No Education	Daily labor	600	1
p9	41	F	widowed	protestant	Amhara	Second cycle	trader	400	3
p10	40	F	widowed	Orthodox	Oromo	No Education	Trader	500	4

2. Lived Experiences of Poor food Consumption among ART Clients

Although there are so many factors, poor food consumption is known as the major influence in people with HIV, and comprises lack of access to food of sufficient quality and quantity to perform usual daily activities. It may disturb individual's nutritional state and also affects adherence to antiretroviral drugs thus hindering management of the disease. Therefore it is important to realize that poor food consumption can lead to malnutrition and, if prolonged, even death. Here the researcher explored the experiences of poor food consumed ART clients who's household food consumption score were below 21 and the lowest ones. Totally 133 ART users were screened as their food consumption is poor and their households' food consumption score were calculated. Out of 133 ART users that screened as food unsecured, 37 of them scored below 21 and assured as they have poor food consumption. Of thus, ten of them who's FCS were the lowest are selected and they interviewed to share their experiences. Generally four themes are emerged from the participants' experiences; Perceived meaning of balance diet, vulnerability to poor food consumption, adherence experiences and copying mechanisms.

2.1. Perceived Meaning of Balanced diet

Participants' experiences related to meaning of balanced diet were explored in detail. Half of the participants had misperception about balance diet. I.e. quality (nutrient type) and quantity including frequency of food they needed to take is not well understood.

2.1.1. Miss perception about quality of food

Half of the participants assumed that all item of food have the same nutrient types and some others also explained the nutrient content of food in wrong way. They also responded that nutrient content of food as can't alter by preparation of food. Therefore the quality of food that is needed for survival is not understood in appropriate manner. A 40 year aged participant said:

> *"I don't know what mean by balanced diet, is it may be eating of excess food! … I assume as all types of food are equally important and I eat what I got in my home. … Preparing food means cooking it in appropriate manner. If foods are not heated well, it can create abdominal crumb."*

A 47 year aged participant said:

> *"… The function of egg, milk and meat is for vitamin A and cabbage is vitamin C…."*

2.1.2. Perception about quantity of food

Some of the participants also didn't describe the importance of taking adequate amount food for their healthy life. They assume as they are food secured if they got a little food with water before their medication or if they got food once per day. Their intension was on creating good condition to take their medication; not on getting adequate food. Therefore the amount and frequency of food that is important to survival is not considered in appropriate manner. A 35 year aged female participant said:

"... If we got little food and we drunken water, our abdomen become 'shefe'- to mean stable. *But if I am not accessed with that, I become forceless and lied on earth…."*

"...I was taking my medication two times per day so that if I took small food before my medication everything became ok..."

A 41 year aged participant said:

"... Of course thanks to God we can't slip without eating at list once per day…."

2.2. Vulnerability to Poor Food Consumption

Most of the participants described themselves as their food consumption is poor. They raised so many concepts for how their food consumption became poor. According to their explanation the main reason for their poor food consumption was their low capability to get adequate food. They believed that their low capability to get adequate food is as results of their low level income, illness, large family size, food consumption increment, loss of partner, insufficient support and loss of their asset. Moreover for their low level income they responded concepts related to low starting capital, low wage, workless ness, non-diversification of income and discrimination. Here each of concepts is discussed in detail and explained how it contribute to poor food consumption and worsen the condition.

2.2.1. Low level Income

The entire participants mentioned that their low level income is one of important determinant that take a great share for their poor food consumption. Experiences related to non-diversification of income, workless ness, low wage, low starting capital and discrimination were raised as the main problems they encountered to improve their low income.

Non-diversification of income and workless ness

Most of the participants shared that involving in only one work can't enhance to increase the income of the household, so that members of the household couldn't survive the inflation of market and secure their food. So they believed that it is important if income diversification of the household is maintained to secure their food. A 30 year aged female participant said:

"It is difficult to survive inflation of the market by only one work as source of income. So it is mandatory to diversify our source of income to overcome our food problems…"

A 35 year aged female participant said:

"We are not farmer so everything can be retrieved form market with their inflation cost. Since I am house maid, the only income source of the household is my husband who is daily labor. It is difficult to satisfy the dietary needs of the household members by his income only. Even my husband can't forward the money he got, because he is addicted with alcohol. So the current situation of our life is not good….." crying.

