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PSYCHOSOCIAL PROBLEMS ENCOUNTERED BY ART DRUG USERS: THE CASE OF DEBREBIREHAN ZONAL HOSPITAL AMHARA REGION

BY

MEKASHA TEKLEGIORGIS

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A Thesis Submitted to the School of Graduate Studies, Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Counseling Psychology

Approved by Board of Examiners

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DEDICATION

This work is dedicated to those of people who died of HIV/ AIDS with out getting the service of antiretroviral treatment. More over, it will be for all people who are currently using ART drug to live with HIV in friendly ways regardless of some psychosocial problems encountered.

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ACRONYMS/ABBREVATIONS

ART	Antiretroviral Treatment
HAPCO	HIV/AIDS Prevention and Control office
UNAID	United Nations Joint Program on HIV/AIDS
MoFED	Ministry Of Finance and Economic Development
HIV	Human Immunodeficiency Virus
FGD	Focus Group discussion
UNDP	United Nations Development Program
DACA	Drug Administration and Control Authority
ILO	International Labor Organization
AIDS	Acquired Immuno Deficiency Syndrome
OIs	Opportunistic Infections
RACs	Regional HIV/AIDS Councils
EHNRI	Ethiopian Health and Nutrition Research Institute
USG	United State Government
PEP	Post Exposure Prophylaxis
ECA	Economic Commission for Africa
PLWHA	People Living With HIV/AIDS

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ABSTRACT

The threat of psychosocial problems, such as stigma and discrimination may prevent people living with HIV/AIDS from revealing their status to others, and serve as the major barrier to HIV treatment and ART adherence. The purpose of this study was to assess whether psychosocial problems existed or not in clients of ART, and then if it was real, which gender was more susceptible to the existing problem. In this study, data were analyzed from 165 respondents of male and female respondents who have been selected purposively from 552 total populations, ART users, at Debrebrehan Zonal Hospital. Of which 91(55.2%) of respondents were females and 74(44.8%) of them were males. The results of chi-square analysis for both psychological and social variables are significant. This is not true for gender analysis. Data were collected by the use of questionnaires, FGD and in-depth interview. According to the findings of this study, psychological and social problems, such as depression, stress, and feeling of shame, stigma and discrimination are those that influence access and adherence of ART significantly. With regards to the services offered and ART related psychosocial problems of the two genders, it is insignificant. In conclusion, there are psychosocial problems related to ART drug access and adherence on h, the users as well as the public. Hence, providing effective counseling service for ART users, creating awareness for the public to minimize stigma and discrimination, social discussion about HIV/AIDS and its treatment, provision of adequate education, empathic understanding and social support will be suggested

CHAPTER ONE

Introduction

1.1 Background

Acquire Immune Deficiency Syndrome (AIDS) is a deadly disease that kills by stripping the body of its defenses against other diseases (Economist, March 1985). Although it was not generally recognized just a decade ago as a serious life threatening disease, AIDS today stands infamous as of epidemic whose tentacles are reaching out to infect every corner the globe (Topic, 1987). It is a global health emergency that requires global collaboration and action. The estimated incidence of HIV infection in the world is over 35 million. According to (Ethiopia's Ministry of Health Repor,1996), by April 1995, there were 15,565 cases of HIV/AIDS in the country, and the male to female ratio reported was 1.6:1 (Path Finder International- Ethiopia, 1999). AIDS is caused by a virus that was identified in 1983 by Dr. Luc Montagnier of the Pasteur Institute in Paris and Dr. Robert Gallo of the U.S. National Cancer Institute as the Human Immunodeficiency Virus (HIV). This viral infection appears to be transmitted in three days: (a) through intimate sexual contact; (b) through infected blood products or contaminated needle; and (c) from infected mother-to-child before, during, and shortly after birth.

Africa is the continent most severely affected by HIV/AIDS MOH (2002). Take Ethiopia for instance, about 3 million Ethiopian adults and children were estimated to line with HIV/AIDS by the end of 1999. National surveillance report shows that prevalence of HIV infection in Ethiopia is 7.3%. There is however, a significant urban-rural differential (African Health, November 1998). Currently, HIV/AIDS epidemic

continues to spread worldwide. To day, some 37.8 million people (ranging from 34.6-42.3 million) are living with the virus, which killed about 3 million in 2003 and over 20 million (EJHD, August 2002). Sub-Saharan Africa, with only 10% of the total world population, is carrying the burden of 80% of the world HIV infection and AIDS cases. With an estimate of 1.5 million people living with HIV/AIDS, a national prevalence rate of 4.4% (12.6% urban and 2.6% rural). Ethiopia is one of the hardest hit countries by HIV/AIDS epidemic. It hosts the fifth largest number of people living with the virus globally. Out of the 1.5 million people living with HIV/AIDS (PLWHA), 817,000 (54.5%) are women and 90,000 (6.4%) are children under 15 years. There are about 537,000 (35.8%) orphaned children. Some 245,000 (16.3%) PLWHA will be in need of ART during 2004 HAPCO and FMOH (2004). The above statistical data indicates that HIV/AIDS prevalence is severe in Ethiopia. This is because most individuals have insufficient knowledge about accessing to basic health services such as HIV testing, on-going psychological/psychosocial support and care, and treatment.

When we talk about gender dimension and sensitivity, women health involves their emotional, social and physical well-being and is determined by social, political, economic context of their lives, as well as by biological. Here, gender reefers to the socio-cultural perceptions and differences in roles, responsibilities and rights of women and men. It is dynamic and varies from one society to another and from time to time. HIV/AIDS affects women and men differently in terms of vulnerability and impact. This is because of their biological factors which make women more susceptible to infection than men, structural inequalities in the status of women that make it harder for them to take measures to prevent infection and also intensify the impact of AIDS on them (MOH, 2004). The gender dimension of HIV/AIDS should be recognized in prevention and control of HIV/AIDS, more importantly in

the treatment of PLWHA (ILO, 2001). Since HIV/AIDS transmission and its impact is skewed towards to women, more equal gender relations and empowerment of women are vital to successfully prevent the spread of HIV infection and enable them to cope with HIV/AIDS and its psychosocial impacts.

The social, political and economic status of women as well as the attitude and perceived role of women in a society is an important determinant factor of collective vulnerability to HIV/AIDS HAPCO (2004). Hence any intervention in HIV/AIDS has to be gender sensitive so that women must be actively involved in prevention, control, care and support and more importantly in treatment (ART) activities.

The two most important factors that help people living with HIV/ADIS (PLWHA) are social and psychological and they can also be impacts of HIV/AIDS. And therefore, in the advent of HIV/AIDS both psychological and social consequences of the disease are essentially difficult for women and men including children who are living with HIV.

1.2 Problem Statement

Like many countries in Sub-Saharan Africa, HIV/AIDS now poses the foremost threats to Ethiopia's all sectors of development, especially in areas of economic, social, demographic, capital development. HIV/AIDS currently causes death not only on those who are infected with the virus but also to those uninfected ones with its indirect psychological health impact. It is well understood that treating HIV/AIDS apart from development activities can no more bring nationally envisaged result in sustainable manner. Because of this, women and HIV/AIDS are also one and the most sensitive issues in the study of HIV/AIDS prevention control and treatment (HAPCO, 2004).

Nowadays, people living with HIV/AIDS (PLWHA) are in access to anti-retroviral drug /ART/ freely from any drug dispensary all over the country. Previously, it was unthinkable to start ART since it was very expensive to use it. By now, thanks to American president George W. Bush UNAIDS great aid for preventing, control and treatment HIV/AIDS in Africa, particularly in Ethiopia it is easily available in all ART centers for those who are referred to use it by the concerned professionals just after screening the status of the patient and the result of voluntary counseling and HIV testing (VCT). In doing this, there are many psychosocial problems related to the patient before and after taking ART, especially those of women who have many burden of family responsibility together with the problem of stigma and discrimination since they are being ART users. In the epidemic of HIV/AIDS, there are many problems that are very difficult to curb them. Those of limiting factors in ART access and adherence are nutrition insecurity, low family or personal in come, unemployment, people's misleading thought, social discrimination and stigma, and the denial of the rights of PLWHA and human right (MOFED, 2002). Therefore, this study focused on the problems of people living with HIV/AIDS and knowing that the access & adherence of ART in relation to their psychosocial problems encountered is indispensable for both genders while they are being treated.

1.3 Hypotheses

- What are the major psychosocial problems of ARV- drug users ?
- Is there a significant psychosocial problem on ART clients' ARV-drug access & adherence?
- Is there a significant difference between the two genders in their psychosocial problems related to drug access & adherence?

Hypothesis 1

Null hypothesis (H_o): There is no significant psychosocial problem in ART clients.

Alternative hypothesis (H_1): There is a significant psychosocial problem in ART clients.

Hypothesis 2

Null hypothesis (H_o): There is no significant difference between the two genders in their psychosocial problem & ART services.

Alternative hypothesis (H_1): there is a significant difference in both the psychosocial problems & ART services.

1.4 Objectives of the Study

General objective

The main objective of this study is to assess the psychosocial problems of ART users and the services they receive are equally appropriate to men and women.

Specific Objectives

- To assess the major psychosocial problems of ART users.
- To explore problems related to HIV/AIDS & its treatment.
- To determine the difference of psychosocial problems in men and women.

1.5 Significance of the Study

- The identification of gender sensitive HIV/AIDS prevention and treatment is the most crucial point in order to fight against HIV/AIDS and helps to protect children's future HIV status (i.e., PMTCT) will be effective.

- Women generally have the lower standards of living at home and out side the home as compared to men. Ultimately in nutrition, housing, and treatment is the most crucial point in order to fight against HIV/AIDS and helps to protect children's future HIV status (i.e., PMTCT) will be effective.
- Women generally have the lower standards of living at home and out side the home as compared to men. Ultimately in nutrition, housing, family, male economic dominance, domestic violence and many other factors might have a great influence on their ART drug adherence. The study will indicate the type and prevalence of gender related problems in their health service activities.
- Supportive health strategies to minimize the problems encountered to ART clients in their psychosocial context will be formulated.
- Many researchers in our country while they were doing their study primarily depend on the issues of HIV/AIDS prevention and control and did little on ART so that this study will open a door for further study.

1.6. Delimitation of the Study

The study is basically claimed to conduct on one ART center which is the only center of the region that services for about 552 clients in that Northern Shewa Zone, Amhara Region, Yifat and Timuga, Tegulet and Bulga, and previously called Menz and Gishe. Among many centers of the country's ART services this may give insufficient conclusion but the study area can be taken as the sample area of the region as if Debrebrehan Zonal Hospital is the only Hospital in that region.

1.7 Limitation of the Study

The study has some limitations among these:

The first one is that the study was designed to conduct at Alert Hospital here in Addis Ababa. But because of the difficulty of obtaining respondents' cooperation and willingness in getting relevant information openly, as it was checked during pilot study at Black Lion Hospital, the researcher changed his site of study to Debrebirehan Zonal Hospital.

Secondly, in the study area lack of time, budget and man power and other constraints limited both the sample size & type of sampling.

Thirdly, the sampling technique was purposive sampling because of the nature of the study that it was unable to compute sample size.

Fourthly, the study by chance did not include pregnant woman with HIV/AIDS and children who were adherent of ART.

1.8 Operational Definition of Terms

- **ART/ARV DRUG:** It is an abbreviated from of antiretroviral therapy which is a generic name of HIV medical therapy for those people living with the virus to prolong their life.
- **CD_4 Count:** A type of white cell count type (T-lymphocyte) that is most usually attacked by HIV.
- **Discrimination:** Actions or treatments which are based on stigma, or directed towards the stigmatized person or people.
- **Epidemic:** A situation in which HIV/AIDS attacked a large number of people with in short period of time or at a time.

- **Gender Equality:** The more equal men and women relations and empowerment of women with in the society, especially to combat HIV/AIDS.
- **Gender Sensitivity:** HIV treatment and prevention should be targeted on both men and women explicitly with out any differentiation in politics, social, economic as well as attitude and perceived role of women in the society.
- **Mother-To-Child Transmission prevention (MTCTP):** It means the mother-to-child HIV transmission prevention strategy while the child is at birth, before or after birth from his/her mother.
- **Psychosocial Problems:** Problems which are both psychic in an individual thinking and/or in his/her personal social relations that may bring in conflict with in any life situation of a person..
- **Stigma:** Conditions in which we separate our selves form others as that of illness, disfigurement, disability, death and shame.
- **VCT Services:** Voluntary counseling and testing services that help individuals for both prevention and treatment strategy in fighting against HIV/AIDS.
- **Home based care services:** Services, both medical and others, are given for chronic HIV patients by care givers at their own home.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. HIV/AIDS and Development

It may seem a paradox but one of the out comes of the HIV epidemic is a deeper understanding of development. Although the global epidemic of HIV was seen initially as a crisis in public health and was defined as a health issue that required a health response. But today HIV/AIDS reflects a much complex understanding of social, cultural and economic determinates and consequences of epidemic that becomes a developmental issue in all of its dimensions (UNDP, October 2000). The failure of global and national response to HIV epidemic has its basis in category error, in that the problem was misinterpreted as one solely of public health and not of development but an effective response to the epidemic that entails more than redefining it as a development problem. Because of this, HIV epidemic is not simply about public health rather it is much more than health and is more generally about development (Ibid). HIV/AIDS is primarily an adult disease with significant demographic impacts. AIDS directly reduces the size of the economically active population so that HIV/AIDS leads falling labor quality and supply, more frequent and longer period of absenteeism, losses in skills and experience, resulting in shifting less experienced and younger work force with subsequent production losses MOFED (July 2002).

These all impacts intensify existing skill shortages and increase, cost of training and benefits. HIV/AIDS is already putting a brake on economic growth in the worst of affected countries through diversion of investment, deficit greeting pressures on public resources, and loss of adult labor and productivity (Ibid:4).

2.2 HIV/AIDS and Women

As a myth, when AIDS emerged the medical profession was made male dominated and male toyed so that the impact of HIV on women was largely ignored some years ago. Even now, the risk of women becoming infected with HIV is not fully understood by every one. As the reality shows that, the proportion of AIDS patients who are female steadily grown from about 8% in 1981 to about 18% in 1997, and continued to grow BSG (1999). The median age of women at the time of diagnosis with AIDS is about 35 years, and women aged 15 to 44 years account for 84% of female AIDS cases. AIDS in women is primarily associated with two modes of HIV transmission: sharing dry injection equipment (41% of cases) and sexual contact with infected male partners (38% of Cases). Women at the highest risk for heterosexual transmitted HIV include those who's made partner have at high risk behaviors such as sharing drug injection equipment, having multiple sex partner or having sex with men (Ibid:10).

In one study conducted in United States, each year about 7000 HIV positive women deliver in farts given the trans placental HIV transition rate of 20 to 30%, about 1,000 to 2,000 are born with HIV infection each year in many cultural, male sexual privilege contribute to the spread of HIV. In many cases, the risk of HIV for lesbians and bisexual women are different from the risks of HIV for heterosexual women. Another study of 1,086 lesbians and bisexual women revealed that 53% of self-defined lesbians and 90% of bisexual women had sexual experiences with men in the previous fifteen years (Ibid:12).

These two studies suggest that, contrary to what some people believe, a considerable number of lesbians and bisexual women engage in behavior that puts them at risk for HIV infection. Although a number of

women infected with AIDS have increased, they account for only 10.6% for all reported cased (Sheridan and Radmacher, 1992).

In many societies women are expected and taught to subordinate their own interest to those of their partners. With such expectations, young women often feel power less to protect themselves against HIV infection, in addition to endurance of sexual coercion and abuse (WHO "population reports", 2001, vol. 2, no 3.). The risk of becoming infected with HIV during unprotected sex is two to four times greater for women than men. Regarding to transmission, male to female transmissions more likely, because during the vaginal in the course a woman has larger surface area of her genital tract exposed to her partner's sexual secretions than does a man. Also HIV concentration is generally higher in men's semen than in women's sexual secretion (Ibid:8).

AIDS can also have a very serious impact on the lives of women when it strikes a family member. In most cases, women don't have secure occupation which can provide a steady and adequate in come. Thus, if the husband dies, the remaining wife and children can be particularly vulnerable, and some times a woman may be exploited or may have to resort to selling sex to provide cash income (MOH, 2998). Factors that make women are more vulnerable to HIV infection due to biological cultural and socioeconomic reasons. Due to these reasons, they are exposed to unwanted pregnancies, unsafe abortion, rape, abduction, early marriage and sexually transmitted infections which all expose them to HIV infection. Therefore, there is a need to give special attention to this target population. This may include activities ranging form awareness creation, raising, in formation delivery methods and systems, availability of counseling services, peer group education, laboratory set-up, gender sensitive human resources development,

challenging social taboos, conducting research and so on (NAC .001, and MOFED, July 2002).

Gender inequalities in Africa, particularly in Ethiopia are also a factor, because women have little control over sexual relations, including low bargaining power over condom use. This exacerbates the epidemic, which is linked to traditional sexual and social attitudes and practices; such as sexual relationship between young girls and much older man, and the wide spread practice of female genital mutilation (FGM). Due to all these multiphase problems, one study indicated that women in sub-Saharan Africa constitute 55% of HIV- infected individuals. Of newly infected 15 to 19 year-olds more than two thirds are female, in countries such as Ethiopia, Malawi, Tanzania, Zimbabwe, for each boy infected in this age group, there are 5 to 6 girls infected (ECA 2004).

2.3 HIV/AIDS and Its Major Impacts

The recent scientific efforts have resulted in a series of discoveries and advances in understanding and controlling the virus that causes AIDS; this progress has had limited impact on the majority of HIV infected people and populations living in developing countries. The social and economic conditions that nature the spread of the virus have to be confronted as essential elements in local and global efforts to stem its spread and great effective solutions to halt the epidemic (Miriam, L. 1990). HIV has found a wealth of opportunities to thrive among tragedy human conditions fueled poverty, abuse, violence prejudice, and ignorance. Social and economic circumstances contribute to the vulnerability of HIV infection and intensify its impact. Just as the virus depletes the human body of its natural defense, it can also deplete families and communities of the assets and social structures necessary for successful prevention and provision of care and treatment for PLWHA. The impact of HIV/AIDS extends beyond those living with

virus, as each infection produce consequences, which affect the lives of the family, friends and communities surrounding on infected person. The over all impact of the epidemic encompasses effects on the lives of the millions of PLWHA or those who have died. Poverty, a leading promoter of HIV/AIDS, is clearly a factor of the spread and impact of HIV/AIDS (Ibid:5).

The vast majority, over 90%, of all people infected with HIV since the beginning of the epidemic is from the developing world. HIV/AIDS is having profound impacts on the livelihoods. In Sub-Saharan Africa, these include the death of working age adults, the diversion of resources to caring, and the rapture of traditional chains of knowledge transmission. In sub Saharan Africa where two thirds of the world's infections occurred more than 7.4% of the population between the age of 15 and 49 is estimated to be infected with the virus (white, J. and Morton, J., April 2005, 15).

The impact of ill health on human capital in Africa is over where liming. Ill health resulting from infectious diseases such as HIV/AIDS indiscriminately affects both the skilled and unskilled human resources.

The International Labor Organization (ILO) projections for population and labor force in the year 2000 indicated that the size of the labor force in high prevalence countries would be 10-30% smaller by 2020 than it would have been with out HIV/AIDS. For instance, the projected loss for Ethiopia is 10.5%. The impact is smaller but significant in the lower prevalence countries of the world (ECA, 2004). In one research finding in developing countries, the impact of HIV/AIDS on health workers also significant because of:

- Problems of human power shortage and inadequate infrastructure because HIV/AIDS poses new challenges and increases work load;
- Professionals are affected and died by the epidemic;
- There is the special psychological pressure to which health workers are exposed, for example HIV drug such as AZT or other regimes are not easily available (African health workers, December 2005).

In general, the over all impacts of HIV/AIDS on the individual, household and community are ultimately felt at the level of the over all socio-economic settings. Though overlapping the impacts could be grouped in to demographic, economic, social and service provision, social and psychological, and health impacts (MOFED, July 2002).

In Ethiopia case, AIDS has had detrimental socio-economic impact. The finding from antenatal care surveillance and studies conducted at schools, work places and among or phones indicate similar results (HAP co, 2006).

2.4 HIV/AIDS and Risk Reducing Strategies

As with other sexually transmitted diseases, preventing HIV infection requires both individual efforts and the efforts of public health agencies. Form public point of view, it requires people to make changes in the areas of their lives, such as sexuality and drug use in such cases of people's life style it is very hard to reach and motivate behavioral changes (Bauer, Shainberg and Gallianso, 1999).

Some of the suggested risk reducing strategies in HIV infection is sexual abstinence; reducing number of sex partners; care full selection of sex partner move slowly into a sexual relationship; safe sex practices and no sex with prostitutes (Ibid).

The challenge of HIV/AIDS transmission in developing world is daunting. To turn back the raising tide of infection, it is a need of public health approach that respects the people to make their own decisions. In much of Africa, HIV/AIDS is generalized epidemic affecting all age groups and segments of society. Because of this a comprehensive approach is needed to combat a generalized HIV/AIDS epidemic. Fro instance the HIV/AIDS strategy of the government of Kenya emphasizes an evidence-based approach rooted in "ABC": Abstain, Be faith full, and the correct and consistent use of condoms (American Embassy weekly repost, August 24, 2006).

In our case, Ethiopia has adopted a comprehensive HIV/AIDS policy in 1998 with the over all objectives of guiding the implementation of successful programs to emphasize prevention, care and support, forgotten vulnerable groups to reduce the adverse socio-economic consequences of the epidemic. The over all gals of the policy and frame work are to reduce HIV transmission, reduce associated morbidity and mortality; reduce burdens on individuals, families and society at large. This was done by national AIDS council, established in April 2000, now it is substituted by HIV/AIDS prevention and control office (HAPCO), which includes religious bodies, government members, and non-government organizations, ministry of health and other organizations. The policy has implemented its strategy through 10 general strategies. The most important of which include information, education and communication (IEC).

- Information, education and communication
- Sexually transmitted discuses prevention and control
- HIV testing and screening.
- Adoption of proper sterilization and disinfection procedures.
- HIV surveillance, notification, and reporting, and

- Prevention of medical case and psychosocial support to those infected by HIV/AIDS (MOFED, July 2002, and

http://www.hiv/adis-ethiopia.htm) .

Since Ethiopia is one of the focus countries of emergency plan in prevention, treatment and care program, it has a critical intervention for HIV/AIDS prevention:

- Supported youth peer education and life skills programs.
- Directed comprehensive behavior change communications program for most at risk populations.
- Provided mass media community programs for general pulsation to increase knowledge of HIV transmission and prevention methods.
- Mobilized religious and community leaders to support HIV prevention and support programs and also to reduce stigma facing people with HIV/AIDS.
- Supported expansion of voluntary HIV counseling and testing centre.
- Supported strong partnerships for prevention and care services with organizations, particularly the Ethiopian Orthodox Church and supreme council (www.ethiopiaglobalaidsprogram%20-htm).

Among all, these above major HIV/AIDS risk reducing strategies are the most relevant strategies in Ethiopian context.

2.5 HIV/AIDS and Counseling Psychology

HIV/AIDS counseling is "confidential communication between a client and a care provider aimed at enabling the client to cope with stress and to talk personal decisions relating to HIV/AIDS" (MOH, January 2003).

The counseling process includes the evaluation of personal risk of HIV transmission, the facilitation of preventive behavior, and evaluation of coping mechanisms where the client is confronted with positive result. It is to be noted that HIV/AIDS counseling requires some the same basic counseling skills and procedures used for serious personal and emotional problems. However, the natures the infection and the disease requires some unique procedure, an skills in that HIV/AIDS psychological counseling focuses on prevention, coping behavior, treatment, caring and support aspects. The ability to provide HIV test requests to clients and managing their reaction, and the reactions of partners and family member(Ibid:3).

The concern of HIV/AIDS counseling requires explicit discussion of sexual practices and death (MOH, 2003). HIV/AIDS counseling and testing (VCT) started in Ethiopia at the end of 1998 with two social workers in the ministry of health. Their focus was on the sero-survey participants (commercial sex worker, and long distance truck drivers) conducted in 1988 and 89. Later, because of increased demand for counseling and testing from hospitals, many professionals and social workers were trained to cover the needs (Ibid:24).

An important guideline for counselors is to focus on behaviors and not on life style. It is not who you are, but what you do, that put you at risk for AIDS. Fear of AIDS will not, in it self, motivate all individuals to change their habits. One can only offer individuals the opportunity to make choices for them selves based on the most reliable, currently available information (Journal of counseling and development, April 1989). Because of fear and distress, the majority of PLWHA may not avail counseling services and psychological support, which are most of the time unavailable. Some react with behavior, which proves rejection or discrimination (Miriam, L. 1990). Infect, counseling services deals

with not only the individual but also his/her spouse, extended family, friends, and relatives and some times also the doctor allotted for dealing with the patient. Counseling has various dimensions, from denial phase to grief counseling and finally care and support system (Mehta, S, and S., K. Sunider, 2004: 139).

According to Dr. Yosuf, counseling is a branch of applied psychology which is unrelated with other fields such as sociology, cultural anthology education and so on (Yosuf, 1998). Thus, counseling psychology is one of the most important psychological terms which is greatly applied in the field of medicine for treatment and prevention of HIV/AIDS in this days.

2.6 Psychosocial Impacts of HIV/AIDS

Socially, HIV/AIDS has many adverse effects on the life of the people living with HIV/AIDS (PLWHA) in particular and the society at large. The serious psychological and emotional effect of HIV/AIDS on family functioning are further complicated the by social stigma associated with the disease (HAPCO, 2004). HIV/AIDS is the source of stigma and discrimination. People living with HIV/AIDS (PLWHA) may experience discrimination related to employment, housing and medical care education and social integration (WHO, 1990). For instance, majority of our women and children with HIV/AIDS are poor living with helpless conditions of living. Because of this, poverty brings problems of housing and food, as well as social services such as medical care. AIDS patients must endure the stigma of their disease as well as the physical suffering. Like the Lepers of biblical times, AIDS victims wear a bandage age of shame. There are many reasons but the most important being the disease association with homosexuality and drug abuse, behaviors that violate large numbers of people (Ibid:22). Counselors, religious communities, family numbers and the public

should, therefore, provide vital care and support at home and with in the community.

2.6.1 Psychological Impacts of HIV/AIDS

The psychological impact of AIDS cannot be different from social one; rather, it may be the product of social problems encountered to the victims. AIDS is frequently described as a tragedy and complex phenomenon that provokes shattering emotional and psychological reactions for all who are involved with the illness (Topic, 1987). This can be described among three population groups that can be delineated in discussing the psychological impact of AIDS. Clients with the disease and their sexual partners; individuals at high risk for AIDS based for epidemiological data, and individuals are not specifically at risk but who are aware of and affected by the presence of AIDS with in society. AIDS epidemic has a profound impact on the gay community. Gay men without AIDS symptoms have developed acute psychological reactions that include panic attacks and generalized anxiety. Some have developed somatic reactions that mimic AIDS symptoms such as fatigue and night sweats.

