

**THE CHILDBEARING INTENTIONS AND DESIRES OF PEOPLE LIVING WITH  
HIV/AIDS IN TESFA-GOH ASSOCIATION OF BAHIR DAR TOWN**

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## DECLARATION

I hereby declare that the dissertation entitled **THE CHILDBEARING INTENTIONS AND DESIRES OF PEOPLE LIVING WITH HIV/AIDS IN TESFA-GOH ASSOCIATION OF BAHIR DAR TOWN**, submitted by me for the partial fulfillment of the MSW to Indira Gandhi National Open University, (IGNOU) New Delhi is my own original work and has not been submitted earlier, either to IGNOU or to any other institution for the fulfillment of the requirement for any other programme of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

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**CERTIFICATE**

This is to certify that Mr. **EMBIALE AREGA** student of **MSW** from Indira Gandhi National Open University, New Delhi was working under my supervision and guidance for his project work for the course **MSWP-001**. His project work entitled **THE CHILDBEARING INTENTIONS AND DESIRES OF PEOPLE LIVING WITH HIV/AIDS IN TESFA-GOH ASSOCIATION OF BAHIR DAR TOWN**, which he is submitting, is his genuine and original work.

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# **Chapter One**

## **Introduction**

### **1.1. Background of The Study**

In situations of an HIV/AIDS epidemic that is characterized predominantly by heterosexual transmission, individuals of reproductive age groups in Ethiopia make fertility related decisions and childbearing desires in an environment which is much more complex than in previous generations. It is vital for health communicators to understand how HIV positive and high prevalence, regardless of status, influence the desire of a person to have a child and fertility related decisions so as to fully address the reproductive health concerns of the public.

Over 90% of the people infected with Human Immune Deficiency Virus (HIV), which causes AIDS live in the developing world. The joint United Nations program on HIV/AIDS (UNAIDS) expects that this proportion will continue to rise in countries where poverty, poor health systems, and limited resources for prevention and care fuel the spread of the virus (UNAIDS, 1999).

An estimated 70% of the global total of HIV positive people, 26 million out of 37.1 million, lives in Sub-Saharan Africa. Sub-Saharan Africa contains only 11% of the global population. Since the beginning of the epidemic, over 15 million Africans have died from AIDS (Karen, 2002).

With an estimated 77 million inhabitants in 2008, Ethiopia is the third largest most populous country in Africa and about 85% of the population lives in rural area (CSA, 2008). The country is among the least developed in the world, as 169<sup>th</sup> out of 179 countries according to the 2008 human development report (UNDP, 2008). In addition to this, the country is characterized by high mortality, low life expectancy, high fertility rate, constant population movement, poor health access and infrastructures.



Fertility is one of the principal components of population dynamics that determines the size and structure of the population of a country, and has a powerful effect on its health and economic success. Fertility continues to be relatively high in Ethiopia, with women continue to marry and give birth at a young age, have polygamous unions, and engaged to respect parental and cultural pressures imposed on them as to marry and give birth to a child. Yet more than three quarters of married women report that they either want no more children or want to wait at least two years before their next birth. Despite high knowledge of family planning currently only 15% of married women are using any contraceptive method (CSA and ORC Macro, 2006).

With access to prevention of parent-to-child transmission (PTCT) and antiretroviral therapy (ART), people living with HIV/AIDS are better able to consider childbearing and parenthood. However, there is limited understanding of the reproductive health care needs and the impact of infection on the childbearing desires of women living with HIV/AIDS because of the risk of HIV transmission to children and sexual partners (HAPCO, 2007). Women living with HIV/AIDS must also consider many factors when making childbearing decisions, including support from partners and health care providers.

An Ethiopian woman has about five children in her life time. The total fertility rate, or TFR, is 5.4. This represents a large total reduction over the past two decades, from a TFR of 6.4 in 1990. However, very little change has occurred since 2000 when the Ethiopian Demographic and Health Survey (EDHS) found a TFR of 5.5. In 2005, Ethiopian men and women were asked how many children they would like to have, if they could choose. The ideal family size for women was 4.5 children, and men would like 5.2. Ideal family size has decreased by one child since 2000, when women reported an ideal size of 5.3 children and men desired 6.4 children (CSA and ORC micro, 2006).

In general, the study is aimed at identifying the major factors affecting the childbearing intentions and desires of people (men and women) living with HIV/AIDS and at estimating the extent of childbearing intentions and desires of these people to some extent. The findings can be used to promote the required efforts to a large extent and for provision of better solutions for the factors affecting the childbearing intentions and desires of people living with HIV/AIDS, and to create conducive environment for PLWHA in relation to the study in particular and for their future life careers in general.

## **1.2- Statement of the Problem**

Women in Sub-Saharan Africa between the ages of 15 and 24 years constitute 76% of those of risk for contracting HIV, and the risk of infection for this group is three times that of the general population (Karen et al.2002).Because HIV affects mostly women in their reproductive years, decisions about childbearing among women living with HIV/AIDS (WLHA) continue to be a subject of debate in resource constrained settings. Despite advances in ART and prevention of mother-to-child transmission services, many women living with HIV/AIDS in these settings wrestle with the decision to have children (Chen, 2001). Moreover, since it is perceived that many health care workers are unsupportive of women living with HIV/AIDS childbearing plans, WLHA often are discouraged from having children.

Many findings show that HIV/AIDS and family planning are intertwined-one could say, integrated-in the minds of many developing countries as they confront the very real and present danger posed by heterosexual transmission of the virus. Given the dire economic conditions of so many developing countries, economic exigencies were cited as factors that led to have fewer children, especially among men. Yet, many study participants-women and to a lesser extent men-

spontaneously mentioned the influence of HIV/AIDS in reducing their family size as well as their compatriots.

The report done in 2007 in Zambia examines the role of HIV and AIDS in fertility decision making, changing social norms about childbearing and contraceptive use, and it explores the role of communication in that process. While research has shown that social norms often discourage HIV infected people from having children(Rutenberg, Biddlecom and Kaona,2000:Feldman and Maposhere,2003), many studies of HIV infected individuals found that 28-29 percent of respondents wanted children in the future(Chen et al ,2001) and a study of women in Zimbabwe found that young childless women often wanted to become pregnant(Feldman and Maposhere et.al,2003).When one or both partners are infected, individual factors in tandem with social ones influence childbearing decisions.

As prevention from mother to child transmission(PMTCT) programs provide for both prevention of HIV transmission from mother to child and enrollment of infected pregnant women and their families into antiretroviral treatment, the government of Ethiopia undertaken an effort to mitigate the impacts of the epidemic in the general population and amongst children in particular(HAPCO,2007).It is expected further to decline if the present HIV preventive strategies and treatments get continue and this directly or indirectly might open doors for PLWHA to make decisions concerning childbearing desires.

Given that the majority of HIV positive men and women are in the reproductive age and major modes of HIV transmission in Ethiopia is heterosexual and mother to child transmission, a better understanding of reproductive choice of HIV positive individuals is important especially as Antiretroviral medication is becoming more accessible. Accurate description of the childbearing

intentions and desires of HIV infected individuals is necessary because it may help them achieve their desires without scarifying the health and wellbeing of their new born baby.

In this paper, I examined the ways in which childbearing intention and desires of PLWHA are influenced by socio-economic factors, partners, cultural and even by health care workers, and other associated factors. Moreover, the power to make such decisions depends on the information available to these PLWHA and how independent or autonomous they are within their families and society at large.

### **1.3. Research Questions**

- How do socio-economic and demographic factors determine the decisions of people living with HIVAIDS towards childbearing intentions and Desires?
- What are the health related factors affecting the decisions of people living with HIVAIDS towards childbearing intentions and Desires?
- What are the cultural factors that influence the decisions of people living with HIVAIDS towards childbearing intentions and Desires?

The study will evaluate the childbearing intentions and desires of PLWHA and its determinants among HIV-positive men and women in Tesfa-Goh association in Bahir Dar town.

If this study shows that certain factors exhibited are affecting the childbearing intentions and desires of PLWHA, then special programs like Income generating activities, Health care programs and a call for restructuring care and treatment services will make PLWHA to make the right decisions and seek for alternative forms of care so that they will have the desired number of children in their future career.

## **1.4- Study Objectives**

The general objective of this study is identifying the determinants of the desire to have a child among HIV positive men and women in general and in Tesfa-Goh PLWHA association-Bahir Dar in particular.

The specific objectives of this study are

- Examine how socio-economic and demographic factors determine the childbearing intentions and desires among people living with HIV/AIDS.
- Identify health related factors affecting childbearing intentions and desires of PLWHA.
- Explain the effect of cultural factors in affecting childbearing among people living with HIV/AIDS.
- Assess the desire to give birth of women and men living with HIV/AIDS

## **1.5- Significance of the Study**

This study is conducted in Tesfa-Goh PLWHA association in Bahir Dar town focusing on the childbearing intentions and desires of HIV positive men and women in the association. The study subject included both men and women living with HIV/AIDS who are the members of the association.

This study is important for the following reasons-

- It supplies base-line data concerning the fertility and childbearing desires of people living with HIV/AIDS to
- The findings of the study will contribute to the formulation and execution of health education programs on the fertility issues of PLWHA in Ethiopia.
- The study tried to demonstrate childbearing intentions and desires of people living with HIV/AIDS in spite of the sensitivity of the issue.

- The study will make the target groups to get benefited economically and with respect their health statuses through the implementation of the findings.

### **1.6. Delimitations of the Study**

In this study, I have gathered some statistics about childbearing intentions and desires of people living with HIV/AIDS who are enrolled in Tesfa-Goh association with respect to their socio-economic, demographic, health related and cultural issues. The sample selected for this study was limited to People Living with HIV/AIDS enrolled in Tesfa-Goh association-Bahir Dar. Thus, the ability to generalize to the entire population of PLWHA and beyond its borders is severely limited.