Low wage

Few of the participants also mentioned that the wage paid them is so low that couldn't consider the marketing condition of the season. They explained that even as it couldn't cover their home rent and child care costs. So they believed as it will be good if employers considered the situation and pay appropriate wage to improve the food consumption problem of the ART clients. A 30 year aged female participant said:

"… It is my obligation to keep mine and my sons' soul. But the problem is that I paid 500.00 birr only per month for my fulltime services I provided, which is so small that can't cover even my house rent and my child care costs. So it will be good if private employer considered the marketing situation and pay appropriate wage."

Low starting capital

Some of the participants mentioned that low starting capital couldn't enhance them to use their potential and involve in profitable work. So they believed that if their starting capital were appropriate and able to involve in comprehensive work, they would resolve their poor food consumption.

A 37 year aged female participant said:

"… in some extent I tried to sustain my life. It is the cumulative effect of this and other supports that I becoming alive. I worked without worrying about credit. Of course my working capital is

so small that means if I had better starting capital on my hand, I became profitable and create my sustainable life."

Discrimination

Few of the participants also mentioned that discrimination were another contributor of our poor food consumption. They said that once they were identified as HIV positive, no one could buy their products.

A 35 year aged female participant said:

"Even if I tried to improve my daily income via income generating intervention like trading 'enjiera', they knew me as HIV positive person so that they didn't buy me."

2.2.2. **Illness**

Most of the participants described that their illness disallow to work and earn money for their survival, and exposed to extra expenses so that they became low income and faced difficulty to get adequate food. A 35 year aged female participant said:

"… If I was healthy and I worked 'enjera' for even hotels, I could get 1000 to 2000 birr and I could save money. Since my illness confronted me to do so, I forced to do incoherent work to get a little food for my medication and even for my survival. Know I am living a hand to mouth life. Lack of food became a series problem for me."

Even some of the participants shared that due to their illness they became workless ness. Then they exposed to poor food consumption. A 30 year aged female participant also said:

"Inability to work is the main reason that I am not able to overcome my food problem. Previously, I remember that you by representing GZDA bought me 'teff' and I attempted to do 'enjera'. Immediately my body effected with 'almaze balechera' and I became sick for around two month. Due to this the work become unable to continue and I used that teff for home consumption. Currently I have nothing to do."

2.2.3. **Family Size**

Most of the participants shared that large family size of the house hold in which ART client exist can aggravate the food consumption problems. They explained that under inadequate food

condition, having children is a difficult thing to survive burden. They lived for their child and gave priority to them for food consumption; lead them to take their medication even without food. A 47 aged male respondent mentioned that:

"Both of us are ART users and our family number is four. I am guardian and my income is the only source of my household's income. Moreover children's school fee and house rent payment are another burden that aggravates the food insecurity situation of my family. … I feel so much and I criticize myself and it is my pray to my God to overcome this problem."

2.2.4. **Starting ART**

Most of the participants shared that starting ART had have a great benefit in recovering their health problems although it aggravate the scarcity of food situation by increasing the appetite of the clients. So starting ART increases the need for food consumption under inadequate food condition of the clients and worsens the poor consumption of food among ART users. A 35year aged female participant explained that:

"… Before starting ART I didn't feel hungry, however after I started it my appetite for food became increase seriously and aggravate our food insecurity situation. Previously I worked 'areqe', local alcohol as income generating activities. After my husband died, I tried to involve in whatever type of works as like daily laborer and sanitarian. Almost all of the income that I got from daily labor is paid to house rent; no money would remain on my hand. …"