In some cases, severe anxiety reactions have impaired social and occupational functioning (Forstein, March 1984). What are the psychological effects on people who struggle to cope with this fear some plague? The reaction to the news that one is HIV-positive is frequently a state of shock, bewilderment, confusion or disbelief (Ellen, 1998). To cope psychologically, AIDS patients and those who are infected with HIV need education and information about the disease. They can be helped by psychotherapy, self-help groups, and medications such as anti-depressants and anti-anxiety drugs (Ibid:24).

Psychological support is an essential element of care and support package that ranges from purely psychological support to the social measures needed to create an environment in which those affected can cope and thrive (UNAIDS Report, 2002).

Both psychological and social support can help reduce stigma and other negative consequences of being HIV-positive and in this way make people less reluctant to seek HIV voluntary counseling and testing (VCT). In turn, the staff of counseling and testing facilities can continue to render psychological support: for example, by assisting individuals to share the news of their test result with their spousal or trusted relatives (Ibid).

The most serious psychological problems are for those people who actually have the disease. The majority of AIDS victims are relatively young; that is, 68% are between thirty and forty nine years of age. Most of these men have previously been healthy and have not had experience with major medical illness (Shiver, 1990). Although the major effects of HIV/AIDS on PLWHA are health problem, there are also various psychological problems such as fear, stigma, anxiety, stress and depression that are common in their daily life events.

2.6.1.1. Fear of AIDS, Stigma and Denial

The spectator of the AIDS epidemic is so terrifying that some suggest it has given rise to a related epidemic afraid. Afraid is transmitted through gossip, media sensationalism, and well-meaning but perhaps ill-informed people. HIV/AIDS fear/afraid most commonly, it is the problem of gay community or homosexuals (Sheridan and Radmacher, 1992). Fear of HIV/AIDS is an emotional state in the presence or anticipation of a dangerous or noxious stimulus. It is characterized by an internal, subjective experience of extreme agitation, a desire to flee

or to attack by the variety of sympathetic reactions (arousal functions). PLWHA have many fears such as fear of desertion, rejection, leaving children/family uncared for, disability, loss of confidentiality or privacy. It may be based on other experiences or due to lack of information about HIV/AIDS. Fear can often be reduced by discussing the problems openly and provision of some psychological support (WHO population report, 2001). Therefore, to treat the fear of AIDS, it is necessary to understand the societal sources of the client's fear as well as the people with HIV/AIDS unique social and cultural milieus. Treatment and prevention goals need to be realistic and tied to current medical knowledge. The fear of contracting AIDS from in feted persons has lead to a great deal of hysteria among the general public (Journal of Counseling and development, April 1989). Because of the stigma of AIDS, AIDS patients must endure the stigma of their disease as well as the physical suffering.

The stigma of AIDS has greatly added to the burden of patients dealing with a life of threatening illness. The stigma surrounding AIDS can extend into the next generation, placing a further emotional burden on the shoulders of orphans and other survivors (Sheridan and Radmacher, 1992 and UNAIDS Report, June 2000). Denial is the unconsciously refusal to face thoughts, feelings, wishes, needs, or reality factors that are intolerable. It is a protecting self defense mechanism from unpleasant and stressful situation by refusing to acknowledge the reality. Some people may respond to the news of their HIV infection by denying it. If denial is not challenged, people may not accept the social responsibilities that go with being infected. Denial or desire for revenge may actually increase high-risk behaviors in some people with positive HIV tests. Because of the above condition denial, blocking the awareness of reality to challenge patients' denial, one should not attempt with out psychological support. In general, fear,

stigma and denial are a vicious circle (Shiver, 1990; Sheridan and Radmacher, 1992; MOH, 2003, and UNAIDS Report, June 2000).

2.6.1.2. Anxiety, Stress and Depression

ANXIETY It is feelings of fear and apprehension, uncertainty or unconsciousness or tension that a person experiences in response to unknown objects or situations, which are followed by increased and prolonged physiological arousal. These may be normal and transitory, or abnormal and long lasting (Card Well, 1996).

Anxiety is any emotion that is distressing. Some times, it may have no specific cause unlike fear, the cause of which can be seen and dealt with by fighting or running away. The feeling of anxiety is frequently generalized from one situation or stimulus to another and named by Freud as "free floating anxiety" (Hay Ward, 1997). In this type of psychological problem, the most significant arousal performance relationship is the link between thought and performance. Thoughts associated with anxiety are persistent, intrusive and negative that they tend to be future oriented, for example, "what happens if ...?" or past-oriented, as "if I missed, I ..." (Coolican, H, et al, 1996). HIV/AIDS type of anxiety is a cognitive type that is the feeling of fear related to the event. Hence, this type of vague, unpleasant, emotional state with qualified of apprehension, dread, distress and uneasiness called, psychologically, anxiety that can become a feature in the life of a person with HIV, reflecting the chronic uncertainty associated with the infection (MOH, 2003).

STRESS It is a state of physical and/or psychological strain, a state of psychological tension produced by psychological forces and pressure. Some of the factors which cause stress in HIV testing include fear of being infected, having to decide whether or not to be tested, knowing about the test results, facing premature death, etc. Stress reduces the ability to make decisions, to understand information and to charge behavior (Ibid). It is the response of stress or which may be internal or external that results in physiological, coping strategies or behavioral responses (Hay Ward, 1997). An important aspect of stress due to environmental event "lack of fit" between the person and his/her environment (the transactional view of stress) is a product of imbalance of perceived demands and a person's perceived ability to cope rather than the actual demands and the actual ability to cope. Stress has wide ranging effects on the individual; including subjective effects, cognitive effects, psychological effects, organizational effects and health effects, such as coronary heart disease, ulcers, headaches and HIV/AIDS recently (Card Well, 1996). In patients of HIV/AIDS the signs of stress include inability to sleep, loss of appetite, fits of anger, withdrawal from close relationships, or rapid swings of mood (Ibid:44).

DEPRESSION It is a type of mood disorder in which the person experiences feelings of great sadness, worthlessness and guilt, and finds the challenges of life over whelming. It is an emotional state that most people experience some time during their lives. Depression can occur at any age even infants when they separated from their mothers. The distinction between depression as a clinical syndrome and a mildly altered mood state such as sadness or unhappiness is

one that can be confusing. Sadness are unhappiness over the inevitable losses and disappoints of life are universal. Depression usually begins as a reaction to a loss or a failure or some other disappointments (Card Well 1996; Shiver, 1990, and Simons and Prardes, 1977). Relating depression to some other diseases like cancer, clinical observations suggest that cancer patients (probably more than HIV patients) are generally depressed, although some researchers have questioned whether cancer patients are any more depressed than other equally ill patients (Sheridan and Radmacher, 1992). Beck in his triad of depression, he has had influence on cognitive therapy developments, particularly in the area of depression. People may be depressed because of their habit of illogical and are negative thinking about the "triad" of self, world and future. His therapeutic process consists of many steps to treat a patient logically and positively (Card Well, 1996). A recent study from WHO found that depression is a deepening global health crisis. It afflicts 150 million people and ranks fourth among all diseases in the economic and social costs it extracts. The impacts on people's lives can be devastating. Between 15 and 20 percent of sufferers commit suicide. Depression is also associated with high risk behaviors, such as alcohol or drug abuse and unprotected sex, which can lead to other illness such as AIDS. Fortunately, many of the social changes are also promoting greater openness toward what many mental health experts say is the best are: talk therapy (New Week Journal, June 21, 2004). In case of HIV victims, depression may arise for a number of reasons, including the realization that a virus has taken over one's body, the absence of cure and the refuting feeling of power

less ness. The counselor, therefore, should provide emotional support and also alert the care takers (client attendants) about the risk of suicide and on protection measures (MOH, 2003).

People Living with HIV/AIDS (PLWHA) and their families were not experiencing the psychological impacts of chronic illness and bereavement but they were also being stigmatized by the local community. This made these individuals less likely to seek support or to be open about their sero-status to their family and others. It also inhibited other members of the community from making use of HIV testing services (White and Morton, April 2005). According to Tedla, "depressive illnesses are among the most prevalent of the psychological problems in Ethiopian communities, affecting Ethiopians of all ages, socioeconomic classes, and educational levels. Fortunately, depressive disorders respond well to treatment. Over 80% of all serious depressions can be treated successfully. Even so, relatively few Ethiopians who experience symptoms of depression seek professional help (Tedla, November 23, 2002).

2. 6.2 Social Impacts of HIV/AIDS

The new era had began almost invisibly, reflected in rising rate of HIV infection in young men and women and the steady increase of dying AIDS patients in crowded hospital words. The emergence of HIV/AIDS was accomplished by extreme social stigma, fear, and a sense of powerlessness among care provides (WHO Bulletin, 2001). Based on many impacts of HIV in social aspect, the following can be discussed.

2.6.2.1 Stigma and Discrimination

HIV related stigma may well be greatest obstacle to action against the epidemic, for individuals and communities as well as political, religious leaders. An all out effort against stigma will not only improve the quality of life of people living with HIV/AIDS and those who are most vulnerable to infection. Defeating HIV related discrimination requires health and social services to be sensitive to it and against it. Voluntary counseling and testing (VCT) services are also central to tacking to stigma because they contribute the entry point for care and treatment, and it is at this point that potential patients are at their most vulnerable to stigma (Ibid:7).

Protection from discrimination extends well beyond the health and related sectors. For example, International labor organization (IOL) has recently brought about new code of practice on HIV and the world of work so that HIV discrimination at the work place has been a focus in many countries (http://www.afrolgenderprofileethiopia.htm). In Ethiopia, discrimination due to being of HIV sero-positive individuals is the most acute problem in rural areas, where 85% population lives (Ibid). This unnecessary negative connotation could be effused by Medicines Sons Frontiers (MSF) a private, non-profit, international non-government organization that the stigma and discrimination faced on a daily basis by many PLWHA is the result of, based on their study, ignorance faced about HIV, a reluctance to act independently and the fear of being associated with promiscuity (htt://www.msf.org). Because of all social activities, social behavior and attitudes towards PLWHA in response to stigma can include distancing, Ostracism again, rejection and avoidance, stereotyping, social discomfort, pity and in extreme cases, violence. PLWHA may experience societal discrimination related to employment, housing and medical care, education, social integration

and so on. Therefore, discrimination should be protected by law and may not result in violation of human rights. In other words, promoting and protecting human rights in the context of HIV/AIDS is essential to ensure effective response to the epidemic. (Weekly Special Report, December 2004).

2.6.2.2 HIV/AIDS in Families

"Family" in abroad manner includes related and unrelated people whose lives are closely intertwined. The presence of HIV in a family affects every family. Family cohesiveness might be tested as various crises arise. Disclosure of an HIV-sero positive status to other family members depends on the inter-personal dynamics of the family. Cultural factors influence the ease with which disclosure can be made. Regardless of the person for nondisclosure, people who are HIV positive and do not reveal this to family and friends deprive themselves of much needed social support in a time of great need (Bauer, Shainberg, and Gallianso, 1999).

2.6.2.3 HIV/ADIS in Women

Women are vulnerable to HIV/AIDS, because they may have limited ability to protect them selves from HIV infection. Women may be at risk of HIV even though she is faithful to her husband, because her husband may have out side sexual partners. More over women both socially and culturally as well as economically are dependent on men. Because of this, women will be affected in a number of ways:

- Economic vulnerability is greater if the husband or breadwinner dies.
- Burden of care in AIDS affected husbands fail on women and girl children.

- Subordinate position to men can make it difficult to protect them selves against HIV.
- The social stigma affects the infected women more than men (MOH, 1998; MOH, 2003).

By holding the entire above heavy burden in the society, women are the key to achieving health for all, because they play a crucial role in preventing infection with HIV-positive people and people with AIDS. So AIDS has always a profound impact on women, both as an illness and a social and economic challenge (WHO, 1990). The impact of HIV/AIDS epidemic is particularly hard on women and girls as the burden of care usually falls on. Girls drop out school to care for sick patients or for younger siblings. Older women often take the burden of caring for ailing adult children and later, when they die, adopt the potential role for the orphaned children (UNAIDS Report, 2004).

In one WHO study the worldwide ending in 2002, it was estimated 29 million (45%) of women infected by HIV out of 65 million people with HIV. In this case, in sub-Saharan Africa the ratio of women to men is 6:5 & the male to female ratio of AIDS cases among Ethiopia teenagers is 1:3 (Stine, 2002). In general, the impact of HIV/AIDS on women, according to Bennett, 1990 on Gender and AIDS inter net web site, "the impact of HIV/AIDS on women has been referred to as `triple jeopardy` in that women gender roles are generally expected to fill productive, reproductive and community". In other words, this means that HIV/AIDS affects women as individuals, mothers and caregivers in these socially defined roles (Ibid).

2.6.2.4 HIV/AIDS in Orphaned Children

Ultimately as many women begin to die of AIDS their families and their communities will be confronted by an increasing number of orphaned

children for whom they must be responsible. Due to so many reasons on enormity and complexity of the social and emotional consequences of AIDS on women, children and families will test the geniuses and commitment of those medical and social services practitioners are responsible for their care (WHO, 1990). Children are affected by HIV/AIDS in ways that can diminish their child hoods and as a result limit choices and opportunities for success full survival through out their lives (Miriam, 1990). According to Who report on global HIV/AIDS epidemic in 2002 it was proposed that "all government's policies and strategies by the year of 2005 to build and strengthen governmental, family, community capacities to provide a supportive environment for orphans, girls 7 boys infected and affected by HIV/AIDS in providing counselling, work situation, good nutrition, health and other social services on equal basis" (UN AIDS, June 2001).

Today, about 14 million orphaned children who have one or both parents died of HIV/AIDS are living in the world. Approximately 11 million (80%) of them live in Sub-Saharan Africa. How ever, the orphan crisis is not restricted only to this region. There are an estimated 1.8 millions south and south East Asia and the Pacific, 330,000 in Latin America and the Middle East (Ibid). Because of HIV/AIDS, poor countries will continue to face an increasing number of deaths and the resulting orphan hood.

Ethiopia is among the least developed countries in the world. Worse yet, the situations have become exacerbated with the emergence of AIDS. In Ethiopia 1.2 million AIDS orphans were estimated in 2000, which will increase to 1.8 and 2.1 millions in 2009 & 2014, respectively. The main impacts of HIV/AIDS on orphans are social, economic and psychological effects of HIV/Aids on children. Its

challenges on development affected many AIDS orphans on their living conditions, families, and local development. AIDS orphans are those children and young adults aged between 10 to 20 years, who lost their parent/s due to AIDS (Horn of Africa of AIDS Journal, July 2005). Because of these, a well organised research on orphan psychological problems and their general means of means of survival solution has to be conducted to evaluate t the prevalence, to take a measure on this hot issue. Children in Africa still are not receiving the HIV/AIDS prevention services or ART services they need, even though drugs are available, affordable and access among adults in the past few years. In Cameron, for instance, only 400 of the15000 to 40000 children to be HIV-positive in 2005 were receiving the treatment they needed. In some African countries, 2% to 3% of children who need drug are receiving them (Medical World, 2006).

In Ethiopia, the number of orphans due to AIDS is also growing and worsening the social and economic of children. The burden of their care falls on grand parents, older sibling, and the community at large. According to Ethiopia 2003 major HIV fact sheet, the total number of orphans was 4554,000 and among these 539,000(11.8%) was HIV/AIDS orphans (HAPCO and FMOH, 2004). In the year of 2005, it was estimated that there was a total of 7 44,100 AIDS orphans age 0 to 17; 529,800 were maternal, 464,500 paternal and 250,200 dual orphans. The estimated total number of persons requiring ART, 2005 was 277,800 (including 43,100 children). As many studies showed that HIV/AIDS accounted for an estimated 34% of all young adult deaths 15 to 49 in Ethiopia and 66.3% of all young adult deaths of same age group in urban Ethiopia (FMOH, Septembr2006). All the above data showed that there is a higher rate of HIV/AIDS in Ethiopia.

2.6.2.5 HIV/AIDS at Work Place

HIV/AIDS drastically affects labour in the work setting, back economic activities and work progresses. The vast majority of people living with HIV/AIDS worldwide are between 15 and 49 in the prime of their working lives. AIDS weakens economic activity by squeezing productivity, adding costs, diverting productive resources, and depleting skills. In addition, as the impact on households grows more severe market demand for products and services can shrink. The epidemic hits productivity mainly through increased absenteeism, organizational disruptions, the loss of skills & organizational memory (UNAIDS, 2002). In comparative studies of East African account, as much as 25 to 54% company costs are increased. An over view of HIV/AIDS impact on industries and/or work place are both financial and human capital, such as insurance cover, retirement funds, health and safety, medical assistance, funeral costs increased absenteeism, morbidity, mortality trigger increasing disorganization in work forces, as the result of rising staff turn over loss of skills, weakened morale. One Zimbabwean study showed that AIDS related absenteeism accounted for 54% of all AIDS related costs, followed by symptomatic illness at 35% (Ibid).

In general, HIV/AIDS has server social, psychological and economic influences on both individuals and societies. The disease causes painful stress, disability and death to the individual patient. On the other hand, the familial, social and economic problems associated with the disease are over whelming that includes divorce, family disintegration and orphaned children [HAPCO, December 2003].

2.7. HIV/AIDS in Gender Study Realities

2.7.1 HIV/AIDS and Gender

HIV/AIDS realities seem to be increasingly characterized by feminization of HIV/AIDS in that woman and girl children remain to be at the greater risk of HIV infections and are more affected by HIV/AIDS realities and challenges. It is gender context of society, defining females largely as "inferior", as the "weaker sex", as the ones who are socialized to become "good women" and who should respect the male "head of the house hold" at all times that seats an environment in which women are not in the position to not choices, let alone informed choices (AIDS Legal Net Work, June 2006). Hence, women will remain to be more vulnerable to HIV infection. "Statistics indicating that 60 to 80 % of women infected had only one sex partner in their life and 80% of all new HIV infection in women occur in marriages and/or long-term relationships ..." (Ibid). In Ethiopia, this type of reality in 2004, the female adult prevalence is 5% (MOH, 2003).

2.7.2 HIV/AIDS in Gender Mainstreaming

In HIV/AIDS mainstreaming, gender recognizes that a forceful response to gender issues centered on removing discrimination, empowering women, providing free access to preventive measures and ensuring adequate care and support of persons infected and affected by the epidemic is an issue at the very heart of the development of a cohesive and cross-cutting strategy for the prevention and mitigation of HIV/AIDS on African society (The Horn of Africa AIDS Journal, June 2005).

Mainstreaming HIV/AIDS is a systematic and dynamic process of change in policies, strategies, values, norms power and economic

relations surrounding HIV and AIDS with in sectors, organizations, communities and householder (HAPCO and UNDP-Ethiopia, 2001).

Many countries have moved for ward in mainstreaming health into development programs, at least in the planning stages. But the mainstreaming of health, particularly HIV/AIDS remains weak (ECA, 2009). The goal of mainstreaming HIV/AIDS into development and humanitarian work at sectorial, institutional and community levels is to ensure that the impacts of HIV/AIDS and to create and implement preventive policies and strategies. Mainstreaming HIV/AIDS intends to assist individuals to move beyond the mentality of "business as usual" to address the epidemic in a strategic way in all sectors, both inside their own organizations and were widely in the communities they serve (HAPCO and UNDP-Ethiopia, 2001).

In Ethiopia, gender and HIV/AIDS seeks to address the differential impact of HIV/AIDS on women, men boys and girls. Gender mainstreaming also seeks to promote social justice by reducing gender inequality. Gender mainstreaming ensures that gender inequalities are addressed in the design, planning, implementing, monitoring and evaluation of HIV/AIDS programs and ensure that the beneficial out comes are shared equitably by all women, boys and girls (Ibid:3).

Because of this fact, HIV/AIDS mainstreaming is the systems thinking helps to manage the complexity of the many responses to HIV/AIDS, which should be viewed synergistically.

2.7.3 HIV/AIDS in Gender Sensitive Prevention, Care and Treatment

Given that male behavior is one of the main determinants of HIV infection in women, the participation on men in prevention activities is clearly essential. As the result of many cultural expectations, men have more sexual partners than women and are more likely to engage in risky behaviors as drinking, reckless, and injection drugs (RHO, 2006 HIV/AIDS special focus). To address the gender imbalance in HIV/AIDS pandemic a number of approaches are available working with men and women on prevention and care, such as:

- Highlighting how gender stereo types and expectations affect both women and men, and support work to improve gender equality and equity;
- Challenging damaging notions of muscularity and other gender stereo types;
- Encouraging men and boys to explore the ways in which they were raised and how they are expected behave;
- Encouraging men to discuss sex, drug use, and HIV/AIDS;
- Strengthen women's ability to decide when, where, and whether sex occurs;
- Improve men access to information, counseling and support;
- Advocate for wider understanding and acceptance of men who have sex with men;
- Support efforts to reduce male violence and sexual harassment

(http://www.hivaids%20secial%20focus%20%20gener%20andhivadis.htm).

The majority of people living with HIV in low and middle income countries are not aware of their HIV infection. Increased provision of treatment and care services will help motivate people to be tested since voluntary counseling and testing services (VCT) stands at the heart of prevention and treatment. After testing positive, people living with HIV can be offered care, treatment and support services, including ART when necessary. Counseling and other services aimed at prevention of secondary transmission, as well as the provision of ART to prevent mother-to-child transmission. Effective prevention programming for treatment, care and support services therefore goes hand-in-hand (UNAIDS, 2006). The contribution of women in HIV prevention, care and treatment seldom recognized and quantified. Research has also shown that health-seeking behavior is more often than not determined by reproductive roles, either as a pregnant woman or as a mother with a sick child. Factors, which impact on health seeking behavior, include money, time, attitude of health care workers and mobility (Tallis, 2001). When we come to our context, prevention, care and support of HIV/AIDS program is implementing as:

- Prevention is done by information and education service, peer education, use of barrier methods, HIV testing and counseling service, sexually transmitted infection (STI) management and preventing occupational exposure;
- Care and support is done by: effective health care, counseling, disclosure, protecting the right of employees with HIV/AIDS and provision of equal benefits to HIV positive people as of uninfected ones;

- Treatment service is provided for PLWHA based on ART guide lines, which have been written, adopted policies and conducted professional training equally for both gender (HAPCO and UNDP-Ethiopia, 2001, and I-TECH and MOH, July 2005).

2.8 Anti-Retroviral Therapy /ART/

HIV/AIDS prevention, control, care and support are inseparable from treatment of people livening with HIV/AIDS (PLWHA). Although a number of drugs have been formulated to be only partially effective and have a serious side effects. ART has been contributing a growing demand of HIV therapy. In March 1987, the treatment of AIDS in U.S.A. took an important step forward when the drug Zidovudine (AZT) was finally cleared for use by Food and Drug Administration (FDA). AZT had been synthesized in the 1960s by Dr. Horwitz (Topic, 1987). It is inhibited viruses in the test tube including duplication of HIV virus. In fact, many studies are under way to test the value of combinations of anti-viral drugs and substances that can strengthen the immune system (Ibid). Medical care and HIV treatment ranges from prevention and treatment of opportunistic infections (OIs) that arise to treatment directly targets the virus it self. Both ART and other treatments work best when people are well nourished, not over-tried, and are able to have positive attitude to wards life. The whole well being of the person, spiritual, psychological and material is important but not only just physical or medical treatment (HAPCO, December 2003). Over the last 15 year, clinicians in U.S.A. and Europe have learnt about limitation of ARV chemotherapy. Because of that prior to AZT, physicians targeted intervention efforts to prevent opportunistic infections and expand access to mental health and palliative health care services (Jackson, 2002). Zidovudine is the oldest and the best known treatment that

inhibits HIV replication, which is especially effective against the lethal AIDS. It is expensive and generally not affordable in developing countries. Such agents include ddI, ddC, D_4T, Azdu and Statvudine (Ibid). In Africa, only a few research studies on treatment costs for PLWHA have been conducted. Only one-third of the population has regular access to even essential drugs, such as Chloroquine and penicillin (Amoroso, 2002). In past years, one of the issues in HIV treatment was when to begin using anti-HIV medications. Treatment was often delayed until HIV-illness became quite advanced. Even though that was the fact, as the better drugs with mild side effects have become available, the trend has been toward initiating treatment sooner, often before any symptoms appear. Many experts now like to see treatment begin with in 90 days of infection because of many reasons such as HIV is homogonous early in an infection; the early period of HIV infection is now recognized as a period of much hidden destructions; stopping HIV replication early decreases the risk of developing resistance ART and, 9 out of 12 people who started triple therapy (AZT, 3TC and Retronavir) with in 90 days of HIV infection, the virus was reduced to undetectable level in their blood and CD_4 counts improved (Olebounders and Kapita, 1994).

Regarding to mother to child transmission prevention therapy (PMTCT), it is possible for an HIV-infected mother to pass the virus directly before or during or through breast milk. Approximately, 20% of babies born to HIV-positive women who under take no transmission reduction measures will be infected with HIV. Taking AZT during the later stages of pregnancy and delivery reduces this probability to 5% to 8% (Bauer, Shainberg and Gallianso, 1999).

In our context, the Medical Follow-Up Clinic (MFUC), a special clinic for people living with HIV/AIDS (PLWHA) provides an on-going counseling,

treatment of opportunistic infections, general health checks, and ART. In the county, of 265,000 cases, less than 10,000 are currently receiving in many centers of government, non-government and private centers. Safe and effective use of ART drugs in Ethiopia requires meticulous treatment planning, strong coordination and dominant leadership

(www.staf.org/adis101/transmition).

All over the nation, the total break down budget was allocated in the year of 2004 was 1,840,000 birr only for ART drug provision (EJHD, August 2002). Therefore, for the better implementation and monitoring program, this study will enhance better information on problems of ART clients and ART drug supply based on trained staff personnel routine activities and PLWHA demands.

In general, based on the aforementioned important points, psychosocial support is so essential to effective care, treatment and support. This is because psychosocial support helps to mitigate the devastating impact of AIDS on PLWHA. Counseling, spiritual support for disclosing one's HIV-positive status, end-of-life and bereavement support, peer support, and practical economic assistance are all part of psychosocial support for PLWHA. Since HIV/AIDS has severe diverse impact on social, psychological and economic affairs on both individual and society level, psychosocial support is also essential to the success of ARV treatment. This has been shown by a number of studies that psychosocial problems such as depression and social problems like family disintegration reduce people's ability to adhere the complex ARV regimens in the treatment of HIV/AIDS.

2.8.1 ART Users and Related Factors

The antiretroviral HIV drugs that are currently available can improve the quality of life of some one infected with HIV, helping them to stay well much longer than they other wise could (http://vie.watdmt.com).

Antirational adherence in young and adolescents posses unique and formidable challenges. Young children may have particular difficulty taking medication. Adolescents may refuse to take medication as a manifestation of other wise normal rebellious behavior. Furthermore, the crucial role of family support in pediatric adherence can be compromised by other associated burdens, such as low in come, an HIV infected parent, stigmatization, or unclear familial responsibilities regarding the child's medication adherence. Despite these changes, ART is successfully administered much of the time and has drastically changed the prognosis of pediatric HIV disease (DHHS, October 2006).