### **1.7. Limitations of the Study**

- The study concentrated only on women and men living with HIV/AIDS and who were members of the association due to the difficulty of getting others who weren't members of this association. Thus findings may not be generalizable to the community of PLWHAs.
- Time and money were the main constraints not to perform the study as expected.

### **1.8. Definitions of Terms**

**PLWHA Association**-is an association of people living with HIV/AIDS in volunteer membership.

**HIV positive Men and Women:** refers to women and men living with HIV/AIDS and aged between 15-49 and 15-59 respectively.

**Childbearing**-the process of giving birth to children

**Partner childbearing desire-** is the interest of a husband/wife/spouse to have a child

**Self Reporting Health status-** is the perception of the HIV positive men and women whether their health is improved or not as compared to the past

**Mother –to-Child Transmission (MTCT)-** refers to the transmission of HIV from the mother to child through various mechanisms like delivery, breast feeding and pregnancy

**Prevention of Mother- to- Child Transmission (PMTCT)-** refers to the methods that help to decrease the chance of transmission of the virus to the child by a certain percent

**In Union-** refers to women or men who are married or living with a partner

**Not in Union-** Women or Men, who not yet married, divorced, widowed, or separated at the time of the survey.

**N-** Number of respondents or participants

## **CHAPTER TWO**

### **2. REVIEW OF RELATED LITERATURE**

The major mode of HIV-transmission in Ethiopia is unprotected heterosexual intercourse which accounts for 88% of HIV- infection and mother or parent- to- child transmission accounts 10% and the majority of new infection occurs in reproductive age groups 15-49 (MOH, 2006).

A good understanding of behavior changes on child bearing behavior within the context of social ,economic ,demographic ,health related and institutional factors helps to observe how population changes and to identify determinant factors for changing childbearing behavior. The following review of related literature shows how different factors affect childbearing intention and desires of people living with HIV/AIDS.

#### **2.1 .Factors that Affect Childbearing Intention and Desire among HIV**

##### **Positive Men and Women**

Antiretroviral treatment has improved health status and life expectancy of PLWHA making them enjoy life similar to uninfected individuals (Moore and Johnson 2002). Some studies have even repeated that some anti retro viral drugs may increase sexual activity among women increasing their likelihood of pregnancies (Ewilson ,2004).Scaling up of ART is currently underway in Sub – Saharan Africa increasing survival of PLWHA with little attention on their reproductive health needs (UNAIDS ,2011).

Unprotected sex has been discouraged among PLWHA due to risk of transmission or acquisition of new viral strains and vertical transmission, moreover, policies and stigma have discouraged



reproductive intentions of PLWHA .However, studies suggest that PLWHA desire and continue to have children equally to those without HIV infection (Cooper, Myer, and Ogilvie, 2007). A limited number of studies mostly in developed countries involving selected groups of people such as women in ART centers and/or urban settings where socio-cultural pressures are less have speculated that most pregnancies of PLWHA could be intentional( Ogilvie et al.,2007).

In rural areas, cultural values are attached to fertility and a significant social status is assigned to people with children (Dyer, Hoffman, 2002). In this era of HIV infection, the level of desire and intention to have children in the rural general population is not well understood. Additionally there are a few insights into factors affecting desire and intentions to have children among PLWHA in Africa. Lack of information has slowed down efforts to integrate reproductive health services in the routine HIV/AIDS care and treatment.

The report done in 2007 in Zambia examines the role of HIV and AIDS in fertility decision making , changing social normal about childbearing and contraceptive use , and it explores the role of communication in that process. While research has shown that social norms often discourage HIV – infected people from having children (Rutenberg , Biddlecom and Kaona ,2000; Feldman and Maposhere ,2003), many studies of HIV – infected individuals found that 28-29 percent of respondent wanted children in the future (Chen et al.,2001); a study of 250 men in Brazil living with HIV found that 43% wanted children (Pavia ,2003 ); and a study of women in Zimbabwe found that young childless women often wanted to become pregnant ( Feldman and Maposhere et al.,2003).When one or both partners are infected , individual factors in tandem with social ones influence childbearing decisions. A recent article in the Lancet (Myer, Morroni, and Sadr, 2005) called for more research to understand the factors that influence HIV- infected

women's reproductive decisions. The study discussed here in also explores the impact on men's reproduction decisions.

This stands in contrast to a number of other studies. A case in point is a qualitative study carried out in Ndola, Zambia ,in 1997 ,which found that; participant's high a awareness and concern about HIV and AIDS were not directly reflected in their childbearing decisions. Instead, the most important and most common factor that influenced childbearing decision was economic conditions; especially, women and men said their ability to provide for their children determined their childbearing decisions (Rutenberg et al., 2000).

Similarly, other studies that have explored the relationship between an HIV – positive diagnosis and subsequent fertility behavior have found that known HIV status has little association with child bearing .For example interventions with HIV positive women in Africa have not been found to motivate a significant change in reproductive outcomes. in depth interviews a among women in Cot d'Ivoire who had known their HIV status during pregnancy revealed that most women (12 out of 15) with fewer than four children intended to become pregnant again even though they had been advised not to have more children because of their infection (Aka- Dago – Akribi, 1999). Similar findings fewer reported from Zaire, where a study of fertility rates in 238 HIV infected women followed for 3 years postpartum found “disappointingly high” fertility rates in women who had been provided with a comprehensive program of HIV counseling and birth control (Ryder, 1991 ).

At least one study, however, did not point exclusively in this direction. In a study conducted in Zambia in 1995, researchers found that no one mentioned HIV/ALDS “as a factor influencing their preferred family size during the initial survey” (Baylies, 2000) .Further investigation ,

however, found that 17 of the 65 individuals re-interviewed did mention that the threat posed by HIV/AIDS had led to the decision to have fewer children. Among those individuals, it was primary worries about unduly burdening others with minor children they would leave behind and secondly, an effort to reduce their own risk that led to this decision (Baylies et al., 2000). Whereas earlier studies found a wide spread belief that vertical transmission of HIV/AIDS from mother to infant was inevitable (Rutenberg et al., 2000), most of which were conducted prior to the wide spread availability of PMTCT programs. The study in Zambia in 2007 was found to be quite the opposite; many respondents seemed to believe that HIV transmission would be avoided if the delivery was "properly handled" with only a few recognizing that this risk of transmission in Zambia remains high, moreover recent research estimates vertical transmission between 18 and 30 percent in resource –constrained setting such as in Zambia (Eure and Martison, 2006). Accurate information about transmission rates seem not to have been widely disseminated –or understood in Zambia.

Of the sixteen HIV-positive interviewees, only two-third of whom had no children –expressed a clear desire for children. To explore the fertility needs and concern of young women and men, which differ from their older counterparts a few HIV-positive interviewees mentioned that they would consider another pregnancy if they could be certain the child would be born "AIDS-free". For the most part, the interviewees mentioned that they "weren't allowed" to have children, because of their poor health conditions, the unacceptable risk of infecting their partners, or the high probability of having an HIV- positive infant. While stigma remains a serious problem, it seemed to be an obstacle more with respect to disclosing one's status than limiting one's fertility desires (Carol, 2007).

The findings reported herein clearly support the wisdom of integrating HIV/AIDS testing and counseling with family planning. Increasingly, the public tends to think of the two in tandem: most people want to know how to protect themselves, their partners, and their children from HIV transmission, recognizing that it may well include contraceptive use. Access to counseling and testing should therefore be a standard part of family planning services. Integrating, counseling and testing into family planning service can therefore reduce the stigma associated with HIV, and increase access to and use of voluntary counseling and testing (VCT) services. Family planning programs have both an opportunity and an obligation to assist individuals in making informed choices that will enable them to safeguard their well-being.

As has been emphasized in recent international consensus, statements issued by WHO ( *Global Call to Action*, 2004) and UNFPA (*New York Call to Commitment*, 2004),the integration of reproductive health(of which family planning is a component ) and HIV/AIDS policies and programs will save lives and money, and help scale up and speed up urgent effective responses. The challenge to service providers is, therefore to promote not only access but also consistent and correct use of condoms in addition to bringing of attitudinal changes. The available literature suggests that most unplanned pregnancies and HIV/STI transmissions occur because condoms are not used consistently and correctly (Steiner, 1999) .Consistent and correct condom use is estimated to be as much 97 percent effective in protecting against both unintended pregnancy and HIV transmission (Trussell and Kowal, 1998; Weller and Davis, 2002; Mann, 2002).

## **2.2. Theories Related to Fertility Desire**

Theories on fertility desire indicated that child –bearing desire of people is affected by Economic and Socio –Cultural factors in addition to their personal preferences. Different theories see these factors from different perspectives as indicated below.

### **2.2.1. Demand or Rational Choice Theory**

It states that in deciding to have a child people make a considered calculation that the benefits of an additional child outweigh the costs. The frame work is the maximization of utility; if greater utility can be obtained from an alternative to an additional child, then that alternative will be chosen (Becker 1981 as cited in McDonald 2001). Decline in fertility thus implies that on the general population on average the costs outweigh the benefits of additional child or the utility will be maximized by choosing another alternative than having a child.