2.2.5. **Insufficient Support**

Most of the participants assumed that Supports that are provided from government and others are not enough and sufficient to recover the food scarcity of ART clients. They mentioned that free ART service and plump net supports were given by the government. Moreover, Grant in kind, Seed money, Sanitation kits, and Training supports were given by few NGOs especially from Gurage Zone Development Association. A 35 aged female respondent mentioned that:

"From the government side only medication (ART) and plump net supports are available for us. Of course getting ART service freely is not a simple support, I like to thank for their consideration because if ART is not accessed to us we may not alive still. However once we became exhausted and identified as the one affected by food deficiency, plump net support can be given to us depending on our level of malnutrition. But after that no sustainable support can be given to us. From NGO, Guraghae zone development association is the one that supports us in IGA to improve our household income, sanitation material and trainings. Even this is also not

sustainable and not enough to resolve the overall problems of us. Some times when I become hungered, I ask to my friends to give me food."

2.2.6. **Loss of Partner**

Most of the participants who's their husbands died due to HIV described that they were exposed to food scarcity due to shortage of income following the death of their husbands. They also explained that they became challenged to pay home rent and care their children once their partner was widowed or divorced. So that they didn't get adequate amount of food for their survival and faced under problem of poor food consumption. A 37 aged female respondent mentioned that:

"When my husband was alive, I didn't worry about food. He gave me money for everything that I need for my house. Once he died… I challenged to get money for home rent as well as for food. I became homeless with my two children of which one is malformed. Then after, the earth became twisted over me. Everything became difficult for me and I gave my healthy elder son to one respectable person. Then I tried to live with my malformed son on veranda. Oh my God! I had a long history; I don't want to rehearse back to this history. Crying…"

2.2.7. **Lack of Asset**

Few of the participants described that they sold their asset when they faced food scarcity or when they became sick and unable to survive the condition. Due to this, few of them lost their fixed asset like home and land. So that their productivity became lower and their expenditure like for home rent increased, as a result they exposed to poor food consumption. Therefore few of them assumed that lack of asset is either one that contributes to their poor food condition or aggravate the non-survival of the situation. A 45 aged female respondent mentioned that:

"…when I didn't get sufficient amount of food, I became sick and I challenged to survive the side effect of ART. It is at this time that I sealed my assets for consumption purpose like as cattle and small land that I had at rural area near to Butajira at which my families lived. Currently we don't have any asset that we can sale either for our survival of insufficient food or to change our life situation. Moreover living home is another important asset which has its own influence in our struggling for survival."

2.3. **Adherence Experiences under inadequate food condition**

Majority of the participants mentioned that food scarcity is their main problem that worsens the illness condition, side effect of ART and emotional behavior of the participants; which then lead them to not adherence their medication.

2.3.1. **Illness**

Most of the participants mentioned that their illness in any way disturbs their adherence. They mentioned that due to lack of food their food consumption became poor; illness became serious and faced difficulty to survive the pain. As the result they decide to stop ART even though they recognized the risk. A 40 aged male respondent said:

"The main problem is my illness. If I am healthy for one month, I become seek for the next month. So that I didn't get adequate food and I couldn't survive the pain of my sickness; I decide to stop taking ART."

2.3.2. **Side Effect of ART**

Most of the participants shared that side effects of ART were one of the challenges in adhering ART. They also shared that side effects of ART were aggravated under poor food consumption condition and lead to them other burden and non-adherence. They explained that when they took ART in absence of food, they feel burning of epigastric area, Headache, vomiting, balance problem and totally discomfort. So that they were forced to stope to take medication in rare case or miss to take ART at exact time even though they knew the benefits of surviving side effect and adherence. A 37 aged female respondent mentioned that:

"After I started ART, there exist great differences in my potential as compared to before ART. I assumed it as the difference b/n earth and sky. Once I started ART, thanks to God I became well. I assumed that God come to earth to cure me. However I feel headache, vomiting, balance problem, false slipping when glided on earth and gastric burn cumulatively discomfort me. Due to this side effect, in rare case I miss to take my medication at exact time."