There are some issues to be considered with children taking antiretroviral therapy:

- Adherence can be a problem because of side effects, pill burdens, swallowing difficulties, unpleasant tasting medications, or food requirements.
- Depending on the age of the child, adult supervision is usually needed to ensure the medication is taken consistently and correctly.
- Other medications may interfere with the antiretroviral so that consult your doctor before using other medications.
- With younger children some medications have to be taken as a syrup, which my require refrigeration.
- When the child is born with HIV, he/she should receive drug opportunity infections until their viral load is suppressed.

- Children with tuberculosis (TB) may have a post pone antiretroviral treatment as the drug can have negative interactions (http://view.at dmt.com)

There are more antiretroviral drugs available of adults than there are for children because of the way some of them react negatively with the growing children immune system. Children are given combination treatment based on the body surface area (calculated by meaning Height and Wight) or some times body weight alone as a child grows the dosage increases, as does the number of treatment options (Ibid). Fixed dose combinations (two or more drug regimens prepared in the form of one tablet) are not recommended because the amount of each drug in the tablet cannot be tailored to suit an individual. A child may at times take have to take a higher dosage than adults because of their metabolism processes the drugs more of quickly (Ibid).

Treatment in children of our case, children needing ART in year of 2005 AIDS yearly report was 43,000 Ethiopia (2006). In the year of 2006, among the children ever stared on ART, 69% were among ages 5-14 years, 4% were infants less than 18 months of age, and 27% were children 19-59 months of age (FMOH/HAPCO, September 2006).

2.8.2 ART in Women

The identification of pregnant women infected with HIV and their prompt treatment has already resulted in a marked decease in the number of children infected with HIV so that enrolment of women infected with HIV and their children exposed to HIV now a days could be strongly encouraged (Pizzo and Wilfert, 1998).

In high income countries, a full range of services for preventing mother to child transmission of HIV is nearly universal where as in some low

and middle income countries are still approaching their goal (WHO, March 2006).

This type of issue in developing countries, particularly in Sub-Saharan Africa, MTCT is increasing. According to the December 2003 WHO/UN AIDS report of HIV/AIDS, 2.5 million children under the age of 15 are infected with HIV around the world. Of these, 80% are from Africa. The reasons for increasing infection are high HIV infection rate among women of reproductive age, high fertility rate, and lack of PMTCT measures. However, studies conducted in some African counties have shown that ART drugs can significantly decrease MTCT (IFR and RCS, 2004).

Several ART regimens reduce the risk of MTCT in both breast-feeding and non-beast feeding women. The mechanisms by which these regimens prevent or reduce mother to child HIV transmission include deceasing viral replication in the mother, leading to a decrease in viral load and/or prophylaxis for the infant during and after exposure to virus. Because this, ART drugs are effective in both treating maternal HIV infection and preventing MTCT. Pregnant women receiving ART therapy thus require on going care and monitoring with in the local HIV/AIDS program (MOH, November 2004).

Mother to child transmission is by far the largest source of infection in children. With out specific measures, the risk of an infant acquiring the virus from an infected mother ranges from 25 to 45%. A study in Ethiopia has indicted that transmission rate ranging form 29 to 47%. Because of this, in Ethiopia more then 250,000 children under the age of five have already been infected with HIV. This increasing number of HIV infected children also places enormous burden on families and the heath care systems (FMOH, March 2002).

A very significant way of reducing the number of new infections of HIV is to prevent mother to child transmission (PMTCT). Effective ART regimens are available at a relatively low cost with treatment protocols, which are easily applicable (Ibid:31).

The current statistics for the total number of women on ART in Ethiopia is steadily increasing, that is 38, 810 (49.9%) women living with HIV/AIDS (both non pregnant and pregnant ones as of 10, March 2007 monthly HIV care and ART up date report (HAPCO, March 10, 2007 update Report).

2.8.3 ART in Children

Deaths due to HIV infection, newborn children with HIV may have a significantly higher viral load than adults because their immune systems are immature. The progression of HIV can be rapid if not treated (http://www.lib016.htm) studies have shown that highly active anti retroviral therapy [HAART] is very effective in suppressing the virus in children, but it must be administered in the correct dosage. CD_4 counts in children are generally much higher than adults, and change with the child's age (Ibid). In contrast, HIV infection is emerging as the major cause of infant and child hood morbidity and mortality in developing countries (MOH, January 2005).

Children in Africa still are not receiving the HIV/AIDS antiretroviral services or drugs they need, even though the drugs are a fordable and available (Medical World, October 2006). The response to ART in children is good. It the child becomes infected after combination therapy (African Health November 1989). In fact the goal of ART in children are to sustain maximal suppression viral replication; to restore immunologic function; to restore HIV related morbidity and mortality;

to improve the quality of life and to prolong the survival of child (MOH, January 2005).

Based on some studies on children ART adherence, there are factors to be considered. One is family variable such as social instability, un stable housing, lack of disclosure and pediatric depression, and the second one is families perceptions of disease and the value of its treatment, and the hast factor is related to treatment regiments, such as regimen complexity, pill burden and to tolerability. Now a days, thee are more than 744,000 orphaned in Ethiopia and 277,800 were in need of ART in 2005 (MOH and HAPCO, September 2006). Because of the above facts, less than 1% of children eligible for ART are receiving it. Of these, 50% are in Ababa with the majority residing in orphanages outside Addis Ababa, facilities visited have no more than 40 children on ART (http://www.google.com/search).

In general, in all age categories of children as to the month of March, 2007, there are a total of 3326 children on ART starting the age of infants<18 months to14 years (Monthly HIV care and ART up date, March 10, 2007).

In Ethiopia, an estimated 134,000 children under age is are living with HIV very 2006; approximately 30,000 babies were born with HIV/AIDS very few infants and children have access to the care and treatment services they need in order to service while 43,000 are eligible for anti retroviral therapy (ART), only 3,000 (7%) initiated ART as of the end 2006 (ICAP, 2007).

2.8.4 ART in Adolescent and Adults

Antiretroviral theory for treatment of Human Immunodeficiency Virus type 1 (HIV-1) infection has improved steady since the advent of combination therapy in 1996. More recently, new drugs have been approved, while some previously popular drugs are being used less often as their draw back be came prominent in to (http://aidsinto.nih.gov).

The viral load and CD_4 count of are the patient are the main factors for the start of AT in HIV/AIDS patients. This means that, the high viral load, the greater the fall in CD_4 cells and the more likely the emergence of opportunity infection and other adverse effects and the worsening of the patient's health (Pratt, 2003). With the advent of different types of antiretroviral agents, physicians saw that they could use these drugs in combinations to slow or halt this destructive viral replication (Ibid). Because of this, ART is aimed at reducing the plasma HIV RNA level (viral load) to the lowest possible level, preferably below the level of detection, as quickly as possible for as long as possible. Today treatment protocols, regimens and associated assays for monitoring treatment efficacy have become sophisticated (Ibid). The Current goal of antiretroviral chemotropic is to reduce viral load to the lowest possible for as long as possible. ART principle is based on the clear relation ships between viral burden and disease progression, and between rate of viral replication and the development of drug resistance (Essex M. et al, 2002).

ART has its own principles in HIV therapy such as preservation of immune function; reduction of HIV related morbidity and mortality; maximal and durable suppression of viral load; preservation of future treatment options; minimization of toxicity, and reduction of HIV transmission. In addition to this, it has also current drug fragment

strategies, especially for resource limited countries about: when to start; what to start; when to switch, and what to switch to issues showed be considered (Ibid).

As of December 2005, an estimated 1.2 million people living in low and middle-income countries had access to ART therapyHAPCO,2005). To mention as an example in sub-Saharan Africa as of estimated number of people needing ARV therapy, receiving therapy and ARV therapy coverage, December 2005, were 4, 000,000, 810000 and 17% from the world total estimated number of 6.5 million people needing ARV therapy as of December 2005 respectively (UNIDS, 2006). To see this fact in a better way, the same continent, middle east and north Africa with in the same year, December 2005 has 4000 PLWHA receiving ART, 75, 000 PLWHA needing ART, and 5% ART courage in that fiscal year (Ibid).

In fact, comprehensive HIV/AIDS treatment is complicated endeavor, and the needs of host countries, as defined by their national strategic, difference. There are a number of significant components of quality ART, including general critical support for patients, such as non-antiretroviral medications and laboratory tests, training and support for health care personnel; physical in infrastructure, including clinics, counseling rooms, and other relevant component of treatment, of HIV/AIDS

(http://www.state.govdocument).

Ethiopia is one of the 15 focus countries of the emergency plan, which collectively represent at least 50% of HIV infections worldwide. Under the emergency plan, Ethiopia received more than 47% million in fiscal year (FY) 2004 to support comprehensive HIV/AIDS prevention, treatment and care program. In FY 2005, the U.S was committed more

than $844 million to support Ethiopia's fight against HIV/AIDS (FY 04, GAC Ethiopia, Final pub). According to country profile report in 2004, Ethiopia had 1.5 million HIV-infected people, 120,000 AIDS death and 720,000 AIDS orphans. Due to this sever problem, Government of Ethiopia has been following critical intervention plan for HIV/AIDS treatment, such as strengthened leadership style; assisted selection of hospitals for ART; settled supportive laboratory services; supported assessment of pharmaceutical management system, and created linkage between different health institutions and the community to facilitate delivery of treatment, follow up of clients and referral to community and home based care (Ibid).

The current status of ART in Ethiopia has been a stead fast in provision of ART service. The MOH, with support from national and international partners, has developed an ART policy and ART guidelines that are currently being up dated (HAPCO, March 2005). Ethiopian government and other international partners are working together with the goal of ensuring a safe, effective, equitable, and sustainable ART program in the county. Both parties are committed to fight HIV and not the victims of HIV, to provide treatment to PLWHA in need; to address stigma and curb the ranging epidemic for the collective good; to commit time and resources to care for PWHA with sensitivity and dignity, and to ensure the ARV program in Ethiopia is on the right track (Ibid).

Though all the above conditions are supported by Ethiopian government and its international partners, the provisions gender sensitive adherence support is still in question except pigment women Fear, stigma and other misconceptions that drugs can harm the fetus has been reporting and affect adherence to ART in pregnant women. Similar factors that prevent women from seeking health services such as lack of time, lack of child care, lack of privacy, work load, and fear of unintended disclosure of HIV statues many also interfere with ART

adherence (WHO, 2004). Programs should, therefore, include strategies for treatment support and follow up that are acceptable to men and women in need of ART. In addition to this, women with HIV/AIDS will need to be counseled appropriately about their options and choices for contraception, pregnancy and child birth, women may also require treatment for sexual and reproductive tract infections (Ibid:25).

ART in women should be considered in giving them the right type of drug since women experience HIV/AIDS differently from men both physiologically and socially (http://www.oar.nih.gov/public/pubs/fy 2005.pdf).

According to MOH, January 2005 report, about 265, 358 PLWHA need ART, and of this population only 2% can afford to pay for ARV drugs and health care services (MOH, January 2005). Ministry of Health (MOH) has many considerations for selection of ARV treatment regimens, which includes important points, such as potency and side effect profiled, availability and cost of drugs, laboratory mentoring requirements, potential for maintenance of future treatment options, anticipated patient adherence, co-existent conditions as that of metabolic abnormalities and co-infections, and use of concomitant medications (Ibid:43).

In ART program report, government of Ethiopia lunched the free ART program in January of 2005 and "Accelerating Access to HIV/AIDS Treatment in Ethiopia, Road map 2004-2006" in June of 2005. The Road Map targets to put 100,000 persons on ART by the end of 2006. The actual data by the end of July 2006, 45,595 patients had ever started on ART at 132 facilities across the country. Of these, 35,465 were on treatment currently and 18,384 were enrolled in the first six months of 2006. Of these people, ever stated on ART, 47% were adult males greater than 14 years of age, 48% were adult females greater than 14 years of age, and 4% were children. Among children ever

started on ART, 69% were among ages 5-14 years, 4% were infants less than 18 months of age, and 27% were children 15-59 months of age (MOH, September 2006 AIDS Report).

According to MOH-FHAPCO, the monthly HIV care and ART up date report in March 10, 2007, the total national ART users are 77,833 ever started at the end of the month. Among these, persons currently on ART are 61,256 (78.7%), pediatric patient on ART regimens are 2802 (4.6%) of the total currently on Art and the total adults on ART regimens are 57, 803, 94.4% (Ibid).

2.9 Adherence to Antiretroviral Therapy

The advent of highly anti retroviral therapy (HAART) in the later half of the 1990s transformed both the clinical care and the health out look for people living with HIV infection. Although HAART regimens have produced dramatic reduction in HIV related mortality in countries where they are available, there is also a considerable that strict adherence is a crucial factor in maximizing the benefits of therapy. In developed world both health care practitioners and people living with HIV infection are how to sustain a life long commitment to near-total adherence, toxic and often complex regiments of ART (Pratt, 2003). Adherence to ARV treatment is essential to maintain long-term health benefit and avoid development of drug resistance. In fact, it is not possible for health care providers to reliably predict which individuals will ultimately be adherent to their treatment plan, as adherence does not correlate with gender, cultural back ground, socio-economic or education level, or language barrier between provider and patient. It is, therefore, essential to provide all patients with a comprehensive plan to support adherence that utilizes multiple strategies and all members of health care as well as family and community (MOH, January. 2005).

This is because new diagnosis or symptoms can influence adherence. For example, depression might require referral, management, and consideration of the short and long term impact on adherence (MOH, January 2005). Antiretroviral adherence is the second strongest predictor of progression to the AIDS and death, after CD_4 count. Incomplete adherence to ART, however, is common in all groups of treated individuals. The average rate of adherence to ART, approximately 70% despite the fact that long term viral suppression requires near perfect adherence. Many recent studies showed that the typical adherence rates for medications prescribed over long periods of time are approximately 50 to 75% (Machtinger and Bangsberg, 2005). The relationship between adherence and resistance to ART is more complex than the basic assertion that "non-adherence increases the risk of drug resistance" (http://www.libo16htm).

Poor adherence leads to the development of resistance, virologic failure, and increased morbidity and mortality. Research studies showed that virologic failure occurred in up to 55% of patients whose adherence was as good as 90 to 95%, while failure occurred in only 22% of those whose adherence was greater than 95% (Essex, 2002).

There are many reasons for variability in response to antiretroviral (ARV) are complex but may include inadequate adherence due to multiple social issues that confront patients. Patient factors clearly associated with the risk of deceased adherence, such as active substance abuse, depression, and the lack of social support, which needs to be addressed with patients before initiation of ART (DHHS, October 6, 2005). When patients of HIV have adherence to ARV therapy, HIV viral suppression, reduced rates of resistance, and improved survival have been correlated with highlights of adherence to antiretroviral therapy (Ibid).

According to (Yonas, 2005), adherence is a dynamic process, and patient behavior can change over time. In his unpublished thesis research, the researcher found out the reason for ART non-adherence that patients skipped their ARV drugs due to different adherence barriers. 33.9% of patients were asserted that they missed their doses due to being to busy with other things or having simply forgotten; while 27.5% listed being away form home as a primary reason for treatment of non-adherence. Other barriers to treatment include; felt sleepy (16%), there was a change in their daily routine (4.6%), felt depressed (4.6%) and they did not want others to notice that they are taking medicine (4.6%). Depression has been strongly related to non-adherence in some but not all studies.

A number of factors are associated with non-adherence to ART. The most important factors associated with medication adherence are commonly the following types:

- **Patient Variables**

Patient variables include socio demographic factors, such as age, gender, race, ethnicity, income, education, literacy, housing status, insurance status, HIV risk factors, and psychological factors (mental health, substance use, social climate and support, knowledge and attitudes about HIV and its treatment).

- **Treatment Regimens**

Factors related to treatment regimen include the number of pills prescribed, the complexity of the regimen (dosing frequency and food instructions), the specific type of antiretroviral drugs, and the short and long-term side effects. In this case, her, complexity of the regional and drug side effects the most clearly associated non-adherence ART factors.

- **Disease characteristics**

Disease characteristics include the stage and duration of HIV infection, associated opportunistic infections, and HIV related symptoms. A few studies described there is a relationship between HIV related symptoms and non-adherence.

- **Patient Provider Relationships**

Patient provider relationship characteristics that may affect adherence include the patient's over all satisfaction and trust in the provider and clinic staff, the patient's opinion of the providers competence, the provider's willingness to include the patient in the decision making processes and others.

- **Clinical Settings**

Aspect of clinical setting that may influence adherence include access to on going primary care, involvement in dedicated adherence program, availability of transportation and child care, perceived confidentiality, satisfaction with past experience and others (Yonas, 2005; Machtinger, January 2006, and http:/www. adherence to hiv art. htm).

In conclusion, many factors have been associated with adherence behavior. Some of these factors are largely immutable by the clinician, such as older age, low income, low literacy and the patient's social milieu (Kojic, 2006).

2.9.1 Determinants to Antiretroviral Therapy

A number of factors may influence the safety and efficacy of antiretroviral therapy in individual patients. Examples include, but are not limited to non-adherence to therapy, adverse drug reactions, drug

interactions, and development of drug resistance. Drug resistance, which has become a major reason for treatment failure, (DHHS, 2005). In some studies, some patient cohorts suggest that sub optimal adherence and toxicity accounted for 28%-40% of treatment failure and regimen discontinuation. Multiple reasons for treatment failure can occur in one patient. Some factors which have not been associated with treatment failure include gender, race, pregnancy, history of past substance use (Ibid: 30). Many HIV infected adolescents have specific adherence problems. Comprehensive systems cares are required to serve both the medical and psychosocial needs of HIV infected adolescents, who are frequently inexperienced with health care systems. Many HIV infected adolescents face challenges in adhering to medical regimes for reasons that include denial and fear of their HIV infection, misinformation and distrust of medial establishment, fear and lack of belief in the effectiveness of medications, low self-esteem, unstructured and chaotic life styles, and at last lack of families and social support. Treatment regimens of adolescents must balance the goal of prescribing a maximally potent antiretroviral regimen to facilitate adherence (Ibid: 31).

Antiretroviral drug have not been available for very long, and despite on going research and development. There are some problems associated with them. Antiretroviral drug or combination of drug can fail for a number of reasons include; the combination of drugs was to strong enough; the drugs were not absorbed properly by the body; drug resistance, drug interactions, strong side effects, and poor adherence (htt://www.startingatnirectorviraltreeatment.htm).

Researchers have studied interruptions of antiretroviral therapy (ART) for various reasons. These treatment interruptions usually strategic treatment interactions or structured intermittent. During most

treatment breaks, the viral load climbs very quickly and CD_4 cell counts drop. There were several reasons why treatment interruptions were studied:

- People who started treatment as soon as they got infected;
- People on therapy who don't meet current treatment guide lines;
- Using "intermittent therapy" to reduce side effects and costs;
- Stopping treatment to deal with drug side effects, and
- Waiting for a new dug to be approved.

Some of the structured intermittent therapy (SIT) faced by mostly HIV parents and by ART users are the above. During this time, people ending a treatment interruption might have hard restarting medications. This can be due to side effects, or due to psychological difficulties in getting back on treatment (Wilkin, Gulick and Glesby, June 2006).

In general, treatments of HIV/AIDS have failed mainly through the following three important reasons:

- Due to clinical disease progress;
- Due to immunologic fail in CD4 counts;
- Virologically, due to the rise in viral load (MOH, January 2005).

A number of other factors impact negatively on ART adherence. These include lack of social stability (unstable housing, the lack of social support, homelessness), psychiatric problems, major life event and arsis, as well as the severity of HIV related medical problems. Sever illness also makes it difficult to adhere ART for some group of HIV patients. In North American studies, ethnicity was found to impact on

adherence as does gender; women injectors and/or crack smokers are less likely to adhere to treatment. Another major cause for non-adherence is the interaction between antiretroviral drugs and medications used by PLWHA (Oppenhem, Aceija, and Stemson, 2003).

2.10 Antiretroviral Therapy Policy and Implementation in Ethiopia

The government of Ethiopia adopted the policy of ARV drug supply and use in July 2003, paving the way for more initiatives towards facilitating access to free and low cost ARV drugs. To make ARV treatment more accessible, government of Ethiopia launched the free ARV treatment initiative on 24 January 2005. At the same time, other essential documents were developed to further clarify how the implementation of the ART program will be achieved (HAPCO, February 2006). In 2005, the FMOH published accelerating access to HIV/AIDS care and treatment Rod Map for 2004-2006 specific ART enrolment targets are provided, including the goal of providing ART for 4000 children by the end of 2006. That would result a 10-fold increase in the number of children receiving ART, but the target still represents only 6% of children in immediate need of ART. The adult target for the same period is 31% of those in immediate need of treatment (Ibid:8).

Following the publication of the "Guide line for Implementation of ART in Ethiopia", in January 2005, the "Accelerated access to HIV/ADIS treatment in Ethiopia, Road Map 2004-2006" was the next important document published by Federal Ministry of Health (FMOH). This document reflects the national target and therefore, includes all sources of ART in the country, free based ART through Global Fund, and PEPFAR, AIDS initiatives in the public and private sector, and lastly, through private initiatives from partners like NGOs and others (Ibid:12).

Again in January 2005, the guideline for implementation of ART in Ethiopia provided specific guidance for national ART program implementation and emphasized the need to prioritize children for ART. The national guide on the use of ARV drugs, issued in 2003 and revised in 2005, includes a short section on pediatric care and treatment (http//www.state.gov/documentslrganization/56776.pdf).

The implementation of a safe and effective ART is a serious challenge in such a resource-constrained country, where there is a little experience in managing ARV complex treatment program (MOH, January. 2005). Several policies are in place to support the implementation and scaling up of the national response, including the national HIV/AIDS policy, the national strategic frame work on the prevention and control of HIV/AIDS, and the supply and use of ARV dugs policy. This policy guideline developed by MOH in collaboration with Drug administration and Control Authority (DACA), the HIV/AIDS Prevention and Control Office (HAPCO), Addis Ababa University (AAU) and Control for Disease Control and Prevention (CDC)-Ethiopia, International Education and Training Center on HIV (I-TECH) and the World Health Organization (WHO) county office will guide the implementation of national ART program (Ibid:4).

Because of this, the MOH has developed its type of guideline to help foster a flexible, creative, and energetic response. This guideline is basically based on sound, scientific and ethical standards, and promotes sustainability and equitable access to treatment. Its primary goal is to support the development of standardized, safe and effective ART program nation wide. The target audiences of this guideline include health providers, community health workers, community-based organizations' staff, PLWHA, and program managers in the public and private sectors (Ibid:6).

The MOH, HAPCO, DACA, EHNRI, AAU, Regional Health Bureaus, the private sector, the media, and local NGOs, with the support from UN, WHO, USG and other intentional partners, are working together with the goal of ensuring a safe, equitable, accessible and sustainable ART program in Ethiopia (HAPCO, March 2005). As to the ART service provision, it is unlikely to be available for all those in need, but the following thee groups have been designated as a priority recipients:

- Those who are the sickest and those ART leads to improved health;
- Those who are most vulnerable such as children;
- Those who fall under national strategic priorities such as PMTC and PEP (Ibid:22).

2.10.1 ART Policy and Guidelines

In many cases, elements of policy can be implemented even before policy is adopted. The need for a comprehensive AIDS policy may become apparent only when the HIV epidemic becomes so sever that large portion of population is affected. The goal of the policy project in ministry of health is to create supportive policy environments for family planning and reproductive health programs, including HIV/AIDS, through the promotion of participatory policy process and population policy that responds to client needs (Stover and Johnson, 1991). Once policy is approved, such as ARV drug distribution and implementation approval, other policy issues can be implemented only through enabling legislation, with the development of guidelines, or part of a strategic plan (Ibid).

Ethiopian government adopted the policy of ARV drug supplying use of the first time in July 2003. Such move paves the way for more initiatives towards facilitating access to free and low cost ARV drugs.

Subsequently, the government launched the free ARV treatment initiative in January 2005, which has given access to significant number of patients in a very short period of time (Kebebew, December 2005). The policy is formulated to strengthen and expand the ART national program. The main goal of the policy was to implement safe, effective and accessible ART program while strengthening the health care system (Ibid:16).

In the National ART Policy Program(2005), the guiding principles are many. Some of them includes ART will be an integral parts the HIV continuum for care, treatment and clinical procedures will conform with national ARV treatment guidelines; equitable universal access will be strongly promoted; efforts will be made to ensure sustainability; only one National ART Implementation Guideline will be followed; public-private partnership will be encouraged and promoted, and other guiding principles were included in the ART policy (www.icasa/day5arehtiopia.pdf). To fulfill the above guiding principles, bank support contributes a lot to the preparation of ART policy and ART guidelines (http://www.policyprogject.com.pdf).There fore, strong political commitment, meaningful political participation, effective resource mobilization, accurate data for decision making, and trained cadre of people with capacity to guide policy formulation and implementation are critical elements of enabling ART policy environment (www.policyprogect.comepdf).

As HIV/AIDS evolves for a death sentence to a chronic disease, much needs to be done to further develop high quality ARV therapy programs. This include, management teams to coordinate the process of providing services, treatment preparedness and community engagement, reliable and efficient procurement and supply chains for monitoring the adherence of people receiving ART therapy and treatment success,

monitoring drug resistance, adherence support and operational research to learn by doing (http://www.whoint/entity/3by5/3by5/forward.pdf).

2.1o. 2 ART Implementation and Guidelines

Success full implementation of ART program requires appropriate and standardized structural processes; measurements and monitoring that strictly follow national ART policies, guidelines and protocols. Thus, ART implementation guideline is guided by the national HIV/AIDS policy that works on supply and use of ARV drugs. The guideline on ARV, PMTCT, OI, STI, VCT and infection presentation, including post exposure prophylaxis (PEP) serves to standardize the national approach to ART (MOH, January 2005). Service Jan. 2005). In implementation program some policies have been implemented through operational or strategic plans or establishment of committee to develop operational guide lines (Stave and Johnston, August 1999).

"ART Policy Formulation experiences from Africa", provided participants with an opportunity to share their experiences in the policy process and in confronting strategic policy issues (Ibid:9). Supportive policy environment is crucial to the implementation of successful programs that prevent the spread of HIV, deliver care to those infected, and mitigate the impacts of epidemic

(http://www.rtin.org/pubs/policyformulationHIV/AIDS.pdf).

In general, in the implementation ART program and policy, there are important critical issues that have to be considered, such as affordability, cost effectiveness, sustainability, equity and access and other implementation instruments that can be strictly considered to the proper ART supply and use for ART clients all over the nation.

Based on this literature review, the researcher will assess the practical ART access and adherence together with its related problems in the study area. Thus, this excessive review of literature will give a profound knowledge about the problem of the study.

CHAPTER THREE

METHODOLOGY

3.1Study Design

The study consisted of a combination of methods. Both quantitative and qualitative methods were employed in data collection. The two approaches were arranged to complement each other to explore issues related to psychosocial problems which were happened during the service of antiretroviral therapy (ART).

Quantitatively, a survey of structured questionnaire was conducted for hundred sixty five respondents of ART users at Debrebrehan Zonal Hospital. Qualitatively, the researcher conducted focus group discussion for seven member of participants; one from ART department, one form pharmacy department, one from counseling department, one from community leader and two from PLWHA and adherent of ARV drug, one male and one female discussants were included to respond for prepared FGD questionnaire. The other type of qualitative method of data collection was in-depth interview for policy makers of ARV drug distribution and access at HAPCO here in Addis Ababa. All these methods are used to answer issues cited in the objective of the study.