### **2.2.2. Risk and opportunity theory**

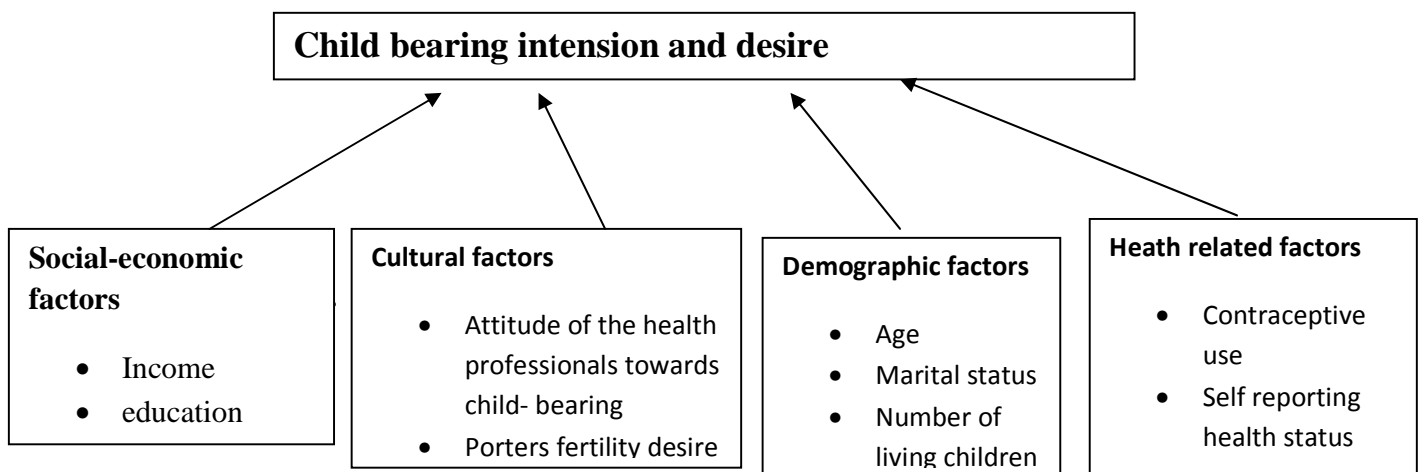
This theory used the assumption of demand theory as a base and states that the costs and benefits are mainly future costs and benefits and we can't know with certainty what the costs and benefits will be (McDonald et al., 2001). In having a child people are making a decision to change their future life course and hence their future orientation. If there is a perception that economic, social, intimate or personal futures are uncertain, decision makers may make a mistake on the side of safety in order to avert risk or they may pursue an opportunity that is within their reach.

### 2.2.3. Post –Materialist Values theory

It mainly focuses on changing values and more associated with a sociological approach. This theory stipulates that changes in social and demographical behavior have been driven by the growth of values of individual self – realization, satisfaction of personal preferences, liberalism and freedom from traditional forces of authority, particularly religion (McDonald et al.,2001). It encourages low fertility .The lesson from this is that low fertility is a societal phenomenon related to those women who are more highly educated , less religious, more urban or more liberal in their attitudes and values.

### 2.3. Conceptual Framework

**Figure1. Conceptual Framework on factors that influence Childbearing intentions and desires among people living with HIV/AIDS**



### 2.4. Impact of HIV/AIDS on Fertility and Childbearing Desire

Adult mortality due to AIDS can create several distinct population level effects on fertility and childbearing desires. Probably the most important population level effect is the loss of substantial reproduction potential due to adult female mortality (Gregson et al., 1994). AIDS mortality

occurs primarily in the adult reproductive ages where the selective loss of reproductive-age adults can be expected to reduce the Crude Birth Rate (CBR)-the ratio of total births to total population-because the death of reproductive age adults would have a larger proportionate impact on the numerator than the denominator of this ratio. Zaba and Gregson (1998) propose that the mortality from a mature AIDS epidemic might act to increase the General Fertility Rate (GFR), due to higher AIDS mortality at the older reproductive ages where fertility rates are relatively lower. This assumes an age pattern of HIV-infection and a distribution for the elapsed time from infection to death that jointly produce disproportionate rates of AIDS mortality at the older reproductive ages. Further the above analysis clearly shows that, fertility rates in the reproductive ages are highly affected by HIV/AIDS in such a way that its epidemic has made people to be worried, biased in decision making to have a child and lead their healthy life styles in their future careers.

At present, the effect of HIV/AIDS on fertility and childbearing desire among those person infected with HIV is far better understood, and with more precision, than the corresponding effect for uninfected persons. As evidence synthesized from six African studies conducted in the early and mid 1990s: three in Uganda, two in Zambia, and one Tanzania, one can conclude that over all fertility of HIV- positive women is 25-40 percent lower than that of HIV- negative women for reasons associated with their status and wide spread distribution of HIV, and other determinant factors like-socio-economic, cultural, demographic, and health related issues at large ( Zaba and Gregson et al.,1998)

## **CHAPTER THREE**

### **3. METHODOLOGY**

#### **3.1. Study Design**

The aim of the research is to investigate the determinant factors affecting the childbearing intention and desires of PLWHA (both men and women) in Tesfa-Goh association of PLWHA in Bahir Dar town.

To accomplish this task, the researcher used the quantitative and qualitative methods in which questionnaire involving both open-ended and close-ended items were employed as to gather the required data through active involvement of the selected participants during the survey. In addition to this, the researcher used structured interview method and Focus Group Discussion (FGD) to collect data from the sample size.

#### **3.2. Universe of the Study**

The universe of the study included all men and women living with HIV/AIDS in Tesfa-Goh PLWHA association which is found in Bahir Dar town. Bahir Dar is located in North-Western part of Ethiopia and is 549 kilometers away from Addis Ababa. It is the capital city of Amhara region and according to Genomes geographical data base 2011, the total population number of Bahir Dar town was around 168,899. The study area is selected for reasons that it is so close to the researcher and access to make frequent visits and contacts with the intended participants and concerned bodies so that the research under study will be held as required and helps to reach to the desired outcomes at large.



Tesfa-Goh PLWHA association in Bahir Dar has totally 1006 members who are living with HIV/AIDS and this digit is to be taken as the total population size of the study by which the required sample size for the research study is constructed by selecting representative participants from the total population number (size) using random sampling method for the research study at hand.

### **3.3. Sample Size and Sampling Techniques**

The target population included in the study are people (Men and Women) living with HIV/AIDS in Tesfa-Goh PLWHA association in Bahir Dar town. The total population numbers (size) of the study were 1006. Since the whole populations were very large to manage, representative samples were taken to administer the questionnaire. So, the population taken as the sample size of the study was 100, among these 49 were men and the rest 51 were women; both living with HIV/AIDS in Tesfa-Goh association in Bahir Dar town.

The numbers of participants are taken from the association through considerations of the reproductive ages of men and women and using a random sampling method as a core point. Thus, a total of 100 people living with HIV/AIDS would form the sample. The participants are randomly selected and the age intervals for females included from 15-49 and 15-59 for males.

The sampling method used is random sampling. This sampling method is selected in order to minimize sampling errors in collecting data and to save time. In addition to this, the method makes the participants get involved and benefited from the study, and the study would have true and accurate data since they all know each other and are part of the case under study.

### **3.4. Variable Specification**

The study included both dependent variable and independent variables in order to show how these variables are correlated, affected with each other and to reach to a certain set of conclusion with respect to the study subject at hand.

#### **3.4.1. Independent Variables**

The independent variables for this study are:

##### **Socio-economic Variables**

- Income
- Education

##### **Demographic Variables**

- Age
- Marital status
- Number of living children

##### **Health related variables**

- Contraceptive use
- Self Reporting Health status

##### **Cultural variables**

- Attitude of health professionals towards childbearing

- Husband/Wife/Partner fertility desire

### **3.4.2. Dependent Variable**

The dependent variable is the Childbearing Intention and Desire of HIV-positive Men and Women in Tesfa-Goh association in Bahir Dar town. The dependent variable will be computed and analyzed in relation to the independent variables like-socio-economic, demographic, health related issues and cultural factors as to get a certain set of findings for the study.

### **3.5. Source of data**

The data for the study is collected from Tesfa-Goh PLWHA association found in Bahir Dar town. As to develop a near accurate understanding of the topic of research, different tools are used to collect the data and as to mention the objectives of the research study at hand.

The study used both Primary and Secondary data sources. The Questionnaire and Focus Group Discussion (FGD) guidelines are used as to collect Primary data. The participants were gathered and mobilized by the help of the coordinator in Tesfa-Goh, individuals and other administrators as to get them for information gatherings and apply different methods of data gatherings during the study. While previous works related to the subject, Books, Journals, Publications and other resources are used as Secondary data sources as to support and strengthen the study. In addition, Audio-tape recordings are also used to gather information during group discussion and interview sessions. The Questionnaire is used to collect quantitative data and the Focus Group Discussion (FGD) is used to collect qualitative data and is helpful as to strengthen the quantitative data

### **3.6. Data Collection Methods**

The participants for both the questionnaire and Focus Group Discussion (FGD) were randomly selected from the association of HIV positive men and women in Tesfa-Goh PLWHA-Bahir Dar in order to collect the required data and execute the research study towards bringing the desired outcomes at large.

Both open-ended and close-ended questionnaires are used to collect data from issues associated with independent variables such as socio-economic statuses, demographic, fertility related, HIV and health related issues in general ,and other factors of PLWHA in affecting the dependent variable(childbearing intention and desire of PLWHA). While the Focus Group Discussion (FGD) is used to investigate how and why socio-economic, demographic, health related and other factors affect the childbearing desires of people living with HIV/AIDS. During the discussion, the participants' feedbacks are audio-taped and recorded with their most commonly used or spoken language that is, Amharic and is translated into English since the research study is done in English and for better organization of the data obtained through the discussion times.

Ninety-eight participants are actively involved in handling the questionnaires and in responding voluntarily towards the items (issues) that are related to the variables provided to them in order to gather data with respect to these variables even though two of the participants were unavailable and couldn't bring back the questionnaires during the expected time for the study. On the other hand, eleven of the participants who are living with HIV/AIDS are actively participated during the Focus Group Discussion and in-depth interview session so as to gather qualitative data in relation to the research under study.