A 45year aged female participant explained that:

"If I took ART without enough food my body became burned twenty four hours. I couldn't sleep. I didn't sleep, the day turned over me. I continuously tried to take water to overcome the situation, even currently I am not in good health……. I drunks a lot of water and bathed my body to cool my temperature frequently. I know a lot of my colloquies who stopped to take ART and became bedridden in the hospital. When things became above my control and fear of side effects under inadequate food condition, I also stopped to take ART until I got a little bit food."

A 35year aged female participant said:

"… But until eight years from which I started ART, I have been given bacterium as a result of less number of CD4 cells that I have recorded. Most of my friends can take bacterium for short period of time. Since there is no change on my immunity level, I forced to use bacterium continuously, which is another burden as a result of lack of food."

2.3.3. **Emotional or Nervousness Behavior**

Some of the participants explained that their poor food consumption condition worsen their emotional or nervousness behavior; as the result they decide to stop their medication. A 41year aged male participant explained that:

"My wife is very emotional person, when she felt anything she become frail to take the tablet. She is so sick person so that she needs smooth foods like milk and egg, but our capacity is poor and we can't get these foods. If she didn't get this food, she can't survive the side effect and continue to overthrow the tablet. Finally she has been given glucose at list for up to three days, her health become retrieved and tried to take the medication. The situation is continuing in this manner repeatedly, you can imagine how much life is difficult for us."

2.3.4. **Forgetting**

Few of the participants also shared that poor food consumption also worsened forgetting condition of ART users and hinder adherence of ART. They explained that under inadequate condition of food they became unconscious and they stopped to take their medication at appropriate time. A 30 year aged female participant said:

"…. Sometimes when faced deficiency of food, I became unconscious and forget to take my medication at appropriate time."

2.4. **Copying Mechanisms**

Copying mechanisms experiences of all participants that were shared includes searching food support, fixing to less preferred and cheap food and skipping meal

2.4.1. **Searching food support**

Most of participants responded that they used so many mechanisms to get food for their survival. Some of their means used to get food were: asking support from near friends and neighbors, asking support from any organization, giving their children for source of income, asking and collecting 'offa'- excessive food collected from hotels, asking credit, eating at employer home, and asking family support. They also responded that food supply together with ART can

alleviate the problem of non-adherence especially for those of who became recurrently sick and have low potential to do work. A 30 year aged female participant said:

"Even if I didn't eat food in my house, I would ate my breakfast and lunch at this home and I took two enjera to my home for dinner every day. …… if my problem is seriously I got to my family at 'meqicho' near to Butajira and I took whatever things that exist in the home like maize and other. If I am not healthy I would send my son to my family."

"For those of us who have relatively better potential to do work, it is good if we are supported according to need assessment. However for others who couldn't be involved in such work like elders and OVCs, they should need food supports."

A 37 year aged female participant said:

"When I have nothing on my hand to buy or cook food, I would go to my neighbor and explain them as I and my child have no food to take ART. Then after they gave me food or at least I drank coffee, they are not as such boorish. In addition to these, if I invited to take coffee in the morning by neighbor, I could shift my breakfast portion to lunch. If anyone invited me for lunch, I could transfer my lunch allotment to dinner."

2.4.2. **Less preferable and cheap foods**

Some of the participants shared that they purchased less preferable and cheap foods while they faced shortage of money to fulfill the food need of the household. A 40 year aged female participant said:

"In most case I tried to fix challenges by resource that I has on my hand. Moreover I tried to purchase less preferred and cheap food.

2.4.3. **Skipping Meal**

Some of the participants responded that when they faced food scarcity or shortage of money to bought food and have no alternative to get it, they skipped to take their meal. A 35year aged female participant said:

"… mostly if I didn't get money to bought even 'qoqer' for my son, I send her to school without giving any food. I advised her as she needs to go to school and as I would prepare food if I got any access while she turned back; rather as she will burden the situation."

A 45year aged female participant explained that:

"Even I couldn't like to go simple anyone's house, sometimes I prefer to took coffee and remained in my home to pass the day. You couldn't speak everything that you encountered. Even

if I didn't get anything, I stayed with my inconvenience; for whom I could tell? No one could give you if you asked money."