3.2 Study Area

The study was conducted at antiretroviral therapy units in Debrebrehan Zonal Hospital, particularly at the Hospital ART center; Red Cross home based care, and Debrebrehan ' Tesfa Gogh' HIV center from April 24 to May 23/2007. Debrebrehan Zonal Hospital is the oldest Zonal Hospital found at the center of the city. According to city administration statistics in1996 E.C , Debre Birhan Zonal Hospital has an area of 23,064m^2. It has 72 staff members who currently working in

different health department. Debrebrehan city is one of the oldest cities of Ethiopia constructed during the regime of Zemene Mesafint.

The city has the total population of 79, 832, from this total population 38.28% of them were less than 15 year of age, 57.66% of them also with the age limit of 15-64 years and 4.06% of the city total population were over 65 years of age. The city had the male to female ratio of 1:1.2, that is 31, 486 men for 36, 239 women. In the city, both language and religion are almost homogeneous, 91% of the populations are Amharic speakers and 80% of the populations were also Christian. City is grouped as one of the highland cities and colder areas of the country.

3.3 Subjects of the Study

The subjects/participants of the study were people living with HIV?AIDS (PLWHA) and as the same time they were using antiretroviral drug (ARVs) regularly in that ART center. The subjects were sub-divided in to three groups. Group 1, 115 subjects from Debrebrehan Zonal Hospital ART center. Group 2, 30 subjects from "Tesfa Gogh" people living with HIV/AIDS Association and 20 subjects from Home based care subjects through Red Cross staff cooperation. In general, 165 subjects were collected as the study sample. Among these, 91 subjects were females and 74 were males.

3.4 Sample Size Determination

Determination of both representative and adequate sample size is important in research doing activity, especially in probability sampling. But in this study, the selected sample is 30% of 552 ART subjects based on Wilkison, (1984) sample size determination. Since the sample is purposive it is unable to determine the sample size. Because the nature of the respondents were very different so that some might come

and others might be absent from the center. Thus the researcher used this type of sample size determination.

3.5 Materials and Instruments

The materials and instruments used for data collecting technique were tape recorder for focus group discussion to collect all relevant information from the discussants. Structured questionnaire, structured interview and also participant observation were used for some psychological feelings. The structured questionnaire had six parts. The first one was demographic data items which were six in number. The second part was ART drug access and adherent service receiving items, they were eleven items. The third part was gender sensitive items. It included four items. The fourth part was psychological problems measuring items (A and B). They were twenty six in number of items. The fifth part was social problem measuring items (A and B). They were thirty five in number of items. And the last part was open-ended items which were five in numbers. The others were FGD and in-depth qualitative items. FGD had seven items conducted for seven discussants. They were one from pharmacy department, one from counseling unit, one from main ART unit, one from hospital management, one from community representative and two(male and female) PLWHA who were clients of the center. Of which, four were males and three were females.

FGD scene was structured that the researcher sat at the middle of discussion scene seeing others in front of him who were very comfortable to ask and record. And then the researcher asked the discussants based on his prepared questionnaire and listen to their reaction for those of questions posed so that the researcher took notes and recorded their ideas ,insights , know ledges ,comments and others by tape reorder.

Regarding to in-depth interview , six items were prepared and conducted for one HAPCO ART drug policy makers' representative expert. The procedure was some what the same as that of FGD.

3.6 Sampling Techniques

Since systematic random sampling technique was not convenient, the researcher used purposive sampling because of the nature of the study and inability of getting respondents from their list of references as the researcher wanted to select the sample. To increase sample's representative ness, the sample size was grouped in to 3 groups as explained in the subjects of study above.

3.7 Statistical Tools Used

The collected data was processed and analyzed by 'EPI- 6 program' by community health data analyzer and then by using Statistical Program for Social Science (SPSS-version 11) window by the researcher. Other computer programs such as Ms-widows and Excel programs were also used. In addition to this, excessive statistical organization and analysis using hand calculator was done manually by the researcher him self how ever calculator analysis was used for FGD and Interview.

3.8 Pilot Study

Twenty five questionnaires were conducted for Black –Lion Hospital ART centre users for three days, because of challenging behavior of respondents, data were collected and analyzed for reliability and content validity of test items.

Because of that pilot study, some items were improved and very few items were dropped. The reliability was made for social attitudinal scale, depression scale and social adjustments scales. And their alpha

values were 0.65, 0.82 and 0.86 respectively. Regarding validity some items' content were improved and other two items for open-ended questionnaire were included.

3.9 Variables Studied

- **Dependent variable**

Depression, stress and feeling of shame and stigma and discrimination were studied.

- **Independent variables**

Sex/gender, and ART drug access and adherence were the variables selected for the interest of the study.

3.10 Ethical Consideration

All respondents were selected and participated in the study by soliciting their voluntarily and consent. No respondent was included in the study who was not interested to participate voluntarily. But the cons and pros of the study was explained for them to be aware of the study since most of the respondents came form rural area.

CHAPTER FOUR

RESULTS

This part of the report deals with presentation, analysis and interpretation of data which were gathered though structured questionnaire of survey study, and in-depth interview and focus group discussion of qualitative one. To make the discussion more convenient, the data were systematically arranged under the following two groups. Each of them has sub divisions which deals with the problem of the statement.

4.1 Results for Quantitative Data

4.1.1 Socio Demographic Characteristics of Respondents

Table 1: Socio Demographic Characteristics

Socio Demographic Characteristics	Frequency	Percent
Sex		
Male	74	44.8
Female	91	55.2
Total	165	100.0
Age	4	2.4
< 15		
15-29	60	36.4
30-44	82	49.7
45 and above	19	11.5
Total	165	100.0
Education		
Illiterate	46	27.9
Student (1-8 grade)	74	44.8
9-12 grade student	38	23.0
Above 12 grade	7	4.2
Total	165	100.0
Religion		
Christian	158	95.8
Muslim	4	2.4
No religion	3	1.8
Total	165	100.0
Occupation		
Unemployed	30	20.0
Student	6	3.6
Employed	24	14.5
House wife	48	29.1
Others(prisoners, pensioners,...)	57	34.5
Total	165	100
Marital status		
Unmarried	33	20.0
Married	54	32.7
Divorced	43	26.1
Widowed	33	20.00
Other status	2	1.2
Total	165	100

As shown in the above table, the majority, 91 (55.2%) of respondents were females and the rest 74 (44.2%) were male respondents giving a female to male sex ratio of 1.23: 1.

This shows that females were more users of ART because of their HIV infection in that large population. The majority of respondents' age group was 30-44, 82 (49.7%).

Regarding to education of respondents, the dominant proportion, 119 (72.1%) of respondents were literate. As to religion concerned almost all, 158 (95.8%) respondents were Christian since the region by it self is Christian region. The other socio demographic characteristics by occupation shows that 30 (18.2%) respondents were unemployed; 48 (29.1%) of respondents were house wives; 57 (34.5%) of respondents were engaged in other different activities such as farming, trading, being a prisoner and the like. The last socio demographic characteristics of the study, marital status, 54 (32%) of respondents were married; 43 (26%) of respondents were divorced; 33 (20%) of respondents were either widowed or unmarried.

4.1.2 ART Access and Adherence and Problems Related to the Service.

Table 2: Respondents' Responses on ART Access, Adherence and Psychosocial Problems.

Statement of variable	Frequency	percent
ARV drug regimen currently you take		
1 or 2 ART regimen	43	26.1
3 or more ART regimen	121	73.3
Others	1	0.6
Total	165	100
Center for your ART Access		
Health station	-	-
Health center	02	1.2
Hospital	163	98.8
Others	-	-
Total	165	100
Your current health care provider		
Family	96	58.2
Your life partner	23	13.9
Your organization	3	1.8
Yourself	39	23.6
Others	4	2.4
Total	165	100
Your ART initiator		
Family advice	19	11.5
Health worker advice	92	55.8
Your health status	54	30.9
Others	3	1.8
Total	165	100
Did you skip your ARV drug?		
Yes	10	6.1
No	155	93.9
Total	165	100
Factors related to your non-adherence		
Fear of drug side effect	4	2.4
Problem of social stigma and discrimination	3	1.8
Forgetting	2	1.2
Others	5	3.0
No response	151	91.5
Total	165	100
Factors for ART Adherence		
Benefit of ART	120	72.7
Difficult nature of the Virus	14	8.5
Type of drug regimen	7	4.3
Quality of ART service	21	12.7
Others	3	1.8
Total	165	100
Psychosocial problems en countered while you are using ARV drugs		
Depressed mood /headache/	64	38.8
Absence of social support	40	24.2
Lack of awareness	9	5.5
Social discrimination	13	7.9
Others	10	6.0
No response	29	17.6
Total	165	100
Social problems for ART non adherence		
Stigma and discrimination	22	13.3
Lack of own home	30	18.2
Suspicion about ART	8	4.8
In adequate medial service	1	0.6
Others	11	6.7
No response	93	56.4
Total	165	100
Any problem prohibits your ART Access and/or adherence		
Fear of social discrimination and stigma	37	22.4
ART center far away from home	17	10.3
Alternative use of traditional medicines	4	2.4
Forgetting ART tablets	1	0.6
Others	13	7.9
No response	93	56.4
Total	165	100

As shown in the above table 2, antiretroviral drug (ARV) drug access, adherence and problems encountered are tabulated. The finding of the study indicates that the majority of respondents, 121 (73.3%) of respondents were taking three or more types of ARV drug regimens and the others 43 (26.1%) of respondents were used 1 or 2 types of ARV-drug regimens. Respondents were also asked about ART access, in that 163 (98.8%) of respondents were hospital ART clients where as the other 2 (1.2%) of respondents were health center clients. 96 (58.2%) of the respondents were assisted by their family member for the good of their current health condition and 39 (23.6%) of respondents were living lonely. Other respondents, 23 (13%) were answered that they had life partner to take care of their health condition so that they adhered to ART center.

Regarding to ART initiation, the majority, 92 (55.8%) respondents, 51 (30.9%) of respondents and 19 (11.5) % respondents were primarily initiated to start ART by the help of their immediate health worker advice, condition of their health status and their family member advice respectively.

The response of respondents who were asked about the non-adherence of ART, 155 (93.9%) of the respondents answered "No" and the rest 10 (6.1%) gave their answer "Yes". This indicates that almost all ART users were strict adherents of HIV drugs, and there were only small number of defaulters. They had a very good drug adherence ratio, 93.9% which is greater than the standard of ART adherence ratio, 70-90% (WHO, 2005). Although there was non-adherence; that is defaulters of ARV drug who did not accept the instruction of the physician, there were factors related to this. Based on the findings of this study, only 14 (8.5%) were interrupted their regular ARV drug due to fear of side effects, fear of social stigma and discrimination and unusual forgetting

habit of ART tablets. The majority, 151 (91.5%) of respondents were not faced any problem of being strict adherent for ARV drug.

In contrast to being non-adherent of ART, there were some factors influenced ART users to be proper adherent. Based on the above table, 120 (72%) of the respondents became strict adherent of ARV drug because of its benefit for improvement of their health status. Other major factors for this were the difficulty nature of the virus itself and the better quality of ART service in the center. Other respondents 14 (8.5%) and 21 (12.7%) of respondents had problem of social support and other problem which were not mentioned.

4.1.3 Gender Sensitive Psychosocial Variables

Table 3: Responses of Psychosocial Gender Sensitive Problems

No	Statement of variables	Sex		Total	Percent
1	**Have you any psychosocial problems related to your gender while using ART?**	**M**	**F**		
	Yes	11(40.7)	16(59.3)	27	16.4
	NO	63(45.7)	75(54.3)	138	83.6
	Total	74	91	165	100
2	**Type of psychosocial problems encountered by ART adherents**				
	Social stigma	1(4.2%)	1(4.2%)	2	4.2
	Depressed mood/headache	3(12.5%)	8(33.3)	11	6.7
	Lack of disclosure	5(20.8)	3(12.5)	8	4.8
	Stigma and discrimination	2 (8.3)	3(12.5)	5	10.4
	No problem at all	13 (54.2%)	9 (37.5)	22	13.3
	Gender total				
	No response	24 (32.4)	24 (26.4)	48	29.1
		50 (67.6%)	67(73.6%)	117	70.9
	Total	**74**	**91**	**165**	**100**

The data in table 3, item 1 indicates that 27 (16.4%) of respondents had psychosocial problems such as stigma related to their gender while they were using ARV drug. Among these, 11(40.7%) were men and 16 (59.3%) were female. The table shows that females were scarcely troubled by gender related psycho social problems than males had.

One might infer this condition as a cause because of their being HIV

positive and ART users In general, by observing the data it is possible to conclude that 138 (83.6%) of respondents did not have any gender related problem, of which 75 (54.3%) were females.

Thus, it is important to know its significance by the using chi-square contingency table test. As tabulated in the above table, the responses of the respondents regarding to the types of psychosocial problems encountered by ART adherents, people with stigmatization were small enough not to be regarded, that is only 2 (4.2%) respondents, one male and one female. 11 (22.9%)of respondents were with the problem of depressed mood ,and of which 8 (33.3%) were female respondents. The majority, 22 (13.3%)of respondents were answered that they didn't have any psychosocial problems related to the adherence of the ARV drug where as 117(70.9%) respondents were reserved not to answer the question.

4.1.3.1 Gender Sensitive Psychological Feeling in ART Treatment

Table 4: ART, Shame feeling and Gender relationships

Respondents' psychological reaction	**Sex**		**Total**	**Percent**
	M	F		
Feeling of Shame	48(64.9)	68 (74.7)	116	70.3
No shame feeling	24 (32.4)	22 (24.2)	46	27.9
No response /reaction/	2 (2.7)	1 (0.01)	3	1.8
Total	**74**	**91**	**165**	**100**

In the above table majority of the respondents, 116 (70.3%), of which 74.7% respondents were females who have had HIV/AIDS related feeling of shame and the rest, 46 (27.9%) did not have any psychological shame feeling. As to this analysis, 68 (74.7%) of respondents were females.

Table 5: Test of Contingency to Measure the Significance of Psychological Shame Feeling Reaction

Gender	Feeling of shame	No shame feeling	No response	Total	χ^2 value
M	48 (52.02)	24 (20.63)	2 (1.34)	74	**2.146**
F	68 (63.97)	22 (25.37)	1 (1.65)	91	
Total	**116**	**46**	**3**	**165**	

Critical (2df, α=.05, 3.84)

From the above table 5, one can conclude that the problem of shame feeling for male and female respondents was insignificant while- they were taking ARV-drug in their usual practices.

Table 6: Problems Encountered To ART Users in ART Access and Adherence

Gender based statement	Gender				Total and percentage	
Psychosocial problems encountered	M	%	F	%	Total	Percentage
Restricted mobility	22	29.7	23	25.3	45	27.3
Difficulty in transport access						
Child care and domestic activity	10	13.5	18	19.8	28	17.0
Other factors	11	14.9	18	19.8	29	17.5
	7	9.5	6	6.6	13	7.9
No response	34	32.4	36	28.5	50	30.3
Total	**74**	**100**	**91**	**100**	**165**	**100**

As shown in the above table, item 304, 45 (27.3%) of respondents were restrained by restricted mobility form getting ARV drug, 28 (17.0%)of respondents and 29 (17.6%) of respondents were also encountered by problem of getting transport access, and being business in child care

and other domestic activities respectively.

The majority of respondents, 50 (30.3%) were in the position of abstaining to give their response so that they didn't have any problem related to their gender.

As one can observe from the table illustrated above regarding to the gender difference between male and female respondents, there is no significant difference between the two genders. This condition will be a assured by the researcher in doing chi-square contingency table computation at χ^2 (4df, α= 0.05,) in the table shown below.

Table 7: Computation for ART Access and Adherence to know Psychosocial problem Difference between the two Genders:

Gender	Restricted mobility	Difficulty in transport	Child care and domestic activity	Others	No response	Total	χ^2 value
Male	22 (24.670)	10 (12.560)	11 (13.006)	7 (5.83)	24 (22.424)	74	
Female	23 (30.333)	18 (15.442)	18 (15.994)	6 (7.170)	26	91	4.11
Total	55	28	29	13	50	165	

Critical χ^2 (4df, α=0.05, 9.488)

Table 7 in the above chi -square computation, there was no significant difference between the two genders as it was previously shown in the percentage computation. This indicates that psychosocial problem hindered their access and adherence of ARV drug. Since the chi-square value (χ^2) at (4df, α= 0.05, 4.11) is less than the table value, 9.488, therefore the researcher fails to retain the alternative hypothesis (H_1) and then accept null hypothesis (H_o) assuming that there is no difference between the two genders in their psychological problems which were encountered by ARV drug access and adherence in the study area.

Table 8: Respondents gave multiple responses for gender based psychosocial problems

Statement of gender based psychosocial problems during ART adherence (303 item)	**No of respondents answer more than one problems encountered to them**						
	List of problems in item number						
Identify the problems that you faced while you were using your regular ART	303(1)	303(2)	303(3)	303(4)	303(5)		**Total**
Respondents answered	29 (17.6)	26 (15.8)	74 (44.8)	22 (13.3)	1 1(0.1)	5 6(3.6)	**158**
No answer given	-	-	-	-	-	-	**158**
Total	29	26	74	22	7	-	**158**
Grand total for both respondents							**316**

Some of respondents who answered one answer and no of respondents gave their answer only for a single answer and no respondents gave their responses were also added and gave 316 respondents. This above table indicates that there are 158 alternatives answered by the respondents more than once. This shows that respondents had multiple psychosocial problems.

4.1.4(A). Psychological Variables Data Presentation

Table 9: Respondents Responses for Item Number 401

Item No	Statement variables	Yes		No		Yes Total	Percent Total	No Total	Percent Total	Total
		M	F	M	F					
1	Do you feel unhappy while you take your ART tablets?	27	31	47	60	58	35.1	107	64.8	165
2	Do you have depression which causes poor appetite?	30	39	44	52	69	41.8	96	58.2	165
3	Do you have self confidence whichever ART regimen is?	62	73	12	18	135	81.8	30	18.2	165
4	Do you feel nervous, or frightened or worried about your being PLWHA	31	47	43	44	78	47.3	87	52.7	165
5	Do you perceive your illness and/or being user of ART medication as a punishment or sinful act?	25	39	49	52	64	38.8	101	61.2	165

In the above table 9 item 1, 58 (16.4%) of respondents answered "yes" for the question asked about their unhappiness feeling while they were taking ART medication. Among these respondents, 31 (53.4%) respondents were female respondents. The other 107 (64.3%) of respondents gave their answer "No".

In the 2nd item of the table, a question asked about the assessment of poor appetite because of the presence of depression, 69 (41.8%) respondents answered "Yes" and 96 (58.2%) respondents answered "No". From this, 39 (56.5%) respondents answered "Yes" were females. The table tells us that there were more proportion of respondents that they did not have such a problem.

When one wants to know whether respondents had self confidence to take ART properly based on the prescription of the physician or not, item 3 shows that the proper statistical data. Based on this data, 135 (81.8%) respondents answered "Yes", of which 73 (54. %) were females, and the other respondents, 30 (18.2%) answered "No". This indicates that the majority of ART clients had good psychological feeling in order to use ARV drug.

In the 4th item of the table, 87(52.7%) respondents were in feelings of nervous, or worried about their being HIV/AIDS patient or users of ARV-drug where as 78 (73.3%) respondents were felt under such a problem. When we come to gender difference in accepting the problem, 47 (60.3%) of he respondents were females and the other 31(39.7%) respondents were males.

The last item of the table shows that 64 (38.8) respondents, of which 39 (60.9%) were females answered "yes" that they perceived their problem as a sense of punishment or sinful act when they were taking their ARV drugs. The majority, 101 (61.2%) of respondents were refused to say "Yes" as long as they favored "No". This shows that a large number of respondents were hope fully accepted the ARV-drug and as the same time their being PLWHA with full confidence.

For better understanding about the difference of respondents who answered "Yes" from respondents answered "No" will be tabulated by the following chi-square table below.

Table 10: Chi-Square Analysis to Measure the Significance of the Problems

Statement choice	Measuring Statement Item Number						
	401 (1)	401 (2)	401 (3)	401 (4)	401 (5)	Total	χ^2 value
Yes	58 (80.8)	69 (30.8)	135 (30.8)	78 (30.8)	64 (30.8)	404 (30.8)	**155.78**
No	107 (84.2)	96 (84.2)	30 (84.2)	87 (84.2)	101 (84.2)	421 (84.2)	
Total	**165**	**165**	**165**	**165**	**165**	**165**	

Critical χ^2 = (4df, α= 0.05, 9.488)

In the above table of chi-square, there is a significant psychological problem for both groups of respondents. The calculated value of chi-square (χ^2) at α= 0.05 an 4df is 155.78 which is greater than the table value of χ^2 = 9.488. Therefore, there is a significant psychological problems regardless of gender differences. In order to see gender difference of the problem, the following table will be depicted.

Table 11: Chi-Square (χ^2) Contingency Test for Psychological Problems Related To ARV Drug Usage Based on Gender

Gender	Measuring Item number						χ^2 value
	401(1)	402(2)	403(3)	404(4)	405(5	Total	
Male	27 (25.12)	30 (29.89)	62 (58.98)	31 (33.79)	25 (27.72)	175	**1.42**
Female	31 (33.79)	39 (39.11)	73 (76.52)	47 (44.21)	39 (36.29)	229	
Total	**58**	**69**	**135**	**78**	**64**	**404**	

Critical χ^2= (4df, α=0.05, 9.488)

The above chi-square (χ^2) table shows that whether there is a difference in psychological problem of ARV drug users in their gender or not. Since the calculated value of χ^2 at (4df and alpha =0.05) is less than the table value, 9.488. Therefore, there is no a significant difference between male and female respondents in their psychological problems related to their being HIV/IDS patient and adherent of ARV-drug. Thus, the researcher doesn't have any reason to reject null hypothesis (H_o) in favor of alternative hypothesis (H_1) rather than accepting it.

4.1.4 (B) Psychological Problems based on Beck's Depression Inventory(BDI)

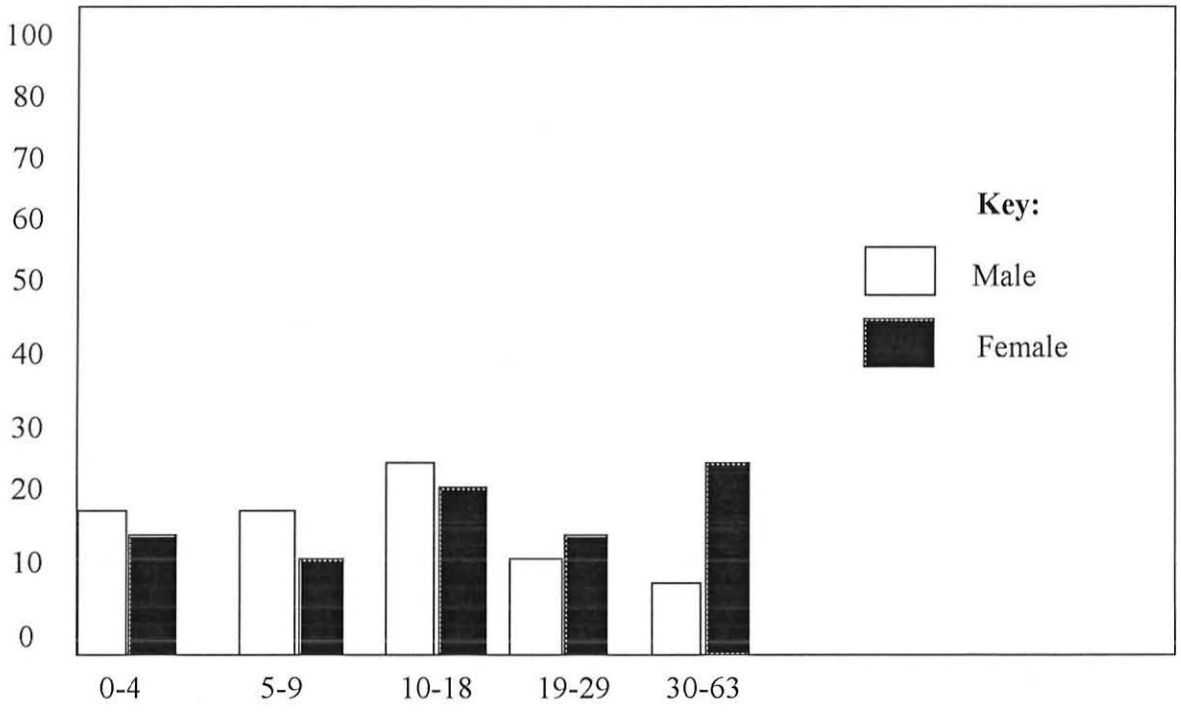
The BDI questionnaire is copyrighted by the psychological corporation. The original version of BDI was introduced by Beck in 1961. It was revised in 1971 and made copyright in 1978. Both the original and revised versions have been found to be highly correlated(r=.94). The BDI is a 21 item self-report rating inventory measuring characteristic attitudes and symptoms of depression. The internal consistency for BDI ranges from .73 to .92 with a mean of .86. The BDI has a split half /Cronbach's Alpha reliability coefficient of .93 where as the pilot test reliability of this study is .82. This shows that this inventory is also convenient measure of depression in our context. It has the highest score of 63 and the lowest score of zero. The total levels of depression interpreted as possible denial of depression for below 4 score, normal for 05-09 score, mild to moderate depression for 10-18 score, moderate to sever depression for 19-29 score and sever depression for score of 30 to 63 (http:/www. Beck Depression Inventory. htm).

Table 12: Psychological Problems of ART Users based on Depression Scale

Depression scale	Gender frequencies		Percent	Total	Percent
0-4	M	17	53.1		
	F	15	46.9	32	19.4
5-9	M	15	53.6	28	17.0
	F	13	46.4		
10-18	M	23	51.1	45	27.2
	F	22	48.9		
19-29	M	12	42.9	28	17.0
	F	16	57.1		
30-63	M	7	21.9	32	19.4
	F	25	78.1		
Total		**165**	_	**165**	**100**

In the above table, 45 (27.2%) respondents were with in the range of 10-18 depression scale, which is mild psychological problem encountered to the respondents where as the other table numbers (percentages) observed in the above table are not much significant. For this reason, thus except for the large score of depression 25 (78.1%) of respondents were female in 30-63 depression scale measurement. The researcher should have to check the significant difference between the two genders after the following figure.

Fig 1. Graph of Depression Scale for ART Users Respondent



The above figure indicates that except for 0-4 range of depression scale, there was larger number of females though the more prominent ones were depression scale range of 10-18 and 30-63. And in the range of 30-63, as this graph depicts greater number of female respondents were grouped in sever depression than male respondents.