### **3.7. Techniques of Data Analysis**

Percentage, mean, variance and other descriptive statistics, as well as graphic illustrations were used to describe the main characteristics like age, income, and numbers of eligible respondents and others for the study subject. Participants responses during data gatherings (qualitative or quantitative) are converted to percentages while mean is used to compute the average age of the participants. The magnitude of the association between the predictor variables in relation to the study subject were examined separately using binary logistic regression analysis.

Co-relational analysis like chi-square was used to compute and illustrate the relationships between the dependent variable (childbearing intention and desire of PLWHA) and independent variables such as socio-economic status, demographic, contraceptive use, self reporting health status, and other health related issues in details for the study at hand.

### **3.8. Ethical Considerations**

The objectives of the study were explained to the participants and they were assured that any information concerning them would never be passed to any individual or institution without their agreement. Their names will not be recorded. Moreover, they were told that it is their right to participate or not to and that one can terminate the interview or questionnaire anytime if he/she feels uncomfortable with it.

## **CHAPTER FOUR**

### **4. ANALYSIS AND DISCUSSION OF THE RESULT**

From the total of 100 men and women living with HIV/AIDS included in the study, two of the selected participants' responses towards the given questionnaire cases were excluded because of the incompleteness of the responses. Analysis was, therefore made on the basis of 98 completed questionnaires (that gives a response rate of 98%).

#### **4.1. Socio-economic and Demographic Characteristics of Respondents**

The socio-economic and demographic variables taken into consideration for this study were- Age, Religion, Ethnicity, Marital status, Literacy status, Income and Number of living children. As indicated in table 1 almost half of the respondents 47 (47.96%) were found in the age group of 25-34 followed by 31 (31.63%) and 20 (20.41%) of the respondents in the age group above 35 and 15-24 respectively.

Respondents were mainly Orthodox Christians 76 (77.55%) followed by protestant 18(18.37%) and then Muslim 4 (4.08%). When you come to the ethnic groups; the Amahara ethnic group made up of almost half of the respondents 72 (73.47%) followed by Agew 15 (15.31%), Oromo 7 (7.14%) and Tigre 4 (4.08%) respectively (table). Among the study population 35 (35.71%) were married/ living with a partner while 63 (64.29%) were not in marital/ consensual union. 47 (47.96%) of the respondents had no children, followed by those who had between 1 and 2 children 38 (38.78%) those who had above 2 children 13 (13.27%). Among the respondents those who had a monthly income of 201birr or more were 52 (53.06) and those with monthly

income 200 birr and below were 46 (46.94%). Almost all of the respondents were literate 86 (87.76%) while only 12 (12.24%) were not literate as indicated in table 1.

Almost half 27 (52.94%) of female respondents were 25-34 years old followed by 16 (31.37%) in the age group 15-24 and then 8 (15.69%) in the age group 35 and above. 39 (76.47%) of female respondents were Orthodox Christians followed by 10 (19.61%) Protestant and 2 (3.92%) Muslims. Most of female respondents were Amhara followed by Agew, Tigre, and Oromo with a total 37 (72.55%), 8 (15.69%), 4 (7.84%) and 2 (3.92) of female respondents respectively as indicated in table 1.

Married female respondent and unmarried respondent constitute almost equal in number, 44 (86.27%) of female respondents were literate and the remaining 7 (13.73) were illiterate. Female respondents with monthly income below 200 birr were 32 (62.75%) and those with 201 or more average monthly income were 19 (37.25%). Most of the female respondents 45 (88.24%) had at least one or more living children and the remaining 6 (11.76%) had no living children during the study time as indicated in table 1.

Half of male respondents were 35 years old and above followed by 20 (42.55%) whose age was between 25-34 and 4 (8.51%) with 15-24 years old. Male orthodox respondents constituted 37 (78.78%), Protestant 8 (17.02%) and 2 (4.25%) of Muslims in their order.

Most of male respondents were Amhara 35 (74.46%), Agew 7 (14.89%), Tigre 2 (4.25%) and Oromo 3 (6.38%). 36 (76.59%) of male respondent were not in Union and the other 11 (23.41%) were in Union. 24 (51.06%) of the male respondents had more than 2 living children 16 (34.04%) of the male respondents had 1-2 children and 7 (14.89%) had no living children of all (table-1).

Almost all 42 (89.36%) of male respondents were literate while 5 (10.64%) were illiterate.

Respondents whose income were 201 and above were 33 (70.21%) and the remaining 14 (29.79%) had an income of 200br or less as indicated in table 1.

**Table-1: Socio –economic and Demographic Characteristics of the respondents**

Characterstics	Sex				Total	
	Male		Female			
	N	%	N	%	N	%
<b>Age (n=98)</b>						
15-24	4	8.51	16	31.37	20	20.41
25-34	20	42.55	27	52.94	47	47.96
35 and above	23	48.93	8	15.69	31	31.63
<b>Religion (n=98)</b>						
Orthodox	37	78.78	39	76.47	76	77.55
Protestant	8	17.02	10	19.61	18	18.37
Muslim	2	4.25	2	3.92	4	4.08
<b>Ethnicity (n=98)</b>						
Amhara	35	74.46	37	72.55	72	73.47
Agew	7	14.89	8	15.69	15	15.31
Oromo	3	6.38	4	7.84	7	7.14
Tigre	2	4.25	2	3.92	4	4.08
<b>Marital status (n=98)</b>						
Not in marriage/consensual union	36	76.59	27	52.94	63	64.29
Married/ living with partner	11	23.41	24	47.06	35	35.71
<b>Literacy status (n=98)</b>						
Illiterate	5	10.64	7	13.73	12	12.24
Literate	42	89.36	44	86.27	86	87.76



<b>Income (n=98)</b>						
Below 200	14	29.79	32	62.75	46	46.94
201 and above	33	70.21	19	37.25	52	53.06
<b>Living children (n=98)</b>						
0	7	14.89	6	11.76	13	13.27
1-2	16	34.04	22	43.14	38	38.78
3 or more	24	51.06	23	45.1	47	47.96

## 4.2 HIV/AIDS Related Characteristics of Respondents

HIV related characteristics in this study were disclosure to husband/wife/ partners, current husband /wife/ partner HIV status, HIV diagnosis duration, recent CD4 count, receiving ART and treatment.

Out of 63 married people or living with a partner, almost all 57 (90.48%) disclosed their HIV- status for their spouse or partner. While a very small group 6 (9.52%) did not disclose their HIV status to their spouse or partner. Moreover, 52 (82.54%) of the married or those living with a partner had an HIV- positive partner/spouse while 5 (7.94%) of the same group had spouse/ partner with no HIV on their blood and the remaining 6 (9.52%) do not know their spouse/ partner HIV- status as indicated below in table 2.

From all the respondent almost 58% had a CD4 count 351 and above and the rest 42% had a CD4 count of 350 and below. Those who followed HIV diagnosis for 2.5 years and above were 75 (76.53%) while the remaining 23 (23.47%) followed the diagnosis between 0.5 and 2 years before the study. The mean HIV diagnosis duration was 28 months as clearly indicated in table 2.

Eighty three (84.69%) of the respondent were on ART while 15 (15.3%) were not on ART till the study time. From those who received ART 63 (75.90%) had a treatment duration 3 years and below and the remaining 20 (24.1%) had a treatment for 3.5 years above as indicated in table 2.

Majority of female respondents, 25 (92.59%) disclose their HIV status for their husband/ partner while very small 2 (7.41%) didn't disclose their status to their husbands/partners.

Twenty two (81.48%) of female respondent had partners / husbands/ partners were HIV positive and 2 (7.41%) of their husbands/partners were HIV-negative and 3 (11.11%) of female respondents do not know their husband/ partner HIV-status. Thirty six (70.59%) of female respondents took HIV diagnosis for 2.5 years and above while the rest 15 (29.41%) took the diagnosis for 0.5 to 2 years. Thirty one (60.78%) of female respondents had a CD4 count 351 and above and 20 (39.22%) had a CD4 count 350 below. Female respondents who receive ART were 40 (78.43%) and those who didn't receive ART were 11 (21.57%). Moreover almost 74% of female respondents were on ART for 3 years and below and 23 (%) of the respondents were on ART for 3.5 and above years as indicated in table 2.

Eighty nine percent of male respondents disclose their HIV status to their wife / partners and 11% didn't disclose. Most husbands 30 (83.33%) had HIV-positive wives/partners and 3 (8.33%) of the husbands had HIV-negative wives and also 3 (8.33%) of husbands do not know their wires/partners HIV-status.

Thirty nine (82.98%) of male respondents follow HIV diagnosis for 2.5 years and above and 8 (17.02%) of male respondents for 0.5 to 2 years. Twenty six (55.32%) of male respondent had a recent CD4 count of 351 and above while 21 (44.68%) had 350 and below. Majority of male

respondents 43 (91.49%) receive ART of which 31 (77.5%) within the last 3 years and 9 (22.5%) receive for 3.5 and above year in reference to table 2.

**Table-2: HIV/ AIDS Related Characteristics of the Respondents**

Characteristics	Sex				Total	
	Male		Female			
	N	%	N	%	N	%
<b>Disclosure of HIV/AIDS status to husband/wife/partner (n=63)</b>						
Yes	32	88.89	25	92.59	57	90.48
No	4	11.11	2	7.41	6	9.52
<b>Current Husband/ Wife/ Partner HIV status (n=63)</b>						
Positive	30	83.33	22	81.48	52	82.54
Negative	3	8.33	2	7.41	5	7.94
Do not know	3	8.33	3	11.11	6	9.52
<b>HIV diagnosis duration (years) (n=98)</b>						
0.5 – 2	8	17.02	15	29.41	23	23.47
2.5 and above	39	82.98	36	70.59	75	76.53
<b>Recent CD4 count (n=98)</b>						
350 and below	21	44.68	20	39.22	41	41.84
351 and above	26	55.32	31	60.78	57	58.16
<b>Receiving ART (n=98)</b>						
Yes	43	91.49	40	78.43	83	84.69
No	4	8.51	11	21.57	15	15.31
<b>Treatment duration (years)(n=83)</b>						
3 and below	31	77.5	32	74.42	63	75.90
3.5 and above	9	22.5	11	22.58	20	24.1

### 4.3. Fertility Related History of the Respondents

Out of 51 female respondent only 6 (11.76%) knew their HIV status for the first time during pregnancy. From those who knew during pregnancy almost two third of them decided to give

birth. A very small proportion 11 (21.57%) of female respondents encountered pregnancy after being tested HIV positive of which 8 (72.73%) wanted the pregnancy and the remaining 3 (27.27%) unwanted pregnancies.