A 40year aged female participant explained that:

"I tried to sale 'baqella ashuqe' at 'teje bet' to cover our daily consumption. Sometimes I asked support from the church and they gave me wheat and maize. When things became out of our control, I tried to jump my meal."

2.4.4. **Using their time appropriately for work**

Few of the participants also explained that using their time appropriately either for their work or searching for work is an important thing to survive food problem. They shared that they didn't take more time at any ceremonials event and they gave more priority for their work.

A 37 year aged female participant said:

"… I use my time appropriately; I didn't kill my time at lamentation, wedding, coffee ceremony and the like cultural events. Let I shares you one thing which wasn't shared to anyone before, I gave my time priority for my work that means it is in this way I become relatively productivity…"

CHAPTER SIX: DISCUSSION

This study tried to explore poor food consumption and adherence lived experiences of ART users on the hope that it will help to define strategies for early identification of people at risk and to improve the outcome of ART. The study has, therefore, identified four emerged themes and 22 sub- themes that were categorized under four themes. The four themes that are emerged from the participants' experiences were perceived meaning of balance diet, vulnerability to poor food consumption, adherence experiences and copying mechanisms.

This study revealed that half the participants' perception about balance diet and food insecurity was misunderstood. Therefore, it is difficult to expect participants should make their attempt to overcome their problem of food consumption and able to take their medication with this misconception. An explorative qualitative study on Food Insecurity among HIV Sero-Positive Patients in South Africa support the data as most of the participants do not even know what a well- balanced diet is and types of food that they are supposed to eat (20).

Important finding which need due consideration in this study is the exploration of food scarcity experiences of participants. Majority of the participants shared that they sold their asset for survival purpose and thus worsen their food scarcity condition; they used their low income for home rent and faced a great challenge to secure their food. Therefore asset can plays a great role for the survival of poor food consumption condition of ART user; either serves as source of income or enhance to minimize the expanses. Study on Ethiopia Comprehensive Food Security and Vulnerability Analysis (CFSVA) by Ethiopia Central

Statistical Agency and the World Food Programme support the data as structural factors such as low levels of household assets make millions of Ethiopians vulnerable to food insecurity (15).

The finding also shows that low level income among ART users aggravate the vulnerability to food scarcity. Experiences related to non-diversification of income show as contribute to low income of the participants. Majority of the participants became faced difficulty in surviving food scarcity condition since they had no sustainable work. It is difficult to fulfill the necessary food regularly without assuring permanent income of the participants. Moreover, low wage and low starting capital shouldn't enhance them to survive inflation of good and worsen the food scarcity condition. Discrimination is another problem mentioned as enhances to low income and contribute to the food shortage of ART users. A study made on Adult Nutritional Status among ART Users in East Wollega Zone of Ethiopia also shows low income can lead to household inadequate food and food insecurity, inadequate care, "unhealthy household environment, and lack of health services. (16).

Illness of participants was another important mentioned problem that contributes to the poor food consumption condition of the participants; it allows them either not to work or hinder their ability to work. So if they are not healthy and not stayed on work, they didn't have better income and then lead to difficulty to secure their food. Even they also exposed to extra expenses, so that their struggle to survive the condition became more challenging. Family sizes of their house hold was also explored as one of the problem that makes them more vulnerable to food scarcity. Of course this condition became serious under low income condition of the household. As the family size of the household increased; their food consumption also increased and worsen inadequacy of food. Study on impact of nutrition and fish supplementation on the response to ART also shows that HIV/AIDS affected households are worse off due to the vicious cycle of low productivity due to ill health or care giving, causing poor production, leading to food insecurity and increased vulnerability to disease and infection, which in turn leads to lower productivity again (18).