Table 13: Chi-Square Test of Significance for Depression Difference between Two Genders

Gender	Range of depression scale					Total	χ^2 value
Male	0-4	5-9	10-18	19-29	30-63		
	17 (14.65)	14 (12.11)	23 (20.63)	12 (12.56)	8 (14.35)	74	**7.055**
Female	15 (17.65)	13 (14.89)	22 (25.37)	16 (15.44)	24 (17.65)	91	
Total	**132**	**27**	**46**	**28**	**32**	**165**	

Critical χ^2 (4df, α= 0.05, 9.488)

The above χ^2 table shows that there is no significant difference in having problem of depression between male and female respondents while they were using ARV-drug in their daily life.

Since the calculated value of χ^2 (at 4df and α = 0.05) is 7.055 which is less than the table value of χ^2 which is 9.488, therefore, the researcher accepted null hypothesis (H_o) that favors no difference between the two genders in their psychological problems and reject alternative hypothesis (H_1) that assumes there is a difference between to the two genders in their psychological problems while they were using ARV-drugs.

4.1.5Social Problems Adjustment Variables Data Presentation

4.1.5(A). *Likert Social Attitude Measuring scales*

This scale has five attitude measuring scales. These are Strongly Disagree(SD), Disagree(D), Neutral(N), Agree(A) and Strongly Agree(SA) with the score value of 1,2,0, 3 and 4 respectively. This

five scale is more reliable measure of attitude than the two scale of measurement.

Table 14: Attitude Measuring Scales for Respondents' Social Problems

No	Measuring items	Attitude Scales					SD &D	SA & A	Total
		SD	D	N	A	SA			
1	I feel difficulty to enjoy in my life	23 (13.9)	43 (26.1)	20 (12.1)	58 (3.2)	21 (12.7)	66 (40)	79 (47.9)	165 100
2	I feel happiness if I get social support from community	12 (7.3)	3 (1.8)	4 (2.4)	39 (23.6)	107 (4.9)	15 (9.1)	146 (88.5)	165 100
3	Unless I get social support from the community I think so that I will be in trouble	11 (6.7)	16 (9.7)	12 (7.3)	37 (22.4)	89 (53.9)	27 (16.4)	126 (76.4)	165 100
4	I believe that if I skip ARV drug for a while due to social stigma and discrimination, I may die with in a short period of time.	17 (10.3)	8 (4.80	4 (2.4)	41 (24.8)	95 (57.6)	25 (15.15)	136 (82.4)	165 100
5	I think that any types of social and psychological problems such as stigma and discrimination could have a negative impact on ART adherence.	14 (8.5)	27 (16.4)	3 (1.8)	43 (26.1)	78 (47.3)	41 (24.8)	12 (73.3)	165 100
Total		77	97	43	218	390	-	-	825

Table 14 indicates that the attitudes of the respondents skewed to the positive acceptance of the measuring items in that 122 (73.9%) respondents were answered both agree and strongly disagree responses where as 35 (21.2%) of respondents had negative attitudes; the rest 8 (4.9%) respondents had neutral attitudes that can shift to both sides of the respondent.

In general, one can conclude from this result that most of the respondents had positive attitudes toward their social problems. To verify the significance of the problem, it well be computed in the following table by the use of chi-square computation.

Table 15: chi-Square Test for Attitudinal Scales for Social Problems

Attitude Measuring Item	Social Problems Encountered to ART Users Measuring Attitudinal Scales						
	SD	D	N	A	SA	Total	χ^2 value
1	(15.4) 23	(19.4) 43	(8.6) 20	(43.6) 58	(78) 21	165	146.768
2	(15.4) 12	(19.4) 3	(8.6) 4	(43.6) 39	(78) 107	165	
3	(15.4) 11	(19.4) 16	(8.6) 12	(43.6) 37	(78) 89	165	
4	(15.4) 17	(19.4) 8	(8.6) 4	(43.6) 41	(78) 95	165	
5	(15.4) 14	(19.4) 27	(8.6) 3	(43.6) 43	(78) 78	165	
Total	77	97	43	218	390	825	

Critical χ^2 (16df, α= 0.05, 26.30)

Note: Numbers in parenthesis are expected frequencies.

As shown in the table above, the chi-square test computed to know the significance of the problem reveals that the respondents have had significant social problem related to their being HIV/AIDS patient and as well as ART users. In this case, since the calculated value of χ^2 (16df, 146.768) which is much greater than the table value of χ^2 (16df, at α= 0.05, 26.30) there is a significant social problems in ART users.

Table 16: Chi-Square Contingency Test for Significance Difference between Two Genders

Gender	SD	D	N	A	SA	Total	χ^2 value
Male	12 (19.285)	23 (19.285)	9 (26.012)	24 (26.012)	6 (9.418)	74	**4.33**
Female	11 (22.685)	20 (23.715)	11 (11.030)	34 (31.988)	15 (11.582)	91	
Total	23	43	20	58	21	165	

Critical χ^2 (4df, α= 0.05, 9.488)

Note: Numbers in parenthesis are expected frequencies

According to the above chi-square contingency table, that can test the significance of the problem between two genders, the calculated chi-square (χ^2) value at (4df and α = 0.05) is 4.33 which is less than the table value of χ^2= 9.488. Thus, there is no reason to accept alternative

hypothesis (H_1) rather than retaining null hypothesis (H_o) that favors there is no significant difference between problems of male and female respondents. This means that there was no a significant difference in social problems between the two genders.

5.1.2 (B) Social Problems Adjustment Measuring Scale

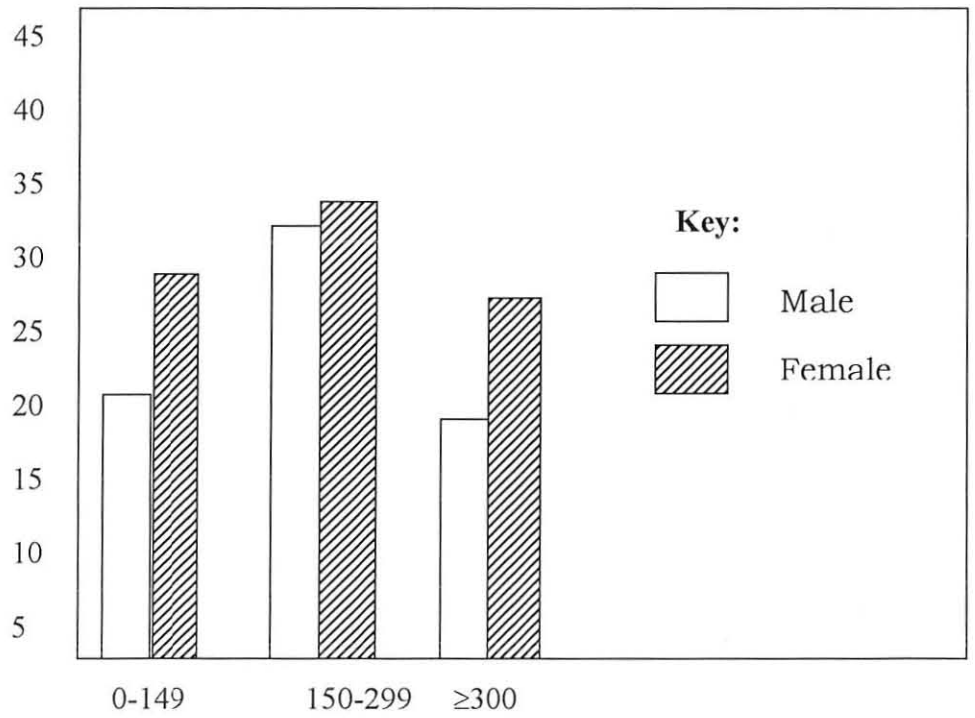
This life stress test was developed by Holmes and Rahe in 1967. They investigated the relative strengths of a number of life events and produced a rating scale called social life adjustment rating scale. This scale can predict the likelihood that one can fall to a stress related social problem from mild to more frequent tension, headaches, acid indigestion, loss of sleep to very serious illness like ulcer, migraines and the like. Life stress scores are interpreted as low susceptibility to stress-related illness for 0-149 sore, medium susceptibility to stress-related illness for 150-299 score and high susceptibility to stress-related illness (http://www.life stress test.htm)

Table 17: Social Problems Adjustment Scale Respondents' Score Value

S.N	Social problems score	Gender score	Frequency	Percentage	Total	Percentage
1	0-149	Male Female	22 29	29.0 31.9	51	30.9
2	150-299	Male Female	31 35	41.9 38.5	66	40.0
3	> 300	Male Female	21 27	28.4 29.7	48	29.1
Total		Male Female	74 91	44.8 55.2	165	100

As illustrated in table 17, 51 (30.9%) of respondents were grouped under 0-1419, 66 (40%) respondents were categorized under 150-299 and 48 (29.1%) respondents were also grouped in >300 score points. This means that majority grouped under the score range of 150-299.

Fig 2 Descriptive Graph for Gender Difference



statistical interpretation to know whether the problem is significant or not between the two genders.

Table 18: Chi-Square Contingency Table to Determine the Statistical Significance between Two Genders

Gander	Score Values In Group Interval			Total	χ^2 value
	0-149	150-299	≥ 300		
Male	22 (22.87)	31 (29.6)	21(21.53)	74	0.59
Female	29 (28.13)	35 (36.4)	27 (26.47)	91	
Total	51	66	48	165	

Critical χ^2 (2df, α= 0.05, 5.90)

As shown in table 18, there is no significant difference in the score value of social problems between male respondents and female respondents. The researcher is forced to accept the null hypothesis since the calculated value of χ^2 at (2df, α= 0.05) is 0.59, which is smaller than the table value, 5.90 at the same degree of freedom and confidence interval. Therefore, there is no significant difference in social problems that needs social adjustment between men and women.

4.1.5(C): Means Comparison between Respondents' Depression Score and Other Social Problems adjustment score On Item 402 and 502

Table 19: Mean Comparison Between Depression Score And Social Adjustment Score

Groups of variable		Sum of square	Degree of freedom	Means square	F-ratio
Depression variable	between groups	827.155	1	827.165	
	With in groups	25101.112	163	153.99	
	Total	25928.267	164		5.371
Social problem adjustment variable	Between groups	20431.053	1	20431.053	
	With in groups	4145845	163	25434.053	
	Total	4,166,276.053			0.803

Critical F (df, V_1, = 1x V_2= 63 p< 0.05, 4.0)

4.1.5c.1 Means plots for Gender Comparison On Psychological Problems

Figure 3: Gender comparison with measures of depression variable (DV) score

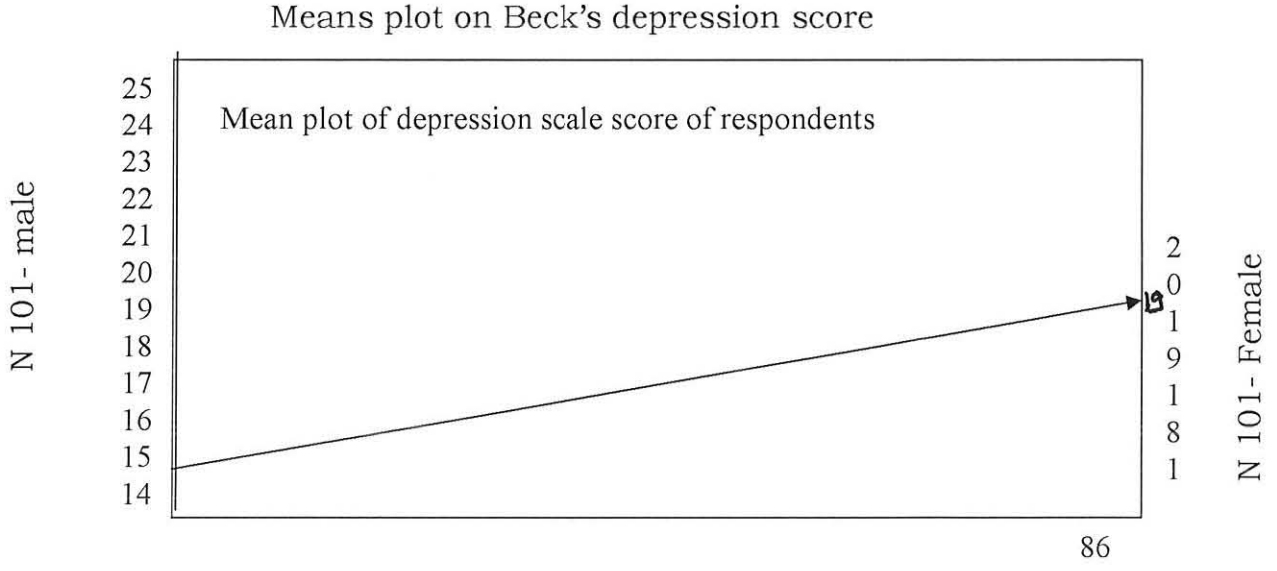
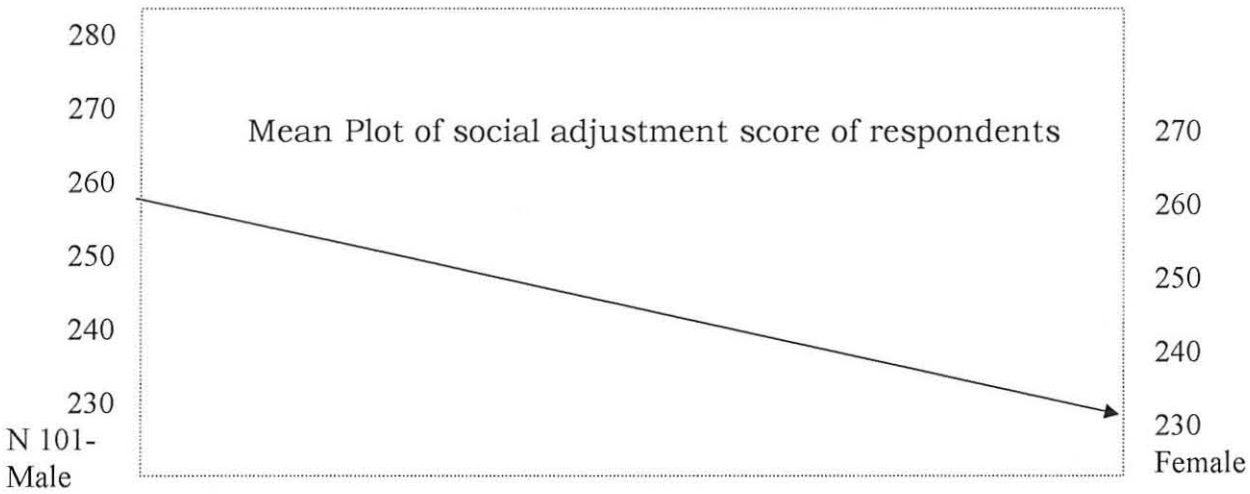


Figure 4: Mean Plot of Social Variable



In table 19, ANOVA for depression and social problem shows that there is a significant difference in their means between the groups of respondents depending on their psychological problems measured by depression scale.

Since the calculated value of F (at V_1= 1 and V_2 = 63 df and $p < 0.05$) is 5.371, which is greater than the table value of F=4.0, the researcher fails to accept null hypothesis (H_o) and retains alternative hypothesis (H_1) assuming that there is a significant mean difference between the respondents and the respondents' mean. In other words, there is a significant variation from respondent to respondent for the occurrence of depression due to ARV drug taking habit that has been experienced.

With in the same table, for the analysis of variance between and with in the groups of ART user respondents, the calculated F-ratio is insignificant at (df (1, 63), $p< 0.05$). The researcher, therefore, accepts the null hypothesis that assumes there is no difference between the respondents mean. In anther words, there is no significant variation from the group of respondents' mean score.

In figure 3, presented above the mean of male respondents versus mean of female respondents obtained from depression score value are drawn from male mean score of 15 to female mean score of 19. This figure indicates that male respondents had minimum mean score of depression than female respondents. Therefore, it shows that there is also a difference of mean in gender context as that of differences between and with in groups of respondents in the computation of ANOVA.

In figure 4, the means of social problem score of male respondents were larger than the mean of females. The drawn line shows that the mean score of female respondents was 230 while the mean score of male respondents was 260. This indicates that female respondents had smaller tress related social problems because of their health problems than males.

4.1.6 Responses of open-ended Psychosocial Variables

Table 20: Respondents Answer for Open-Ended Items after Coding

No	Items' response	Gender				Total	percentage
		Male	Percent	Female	Percent		
1	Medical problem	26	35.1	35	38.5	61	37.2
	Personal problem	4	5.4	6	6.6	10	6.1
	Psychological problem	24	32.4	8	8.8	32	19.5
	Lack of information	2	2.7	2	2.2	4	2.4
	No idea about it	16	21.6	31	34.0	47	28.1
	Others	2	2.7	9	9.9	11	6.7
Total		74	100	91	100	165	100
2	Accurate and proper ART access						
	Strict ART adherence and social support	12	16.2	24	13.2	24	14.5
	Regular follow up	23	31.1	19	20.9	42	25.4
	Avoidance of personal habit	5	6.7	6	6.5	11	6.7
	No idea about it						
	Others	9	12.2	16	17.6	25	15.2
		25	33.8	35	38.5	60	36.4
		-	-	3	3.3	3	1.8
Total		74	100	91	100	165	100
3	Medical problem	17	23.0	22	24.2	39	23.6
	Sexuality problem	3	4.0	1	1.1	4	2.4
	No effect	10	13.5	4	4.4	14	8.5
	No such experience is done						
	No idea about it	2	2.7	3	3.3	5	3.0
	Other problems	41	55.4	59	64.8	100	60
		1	1.3	2	2.2	3	1.8
Total		74	100	91	100	165	100
4	Service offering problem	2	2.7	2	2.2	4	2.4
	Psychosocial problem	2	2.7	1	1.1	3	1.8
	Inadequate Treatment and improper acceptance	2	2.7	1	1.1	3	1.8
	No problem at all	66	76.5	84	92.3	150	91
	Long hour waiting	1	1.3	-	-	1	0.6
	Other problem	2	2.7	2	2.2	4	2.4
	Total	**74**	**100**	**91**	**100**	**165**	**100**
5	Every body should believe the benefit ART	34	45.9	39	42	73	44.2
	Many benefit but some side effect	9	12.2	7	7.7	16	9.7
	People should be given in near ART center	4	5.4	8	8.8	12	7.3
	Every body should know his/her health status	1	1.3	1	1.1	2	1.2
	No comment at all	23	31.1	33	36.3	56	34.0
	Others	3	4	3	3.3	6	3.6
Total		**74**	**100**	**91**	**100**	**165**	**100**

As depicted in the above table 20 item 1, data gathered by open- ended items 61 (37.2%) respondents gave their answer for the question asked them about the major problems of HIV/AIDS were medical problems such as opportunistic infections, stomach ache, pneumonia and others where as 47 (18.1%) of the respondents did not have any idea about the problem. 32 (19.5%) respondents gave their answer that they had psychological problems because of having HIV/AIDS, of which 24 (32.4%) were female respondents.

In the second item of the table, 42 (14.5%) of the respondents answered the question about the solutions of the problems related to ART, that the problem can be minimized by strict ART adherence and having social support; 425 (15.2%) respondents gave their answer that problems which were related to ART could be reduced by the avoidance of bad personal habits and 24 (11.5%) respondents were responded to the question by giving their answer as having accurate and proper ART access. The majority, 60 (36.4%) of respondents were answered that they did not have any idea about the problem.

In the same table item 3, respondents were asked about whether there is any ARV drug related problem in their sexual matters or not. 39 (23.6%) of respondents have faced health problems such as pain around their sexual organ where as 14 (8.5%) and 100 (60%) of respondents answered that they did not have any problem and no idea about the problem were responded respectively.

The fourth item of the table depicts that there were no any deep rooted problem in the ART center. The coded answers as rated in percentile computation have negligible difference, and 150 (91.0%) respondents had no problem at all in that ART center.

At last in the fifth item, the answer of respondents to the question provided them about the benefits and side effects of ART, 73 (44.2%) of respondents were responded by giving their answer, as "every body will be benefited when he/she takes ARV drug". Others, 16 (9.7%) of respondents approved their responses that the drugs HIV/AIDS have many benefits but also have some side effects. The majority, 56 (34%) of respondents were also asked about their comment, they were reserved & did not give any response or comment at all.

From the above table, one can understand that there was no large difference between male and female respondents in their percentage analysis. Thus, there is no difference in responses of the problem between the two genders.

4.2 Results from Qualitative Data

Results obtained form these data sources were grouped in to two: These are focus group discussion and in-depth interview.

4.2.1 Focus Group Discussion

In the structured Focus Group Discussion, many relevant and very important points were discussed. Some of the results which were gathered from this technique listed as:

- Fear of asking to have rent home
- Feeling of shame to share any social service including drug taking and public meeting activities
- Lack of disclosure to tell for others what they have
- Hope less feeling to do things
- Presence of depression causes head ache and other pain
- Presence of stigma and discrimination against them
- Undermining public opinion to get job and social services

- Ostracism and gossip from the public as if they were considered themselves as normal people.

Community people representative at FGD expressed as "if some body is going to be regarded as a fat person, people suppose that he started ART, and if he became thin or loose his weight, people thought that he has got HIV/AIDS" was the main point of discussion among public. This indicates that there was a clearly reflected stigma and discrimination among the public. The other finding obtained from FGD is that there was no difference of ART access and provision between the two genders.

4.2.2 In-depth Interview

The HAPCO ART drug policy makers' representative explained that there were no difference of ART drug distribution and access between the two genders except pregnant women who need different care and support during pregnancy and birth, and then after birth until the child has got 18 months of age. The representative also expressed that their planed ART access was 100,000 PLWHA to distribute by 2006/7 Fiscal year though it was being practical only for 60,000 ART users all over the nation. As he said, the amount of drug access was relatively low from predetermined ART standard to provide for users. He said, "it is relatively better access than other previous years and one thing that we want to tell you, no problem of ART access except little problem of ART implementation in some rural areas of the country". As to the asked issues about the minimum standard criteria for ART drug provision, he better explained that criteria were based on:

- CD_4 count (below 200/mm^3 count for Ethiopian standard and below 350 for WHO standard).
- Body deference mechanism (Immunological status for opportunistic infections)

- Viral load with in the patients' blood circulation.

The other points of interview discussed during the session were that ART difference based on gender, age, economic status and others, such as ART demand and supply including drug policy for distribution and implementation, drug regimen complicity were discussed briefly; and the responses were given. He said that it was provided as it was done in a normal manner of ART daily activities in any center. He also expressed that there were stigma and discrimination as any other people could have, such as people living with disability every time and every where even though it was coming to decline. He said that psycho social problems of HIV/AIDS patients, especially ART users had complex problems. At last, for all of the problems that his organization considered as a visible and vivid problem that has given the following suggestion to be considered in search better solution:

- Lack of proper infrastructure
- Lack of joint activity among processional and government bodies.
- Insufficient ART awareness raising and advocacy activities.
- Lack of well trained ART professionals for some centers.
- Well organized and pre-tested ART guidelines and so on were mentioned.

The HAPCO ART policy makers representative furtherer discussed the challenges of ART drug policy implementations about problems of ART such a lack of awareness, drug regimen complexity (usually complained by ART users), psychosocial problems of PLWHA in adhering ART and practicality of ART drug policy which were functioning through out the country.

He said that provision of ART among all members of ART users could have been impeded by knowledge gap between users and non-users, attitudes of society to ward ART, presence of some psychosocial problems, such as stigma and discrimination, limited country's resource (manpower, material and infrastructure), limited capacity building for the center, different type of social service problems such as road constriction, telecommunication, electricity and the like were also mentioned that have to be solved.

The problem of drug complexity was by then minimized, as he said, "we are giving some types of ART drugs by reducing their regimens' nature as that of double and triple fixed regimen to alleviate users problem of drug burden while they were taking more than two types of drug regimen at once." At last, he was asked on issues about ART policy implementation, problems of PLWHA such as nutrition, stigma and discrimination, current status of ART clients regarding to drug feasibility, affordability, sustainability, safety , and other important issues about the present rumor of ART inland drug production plan that will be practiced.

> *Regarding to policy implementation, it is ok, and is implemented based on multi disciplinary bodies; government bodies gave greater emphasis; solution of social problem like stigma and discrimination can be teaching people; about ART clients' current status, all of the terms you mentioned as feasibility, affordability, sustainability and so forth were full filled as to our standard permitted. Concerning to ART drug production, in the present year, it is planed to set up at Adigrat, in Tigray in cooperation with government and an investor, but we do not know about its quality and quantity since it is not practically seen even though we have a dream to do it (Dr. Elias Abebe, HAPCO ART policy makers representative, May 10, 2007, in-depth interview).*

According to the above interview explanation, we can under stand that there was no ART drug policy implementation problem; it was fully functioning but there were some problems in ART access, adherence and psychosocial problems encountered by ART drug users. As he said, the present government of the country is committed to work on ART; no more concentration of ART center only in towns and cities but also in rural health centers, and that ART program services were exercising in multi disciplinary program of action. And also as the information obtained from the interview we will have better opportunity to have free access to ARV drug if it will be produced here in Ethiopia.

CHAPTER FIVE
DISCUSSION

The focus of the analysis in this study reveals that the prevalence and significance of psychosocial problems encountered by ARV-drug users and the services they receive at the time of ART access and adherence in all age groups and both genders. This study was basically centered on the following issues:

5.1 ART and Problems Related To Service Provision

As indicated in the earlier chapter, the findings of the study showed that 55.2% of respondents were female indicating that women were affected by HIV/AIDS because of their physiological, biological and socio-cultural factors as discussed earlier in the literature. Most of the respondents of the study were in between age group of 15 to 45 (86.3%) of the respondents were adherents of ART. Education had also relation with ART adherence in that educated respondents (72.1%) were adherents of ART drug than undedicated ones. When we come to other demographic data, marital status, married respondents were good adherents of ART than others, indicating that more married couples were living with HIV/ADS as that of other current research findings showed to put them on the top rank of HIV prevalence in our country (HAPCO, 2006).

As we noted from the study finding, almost all respondents (98.8%) were clients of hospital ART center and 73.3% of them were adherents of two or more ARV-drug regions indicting that they had problem of pill burden. Other finding reveals that 58.2% of respondents were helped to adherent and/or access ART medication by their families and also 53.8% of the respondents were first initiated by health worker advice or

VCT counselor indicating that counseling in ART service has brought an extensive behavior change in the area of HIV/AIDS treatment.

The adherence rate of the study finding was 93.9% of respondents were adhered with greater than 95% of prescribed doses. This finding was more consistent with the findings of Yonas (2005), which was 81.2% indicating that patients have brought good awareness of ART service due to passage of time and information availability.

Non- adherent rate of the study population was 91.5% by far grater than the logic of failure late of 55% of patients whose adherent was as good as 90% to 95% while failure occurred in only 22% of those adherence was greater than 95% (Essex, Maxard and et al, 2002: 334). In this case, the failure rate of the study was 8.5% which was smaller than the previous finding.

There were factors identified in the study that they influenced ART adherence and access. The most revealing factor was the benefit of ART which was accessed by 72.7% of the respondents. In contrast to this, there were some psychosocial problem that prohibited ART access and adherence services; the predominant one was depressed mood disorder which was accounted for 38.8% of respondents and the next factor was also absence of social support which was approved by 24.2% of the study respondents. This self-report survey finding was also supported by the findings of FGD and In-depth interview as a complementary. As mentioned earlier in the result part of open-ended items, 150 (91%) of respondents were responded that they did not have any problem of service provision in the ART center where as the other 9% of the respondent complained about psychosocial problems, longer hour waiting, lack of enough trained personnel, improper acceptance and inadequate treatment services. Here, one can generalize that there was no more recurrent problem in the center, indicating that there have

been proper access and adherence as compared to other findings of developing countries.