Out of all pregnancies that occurred after being HIV –positive 6 (54.55%) of females had no children while 5 (45.45%) had only one child, from those who had one child half of the children were born HIV –positive as indicated in table 3.

**Table-3: Fertility Related History of Female Respondents**

Characteristics	Frequency	Percent
<b>Timing of knowing HIV-positive for the first time (n=51)</b>		
During pregnancy period	6	11.76
During non-pregnancy period	45	88.24
<b>Fate of pregnancy (n=6)</b>		
To give birth	4	66.67
To abort the pregnancy	2	33.33
<b>Pregnancy after HIV-positive(n=51)</b>		
Yes	11	21.57
No	40	78.43
<b>Pregnancy (n=11)</b>		
Wanted	8	72.73
Unwanted	3	27.27
<b>Complication due to pregnancy(n=11)</b>		
Yes	3	27.27
No	7	63.64
Do not know	1	9.09
<b>Number of living children after knowing being HIV-positive(n=11)</b>		
<b>0</b>	6	54.55
<b>1</b>	5	45.45
<b>Give birth to an HIV positive child (n=5)</b>		
Yes	1	20
No	3	60
Do not know	1	20

Out of 47 male respondents two third knew their HIV status at the first time after getting seriously sick. Only 1 (2.13%) knew while they were being recruited for employment in an organization. Only 11 (23.4%) of male respondents had a child after knowing their HIV positive status, of these 4 (36.36%) were unwanted 1 (25%) was unwanted or aborted.

Among male respondents, 8 (72.73%) had only one child and 2 (18.18%) has only two children. Of these two categories the majority 7 (70%) were HIV- positive as indicated in table-4.

**Table-4: Fertility Related History of Male Respondents**

Characterstics	Frequency	Percent
<b>Timing of knowing HIV-positive for the first time (n=47)</b>		
Voluntary check up	12	25.53
On blood transfusion	1	2.13
After getting seriously sick	31	65.95
To go abroad	1	2.13
To be recruited in an organization	1	2.13
To get married	1	2.13
<b>Did you have any child?(n=47)</b>		
Yes	11	23.40
No	36	76.60
<b>Child (children) (n=11)</b>		
Wanted	7	63.64
Unwanted	4	36.36
<b>Fate of unwanted child (children)(n=4)</b>		
To give birth	3	75
Not to give birth	1	25
<b>Number of living children after knowing being HIV positive (n=11)</b>		
0	1	9.09
1	8	72.73
2	2	18.18
<b>Your wife gives birth to an HIV- positive child? (n=10)</b>		
Yes	7	70
No	3	30

#### 4.4. Contraceptive History of the Respondents

61 (62.24%) of the respondents were using any type of contraceptive at the study time and the remaining 37 (37.76%) were not using any contraceptive method at all. From those who were using any contraceptive method, the most common reason of the respondent were fear of health problem and the respondent least common reason were both either the respondents or their spouse/ partner had no desire for children as indicated in figure-1.

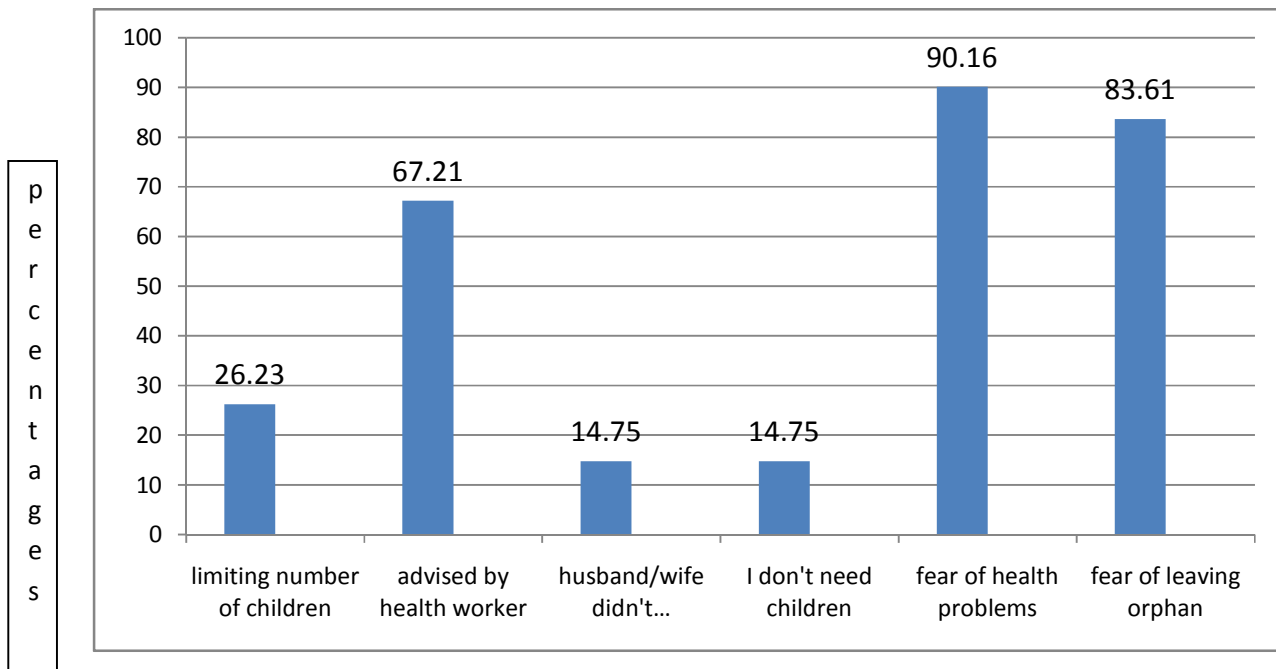
According to table 5, majority of the respondents, 78 (79.59%) had future intention to use contraceptive, 14 (14.29%) of the respondents had no future desire to use contraceptive and the rest; 6 (6.12%) were not decided about their future desire to use or not to use contraceptive method.

**Table-5: Contraceptive History of the Respondents**

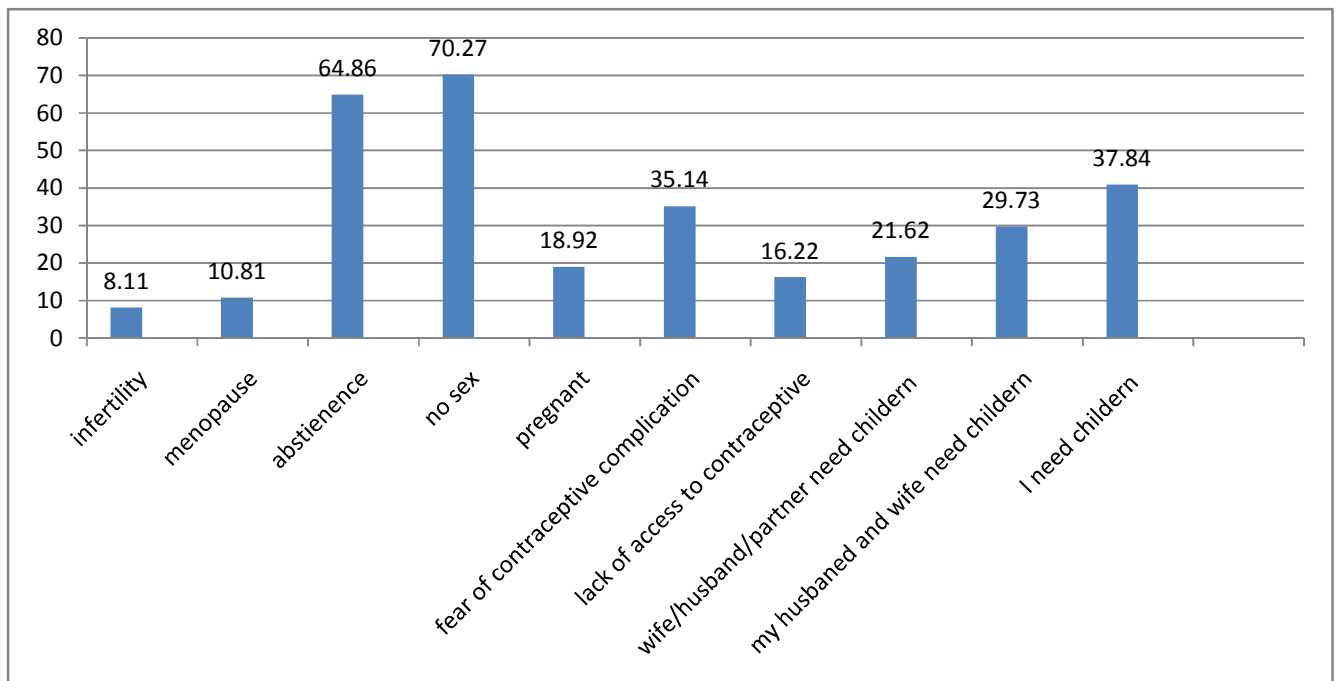
<b>Characteristics</b>	<b>Frequency</b>	<b>Percent</b>
<b>Current contraceptive use (n=98)</b>		
Yes	61	62.24
No	37	37.76
<b>Future desire of contraceptive use (n=98)</b>		
Intention to use	78	79.59
No intention to use	14	14.29
Undecided	6	6.12

For those not using contraceptive method, the respondents most common reason not to use any contraceptive were that they had no sex during the study time with 70.27% of the respondents and their least common reason was infertility with 8.11% as indicated in chart 2.