Finding also addressed that starting ART under inadequate food condition of the clients increases the need to food consumption and magnifies the food scarcity condition. I.e. Starting ART increases the appetite of the participants and led them to consume more food under inadequate food condition; aggravate the shortage food. These data is supported by a manual on Nutrition

and HIV/AIDS for healthcare workers in the Caribbean is that in some PLHIV, starting antiretroviral therapy may result in increased appetite (24). Another study also says HIV-positive adults need to increase energy intake by 10 to 30 percent over the level of energy intake recommended for healthy non-HIV-infected persons of the same age, sex, and physical activity level (11, 12).

The study also found supports that were provided from organizations are not enough and sufficient to alleviate the food scarcity problem of participants. Although there are few supports from governmental and non-governmental organizations, it is not in organized and sustainable ways. So that it is difficult to empower the economic condition of the clients and secured their food without appropriate and sustainable supports. Moreover, Most of the participants who's their husbands widowed due to HIV described that they were exposed to food scarcity due to shortage of income following the death of their husbands. So it is fair to say that ART clients who's their husband died can be more affected by food scarcity.

This study found that Illness in ART clients were not only affecting the income and food scarcity condition but also disturbs adherence of ART. PLHIV clients are more vulnerable to opportunistic diseases and became sick. Moreover side effect of ART by itself again added another illness; obviously this problem became also serious if ART is taken without inadequate food. This condition doubled the burden and they faced difficulty to survive the pain and retain adherence. Additionally emotional or nervousness behavior of ART clients worsens the side effect and resulted forgetting, so that hindering adherence of ART. A qualitative study in Kenya on lived experiences, and consequences of household food insecurity among persons living with HIV/AIDS also show that PLHIV have complained that taking pills on an empty stomach led to headaches, stomach pain, dizziness, shivers or tremors, loss of energy, fainting, sweating, and rapid heartbeat. This mechanism of worsened ART side effects in the absence of food contributing to ART non-adherence has been reported in a variety of settings (25). Another study also find out as those HIV-infected participants described defaulting from treatment when food was scarce because they could not tolerate the increased hunger they experienced on ART. In addition, some individuals were reluctant to initiate ART in the first place, for fear of experiencing hunger without access to an adequate diet (23).

The study also revealed that searching food support through different means like as; asking support from family, near friends, neighbors and organization were used as coping mechanism by

the participants. It is not an easy task and not difficult to imagine how much ART clients are facing food problem; if this situation is prolonged they will be challenged to survive the problem. Sometimes they collect 'offa'- excessive food from hotels, which is full of contamination and is risk to their health were used as copying mechanism. A study in sub- Saharan Africa also shows that adherences to ARVs are not sustainable in the presence of widespread poverty and food insecurity. Therefore the link between food scarcity and poor ARV outcomes further heightens the importance of addressing food scarcity as part of comprehensive care among HIV-infected individuals. (23). Another study in Zambia on A pilot randomized trial of nutritional supplements in food insecure patients receiving ART also found that interventions using supplements or food at time of ART commencement may improve treatment outcomes and providing food support to food insecure patients' increased ART adherence by 40% and increased weight during the first 6 months of treatment (14).

The finding also shows that fixing them to less preferred and cheap food were used as copying mechanism. Here also it is difficult to get appropriate nutrients that are important for our body building. Moreover when there is no alternative to get food they skipped their meal as means of copying mechanisms. Although they didn't want to detach from their children, others few also give their children as source of income. A study in urban areas of Uganda on food security status in households of people living with HIV/AIDS also reported that they sometimes or often had to eat less preferred foods, sometimes or often all household members had to skip meals or did not eat for an entire day (27).

Others few also tried to use their more time for the work in which they were subjected instead of spending more time at social and ceremonial condition. According to their description, they tried to resist their bashfulness and spent appropriate time on their work. It is in this way that they try to cope the worsen ness of the condition.

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CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1 Conclusion

Based on this study's findings the following are concluded.