This condition was further assured by FGD discussants that there was any problem of ART access and adherence at the site of the center except some related problems such as stigma and discrimination, lack of disclosure, problem of awareness about proper use and time of medication, hopeless feeling and problems of having good nutrition were discussed in-depth.

Concerning to the in-depth interview technique, the representative of HAPCO ART drug policy and implementation group leader made a clear discussion about this fact. He expressed that in any ART center there was any problems of ART access and provision that it was being distributed for 60, 000 ART users successfully all over the country. Even it is exercised by the Government of Ethiopia that is planed to work on it in cooperation with multi-disciplinary agencies and institutions.

From all of the above findings, ART access and provision was practically implemented by government bodies where as adherence was based on the choice of ART clients.

The implication of this study finding can be discussed as: ART medication can be accessed and provided for ART clients in two ways. The first one is to fight HIV it self and the other is those to fight many opportunistic infections so that the center pharmacy department head complained about problem of drug for opportunistic infections in contrast to the access of anti HIV drugs. Hence, treatment service provision for PLWHA is based on the guide lines which have been written, adopted polices and implemented by trained professionals equally for both ganders (HAPCO and UNAIDS-Ethiopia, 2001; I-Tech and MOH, July 2005). According to Yonas (2005), most accurate

measures of behavioral adherence, patients can report actual behavior on information carefully constructed, administered and validated for proper ART access and adherence. Although social support was not significantly associated with ART adherence, social support may enhance adherence either direct or indirectly (Ibid: 46). GOE has launched on ART initiative in 2003 and over 13, 000 patients are being accessed ART at a reduced price (MOH, 2005). This condition now completely changed to freebased ART provision for all ART users. Even though ART access and provision for proper adherence of ART, beside scarcity, lack of standardization and quality are the major problems of services available in some centers of the country.

According to Emlet (2005:359), associations between specific patient and regime characteristics with poor HIV medication adherence often have been described in the literature. Characteristics of patients with ART adherence include: regimen complexity, forget fullness, desire to avoid medication side effects, in adequate patient knowledge, family, work responsibilities, depression, medication availability, or desire to simply to have a gap from the endless routine taking of pills. The most important and identified factors in this study found to be significantly associated thus, comprehensive treatment of HIV/AIDS patient is a complicated endeavor, the needs of host countries, as defined by nation strategies, differ. Because of this, combination ART regimens have revolutionalized the treatment of HIV infection which had result in dramatic reductions in morbidity mortality, and health care utilization by sustained suppression of HIV-1 RNA replication.

Further more, the design and implementation of ART programs must, therefore, address issues of transport and distance, opening hours and waiting time in ART clinics as well as those of pressing social problems such as stigma and discrimination. The national ART service has been accessed by only 13% of those who need ART where as the ART coverage for Sub-Saharan Africa countries in 2005 was 17% (UNAIDS, 2006: 24; FMOH, 2006: 47).

5.2 ART and Psychosocial Problems Related to Gender

There was insignificant difference in problems of ART service in the case of both social and psychological issues in both genders. More over, the services of ART received by the two genders were not significantly different. The study result indicated that as obtained form both FGD and in-depth interview study, almost the same ART distribution and access services were given except pregnant women who need quite different attention than others. The study has got consistent results from earlier investigations which were done by (MOH, 1998; 36), in that 59.3% of female respondents had different psychological problems such as stigma and discrimination.

Thus, the findings of the study that indicated only 16.4% respondents were with different types of social and psychological problems related to their being ART users. As to the results obtained from female living with HIV/AIDS and clients of ART explained, most of the ART users, especially women by themselves might have various sources of the problem such as "what others say as a gossip", lack of disclosure, fear and others might be the cause of the problem as one female ART client interviewed about problems related to gender. The other and most probably, it could be the most important point, that the FGD members explained about stigma and discrimination, "There is stigma and discrimination, especially in female gender, but it is still minimizing", female FGD member and the center counselor quoted this issue. The other finding reported by the center physician was that there were a lot of crucial problems in rural women more than other segments of people, as he said in the FGD.

The study has got an important result from interview of HAPCO policy member, an expert interviewee answered the asked question whether there is a difference of services in gender or not. In that interview, he

said that, by any means there was no any gender related ART distribution. It is distributed equally for both genders unless and other wise a woman is pregnant. As the expert responded to the research questions, there was a minimum criterion for ART drug initiation and provision. The minimum standard for ARV drug provision was the prevalence rate of the disease, CD4 count of the patient, immunological status (body defense mechanism) and the viral load of the client influenced the treatment of PLWHA. Thus, the findings of the present investigation is consistent harmoniously with the results of previous studies conducted (Yonas, 2005; DHHS, 2005). It seems likely that there was a significant difference in gender discrimination and disparities of problems encountered by the community depending on the nature of their life style and level of public awareness about ART and HIV/AIDS.

The study finding indicates on table 4 about ART, feeling of shame and gender relationship that there was no significant difference as to χ^2 = (2 df, α = 0.05, 2.146) which is less than the table value of χ^2 = 3.84. This indicates that there was no significant difference between two genders for some elements of psycho social problems encountered to the ART users, but there were mild differences for most psycho social problems such as stigma, discrimination, denial, disgrace and others. This does not mean that gender based inequalities were absent in the case of giving access to ART, other treatment, care and prevention, for people who are risk exclusion including on the basis of their sex/gender. Currently, this condition is limited, according to UNAIDS and WHO (2006) research report information available on sex and age distribution of those receiving ART, how ever, we know that gender based inequalities often affect women's ability to access services.

Study results of qualitative study FGD and interview of female ART user assured that there was gender based inequities, but most of them

were made by users them selves and others by the community people not by government or any other concerned bodies.

Gender inequalities in HIV treatment and other accesses to and interactions to health services, including those for HIV prevention and AIDS care affect most of women living in sub Saharan Africa and other developing counties (UNAIDS, 2004). There fore, attention is required to ensure that women and girls should have equitable access to ART as it becomes available. To address gender based inequalities in HIV treatment, care and prevention, it is very crucial to consider different needs and constraints of women and men when accessing HIV treatment services in different settings and design interventions accordingly. As to the finding of this present study, the researcher has got women's access is more likely to be affected by restricted mobility, difficulties in accessing transport, child care and lack of treatment literacy, as compared to men's. This implies that women of poor nation have problems of gender inequalities.

5.3 ART and Users Psychosocial Problems

Users' problems concerning that they were being ART users are still increasing in many of rural areas and some other urban areas. To see such a condition, it is better to classify according to the findings of the study.

5.3.1 Psychological problems Related to ART

The findings of psycho logical problems were measured in survey items (Yes/No, and Beck's depression measurement scale) and FGD findings of the survey study indicated that the majority of respondents did not have much more pronounced psychological problems as indicated on table 10 107 (64.8%) respondents, 96 (58.2%) respondents, 87 (52.7%) respondents and 101 (61.2%) respondents were answered "no" for

presence of unhappiness feeling, poor appetite due to depression, nervous and being worried about and feeling of punishment or sin respectively of which, the majority of them were female respondents. This study indicates that there was no large prevalence rate of psychological problem in descriptive computation so that to know the significance of the problem, χ^2= (4df=, α = 0.05, 155.78) is computed. This shows that even though large proportion of respondents said no psychological problem related to their being ART users, they have had problems that have been shown on chi-square computation. This study result, gender wise, was insignificant as shown on table 12 that depicts ART psychological problem in relation to gender. This research finding indicates that there were psychological problems which were caused by ART. The research finding was complement to the other findings done on FGD and In- depth interview techniques of data collection.

Most of the FGD discussants cited that the major psychological factors that influenced the problem of ART users such as fear of asking rent home, shame feeling to use latrine and fear of public to take ART medication. Though the above psychological problems were major causes in bringing non-adherence of ART, other determinants such as lack of disclosure, hope less feeling, shame feeling, disappointing and fear or sever fright were the most noticeable factors that could prohibit ART adherence and access. In the case of in-depth interview done with HAPCO expert cited that he couldn't explain in part but explained as it was quite complex that one could not determine or predict so it was being come too obvious to control it, as it is done for people living with disabilities. He added that it is in every where as if they were considered as victims.

This condition further assured by computation of chi-square (χ^2) on Beck's depression scale. The finding of chi-square χ^2 based on gender is

that insignificant, indicting that the difference in psychological problems between male and female respondents were non-existent. Although this was the case, as depicted on figure 1, the graph shows that in 10-18 and 30-63 depression scale, depression was pronounced especially on female respondents.

The implication of the above findings can be better explained by comparing others' finding. Depression has been strongly related to non adherence to ART in some but not in all studies (Yonas, 2005). The finding in this study implies that there is a close relation between depression and ART adherence, but they may have correlation that needs further study.

Depression which is related to ART was found to be significantly associated with ART adherence. It has been shown to be associated to adherence of drug for ART in that depression was significantly associated with non-adherence with ARV-drug (SA and et al; J AIDS 2001:26: 82 and 92). Another study also cited that depression or stress has a negative impact on ARV medication in many ways such as having difficult with the timing of medications, feeling to illness or tiredness to take medication, feeling depressed, over whelmed, and having to many mediations or too many pins to take (Eldrad, J., Chaisson, RE., et al, 1998: 18:117).

In order to assist PLWHA ART adherence, the recent studies suggest that information's specific to ART integrating in to their daily life, to counsel and/or advice the patients to manage their daily regimens. As noted in other studies, as well as this study, patients of HIV who take ART have a range of reasons for failing to adhere to their antiretroviral regimens.

These regimens should be assessed for each patient so that an appropriate adherence enhancing intervention can be under taken. If

the patient has any psychological reasons to miss ART or forgetting, a type of cues or memory aids such as pill boxes, diaries, and alarms and likely to help for proper adherence.

5.3.2. Social problems Related to ART

The emergence of HIV/AIDS was accompanied extreme social stigma, fear, discrimination and power less ness among care providers and ART users. The availability of HIV/AIDS treatment is likely to encourage more people, both men and women to seek healthy living by avoiding social discrimination and stigma.

This study was come up with the findings of two measuring survey instruments, that are social adjustment scale and attitude scale, and qualitative findings obtained from in- depth interview and focus group discussion that has been assessed through the whole study.

Based on this, 73.9% of respondents had social problems which have to be solved, and the other respondents (21.2%) had not a problem inhibits not to use ART; the rest (4.9%) of respondents have had neutral attitude towards the measuring scale. The finding was also assured by chi-square (x^2) contingency table for test of significance to reveal the above prevalence. The result was found to be highly significant at x^2 critical

value (16 df, α= 0.05, 26.30) which is much more significant value of x^2= 146.768. The result was also computed for significance test of difference between the two genders to compare the magnitude of the problem in their social life. The result was found to be insignificant indicating that there was no difference of problems between two genders.

Implication

The development of new and more effective anti-HIV drugs and drug combinations has raised a host of behavioral changes. Lack of complete adherence to drug regimens result in the development of drug resistance strains of HIV, which have a devastating public health and social problem implications (DHHSN, 2005: 14). In addition, HIV infected individuals taking ART experience improved health and a decline in detectable virus when ever the patients are in devoid of any recurring social problem. Because of this, the finding of the study will have a practical implementation to know the major cause of non-adherence of ART, to alleviate the usual negative action and perception of the public and to enhance the proportion of ART users. The influence of both cultural and social factors either enhance or alleviate the proportion of ART users and the extent of disclosure that can be made (Sheridan and Radmacher, 1992). Regarding to the concept of gender, society regard. Females as "inferior" and as the "weak sex" and respect and/or regard males as "the head of the house hold" (WHO, June 2006) can also sometimes will be practical in ART program if other measures will not be taken.

As indicated in both the table and graph, respondents were more concentrated on the score of 150 to 299 groups, which imply most of the respondents (40%) were under the medium stress related health condition even though they were adherents of ART.

Mean comparison based on ANOVA was done to know the variability of social and psychological problems between the groups of respondents. From the computation, depression or psychological problem the finding was significant for mean difference of the groups at $F= 5.371$ and $p= 0.022$ where as the critical value of F-ratio at (1,63), $P< 0.05$, 4.0 which is less than the calculated value of F. This result implies that

depression causes larger problem that causes larger differences of mean value between the groups where as the ANOVA computation for all respondents of the study to measure social problems such as stigma and discrimination had no variability between the groups. The ANOVA result was also assured by means plot of straight line graph by comparing male and female respondents. The result was shown in fig 1 and 2 on the result section, indicating that depression was increased from mean value of 15 for male to female value of 19. This shows that depression for female respondents was greater than male respondents.

Regarding to social problems adjustment variable, the result was the reverse, which shows that male mean male value of 260 to the female mean value of 230 indicating that female respondents had less social problems which need very little support to minimize them.

To complement this study, the research so used FGD and In- depth interview for variety types of groups ranging from community representative to ART policy makers. Some of the summarized findings from both types of study are the following:

- The existence of stigma and discrimination
- Problems of getting rent home/their own home
- Presence of discretion
- Undesirable social problem
- Public under estimate
- Undermining social affairs
- Problem of work place transfer
- Absence of enough social support
- Problem of transport to access ART
- Public gossip and ostracism
- Presence of cultural belief/milieu

- Absence of initiation and others were the most common major problems of ART were in their daily life.

When we come to gender context, the finding of the study showed that 91 (55.2%) of female respondents were adherents of ART indicating that they are victims of HIV/AIDS due to many reasons, such as greater economic vulnerability than men, burden of care in AIDS affected husbandry, subordinate position and further more women are affected by social stigma in a greater degree than men (WHO 1998; WHO, 2003). The impacts of HIV/AIDS on women have been referred as "triple jeopardy" in that they are productive, reproductive and community role players. In other words, HIV/AIDS affects women as individuals, mothers and care. givers in socially defined roles.

The present study finding in ART adherent based on population groups were young adults, age range between the age group of 15-44 (86.3%) of respondents were the regular client of ART center. This is consistent with the vast majority of people living with HIV/AIDS world wide are between in age group of 15-49 (UNAIDS report, 2002). The other finding of the study that every one could be interested in hearing good news was that the FGD research group expressed that no absenteeism in the work place and bed patient of HIV/AIDS after he/she was being adherent of ART. The previous comparative studies conducted in many East African countries reported that as much as 25-54% company costs were incurred for insurance cover medication assistant, increased absenteeism and disorganization of the working forces due to HIV/AIDS (Medical World October 30, 2006). But this study addressed good news contrary to the previous research finding due to. ART now a days, more than any disease, HIV/AIDS is laden with sensitive social issues such as discrimination and stigma, public undermining, discretion, ostracism and others in turn affects the number of people living with

HIV/AIDS who come to ART service and this again influences the rate of non-adherent clients.

In conclusion, many factors in addition to social problems indicated earlier are very much closely associated with ART adherence behavior to bring better health condition while patients who were living with HIV/AIDS. Thus based on the research finding, the investigator should have his own recommendation for all government bodies and concerned HAPCO officials and Experts that they should work on mass media education, advocacy, information and communication so that change in behavior e will be brought among the public.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 SUMMARY

As it is shown in the result sections of the study, major findings are discussed; especially problems related to ART service offering.. These problems were psychological, social and ART access and adherence including gender difference. This can also be summarized as follows:

- Demographic survey on sex and education shows that 91(55.2%) of respondents were females and 74(44.8%) were males. Regarding to age of ART users 142(86.1%) of respondents were in the age range of 15 to 44 years.
- Majority of the study respondents 121(73.3%) were three or more regimens users who were suffered by pills burden. When we come to ART adherence ,93.3% percent of the respondents were strict adherent. This is because the majority of respondents, 120(72.7%) were largely benefited by ARV drug regimens.
- The majority of study respondents, 138(83.6%) were responded negatively when they were asked about the presence or absence of gender sensitive problems. Of which 63 (45.7%) were male respondents and 75(54.3%) were also females.
- The study findings about ART access and adherence in relation to restricted mobility ,difficulty in transport and child care and domestic activities have insignificant difference between the two genders.
- Results for psychological problem assessment indicate that majority of respondents were psychologically affected due to a number of factors such as depression, stress, feeling of shame

and others during ART adherence; but these problems were insignificant when we come to gender differences.

- As to the findings of all the three study instruments(questionnaire, FGD and In-depth interview), there is no significant difference in ART access and provision between the two genders except for pregnant women.
- The study finding also ends up with psychological problems are more likely related to women where as social problems are common for men. But, there is insignificant difference between the two genders. This indicates that women are more likely affected by psychological problems such as depression and shame feeling.
- The FGD finding indicates that there is stigma and discrimination persistently though it is in smaller degree of expression as compared to the previous one.
- Last but not least, the study finding obtained from in-depth interview of ART policy makers' representative expert, there is no any differentiation between the two genders of ART users in relation to provision and access. The only criteria for this were clients' CD4 count, status of body defense mechanism and viral load for initiation of ARV drug. In this interview , problems of ART policy implementation in rural ART centers were also discussed in-depth. from that finding.

From this, the most prominent and identified problems were lack of proper infrastructure, lack of professional joint activity with the government bodies, lack of well rained ART professionals and presence of ill-treated ART guide lines in relation to psychosocial context both in non-government and government organizations.

6.2 conclusion

Beginning from the period of HIV/AIDS emergence to the present day of antiretroviral drug therapy (ART) adherence, many troublesome ups and downs have been practiced; especially in health, social, psychological, cultural and gender related constraints which are the most common ones. The results of this study indicate that psychosocial problems of ART users are the most serious problems that cause many ART non-adherents in the study area. Due to the findings of this study the following detailed conclusions will be added.

- As mentioned earlier in many literature, women have been vulnerable to HIV/AIDS due to their biological, physiological, socio-cultural and gender related problems; now they are also more users of ART than men, 55.2% of the center clients are females. More over, they are more likely susceptible to ART related psychosocial problems, such as depression. Stress, feeling of shame, stigma and discrimination.

- The services given to ART clients were equal for both genders so that there was no gender sensitive treatment except for pregnant women who need proper care, support and treatment during their pregnancy period and after delivery. Thus, there was no significant gender sensitive ART treatment at the study area in particular and all over the nation in general.

- Many psychological problems encountered by the ART users of the study area, shame feeling and depression were the most dominant ones which were slightly more pronounced in women than men.

- One of the study finding is that ART treatment reduced users'/clients' disease burden and dependency and then increased the function, well-being and productivity of PLWHA.

- The most pressing psychosocial problems encountered by the study center's clients were depressed mood, lack of disclosure, stigma and discrimination.

- Male respondents were more affected than female respondents by social problems so that they experienced stress-related illness such as HIV/AIDS.

- In self-reported psychosocial problems, majority of respondents were faced problems of transport access, restricted mobility, and child care and domestic activity which were accounted 56.8% of the respondents regardless of gender difference, that is, there was no significant difference between the two genders.
- Majority of ART clients who came from rural areas had extensive problems of economic, education, social and ART drug timing errors influenced the services of ART and then they became drug defaulters.

- The psychological problems of respondents as measured by Beck's depression scale showed that the majority of respondents (63.6%) were grouped under 10-63 depression scale score; that is, from mild to server depression. Interestingly, this was insignificant when computed for gender differences.

- ANOVA was computed for both depression scale respondents' score and social problem adjustment scale score based on gender. The result for depression score is significant among the groups of respondents where as social problem adjustment scale score is found to be insignificant. When we come to gender difference, female respondents were showed higher depression score mean difference than male respondents who showed more social problem's mean difference. This indicates that women are more likely affected by psychological problems where as men are affected socially than women in their daily ART practices.

In general, gender sensitive ART treatment was absent and problem of psychosocial and ART access and adherence were also equal for both genders in the study area.

6.3 Recommendations

6.3.1 Short-term recommendation

- There is a need for on-going psychological counseling to provide psychosocial support; ART professionals need to deal with the issues of ART drug side effects and other related problems so that ART clients reinforce drug adherence.

- Economic support, especially for balanced diet, disclosing the problem, proper social care and support, and public discussion about the problem are essential elements for ART drug adherence. Thus, ART providers and users seek to identify the potential barriers of adherence and be able to develop appropriate strategies so that adherence might be maintained.

- To narrow the information gap among the public about HIV/AIDS and its treatment, the HAPCO officials enable to work more on rural areas than urban areas so that all forms of HIV/AIDS and ART related problems will be minimized.

- Both social and psychological support for PLWHA and ART adherents necessitate to be given equally in both urban and rural areas NGOs' and for these clients in order to maximize drug adherence and can reduce ART related problems.

- There are many ART clients who did not have enough nutrition for their life subsistence, such as retailers, prisoners, home servants, pensioners and others. But in contrary to this, enormous amount of money used for HIV/AIDS' workshops, seminars, meetings and so on.

Thus, there may be a good idea when it is invested for poor ART users' psychosocial support.

- Some of the government organizations do not have guidelines for the right of HIV/AIDS patients and their treatment and care services; even for work place transfer and program for HIV/AIDS mainstreaming. Thus the relevant HAPCO officials required to follow the implementation of the rules and regulations of HIV/AIDS formulated by the government.

- All parties, health professionals, non-health professionals, care providers and the public need to work cooperatively to fight against HIV/AIDS and its ART related problems on the basis of trust worthy manner.

- Clients of ART some times have had their own created psychological feelings, such as "what others say" need to be avoided and they might be strict adherents of ART regardless of some of their psychosocial problems.

6.3.2 Long-term Recommendation

- Stigma and discrimination on HIV/AIDS patients and ART users are common phenomenon that can affect ART adherents unless and other wise intervention measures might be taken.

- The amount and type of ART regimens need to be changed by drug producers so as to be easier for proper adherence.

- Psychosocial supports provided by the public are very essential element of HIV/AIDS prevention, car and support to take corrective measures in creating conducive environment in which a person can cope and thrive. Hence, the unquestionable work place HIV/AIDS mainstreaming policy implementation should be given greater emphasis by the administrator of the organization.

- Better infrastructure development programs for HIV/AIDS control, prevention and treatment for ART centers of the region in particular and in the country in general could do with trained man power, enough capital and relevant resources.

- The concerned HAPCO officials who work on HIV/AIDS should check and recheck the most prominent ART problems including psychosocial ones for their presence and remedial in the treatment of HIV patients.

- Adequate research undertakings in the area of HIV/AIDS treatment and related psychosocial problems really supposed to be done in-depth.

REFERENCES

African Health. Vol. 21, No 1, November, 1998

AIDS in Ethiopia, (2004). No. 5, MOH, Addis Ababa pp. 5.

AIDS Legal Network, June 2006. Gender Focused Program.

Amoroso A. (2002). AIDS in Africa: ART in Resource Limited Settings. N. Y. Klumer Academic Publication. pp. 324.

Bayer, O., C., Shain B, L., and Gallianso, G. (1999). Dimensions of Human Sexuality. 5th ed. Bostin: Mc GraW-Hill College.

Bennett (1990). Gender and HIV/AIDS Impacts. Dossiers (www.googlessocialimpactsearch) Produced by Eldis, in collaboration With BRIDGE.

Biological Society of Ethiopia(BSE).News letter(1999).Vol.5,No.4, pp.5.

Card Well, M. (1996). The Complete A-Z Psychology Hand Book. London Hodder Head Line Plc. Read Wood Books.

Coolican, H. et al (1996). Applied Psychology. London. Hodder Head Line Plc. The Bath Press, Avon.

Colebounders and Kapita, B. (1994).Treatment for HIV Infection. Kinshasa: Raven Press Ltd. pp.423.

Department of Health and Human Services National Institute of Health Office of Research, (2005), pp. 4.

Development and Cooperation (C+D). International Journal African Health Workers. Vol.32, No. 12, December 2005.

DHHS, October 2005. "Guidelines for use of Antiretroviral Agents in HIV-Infected Adults and Adolescents" (http://AIDSinfonith.gov.) pp.8-31.

ECA(2004).Scoring African Leader ship for Better Health. Addis Ababa. pp.104.

Elder Green W. Samuel (1998). The World Psychology. 2nd ed. USA. Allyn and Bacon. pp. 427.

Eldred L J., WU AW, Chaisson RE, et al(1998) . Adherence to ART. A.J,, Immune Deficiency Syndrome. Vol.8, pp. 117.

Emlet, A., Charles (2006). AIDS Patient Care and STDs. Social Stigma and HIV Medication Adherence. Vol. 20, No 5. Washington. Mary Ann Liebert, Inc.

ENA (October 30, 2006). Medical World, Fortnightly Medical Bulletin. Vol. 6, No 125, pp.6.

Essex, Maxard, et al (2002). AIDS in Africa. 2nd Edition. New York. Kluwer Academic/Plenum Publishers pp. 323 and 334.

Ethiopia (2003). Major Indicators. AIDS in Ethiopia Fact Sheet. MOH, Disease Prevention and Control Department. Addis Ababa.

_____ (2006). AIDS in Ethiopia. The Six Report. Addis Ababa

_____ Global HIV/AIDS Program (GAP): file://www/ethiopian%20-%20 global %20hiv/aids%20program%20(gap).htm.

Ethiopian Journal of Health Development. August, (2002). Vol, 16, No. 2, pp. 20.

Federal Ministry of Health. AIDS in Ethiopia (Sixth Report). National HIV/AIDS Prevention and Control Office, September, 2006. Addis Ababa: pp.47

File://a/afrolgemnderprofile-ethiopia.htm

File://libl/mydocadherencetohivantiretoviraltherapy.htm

File://libol/mydoc/stratingart.htm

File://http:/www.Beck Depression Inventory. htm

File://http:/www.life stress test.htm

FMOH and HAPCO, September 2006. AIDS in Ethiopia. Addis Ababa, pp 31.

Forstein M: The Psychological Impact of AIDS. Seminon Col: March, 1984.

HAPCO and FMOH (2004). Ethiopia Strategic Plan for Intensifying Multi Sectoral HIV/AIDS Response, Addis Ababa: pp. 15.

HAPCO and UNDP-Ethiopia (2001). A Hand Book for Mainstreaming. For a Scaled up Gender Sensitive Multisectiorial Response. Addis Ababa.

_____(2004). Ethiopian Strategic Plan: For Intensifying Multi-Sectorial HIV/AIDS Response. pp. 6.

_____(December 2003) National Monitoring and Evaluation Frame Work for the Multi Secotrial Response to HIV/AIDS in Ethiopia. December 2003. pp. 10.

Hayward, S. (1997). Biopsychology. Physiological Psychology: Introductory Psychology Series. Hong Kong. Macmillan Press.

HIV/AIDS in Ethiopia: A USAID Brief: file://hiv/aids20%ethiopia.htm.

http://www.sfaf.iorg(aids101)transmissionhtml

ICAP (December 2006). Supporting Pediatric HIV/AIDS. Care and Treatment and in Ethiopia. Addis Ababa. pp. 1.

ILO, (2001). An ILO Code of Practice on HIV/AIDS and the World of Work. Geneva: pp. 15.

International Federation of Red Cross and Red Crescent Societies (2004). Service Delivery Model on Access to Care and ART for People Living With HIV/AIDS. Geneva: pp. 19.