**Chart 1: Reasons for using Contraceptive of PLWHA**



**Chart 2: Reasons for not using contraceptive among respondents**



According to the table 6 below, 29 (56.86%) of female respondents were using any contraceptive method at the time of study. The most common reason for using contraceptive was due to fear of health problems and desire for no children as reported by 26 (89.66%) of female respondents followed by fear of leaving orphan reported by 24 (82.76%) of female and to the contrary the least common reason to use contraceptive was their husband /partner didn't have a desire for children as indicated in table 6. 22 (43.14%) of female respondents didn't use any contraceptive and the most common reason responded by 15 (68.18%) of females was they didn't practice sex at the study time and the least common reason as responded by 3 (13.64%) of females was due to lack of access to contraceptive. Majority 14 (63.64%) of females didn't have any intention to use contraceptive or not to use (abstinence) as indicated in table 6.

**Table-6: Contraceptive History of Female Respondents**

Characteristics	Frequency	Percent
<b>Current contraceptive use (n=51)</b>		
Yes	29	56.86
No	22	43.14
<b>Reasons for using contraceptive (n=29)</b>		
Limiting the number of children	7	24.14
Advised by health worker	19	65.52
Husband/ partner / wife didn't have desire	2	6.90
I don't need children	4	13.79
Fear of health problem	26	89.66
Fear of leaving orphan.	24	82.76
<b>Reasons for not using contraceptive (n=22)</b>		
I need children	9	40.91
My wife/husband need children	4	18.18
Wife and husband need children	9	40.91
Lack of access to contraceptive	3	13.64



Fear of contraceptive complication with ART	7	31.82
Pregnant	3	13.64
No sex	15	68.18
Menopause	2	9.09
Infertility	2	9.09
Abstinence	14	63.64
<b>Future contraceptive use new (n=51)</b>		
Intention to use	40	78.43
No intention to use	8	15.69
Undecided.	3	5.88

Most 32 (68.09%) male respondents were using any contraceptive at study time. The most common reason not to use contraceptive by 29 (90.63%) of male respondents was fear of health problem followed by fear of leaving orphan by 27 (84.38%) of males and the least common reason was male respondents didn't need any child (table). The Remaining 15 (31.91%) of these respondents didn't use any contraceptive during the study time. The most common reason was that they were abstaining themselves from sex and the least common reason was infertility. 38 (80.85%) of male respondents intend to use contraceptive in the future, 6 (12.77%) had no future intention to use it and the rest 3 (6.38%) were undecided (table-7).

**Table-7: Contraceptive History of Male Respondents**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percent</b>
<b>Are you using contraceptive method?(n=47)</b>		
Yes	32	68.09
No	15	31.91
<b>Reason for using contraceptive (n=32)</b>		
Enough number of children	9	28.13
Advised by health worker	22	68.75
Husband wife didn't have desire	7	21.88
I don't need children	5	15.63
Fear of health problem	29	90.63
Fear of leaving orphan	27	84.38
<b>Reason for not using contraceptive (n=15).</b>		
I need children	5	33.33
My husband /wife need children	4	26.67
wife and husband need children	2	13.33
Lack of access to contraceptive	3	20
Fear of contraceptive complicates with ART	6	40
Pregnant	4	26.67
No sex	11	73.33
Abstinence	10	66.67
Menopause	2	13.33
Infertility	1	6.67
<b>Future contraceptive use new (n=47)</b>		
Intention to use	38	80.85
No intention to use	6	12.77
Undecided	3	6.38

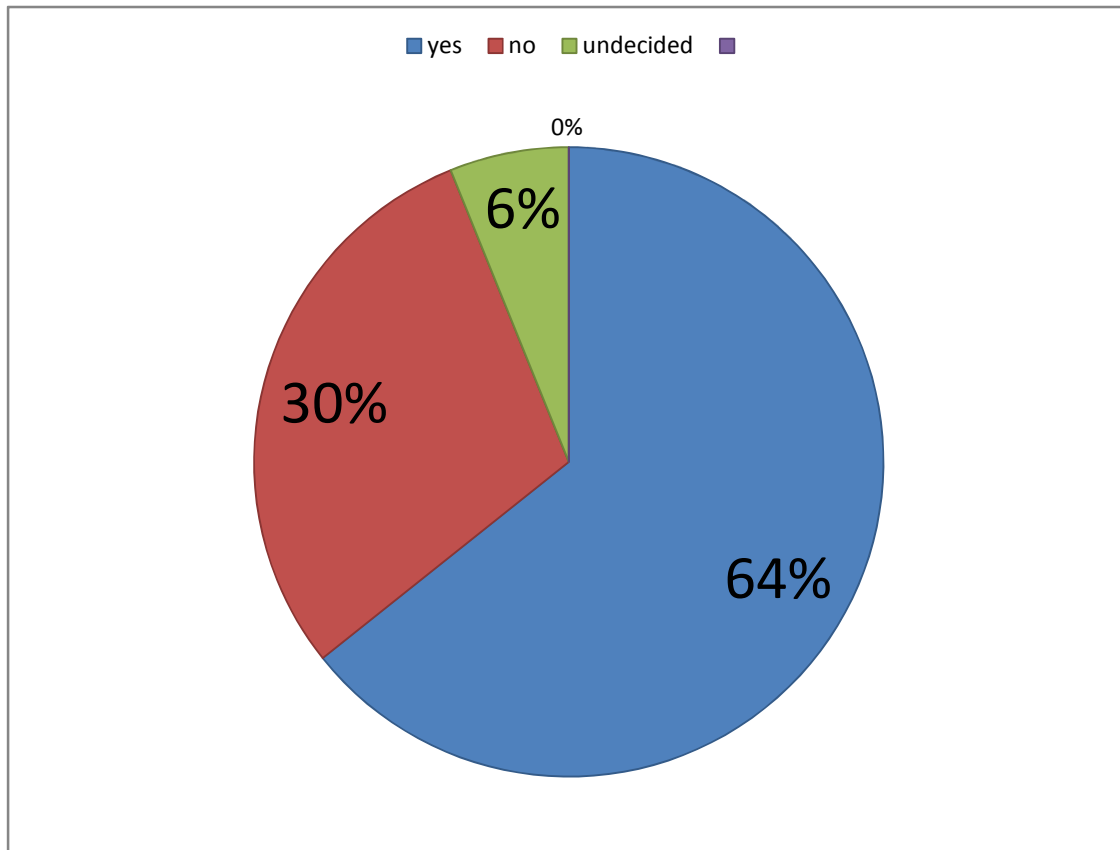
#### **4.5. Knowledge, Intention, Desire and Expectation of Childbearing among the Respondents**

Almost all of the respondents 88 (89.80%) know that HIV positive people can give birth while 5 (5.1%) of the respondents know that HIV positive people can't give birth and the rest 5 (5.1%) of the respondents responded that they don't know whether HIV –positive people can give birth or not.

From the respondents, for three out of five people, the intentions to have a child did not change even after knowing their HIV-status, while for almost two out of five the intention to have a child changed after knowing their HIV-status and 25 (73.53%) of these respondents decided not to have a child (table). 29 (29.59%) of the respondents didn't have a desire for children and 63 (64.29%) of the respondents had a desire for children even after knowing their HIV-status. From those who didn't desire for children the most common reason was fear of leaving orphans responded by 21 (72.41%) respondents and the least common reason was fear of mother- to-child transmission with 16 (55.17%). 41 (65.08%) of respondents in the case of husband/wife/partner fertility desire for future childbearing and 6 (9.52%) of the respondents didn't know their husbands /wives /partners desire for children as indicated in table 8.

Most of the respondents agree that health professionals discourage towards childbearing and 15 (15.31%) of the respondents said that health professionals neither discourage nor encourage HIV-positive people towards childbearing as indicated in table 8.

**Figure 2- Fertility desires of PLWHA**



Majority of female respondents 48 (94.12%) knew HIV-positive women can have a child. 35 (68.63) of female responded their intention to have a child after knowing HIV didn't changed and 16 (31.37%) changed their intention. From those who changed their intention 10 (62.5%) were not to have a child.

Around 36 (70.59%) of female respondents desired to have another child, 13 (25.49%) didn't desire to have a child and the rest were undecided at the time of the survey. For those who didn't desire to have children the most common reason was fear of leaving orphans followed by fear of complicated health problem and the least common reason was that health workers do not advise them to have children. From those who desire for children, 29 (80.56%) expect 1-2 children and

7 (19.44%) expect 3 and above children. Moreover 19 (52.78%) desire a child within two years, 15 (41.67%) after two years and 2 (5.56%) undecided.

Majority 19 (70.37%) of female respondents had husband/partner who desire a child 5 (18.52%) of husbands/ partners of female respondents didn't desire for a child and 3 (11.11%) do not know their husband/ partners fertility desire. On the case of health professionals attitude towards child bearing 43 (84.31%) of female respondents responded health professionals discourage childbearing, 5 (9.8%) said they neither discourage/nor encourage the respondents, 2 (3.92%) do not know health professionals attitude and only 1 (1.96%) agree that health professionals encourage child bearing as indicated in table-8.

About 40 (85.11%) of male respondents agreed that HIV- positive women can have a child 29 (61.70%) of male respondents responded their intention to have a child after knowing HIV- status not changed and 18 (38.3%) changed their intention. From those whose intention changed 15 (33.33%) was not to have a child as indicated in table 8.