Participants' perception about balance diet was misunderstood. The poor food consumption condition of ART users were as a result of their low income due to working with low seed money, focusing on a single and non- profitable work, workless ness of the clients, and low wage they paid. Moreover as the family size of ART clients' household increased, the amount of food needed for consumption also increased and the food scarcity condition of them became a serious problem. In addition, due to their low resistance to diseases ART clients became sick repeatedly and thus aggravate their food scarcity condition. ART users who lost their partner come to be low income household and they are more affected by food problem. Although there are economic empowerment intervention were provided to poor food consumed ART clients, the supports were not consistent and sufficient to overcome the food scarcity condition of the clients. As ART users sold their fixed asset, they also exposed to food scarcity and became poor food consumption.

Participants food scarcity worsens their illness, side effect of ART, emotional behavior and forget-ness of the participants which then lead them to non- adherence of ART. Their copying mechanisms such as searching food, fixing them to less preferred and cheap food, skipping meal and giving their children for source of income were not safe for their healthy life.

7.2 Recommendation

The supports given by the government and NGOs should be sufficient and sustainable to alleviate clients' problems. Food supply, economic strengthening interventions and family planning should be linked with ART care and support services to improve the health outcomes of ART clients. It should be good if ART clients whose their food consumption is poor will be given priority for kebele house rent to improve the health outcomes of ART. Moreover it should be advisable for participants to use their time appropriately for work rather than spending their more time on different ceremonial situation like coffee, mourning and wedding ceremonies.

7.3. Limitation

- Quantity of each food group consumed per day is not considered in the FCS template for categorizing the participants either as their food consumption is poor or not.
- Only the seven day food consumption of the participants were considered to label the participants as their food consumption is poor. I.e. how long the participants are on poor food consumption were not considered.
- There may be recall bias by the participants when they responded their seven day food consumption.

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ANNEXES

Annex A - food Consumption Score Template

Jimma University, College Of Health Sciences, Department of Health Education and Behavioral Science

Explore Lived Experience of poor food consumption among ART clientsin Guraghae district of Butajira town, Ethiopia.

Template for calculating the food consumption score (FCS)

No	Food item	Food group	Weight(A)	Days eaten in past 7 days (B)	Score A x B
1	Maize, rice, sorghum, millet, bread and other cereals	Cereals and tubers	2		
2	Cassava, potatoes and sweet potatoes				
3	Beans, peas, groundnuts and cashew nuts	Pulses	3		
4	Vegetables, relish and leaves	Vegetables	1		
5	Fruits	Fruit	1		
6	Beef, goat, poultry, pork, eggs and fish	Meat and fish	4		

7	Milk, yoghurt and other dairy products	Milk	4		
8	Sugar and sugar products	Sugar	0.5		
9	Oils, fats and butter	Oil	0.5		
Composite score					

Annex B – Consent Form

JIMMA UNIVERSITY

COLLEGE OF HEALTH SCIENCES,

DEPARTMENT OF HEALTH EDUCATION AND BEHAVIORAL SCIENCE

Interview Guide to Explore Lived Experience of poor food consumption among ART clients in Guraghae district of Butajira town, Ethiopia.

Consent Form

Good morning/good afternoon?

How are you? My name is Mekonnen Tamiru

I am from Jimma University Master of Public Health in Health Education and Promotion students. As part of our academic requirements, we are expected to conduct a research. I am interested to explore the lived experience of food insecurity among ART clients in Guraghae district of Butajira Town. This is important in defining strategies to allow the early identification of people at risk and intervention. Participation in the study is completely voluntary based. Your answer is completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you tell me. You do not have to answer any questions that you don't want to answer and you may terminate this interview at any time you want to. You will be

asked Socio demographic questions first and then interview follow. Interview takes about 1-1.5 hours.

May I continue?