I-TECH and MOH. HIV Care and ART. A Course for Pharmacists, Unpublished participant Hand Book, July 2005. Addis Ababa. pp. 9:2 to 10:18

Jackson, H. (2002). AIDS in Africa: Continent in Crisis. Harare: SNS AIDS

Journal of Counseling and Development. Counseling Persons with Fear of HIV/AIDS. April 1989, Vol. 67. pp .3

KebereBeal Melaku(December 2005). Current Status of ART, Opportunities and Challenges. Addis Ababa: pp.20

Kleeberger CA, Phair Jp, Strathde SA, et al (2001). Determinants of Heterogeneous adherence to HIV-ART in a Multi Center AIDS Cohort Study. J AIDS, 26 pp. 82.

Kojic M.E(2006). Initiating ART. http://www.initiating ART.htm. pp.1-3

Machtinger, L. E, and Bangsberg, R.D. (2005). Adherence to HIV Antiretroviral Therapy. U.S.A: University of California Sanfrancisco.

Mehta S. and S., K., Sunider, (2004). Understanding AIDS: Myths, Efforts and Achievements. New Delhi: 5 Ansai Rood, Darya Ganij: pp. 139.

Miriam Lyons (1990). The Impacts of HIV/AIDS on children, Families and Communities:file://libo16mydoc/impactofhiv/aidsonchildren,families andcommunities.htm.

MOFED, July 2002. Ethiopia: Sustainable Development and Poverty Reduction Program. Addis Ababa.

MOH (1998). HIV/ADIS in Ethiopia. Background Projections, Impacts. Interventions. 2nd Edition. Addis Ababa: pp. 36

_____ (2003). National HIV/AIDS Counseling Training Manual HIV/AIDS and Other STDs Prevention and control Team, Addis Ababa.

_____(2005). Guidelines for Use of Antiretroviral Drugs in Ethiopia. Addis Ababa, Central Printing Press.

_____January 2005. Guideline for Implementation of Antiretroviral Therapy in Ethiopia. Addis Ababa. pp. 43-47.

MSF Doctors With out Borders (www.msf.org).

Mugyenyi. N. P, November 1998. "The use of Antiretroviral Drugs in Africa". African Health. Vol. 21 No. 1, pp. 26.

National HIV/AIDS Council (2001). Strategic Frame Work for the National Response to HIV/AIDS in Ethiopia (2001-2005), Addis Ababa.

News Week Journal. Science and Technology. The Talking Cure. June 21, 2004. pp. 56.

Oppenhem, Aceija and Stemson(2003). Anti retroviral treatment: Factors affecting ART adherence. New York: Klumer Academic Publisher. pp.116.

Pratt, J.R. (2003). HIV/AIDS: A Foundation for Nursing and Health Care Practice. 5th ed. London. Oxford University Press. pp. 363 -380.

Pathfinder. International Ethiopia, (1999). A Training Curriculum for Private Medical Practitioners. MOH, Addis Ababa.

People to People (July 2005). The Horn of Africa Journal of HIV/AIDS. Vol. 2, Issue 2, pp.11, 21 and 26.

Pizzo, A. Philip and Wilfert, M. Catherine (1998). Pediatric AIDS: The Challenge of AIDS infection in Infants, Children, and Adolescents. 3rd ed. U.S.A, Williams and Wilkins. DNLM/DLC Library of Congress.

Reproductive Health Out Look (RHO), 2006. HIV/AIDS Special Focus file://a:/hiv-aids%20htm.

Sherdin, L. Charter and Radmacher A. Sally, (1998) Health Psychology Challenging the Biomedical model

Sheridan and Radmacher (1992). Health Psychology. Challenging the Biomedical Model. N.Y: John Wiley and Sons. Pp. 87 Inc.

Shives, O. Louise (1990). Basic Concepts of Psychiatric. Medial Health Nursing. 2nd ed. London: Lippincott. Co.

Simons, C.R. and Prardes, H. (1977). Understanding Human Behavior in Health and Illness. U.S.A: Williams and Wilkins Company, pp. 590-608.

Stine, J. Gerald (2002). AIDS up to Date 2002. Women and HIV/AIDS. pp. 72 and 338.

Tallis, V. (2001). 'Treatment Issues for Women", Paper Prepared For Treatment Action Campaign. South Africa.

Tarantola, D, (2001). "Facing the Reality of HIV/AIDS". WHO Bulletin. Special Theme: HIV/AIDS the Intentional Journal of Public Health.

Tedla W/Giorgis, November 2002. Young Ethiopia Professional. Vol. 21, Issue I, The Last Taboo: Braking the Science About Depression and Mental Illness.

The Economist, (1985). U.K. Vol. 294: No. 7383, pp. 12.

Topic, (1987). Issue No. 175, USA. pp. 7.

UNAIDS (2002). Report on Global HIV/AIDS Epidemic. Impact on Enterprise and Work Place.

UNAIDS (2004). Report on the Global AIDS Epidemic. Executive Summary. Impacts of AIDS. pp. 26-27.

UNAIDS (2006). Joint Untied Nation Programme on HIV/AIDS. Uniting the World Against AIDS. pp. 24

UNAIDS (2006). Uniting the World Against AIDS. Questions and Answers. HIV/AIDS Treatment, Care and Support. pp. 19, 23 and 25.

UNAIDS Report: On The Global HIV/AIDS Epidemic. June 2000.

UNDP, October 2000. Gender Development and the Epidemic www.libo16/mydoc.

United Nations General Assembly Special Session on HIV/ADIS, June 2001, New York on UNAIDS Report on the Global HIV/AIDS Epidemic 2002.

Weekly Special Report. August 24, 2006.Public Affairs Section American Embassy. Vol. 8, Issue 34.

_____Public Affairs. American Embassy, Ethiopia, Vol, 6, Issue 45, December 2004.

White, J and Morton, J. Development in Practice. Vol. 15, No. 2, April 2005: file://www.acdip1041158 186-199htm

Wilkson(1984). Methodology and techniques of social research.4th ed. Bombay: Hamalaya Publishing House pp.270

WHO (2001). Population Reports. Youth and HIV/AIDS. Vol. 29, No. 3. USA. pp. 12, 14 and 21-23.

_____ (March 2006). "Treat Million" "3 by 5" and Beyond Report Magazine. Progress on Global Access to HIV Antiretroviral Therapy.

_____ (1990). AIDS: A Special Threat to Women. pp. 22.

WHO/UNAIDS (2006). Insuring Equitable Access to Antiretroviral Treatment for Women.

Yonas Tadios (2005). "Anti retroviral treatment Adherence and its Correlates among PLWHA on HAART in Addis Ababa". unpublished thesis. AAUMF.pp. 8and 44.

Yosuf O. Abdi (March, 1998). Gender Sensitive Counseling Psychology. A Hand Book for Ethiopian High School Counselors. Department of Psychology, Addis Ababa University: pp. 2-7.

Appendix: A

በአዲስ አበባ ዩኒቨርስቲ
የሳይኮሎጂ: ድህረ ምረቃ ትምህርት ክፍል
ጥንታዊ መጠይቅ
የጥናቱ አላማ

በደብረብርሃን ዞናል ሆስፒታል “ART” ክፍል የጸረ- ኤድስ መድሃኒት ተጠቃሚዎች ላይ በሚከሰቱ ተባማጅ ማህበራዊና ስነ-ልቦናዊ ችግሮች በተለይም አድሎንና መገለልን እንዲሁም የመድሃኒት ግልጋሎትን በተመለከተ ትክክለኛ እና ተጨባጭ መረጃ ሰብስቦ ችግሩን ለማወቅ ነው ::

ትእዛዝ

ይህ ጥናት የሚደረገው በአዲስ አበባ ዩኒቨርሲቲ እና በአጥኚው ትብብር አማካኝነት ነው:: በመሆኑም አጥኚው በምረቃ ጹሁፍ ዝግጅት ላይ ለምጠይቅዎት ግላዊና ማህበራዊ ችግሮችዎ ተገቢውን እና ትክክለኛውን መልስዎን በተሰጡት ምርጫዎች አማካኝነት ይመልሱ :: ስሞትንም በፍጹም አይጻፉ:: መለሶዎም ሚስጥራዊ ተጠባቂነት አለው :: የሚሰጡት እውነተኛ መልስ ለጥናቱም ሆነ ለርስዎ ጠቃሚነት አለው:: በጥናቱ የመጨረሻ ውጤትም ይጠቀማሉ እንጂ ተጠያቂነት የልዎትም ::

ስለ ትብብርዎ ከልብ አመሰግናለሁ ::

ክፍል አንድ፡ የማህበራዊና ማንነታዊ ጉዳየ ላይ የሚያተኩሩ መጠይቆች

ትዕዛዝ፡- ለሚከተሉት ጥያቄዎች ትክክለኛ መልስዎትን መርጠው ይክበቡ/ ይፃፉ።

ተራ.ቁ	መጠይቆች	የመጠይቁ አማራጭ መልሶች	ኮድ
101	ፆታ	1. ወንድ 2. ሴት	
102	እድሜ	1. ከ15 ዓመት በታች 2. ከ15-30 ዓመት 3. ከ31-45 ዓመት 4. ከ 45 ዓመት በላይ	
103	የትምህረት ደረጃ	1. ያልተማሩ 2. የአንደኛ ደረጃ ተማሪ (ከ1ኛ- 8 ክፍል) 3. ሁለተኛ ደረጃ (ከ9ኛ-12 ክፍል) 4. ከሁለተኛ ደረጀ በላይ/ ኮሌጅ የገቡ	
104	የሐይማኖት ሁኔታ	1. የክርስትና እምነት ተከታይ 2. የእስልምና እምነት ተከታይ 3. ሌላ ካለ ይጥቀሱ ----------	
105	የስራ ሁኔታ	1. ተቀጣሪ ያልሆኑ 2. ተማሪ የሆኑ 3. ተቀጣሪ የሆኑ 4. የቤት እመቤት 5. ሌላ ካለ ይጥቀሱ ----------	
106	የጋብቻ ሁኔታ	1. ያላገባ/ች 2. ያገባ/ች 3. የፈታ/ች/ የተለያየ/ች 4. የሞተበት/ባት 5. ሌላ ካለ ይጥቀሱ----------	

ክፍል ሁለት፡ የፀረ-ኤድስ የሕክምና መድሐኒት አቀርቦትና አጠቃቀም

ትዕዛዝ፡- ለሚከተሉት ጥያቄዎች ትክክለኛ መለስዎትን መርጠው ይክበቡ/ይፃፉ።

ተራ.ቁ	ጥያቄዎች	አማራጮች	ኮድ
201	የፀረ-ኤድስ መድሃኒት ተጠቃሚነዎት?	1. አዎ 2. አይደለሁም	
202	የሚወሰድት የመድሃኒት አይነት	1. 1 ወይም 2 የመድሃኒት አይነት 2. 2 ወይም ከዚያ በላይ የመድሃኒት አይነት 3. ሌላ ካለ ይጥቀሱ ----------	
203	የቅርብ የመድሐኒት ማግኛ ቦታዎ	1. ጤና ኬላ 2. ጤና ጣቢያ 3. ሆስፒታል 4. ሌላ ካለ ይጥቀሱ ----------	
204	ከማን ጋር ነው በአሁኑ ጊዜ የሚኖሩት	1. ከቤተሠብዎ ጋር 2. ከያታ ጓደኛዎት ጋር 3. ከቀጣሪዎት ጋር 4. ብቻዎትን 5. ሌላ ካለ ይጥቀሱ----------	
205	የፀረ-ኤድስ መድሐኒቱን እንዲጀምሩ የረዳዎት	1. የቤተሠብ ምክር 2. የጤና ባለሙያ ምክር 3. የአማካሪዎ/ ካውንስለር ምክር 4. የጤናዎ ሁኔታ መለወጥ/መባባስ 5. ሌላ ካለ ይጥቀሱ ----------	
206	መድሐኒትዎትን አቋርጠው ነበርን?	1. አዎ አቋርጨ ነበር 2. አላቋረጥሁም	

207	ካቋረጡ ምክንያትዎ ምንድን ነው?	1. የመድሐኒቱን ተዕኖ በመፍራት 2. የማህበራዊ አድሎንና መገለልን በማሠብ 3. መድሃኒቱን በመርሣት 4. የመድሐኒቱ የአወሣሰድ ስርዓት ስለከበደኝ 5. ሌላ ካሉ ይጥቀሱ ----------	
208	መድሐኒቱን በትክክል ለመከታተል የረዱዎት ምክንያቶች	1. መድሃኒቱ ስለጠቀመኝ 2. የበሽታው ፀባይ 3. የሕክምናው አይነት 4. የመድሃኒቱ አቅቦት መልካም መሆን 5. ሌላ ካለ ይጥቀሱ ----------	
209	መድሐኒትዎትን ሲጠቀሙ ያጋጠመዎት ስነልቦናዊ እና ማህበራዊ ችግሮች	1. ራስ ምታት/ ህመም 2. የማህበራዊ ድጋፍ ማጣት 3. ስለ መድሃኒቱ ያልዎት ዕውቀት ውስን መሆን 4. ማህበራዊ ተገልልዎ 5. ሌላ ካለ ይጥቀሱ----------	
210	የፀረ- ኤድስ መድሐኒትዎትን በትክክል እንዳይወስዱ ያደረጉዎት ማህበራዊ ተዕእኖዎች	1. የህብረተሰቡ ተዕእኖ 2. የቤት እጦት ችግር 3. መድሃኒቱን መጠራጠር 4. የሕክምና ግልጋሎት ማነስ 5. ሌላ ካለ ይጥቀሱ ----------	
211	መድሃኒትዎትን በቀላሉ እንዳያገኙ/ እንዳይጠቀሙ ያደረጉዎት ምክንያቶች	1. አድሎን እና መገለልን መፍራት 2. የመድሐኒቱ ከመኖሪያ ቤትዎ መራቅ 3. ባህላዊ/ሃይማኖታዊ መድሃኒት መጠቀም 4. የሀኪም ትዕዛዝን መርሳት 5. ሌላ ካለ ይጥቀሱ----------	

ክፍል ሦስት፡- የታዊ ተዛምዶ ያለው የስነ-ልቦና እና ማህበራዊ አድሎና መገለል ጥያቄዎች

ትህዛዝ፡- ለሚከተሉት ጥያቄዎች ትክክለኛ መልስዎትን መርጠው ይክበቡ/ይፃፉ።

ተራ.ቁ	ጥያቄዎች	አማራጮች	ኮድ
301	የታን የተመረኮዘ፣ በስነ-ልቦናዎ እና በማህበራዊ ህይወትዎ ላይ የተከሰተ ችግር አለ ብለው ያምናሉ?	1. አዎ 2. የለም	
302	በጥያቄ ቁጥር 301 ላይ አዎ ከሆነ መልስዎ ያጋጠመዎት ችግር	1. በበቂ ሁኔታ መድሐኒት ላለመውሰድ አድሎዊ ተፅኖ በመኖሩ 2. የድብርትና የሀዘን ስሜት 3. የራሴ የግልጽነት ማጣት ችግር 4. ያለመቀበልና እና የመገለል ችግር 5. ምንም ችግር የለም 6. ሌላ ካለ ይጥቀሱ ----------	
303	መድሐኒት በመውሰድዎ ምክንያት የደረሰብዎት ማህበራዊና ስነ-ልቦናዊ አድሎአዊ ችግሮች ካሉ የሚመለከትዎትን ለይተው ያስቀምጡ (ከአንድ በላይ መመለስ ይቻላል)	1. አሣዛኝ ስሜት 2. የፍራቻ፣ የወንጀለኛነት እና የንዴት ስሜት 3. የአዕምሮ መገዳት /በሐሣብ ጭንቀት/ 4. በራስ አለም የመዋለል ስሜት 5. ሌላ ካለ ይጥቀሱ----------	
304	በወረ- ኤድስ መድሐኒት አቅርቦትና አጠቃቀም ላይ ያጋጠመዎት ችግሮች (ከአንድ በላይ መመለስ ይቻላል)	1. እንደፈለጉ መንቀሳቀስ ያለመቻል 2. የትራንስፖርት ችግር 3. በቤት ውስጥ የልጆች እንክብካቤ እና የቤት ሥራ ብዛት 4. ሌላ ካለ ይጥቀሱ----------	

ክፍል አራት፡- የስነ-ልቦና ችግሮች መለኪያ

ሀ. ትዕዛዝ፡- ለሚከተሉት ጥያቄዎች ትክክለኛ መልስዎትን መርጠው ይክበቡ/ ይፃፉ።

ተራ.ቁ 401	ጥያቄዎች	አማራጭ	ኮድ
1	መድሐኒቱን ሲወስዱ ደስታ አልባ ስሜት ይሠማዎታል?	1. አዎ 2. የለም	
2	የምግብ ፍላጐት ማጣት የሚያመጣ ድብርት አለዎት?	1. አዎ 2. የለም	
3	እንደ መድሐኒቱ አይነት እና ፀባይ ሁኔታ ለመውሰድ የሚያስተማምን የመንፈስ ስሜት አለዎት	1. አዎ 2. የለም	
4	የመጨነቅ፣ የፍራቻ፣ ወይም የመረበሽ ስሜት የበሽታው ተጠቂ በመሆንዎት እና የፀረ-ኤድስ መድሃኒት በመጀመርዎ ይሰማዎታል?	1. አዎ 2. የለም	
5	የበሽታዎትን ሁኔታ ወይም የመድሐኒት ተጠቃሚነትዎን በማሠብ እንደ ቅጣት ወይም ሀጢያት ቆጥርውት ያውቃሉ?	1. አዎ 2. የለም	

ለ. ትዕዛዝ፡- ለሚከተሉት ቃላት ስሜቶች ካለዎት የ☑ ምልክት በተሠጠው ቁጥር ስር ያድርጉ፤ ቁጥሮቹ የሚያመለክቱት ያለዎትን የስነ ልቦና ችግሮች ደረጃ ነው።

የደረጃዎቹ ትርጉም፡-

0 = ምንም ስሜት የለኝም
1 = ትንሽ ስሜት አለኝ
2 = መካከለኛ ስሜት አለኝ
3 = ከፍተኛ ስሜት አለኝ

ተራ.ቁ	የድርጊት መግለጫዎች	የሚታዩት የደረጃ ዓይነት				ኮድ
		0	1	2	3	
1	የሐዘን ስሜት					
2	ተስፋ ቢስነት (ጨለምተኝነት)					
3	የመውደቅ ስሜት					
4	በሚሆነው ሁሉ ያለመርካት					
5	የጥፋተኝነት ስሜት					
6	ቅጣትን የመጠበቅ ስሜት					
7	ራስን የመጥላት ስሜት					
8	ራስን መውቀስ					
9	ራስን የመግደል መከራ ማድረግ					
10	የሀዘንባት ስሜት					
11	ከወትሮው በተለየ ሁኔታ የመበሳጨት ስሜት					
12	ማህበረሰቡ የማይቀበለው የማያስተማምን ስሜት					
13	ተስፋ ያለመቁረጥ ስሜት					
14	የሰውነት ሁኔታ ለውጥ ማሣየት					
15	የአፅምሮ ዝግመት /ዝግ ብሎ ማሰብ					
16	የእንቅልፍ ማጣት ስሜት					
17	የድካም ስሜት					
18	የምግብ ፍላጐት አለመኖር					
19	የክብደት መቀነስ					
20	ቅድመ አካላዊ አሣሣቢ ወጥመድ (ለህመም አስቀድሞ የመተንበይ ስሜት)					
21	የአቅም ማጣት ስሜት					

ክፍል አምስት፡- የማህበራዊ ችግሮች መለኪያ

ሀ. ትዕዛዝ፡- የሚስማማዎትን ቁጥር መርጠው የ ☑ ምልክት በቁጥሮቹ ስር ያስቀመጡ፡፡

የቁጥሮቹ ትርጉም

1= በጣም አልስማማም 3= አይመለከተኝ

2= አልስማማም 4= እስማማለሁ 5= በጣም እስማማለሁ

ተራ.ቁ 501	የመመዘኛ ጥያቄዎች	የሃሳብ ገንባሌዎች ደረጃ					ኮድ
		1	2	3	4	5	
1	በዕለት ድርጊቶቼ የመርካት ችግሮች እንዳሉብኝ ይሠማኛል						
2	ለጤናዬም ሆነ ለማህበራዊ ችግሮቼ ሌሎች እገዛ ቢያደርጉልኝ በጣም ደስታ ይሠማኛል						
3	ለኑሮዬ ማህበራዊ እገዛ ካላገኘሁ በጣም የምቸገር ይመስለኛል						
4	የፀረ- ኤድስ መድሀኒቱን ካቋረጥኩ በህይወት ለመኖር የማልችል ይመስለኛል						
5	ማንኛውም አይነት ማህበራዊ እና ስነ-ልቦናዊ ተዕእኖ የፀረ ኤድስ መድሃኒት በትክክል እንዳይወስድ ያደርጋል ብዬ አምናለሁ						

የማህበራዊ ህይወተ ችግሮች መመዘኛ /ማስተካከያ/

ዕዘዝ፡- የ ☑ ምልክት በተሠጠው ክፍት ቦታ ትክክለኛውን እና በሕይወትዎ ያገጠመዎትን ችግር /ድርጊት ያስቀምጡ፡፡

<u>የቁጥሮቹ ትርጉም</u>

1 = አለኝ 2= የለኝም

ኅ.ሥ.ቁ 502	የሕይወት ድርጊቶች /ችግሮች/ ገጠመኞች	1	2	ኮድ
1	የባል ወይም የሚስት ሞት			
2	ፍች /መለያየት			
3	የቤተሠብ አባል ሞት /ከቤት ውጭ የሚኖሩም			
4	በራስ ላይ የደረሰ አደጋ ወይም በሽታ /የሚያስጨንቅ			
5	የጋብቻ ችግር			
6	ከስራ መባረር			
7	የቤተሰብ አባል የጤና ችግር			
8	የእርግዝና/ወሊድ ችግር			
9	የግብረ ሥጋ ግንኙነት ችግር			
10	የቤተሰብ ቁጥር መጨመር			
11	የገቢ ለውጥ			
12	የቅርብ ጓደኛ ሞት			
13	የስራ ለውጥ ማድረግ			
14	ከቤተሠብ ውስጥ የመግባባት ችግር /ከባል/ከሚስት ጋር/			
15	የሰራ ሃላፊነት ለውጥ /ከደረጃ ዝቅ ማለት			
16	ሴት /ወንድ ልጅ ከቤት መጥፋት			
17	በቤተሠብ ውስጥ ብጥብጥ ለምሳሌ፡- ከልጆች ጋር			
18	ትምህርት መጀመር ወይም መጨረስ			
19	የኔሮ ሁኔታ መቀየር			
20	የግል ልምድን መቃኘት /መለስ ብሎ በማሰብ/			
21	ከአለቃ ጋር ያለመግባባት			
22	የሰራ ሰዓት /ሁኔታ ለውጥ/			
23	የመኖሪያ አካባቢ ለውጥ			
24	የትምህርት ቤት ለውጥ			
25	የአምልኮ ጊዜ ለውጥ /ከእምነት በሚያርቅ ሁኔታ			
26	የማህበራዊ ተሣትፎ ለውጥ			
27	የእንቅልፍ መዛባት			
28	የቤተሠብ አባላት ቁጥር ለውጥ			
29	የምግብ ሰርዓት ለውጥ /በቂ ምግብ ባለመኖር			
30	አነስተኛ ህጋዊ ግድፈት /ጥሰት			
	ጠቅላላ ውጤት			

ክፍል ስድስት

ትዕዛዝ፡- ለሚከተሉት ጥያቄዎች መልስዎ በተሰጠው ባዶ ቦታ ላይ ይፃፉ።

1. የፀረ ኤድስ መድሐኒት ሲወስዱ ዋና የማህበራዊ እና ስነ ልቦናዊ ችግሮች ናቸው የሚሏቸው ምንድናቸው? ይጥቀሱ፤

2. ከፀረ-ኤድስ መድሃኒት ጋር የተያያዙ ችግሮች እንዴት ሊቃለሉ ይችላሉ ብለው ያምናሉ? የመፍቴ ሃሣብዎት ይዘርዝሩ፤

3. በፀረ-ኤድስ መድሃኒት አማካኝነት ከግብረ ስጋ ግንኙነት ጋር የተያያዙ ችግሮች ካለዎት ይጥቀሱ።

4. በመድሃኒቱ መስጫ ጣቢያ የገጠመዎት አስተዳደራው፣ ስነ-ልቦናዊ፣ ማህበራዊ ወ.ዘ.ተ ችግሮች ካሉ ችግሮችዎን ከመፍትሄ ሃሣብ ጋር ይጥቀሱ/ ይጠቁሙ።

5. የመድሃኒቱን ጠቀሚታ እና ችግሮች ህዝቡ ሊያውቀው ይገባል ብለው ያምናሉ? አዎ ከሆነ መልስዎ ሃሣብዎትን ያስቀምጡ።

Addis Ababa University

Post Graduate School, Department Of Psychology

Research Questionnaire

Objective of the study

The study tries to assess psychosocial and ART access and adherence problems encountered by ART drug on ART clients of Debrebrehan zonal Hospital. The major objective of the study is that the encountered problems such as stigma and discrimination as well as ART service offering are really common or not, by gathering factual data from respondents of the center to address the problem.

Instruction

This study is conducted in collaboration with AAU for the partial full filament of master's thesis for the researcher. The researcher is going to ask some questions regarding to your personal problems and life situations. Your answers will be kept completely confidential. No need of writing your name.

Thank you for your cooperation

Part One: Personal Background

INSTRUCTION: Answer the following questions by circling the appropriate response.

No	Item	Coding categories	Code
101	Sex	1. Male 2. Female	
102	Age	1. Below 15 2. 15-30 3. 31-45 4. Above 45	
103	Education	1. Not educated 2. Primary school (grade 1-8) 3. High school complete (9-10& 11-12) 4. Above high school	
104	Religion	1. Christian 2. Muslim 3. Other religions, specify _____	
105	Occupational status	1. Unemployed 2. Student 3. Employed 4. House wife 5. Others, specify _____	
106	Martial status	1. Unmarried 2. Married 3. Divorced/separated 4. Widowed 5. Others, specify _____	

Pat Two: ART Medication Access and Adherence

INSTRUCTION: Please select the number of your appropriate answer and then encircle/ underline it.