Around 27 (57.45%) of the male respondents desire to have a child, 16 (34.04%) didn't desire to have a child and the rest undecided. From those who didn't desire to have children the most common reason was husbands had already achieved a desired number of children and the least common reason was no adequate income. From those who desire for children 22 (81.48%) expect 1-2 children and 5 (18.52%) expect 3 or more children. Moreover, 16 (59.26%) desire a child within two years while 11 (40.74%) of the respondents expect after two years. Almost 22 (61.11%) of male respondents have wives /partners who desire a child, 11 (30.56%) didn't desire for a child and the rest didn't know their wives /partners fertility desire as indicated in table 8.

On the case of Health professional attitude towards childbearing 32 (68.09%) of male respondents responded health professionals discourage childbearing 10 (21.28%) said they neither discourage /nor encourage the respondents 4 (8.51%) encourage childbearing and the rest did not know health professional attitude in reference to table 8.

**Table 8-Knowledge, Intention, Desire and Expectations of Childbearing among the respondents**

Characteristics	Sex				Total	
	Male		Female		N	%
	N	%	N	%		
<b>HIV positive people can have a child (n=98)</b>						
Yes	40	85.11	48	94.12	88	89.80
No	3	6.38	2	3.92	5	5.1
Do not know	4	8.51	1	1.96	5	5.1
<b>Intention to have a child after knowing HIV-status (n=98 )</b>						
Not Changed	29	61.70	35	68.63	64	65.31
Changed	18	38.3	16	31.37	34	34.69
<b>The way the intention changed(n=18+16=34)</b>						
To have a child	3	16.67	6	37.5	9	26.47
Not to have a child	15	83.33	10	62.5	25	73.53
<b>Do you have a desire to have (another) child?(n=98)</b>						
Yes	27	57.45	36	70.59	63	64.29
No	16	34.04	13	25.49	29	29.59
Undecided	4	8.51	2	3.92	6	6.12
<b>Number of children expected(n=27+36=63)</b>						
1-2	22	81.48	29	80.56	51	80.95
3and above	5	18.52	7	19.44	12	19.0

						5
<b>Duration to have a(another) child?(n=63)</b>						
Undecided	0	0	2	5.56	2	3.17
Within two years	16	59.26	19	52.78	35	55.56
After two years	11	40.74	15	41.67	26	41.27
<b>Reason for not wanting another child(n=16+13=29)</b>						
Already had desired number of children	12	75	7	53.85	19	65.52
Fear of mother- to- child transmission	9	56.25	7	53.85	16	55.17
Fear of leaving orphan	10	62.5	11	84.62	21	72.41
Advised by health worker not to have child	9	56.25	6	46.15	15	51.72
Fear of complicated health problems	11	68.75	9	69.23	20	68.97
No adequate income	7	43.75	8	61.54	15	51.72
<b>Husband /wife/ partner fertility desire(n=36+27=63)</b>						
Yes	22	61.11	19	70.37	41	65.08
No	11	30.56	5	18.52	16	25.4
Do not know	3	8.33	3	11.11	6	9.52
<b>Health professionals approach towards childbearing (n=98)</b>						
Encourage	4	8.51	1	1.96	5	5.10
Discourage	32	68.09	43	84.31	75	76.53
Neither discourage nor encourage	10	21.28	5	9.8	15	15.31
Don't know	1	2.13	2	3.92	3	3.06

#### 4.6 Self Reporting Health status and Intention to have Children

Almost all of the respondents 93 (94.9%) responded that their current self-reporting health status as compared to the past was improved. 83 (84.69%) of the respondents changed their intention to

have children due to change in current self reporting health status of which 76 (77.55%) were to have children as indicated in table 9.

Almost 48 (94.12%) of female respondents agreed that their current self reporting health status had improved as compared to the past, 3 (5.88%) responded it did not improve, 43 (84.31%) of their intention to have a child changed due to self reported health status of which 42 (82.35%) to had a child ,as indicated in table 9.

Around 45 (95.74%) of male respondent agreed that their current self reporting health status had improved as compared to the past, 2 (4.26%) responded it did not Improve. 40 (85.11%)of the respondents said their intention to have a child changed due to self reporting health statuses of which 34 (72.34%) to had a child as indicated in table 9.

**Table-9.Self reporting Health status and Intention to have Children**

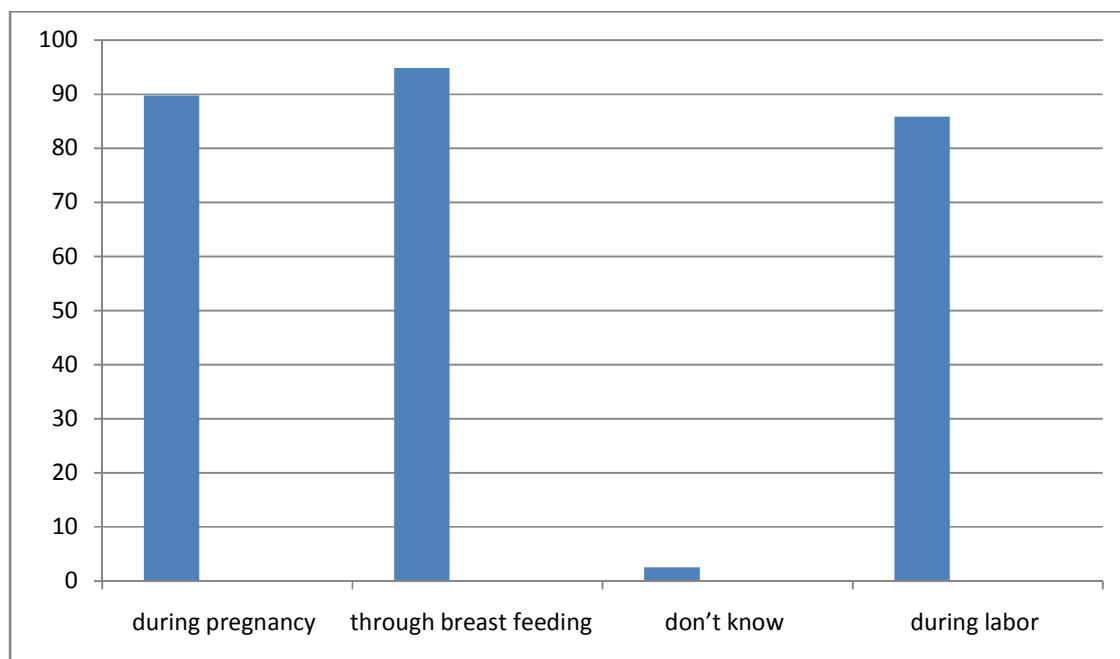
Characteristics	Sex				Total	
	Male		Female			
	N	%	N	%	N	%
<b>Current self reporting health status (n=98)</b>						
Improved	45	95.74	48	94.12	93	94.9
Not Improved	2	4.26	3	5.88	5	5.1
<b>Intention due to self reporting health status (n=98)</b>						
Changed	40	85.11	43	84.31	83	84.69
Not changed	4	8.51	6	11.76	10	10.21
Undecided	3	6.38	2	3.93	5	5.1
<b>The way the intention changed (n=98)</b>						
To have children	34	72.34	42	82.35	76	77.55
Not to have children	9	19.15	7	13.73	16	16.32
Undecided	4	8.51	2	3.92	6	6.13



#### 4.7. Knowledge and Attitude of MTCT and PMTCT of Respondents

Majority of the respondents 78 (79.59%) knew about MTCT of which 71 (91.03%) also know about PMTCT. Again from those who knew about MTCT 74 (94.87%) responded HIV transmits from mother-to- child through breast feeding .Out of those who knew about PMTCT 69 (97.18%) responded PMTCT reduces transmission of HIV virus as indicated in chart 4 below.

**Chart 3.Respondents knowledge about MTCT**



Almost 40 (78.43%) of female respondents had the knowledge of mother- to- child transmission (MTCT) of which 37 (92.5%) had a knowledge of prevention of mother- to- child transmission (PMTCT). Of those who know about MTCT, most 38 (95%) responded that the transmission was due to breastfeeding from those who knew about PMTCT all (100%) replied the service reduces the transmission as indicated in table 10.

38 (80.85%) of male respondents had the knowledge of mother- to- child transmission (MTCT) of which 34 (89.47%) had a knowledge of prevention of mother- to- child transmission (PMTCT). Of those who knew about MTCT, most 36 (94.74%) of male respondents responded that the transmission was due to breast feeding and from those knew about PMTCT 32 (94.12%) replied the service reduces the transmission as indicated in table10.

**Table-10. Knowledge and Attitude of MTCT and PMTCT of the respondents**

Characteristics	Sex				Total		%
	Male		Female				
	N	%	N	%	N	%	/
<b>Knowledge of MTCT(n =98)</b>							/
Yes	38	80.85	40	78.43	78	79.59	/
No	6	12.77	7	13.73	13	13.27	
Do not know	3	6.38	4	7.84	7	7.14	
<b>Method of transmission(n =78)</b>							
During pregnancy	34	89.47	36	90	70	89.74	
During labor	32	84.21	35	87.5	67	85.9	
Through breast feeding	36	94.74	38	95	74	94.87	
Don't know	0	0	2	5	2	2.56	
<b>Knowledge of PMTCT(n=78)</b>							
Yes	34	89.47	37	92.5	71	91.03	
No	2	5.26	3	7.5	5	6.41	
Do not know	2	5.26	0	0	2	2.56	
<b>PMTCT reduces transmission(n=71)</b>							
Yes	32	94.12	37	100.00	69	97.18	
No	2	5.88	0	0	2	2.82	

## **4.8. Differentials in Childbearing Intention and Desire of Men and Women**

### **Living With HIV/AIDS**

To see the association between the dependent variable (childbearing intention and desire of PLWHA) and different predictor variables, bivariate analysis was done by cross tabulating each variable with the dependent one. Moreover, Chi-square test was applied.