1. Yes---------- continue the interview
2. No---------- stops the interview

Annex C - Interview Guide

IDENTIFICATION

Kebele _____ House Number _____ Identification number _____

Section I. Socio Demographic Questions

S.	Questions	Answers	Remark
101	Sex of respondents	1. Female 2. Male	
102	How old are you?	_____	
103	Your relationship to the house hold	1. Head 2. Spouse 3. Son/ daughter 99. Other----------	
104	What is your marital status	1. Married 2. Single 3. Widowed 4. Separated 5. Divorced	
105	What is your religion?	1. Muslim 2. Protestant 3.Orthodox 99.Others	
106	What is your Ethnic group?	1. Guraghae 2. Amhara 3. Oromo 4. Wolita 5. Sidama 99. Other specify---	
107	What is your educational	1. Illiterate 2. Primary education	

	status?	3. Secondary educ. 3. certificate and above	
108	What is your Occupation?	1.House wife 2.Government employee 3. Private/NGO 4. merchant 5. house maid 6.daily laborer 99.other----------	
109	What is your household monthly income?	_____	

Section Two: In-depth Interview Guide

201. Can you tell me what do you know about food and nutrition

Probe: Nutritional Categories of the food, priority of food, substitution of food, preparation of food, and energy/calorie of food

202. Is there any additional food necessary for PLHIV/ ART clients as compared to other healthy person in the same situation? If yes can you explain?

203. Would you tell me about your general dietary practices before and after starting ART?

Probe: food security situation, source of food, yours household monthly income and Resources you have?

204. Can you tell me about how you become faced scarcity of food?

Probe: when did you think that you become food unsecured? What do you feel for your chance as becoming the one?

205. Would you tell me the support that you got from gov'tal and non gov'tal organizations and the change on your life?

Probe: support of family, neighbor, associations, religious? What was your attempt?

206. Can you explain what change you attained by the attempt made on food scarcity?

Probe: In your perspective what make it difficult to conquer?

207. Would you think that getting inadequate food can have an influence on adherence of ART? If so can you explain me how?

208. What coping mechanisms do you use at time of challenge?

Probes: What do you do when you don’t have enough food, and don’t have enough money to buy food? Tell me any other mechanisms which are important in your opinion but not tried by you?

Annex D - Amharic Version Consent Form

[illegible]

[illegible] / [illegible]

[illegible] ART [illegible]

[illegible]

[illegible] / [illegible]!

[illegible] / [illegible] ART [illegible]

[illegible]

[illegible]?

1. [illegible]---------------- [illegible]

2. [illegible]----------------- [illegible]

[illegible] ______________________

[illegible]- [illegible]

[illegible] ____________________ [illegible]

[illegible]

[illegible]

[illegible]

[illegible]- [illegible]

[illegible]

[illegible] ________________________ [illegible] ______________________

[illegible] [illegible] [illegible]----------------------- [illegible]---------------------

[illegible]

1. [illegible] ____________________ [illegible]------------- [illegible] ______________

2. [illegible] ____________________ [illegible]------------- [illegible] ______________

3. [illegible] ____________________ [illegible]------------- [illegible] ______________

Annex E - Amharic Version Interview Guide

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104	□□□□□□□□□□□□?	1. □□□/□ 2. □□□□/□ 3.□□□□□ 4. □□	
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106	□□□□□ □□□□ □□?	1. □□□ 2. □□□ 3. □□□ 4. □□□□ 5. □□□ 99. □□---	
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108	□□□ □□□?	1.□□□□□□□ 2.□□□□□□□□□□ 3. □□□□□□ □□□□ □□□□ □□□□ 4. □□□ 5. □□□□□□□ 6.□□□□□□□ 99.□□----------	
109	□□□□□□□□□□□□□?	_____	

[illegible]: [illegible]

201. [illegible]?

[illegible]: [illegible]?

202. [illegible]/ [illegible]? [illegible]?

203. ART [illegible]?

[illegible]: [illegible]?

204. [illegible]?

[illegible]: [illegible]? [illegible]?

205. [illegible]?

[illegible]: [illegible]?

206. [illegible]?

[illegible]: [illegible]?

207. [illegible]? [illegible]?

208. [illegible]?

[illegible]: [illegible]? [illegible]?

Annex F - Amharic Version Interview Guide **Food Consumption Score Template**

[illegible]

[illegible]/[illegible]

[illegible] ART [illegible]

[illegible]

(Template for calculating the food consumption score)

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8	□□□□ □□□□ □□□□	□□□	0.5		
9	□ □ □ □ □ □ □ □	□□□	0.5		
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