No	Items	Coding categories	Code
201	Do you currently use any ARV-drug	1. Yes 2. No	
202	Which type of ART drugs do you use	1. 1 or 2 drug regimens 2. 3 or more drug regimens 3. Others, specify _____	
203	Your nearest ART access	1. Health station 2. Health center 3. Hospital 4. Others, specify	
204	With whom do you live currently	1. With family 2. With partner 3. With employer 4. Live alone 5. Others, specify _____	
205	Your ART decision making is initiated by	1. Your family 2. Your ART center health worker's advices 3. Your VCT counselor 4. Your health condition 5. Others, specify _____	
206	Did you skip your medication	1. Yes 2. No	
207	If your answer in item number 206 is yes, why?	1. Fear of drug side effects 2. Worries about social stigma and discrimination 3. Forgetfulness in taking medications	

		4. Difficulty of integrating treatment schedule 5. Others, specify _____	
208	Common factors contributing to your strict ART adherence	1. Drug benefit 2. Disease characteristics 3. Treatment regimes 4. Your better drug access and Provision 5. Others, specify _____	
209	Psychosocial problems influencing ART access and/or adherence?	1. Depressed mood/ headache 2. Absence of social support 3. Lack of awareness 4. Social discrimination 5. Others, specify _____	
210	Social problems for ART non-adherence	1. Social stigma and discrimination 2. Lack of own home 3. Suspicion about ART 4. In adequate medical service 5. Others, specify _____	
211	Any problem prohibits your ART access and/or adherence	1. Fear of stigma and discrimination 2. ART center far away from home 3. Alternative use of traditional medians 4. Forgetting ART tablets 5. Others, specify _____	

Part Three: Gender Related Psycho-Social Stigma and Discrimination Variable

INSTRUCTION: Choose your appropriate answer and underline it.

No	Items	Coding categories	Code
301	Have you any psychosocial problems related to your gender while using ART?	1. Yes 2. No	
302	Types of psychosocial problems encountered by ART adherents	1. Stigmatization 2. Depressed mood 3. Lack of disclosure 4. Stigma and discrimination 5. No problem at all 6. Other, specify _____	
303	Put all your responses related to psycho social problems while you are taking ART medications (possible to answer more than once)	1. Feeling of shame 2. Fear, quilt and anger 3. Mental strain 4. Feeling of self-floating 5. Others, specify_____	
304	Psycho social problems encountered by your drug access and adherence	1. Restricted mobility 2. Difficulties in accessing transport 3. Being engaged in child care and domestic activities 4. Others, specify _____	

Part Four: Psychological Measurement Scales

A. INSTRUCTION: Put your best alternative response in the code area/ encircle it

401	Items	Coding category	Code
1	Do you feel un happy while you take your ART tables?	1. Yes 2. No	
2	Do you have depression which causes poor appetite?	1. Yes 2. No	
3	Do you have self confidence what ever ART drug regimen is?	1. Yes 2. No	
4	Do you feel nervous, frightened or worried about your being PLWHA?	1. Yes 2. No	
5	Do you perceive your illness and/or being ART medication user as a punishment or sinful act?	1. Yes 2. No	

B. Instruction: put a check ma ✓ below the grading numbers given 0 to 3 which reflect your psychological problems.

402	Terms for depression manifestation	Degrees of manifestation				Code
		0	1	2	3	
1.	Sadness					
2.	Pessimism					
3.	Sense of failure					
4.	Dissatisfaction					
5.	Guilt					
6.	Expectation of punishment					
7.	Dislike of self /Self-hatred/					
8.	Self accusation					
9.	Deicidal ideation					
10.	Epicidal of crying					
11.	Irritability					
12.	Social withdrawal indecisiveness					
13.	Indecisiveness					
14.	Change in body image					
15.	Retardation					
16.	Insomnia					
17.	Fatigability					
18.	Loss of appetite					
19.	Loss of weight					
20.	Somatic pre occupation					
21.	Low level of energy					

Part Five: Social Measurement Scales

Instruction: Select your appropriate alternative and Put mark √ under the number given below:

No 501	Items	1	2	3	4	5	Code
A	I always feel difficulty to enjoy my daily activities						
B	I feel happiness if I get social support from the community						
C	Unless I get social support from the community, I think I will be in trouble						
D	I believe that if I skip ARV drug I may not live longer.						
E.	I believe that any kind of social and physiological potential barrier may inhibit proper ARV drug adherence.						

Key

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

B. Social Adjustment (Life stress) Scale

Instruction: After you started taking ART, your life has been influenced by certain events. Therefore, please put a check mark [√] under the Yes/no column for your selected response to your life events.

No 502	Life events	Yes	No	Code
1	Death of a spouse			
2	Divorce			
3	Death of close family member			
4	Personal injury or illness			
5	Marriage			
6	Fired at work			
7	Change in health conditions of a family member			
8	Pregnancy (for female only)			
9	Sex difficulties			
10	Gain of new family member			
11	Change in financial state			
12	Death of close friend			
13	Change to different line of work			
14	Problems of communication with spouse/ family member			
15	Change in responsibilities at work			
16	Family member leaving home			
17	Trouble with in-laws			
18	Begin or end school			
19	Change in living conditions			
20	Revision of Personal habits			

21	Trouble with boss			
22	Change in Work hours or conditions			
23	Change in residence			
24	Change in schools			
25	Change in church/mosque activities			
26	Change in social activities			
27	Change in sleeping habits			
28	Change in number of family get together			
29	Change in eating habits			
30	Minor violation of law			
	Grand total			

Part Six

1. What are the major psychological problems that you encounter while you are taking ART drug? Give the solution

   _____

   _____

   _____

2. How do you think the problems associated with ART drugs could be resolved? Mention the solution

   _____

   _____

   _____

3. Mention any sexually related health problem encountered by ARV drug?

   _____

   _____

   _____

4. Mention any service offering social and physiological problems you faced in your ART center. Explain the solution if your answer is yes.

_____

_____

_____

5. Do you think that people should know about ART benefit and/or side effect during ART adherence? If yes, mention them.

_____

_____

_____

Appendix:B

ክፍል ሁለት

የወ.ይይት ጥያቄዎች

ትዕዛዝ፡ ለወ.ይይጠቱ ፈቃደኛ ሆነዉ ስለመጡ በቅድሚያ አመሰግናለሁ።

ስሜ----------ይባላል። የምሰራዉም----------

----------ሲሆን የመጣሁት ከ----------ነዉ። ሁላችንም እዚህ ያልሆነዉ፤ ወንዶችም ሴቶችም የምንወያየዉ ስለ ስነልቦናዊ እና ማህበራዊ ችግሮች ሲሆን ችግሮቹም በፀረ-ኤች አይቪ/ኤድስ መድሃኒት ላይ ያተኮሩ ይሆናሉ። ለችግሮቹም ሆነ ለወ.ይይታችን አንድም እዉነት ወይም ዉሸት ነዉ የሚል መልስ አይኖርም። ሁሉም አስተያየቶች፡ ሃሳቦች፡ መፍትሔዎች ፡ እዉነታዉች፡ ተቀባይነት አላችዉ። ብዙ ልናያችዉ የሚገባችዉ ሃሳቦች ሁላችንም ሊኖሩን ይገባል። ግልጽና መልካም ወ.ይይት እደሚሆን ተስፋ አለኝ ስለዚህ በጉዳዩ ላይ ያላችሁን እዉቅና አስተያየት በነጻነት እንድን ወያይበት እጠይቃለሁ።

የምንወያያቸዉ ሃሳቦች እና ጠቃሚ ነጥቦች እዳይሳቱ የሚቀዳ ቴፕ እጠቀማለሁ። በስተመጨረሻላስገነዝባችሁ የምፈልገዉ ሁሉም ሀሳቦቻችሁና ወ.ይይታችሁ ሚስጥራዊ ተጠባቂነት እንዳላቸዉ ላስገንዝባችሁ አፈልጋለሁ። ስም አይቀዳም።

በስተመጨረሻ ጥሪዬን አክብራችሁ ሁላችሁምለለተገኛችሁልኝ ከልብ አመሰግናለሁ።

የዉይይት ጥያቄዎች

1. በሕክምና ጣቢያዉ አሉ የሚላችዉን ዋና ዋና ችግሮች በፀረ ኤች አይ ቪ /ኤድስ መድሃኒት ዙሪያ ምን እንደሆኑ ቢገልፁልን፡

   - ❖ በፀረ ኤች አይ ቪ ኤድስ መድሃኒት አሰጣጥናአቅርቦት
   - ❖ ከቫይረሱ ጋር በሚኖሩ ሰዎች የጤና፡ የስነ- ልቦናዊ እና ማህበራዊ ችግሮችን በተመለከተ
   - ❖ የጤና እንክብካቤ ሰጪዎቹ መስተንግዶና አቀባበል
   - ❖ በሕክምና መስጫ ጣቢያዎችዎ የሚገለገሉትን ሕመ-ማንን ሁኔታ
   - ❖ በቂ ነዓ የፀረ ኤች አይ ቪ /ኤድስ መድሃኒት ለማታንሚዎች የማግኘትን ሁኔታ

2. በመድሀኒት የአሰጣጥ ስርዓት ላይ ከተገልጋዮች የተገነዘቡትን ችግሮች ምን እንደሆኑ ቢገልጹልን፡

- ❖ የስነ ልቦና እና ማህበራዊ ችግሮችን ተገንዘበዉ ከሆነ
- ❖ የታንሚዎች ዕዉቀት እና የዝንባሌ ሁኔታበተመለከተ
- ❖ በጤና፡ በማህበረዊ እና በስነ ልቦናዊ ችግሮች አንፃር የሴቶች ሁኔታ እማን ደረጃ ላየ እንዳለ
- ❖ አድሎና መገለል የመሳሰሉትን ማህራዊ ችግሮች በተመለከተ

3. ከጣቢያዉ አቅምና ብቃት አንጻር ለህመ-ማን የሚሰጡት ግልጋሎት አጋጥመዉኛ ል የሚሉት ናለ ብትጠቅሳቸዉ

በከተማና በገጠር የመድሀኒቱ ተጠቃሚዎች የአገላገሎት ሁኔታ እና ተዛማጅ ችግሮች ካለ

4. በመድሃኒት አሰጣጥ ስርዓቱ በግዜና ከችግራችዉ ዓጻር፡ እንዲሁም ጽዎታዊ ድጋፍ ካለ ቢየብራሩልኝ

- የመድሀኒት መዉሰጃ ግዜን በተመለከተ
- የጸት ልዩነት ካለ
- የጋጠመዎት ፈታኝ ሁኔታ ካለ

5. መድሀኒታችዉን ላቃረጡ፡በሞት ለተለዩ፡ በችግር ቀርተዉ ለመጡ ምን ዓይነት ክትትል እና እርዳታ ይሰጣችዋል?

- ምቦት እርቀት
- ምአቅም ማጣት
- ምኢኮኖሚ ችግር
- በማሀረሰብ ተጽእኖ

6.በርሶ እይታ ማህበረሰቡ በቫየረሱ ተጠቅተዉ የጸረ ኤች አአይ ቪ መድሃኒት የሚወስዱ ወገኖቻችንን እንዴት ያያቸዋል ብለዉ ያምናሉ፡፡

- ከቫይረሱ ጋር በሚኖሩ ሰዎች ላይ ያላችዉ እዉቀትና ግንዛቤ በተመለከተ
- የማህበራዊ ግንኙነትን እና ተሳትፎን በተመለከተ
- የተከሰቱት ችግሮች ካሉ፡-
  - በሰዎች ስነ ልቦናዊ አስተሳሰብ
  - በዓድርና በስብሰባ ግዜ
  - የማህበረሰቡ ድጋፍ፡ እንክብካቤ እና ሕክምና አሰጣጥ
  - ችግሮቻቸዉን ተቀብሎ ስለማስተናገድ ሁኔታ
- 7.ስለ ወቅትዊዉ የቫይረስ ተጠቂዎች፡የህክናዉ ሁኔታ፡ የመድሃኒቱን አቅርቦአጠቃቀም በተመለከተ የስነ ልቦናና ማህበራዊ ችግሮች የገጠማችዉ ከነመፍትሄዎቹ ጭምር ይጠቁመን፡፡.በመጨረሻም በናተ አስተሳሰብ ከእድሜ ማራዘሚያ መድሃኒት፡ ህክምና አሰጣጥ እንዲሁም ሌሎች ችግሮች (ካሉ) እንዴት ሊቃለሉ ይችላሉ ብለዉ በየምናሉ፡፡ በሳባችሁን በዝርዝር ብትገልጹልኝ፡፡

Part two

In – depth Focus group Discussion

Well come to the interview

My name is _____ I work for _____ and I came form _____. We are here to discuss psycho social problems which are encountered by regular ART users, in both male and female. There is no right or wrong answers. All comments, ideas and facts are welcome. We would like to have many points or view. I would like this to be open interview, so feel free to express your opinions honestly and openly. In order not to miss any points of the interview / discussion, I will be using a tape recorder. At last, I would like to confirm that your all arguments are confidential and used only for research purpose. Even the researcher himself and his assistants will not be sure of the answer so that it will be very confidential and anonymous. Your name will not be recorded. I hope you are willing to participate in the interview scene.

If you are willing, thank you in advance for your cooperation

Questions of Discussion

1. What are the major problems encountered by the ART center?

Probe:

- ART provision and accessibility
- Medical and psycho social problems of PLWHA
- Care givers daily professional activity
- Patients reaction to your medication center
- Availability of enough free education for your patients

2. what is your perception about the clients who are coming for ART Treatment ?

Probe :

- About any overt psychosocial problems
- How about the knowledge and attitudes of patients towards ART
- The position of women regarding to their problems of medical, social and psychological
- Presence or absence of social problems like stigma and discrimination.

3. In your capacity as a service provider, what measure problems you encountered
4. Do you observe any difference among the gender in the services you provide.
5. How do you follow those of ART clients who missed drug, have social problems and died?

Probe :

- Residence problem
- Loss of energy
- Economic problem
- Social problem

6. How does the community perceive PLWHA and their ART medication access and adherence?

   Probe:

   - Their knowledge and attitudes to ward PLWHA
   - Problems encountered by:
     - ◊Social gatherings such as Idir and public affairs.
     - ◊ People's Psychosocial thought.
     - ◊ People's social care, support and treatment.
     - ◊ Acceptance of problem of PLWHA.
   - Current conditions about HIV/AIDS, PLWHA, ART medication access and adherence and all psychosocial problems faced by HIV patient.

7. How do you think in your opinion ART related problems could be solved.

Appendix C

PART III: In-depth Interview for HAPCO Officials

This Interview questions are for ART officials in order to know about ART policy implementation in Ethiopia.

Thank you for your willingness to discuss the basic issues of ART policy formulation & practical implementation in the country. You are one of the few respected professional persons in our community. This is why I felt & should be approached & interviewed. I am soliciting your service & frank responses for all my questions. All your responses will be kept with utmost confidentiality. You have been identified for your dedication & concerned well being of the research subject.

Questions for In-depth Interview

1. How are you implementing the International ART Drug Policy (IADP) for PLWHA in our country?

- Policy guide lines for ART access& provision
- Gender equality drug distribution
- Minimum criteria for free ART drug distribution

2. Do you have any differential policy guide lines in implementing ART drugs for all ART centres?

- For Poor PLWHA
- For Women living with HIV/AIDS
- For Children living with HIV/AIDS
- For Adolescents & Adults living with HIV/AIDS

3. What are your minimum package /policy guide line for HAART provision to economically poor PLWHA?

- Depending on Cost of drug
- Depending on number patients
- Depending on International Drug Administration Regulation
- Depending on Demand & Supply of ART drugs

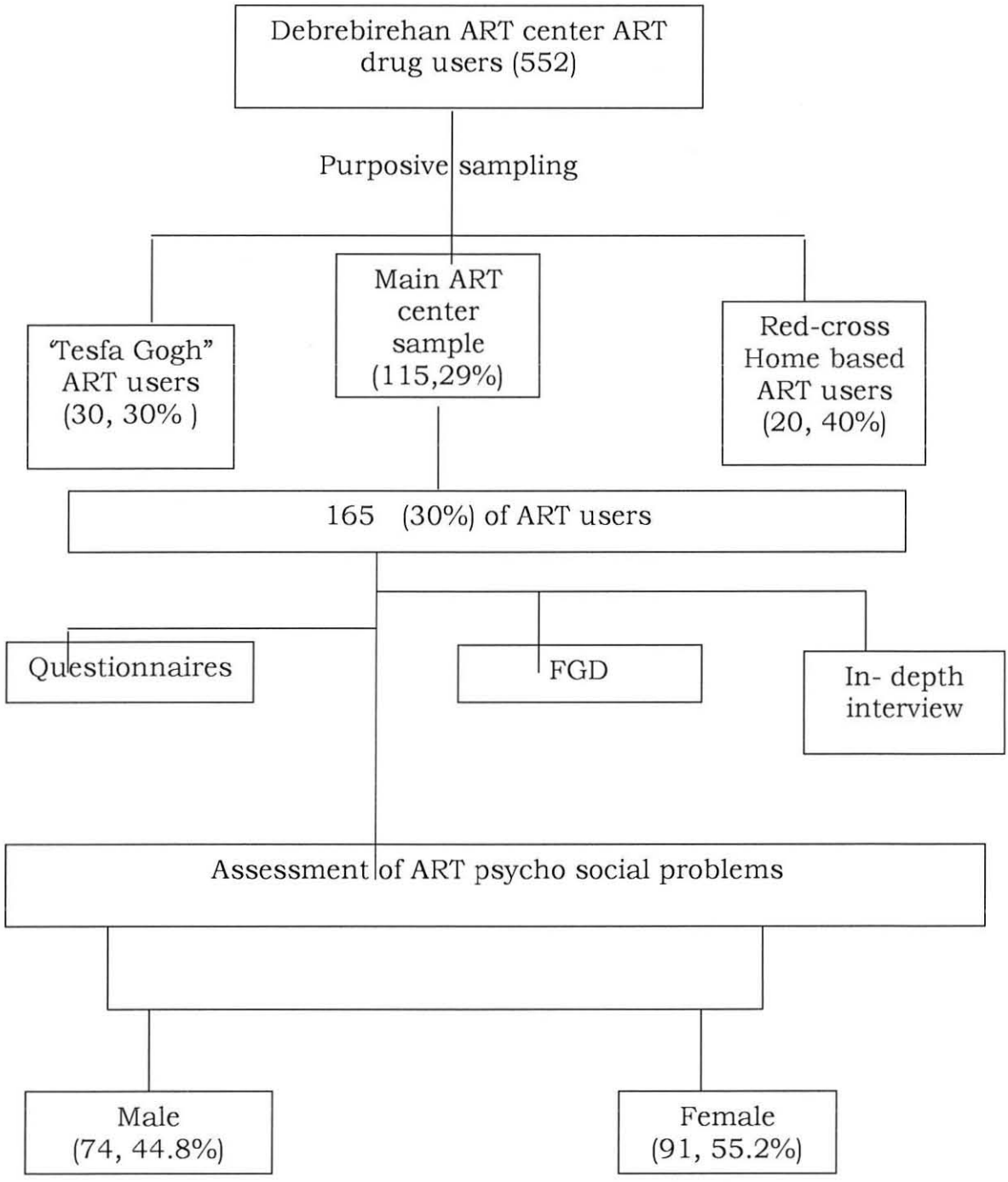
4. What about the challenges you faced in implementing ART drug currently?

- Lack of awareness to ART drug adherence
- Drug regimen complexity
- Psychosocial problems of PLWHA
- Incompatibility of ART drug policy to the status of PLWHA(if any)

5. What will be the solution of the problems & challenges that you faced in ART drug provision?
You are politely requested to suggest your relevant recommendations in this regard, especially about:

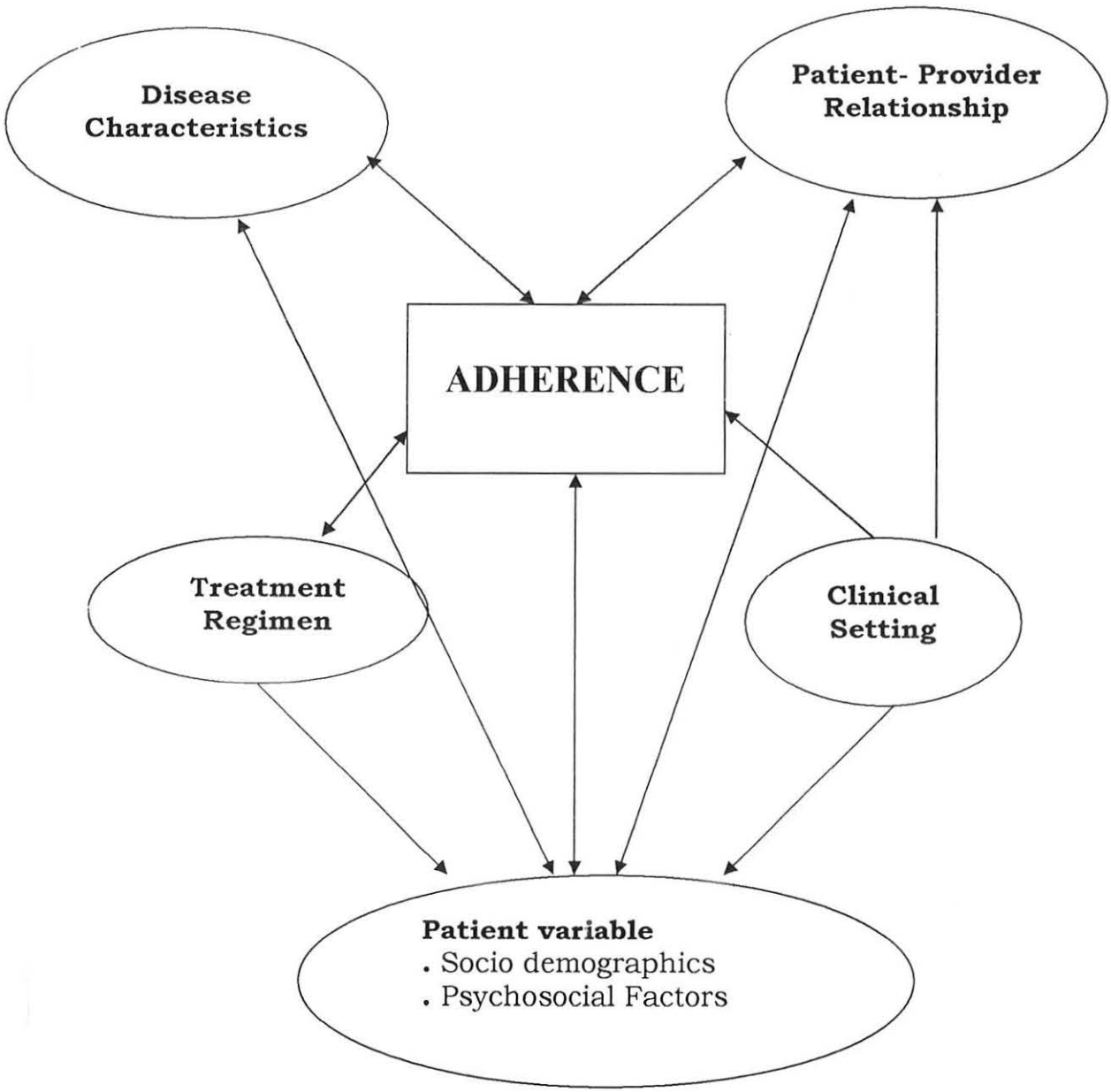
- ART Policy implementation
- Problems of PLWHA, such as balanced diet, stigma, discrimination & others
- Current status of ART clients (such as about feasibility, affordability, sustainability, safety of drug, etc.)
- ART drug production plan in our country regarding to its quality & quantity (nation capability)

Appendex :D Study Architecture

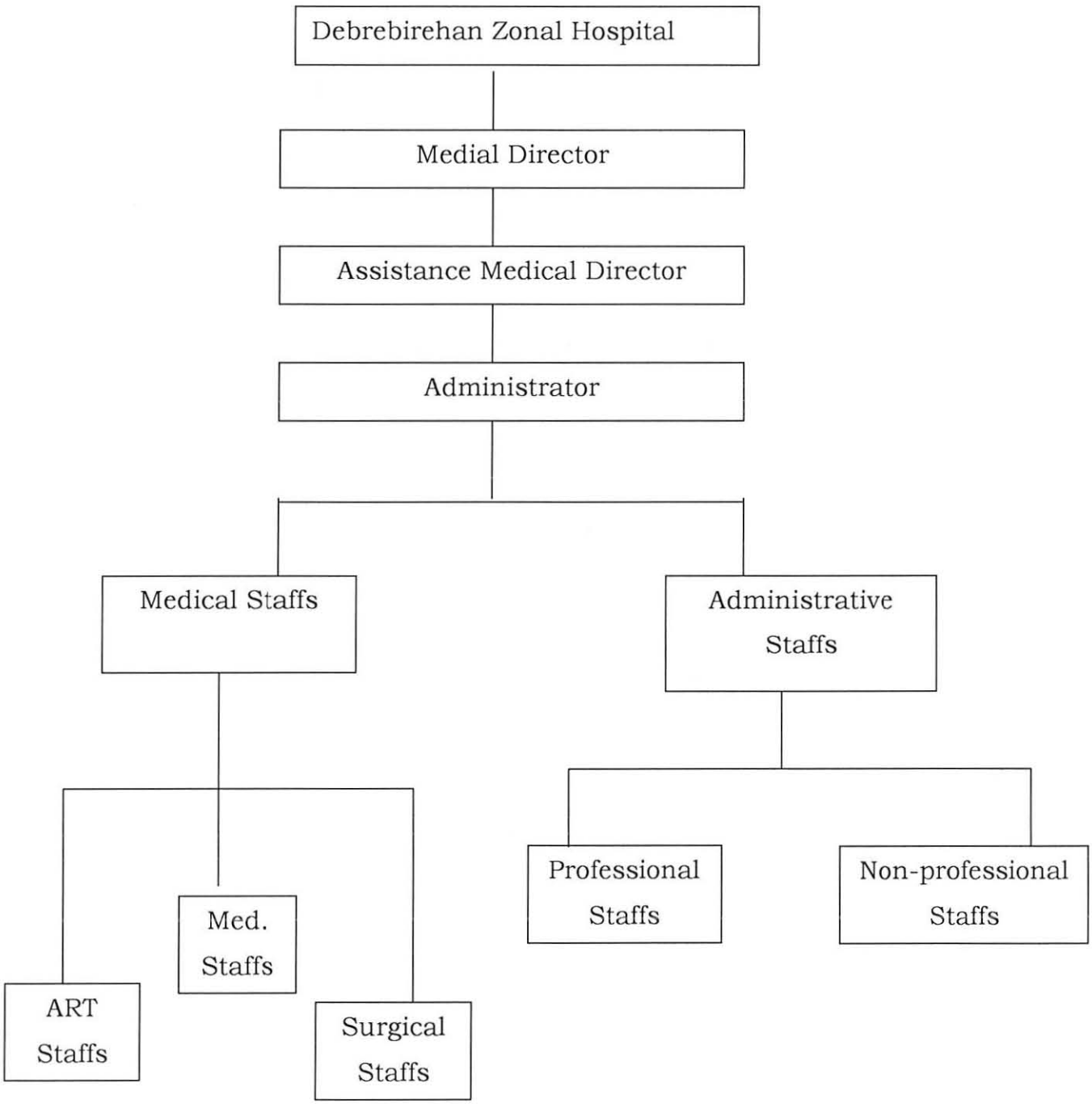


ANNEX- E

DETERMINANTS OF ART DRUG ADHERENCE



Appendix F: Debrebirehan Zonal Hospital Managerial Structure



Declaration

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in any other university and that all relevant sources used for the thesis are duly acknowledged.

Name Mekasha T/Giorgis

Signature _____

Date July, 2007

This thesis has been submitted for examination with my approval as a university advisor.

Name _____

Signature _____

Date _____