#### **4.8.1. Differentials of Childbearing desire by Socio-economic and Demographic characteristics of the respondents**

The Cross tabulation with Chi-square test of analysis in table-11 showed that all the Socio-economic and demographic variables have statistically significant association with Childbearing desire except marital/relationship status.

Respondents of the age group 15-24 had desire for children of 15 (23.81%), the age group 25-34 had desire of 30 (47.62%) for children, and those 35 years old and above had, a desire of 18 (28.57%). Therefore, as age of the respondents increases, the desire for children decreases.

In the case of literacy status of the respondents, those who are literate had 58 (92.06%) of desire for children and the illiterate ones had 5 (7.94%). Respondents who earn an estimated monthly income of 450 birr and below had a desire of 48 (76.19%), those who earn a monthly income between 450 and 850 birr had a desire of 15 (23.81%) and those who earn 851 birr and above had no desire for children totally. From this, respondents with lower incomes have desired more and there is nothing that makes them happier than having children.

Respondents who didn't have any living children had a childbearing desire of 38 (60.32%) followed by those having 1-2 children with a desire of 21 (33.33%) and those who had 3 and above children had a desire of 4 (6.35%). From this, as the number of living children increases, the childbearing desire decreases.

**Table 11:- Cross tabulation with Chi-Square Significant Test of Childbearing Intentions and Desires of the Respondents by Background Characteristics**

Characterstics	Desire for children		Don't Desire for children		X2 value
	Frequency	%	Frequency	%	
<b>Age(years) (n=92 )</b>					
15-24	15	83.3	3	16.7	2.841
25-34	30	68.2	14	31.8	
35 and above	18	60	12	40	
<b>Marital/ relationship status (n=92 )</b>					
Union	42	68.9	19	31.1	0.012
Not union	21	67.7	10	32.3	
<b>Literacy status (n=92 )</b>					
Illiterate	5	41.7	7	58.3	4.596
Literate	58	72.5	22	27.5	
<b>Estimated monthly income (n=92 )</b>					
450 and below	48	77.4	14	22.6	9.524
451-850	15	53.6	13	46.83	
851 and above	0	0	2	100	
<b>Number of living children(n=92 )</b>					
0	38	86.4	6	13.6	26.526
1-2	21	72.4	8	27.6	
3 and above	4	21.1	15	78.9	

#### **4.8.2. Differentials of Childbearing desire by some Health, Fertility, HIV and Cultural related characteristics of the respondents**

From the chi-square analysis of selected characteristics: Receiving ART, HIV-diagnosis duration, contraceptive use and Husband/Wife/Partner fertility desire are significantly associated with the dependent variable (Childbearing intention and desire of PLWHA) as indicated in table-12.

Almost all of the respondents Husband/Wife/Partner desired for children, and the remaining of Husband/Wife/Partners of respondents didn't desire for children. 43 (68.25%) of the respondents who were currently using any contraceptive method had a desire and among those who didn't use any contraceptive 20 (31.75%) had the desire. When those receiving ART were considered, of those who didn't receive ART, 12 (19.05%) had a desire for children. The last variable which had a significant association with childbearing desire was HIV diagnosis duration. In the case of HIV diagnosis duration, 15 (23.81%) of those who took it 0.5 to 2 years ago had a desire and 48 (76.15%) of those who took it for 2.5 years ago and above had a desire for children. From this, as the duration of HIV diagnosis increases, the desire for children also increases.

**Table 12:- Cross tabulation and Chi-square Significant Test of Childbearing Desire by Some Health, Fertility, HIV and Cultural Related Characteristics of the Respondents**

Characterstics	Desire for Children		Don't Desire for Children		X <sup>2</sup> Value
	Frequency	%	Frequency	%	
<b>Recent CD4 count(n=92)</b>					
350 and below	28	44.44	11	37.93	0.345
351 and above	35	55.56	18	62.07	
<b>Receiving ART (n=92)</b>					
Yes	51	80.95	27	93.10	2.273
No	12	19.05	2	6.9	
<b>HIV diagnosis duration (n=92)</b>					
Between 0.5 and 2 yrs	15	23.81	4	13.79	1.216
2.5 and above	48	76.19	25	86.21	
<b>Current Contraceptive (n=92)</b>					
Yes	43	68.25	14	48.28	3.363
No	20	31.75	15	51.72	
<b>Husband/Wife/partner fertility desire (n=61)</b>					
Yes	37	94.9	2	5.1	4.342
No	2	11.11	16	88.8	
Do not know	3	75	1	25	
<b>Knowledge of PMTCT (n=92)</b>					
Yes	42	66.7	24	82.8	1.356
No	21	33.3	5	17.2	
<b>Self-reporting health status (n=92)</b>					
Improved	61	96.83	26	89.66	1.987
Not improved	2	3.17	3	10.34	

66% of respondents who knew about PMTCT had a desire and among those who didn't know about PMTCT 33.3% had the desire. Among those with CD4 count of 350 PLWHA had a desire

of 28 (44.44%) and among those with CD4 count of 351 and above had a desire of 35 (55.56%) for children. The last variable in this analysis was self-reporting of one's health status. 61 (96.83%) of the respondents whose self-reporting health status improved as compared to the past had desire for children and 2 (3.17%) of those whose health status didn't improved had desire for children.

#### **4.8.3. Determinants of Childbearing Intention and Desire among Men and Women Living with HIV/AIDS**

Since the dependent variable childbearing intention and desire has two categorical responses binary logistic regression is the appropriate model which is applied to analyze the effect of each independent variable on childbearing intention and desire when the effect of other factors was controlled.

Health related factors, Socio-economic and demographic variables were included in the analysis. In this section, two models are used: Model I include both men and women living with HIV/AIDS and Model II includes married men and women living with HIV/AIDS. Model II shows the effect of marital status independently on childbearing intention and desire by controlling for all other factors.

In Model I, those in the age group 15-24 years were 5 times more likely to desire children than those in the age group 35 and above. Also those in the age group 25-34 years were 2 times more likely to desire children than those in the age group 35 and above as seen in the computer using the application.

Results of the study showed that current contraceptive use is statistically significant. Respondents who were using contraceptive were 3 times more likely to desire children than those who were not using contraceptive. Those who had no living children were 12 times more likely to desire children than those who had 3 or more living children.

Also Health professional attitude towards childbearing was statistically significant. Respondents who said health professionals' attitude towards childbearing encouraged HIV-positive people to have a child is 9 times more likely to desire for children than those who responded that health professionals were discouraging the patients from desiring for children when computed in the computer process.

In binary logistic regression analysis of model II, respondents of the age group 15-24 were 1.6 times more likely to desire for children than those in the group 35 and above. Those in the age group 25-34 were 0.1 times less likely desire for children than that in age group of 35 and above. Respondents who had no children were nearly 22 times more likely to desire for children than those who had 3 or more children. Those who had 1-2 children were nearly 11 times more likely to desire for children than those who had 3 or more children. Respondents whose husband/wife/partner children were 46 times more likely to desire children than those respondent who did not know their husband/wife/partner fertility desire. Respondents whose husband /wife /partner didn't desire for were 0.03 times less likely to have additional children than those respondents that didn't know their husband/wife partner desire for future children as computed in the computer.

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In the model I, age current contraceptive use, number of living children, and health professionals attitude towards childbearing were found to have statistically significant effect on fertility desire



of men and women living with HIV/AIDS whereas age, number of living children, and literacy status were found to statistically significant effect on fertility desire of married men and women living with HIV/AIDS in model II as observed in the computer using the application.

From the above analysis, the results show that 64.3% of all the study participants had a desire to have children. The comparison between this study and other studies abroad showed that, a lower percentage (28-29%) of HIV positive women desired to have children. The relatively higher percentage of HIV positive men and women to have future desire for children in this study could be the introduction of PMTCT in the last six years and the higher knowledge about PMCT among participants of the study.

Almost 65.3% of the respondents in this study didn't change their intention to have a child after knowing their HIV status while 34.69% changed their intention. Of these 73.53% changed their intention not to have a child. This indicates that the childbearing intention and desire of HIV positive men and women is going to remain high.

In-depth interviews among women in Cote Di'vore who had known their HIV status during pregnancy revealed that most women (12 out of 15) with fewer than four children intended to become pregnant again even though they had been advised not to have more children because of their infection (Aka-Dago-Akribi H, 1999).

To the contrary, most participants in the FGD and in-depth interviews responded that their desire for future birth changed after they knew their status as HIV positives.

#### **4.8.4. Demographic and Socio-economic Factors and Childbearing Intention and Desire**

One of the major predicting demographic variables is age of the respondents. As you see here in the study, as the age of the respondents increase, the childbearing desire decreases as indicated in table 11. This clearly shows the existence of a negative relationship between age and childbearing desire.

In this study although marital status has no statistically significant association with childbearing desire, it shows that, higher proportion of HIV positive men and women in Union have more childbearing desire(68.9%) than those who were not in Union(67.7%). The qualitative study has also similar findings and showed that HIV positive men and women not in union responded if they are married, they have children since they will be in a better condition economically and had a partner who could care about all conditions. Supporting this study in the United States showed that, woman/man who desired children were more likely either to get married or to have a partner than were those who didn't (Chen et al.2001).

The other important variable which affects childbearing desire is the number of living children. About 13.27% of the respondents in this study had no children and the rest 86.74% had one or more living children as indicated in table 1.

Also, there is a strong statistically significant association between number of living children and childbearing desire( $\chi^2=26.526$ ,  $p<0.001$ ). As the number of living children increases, the proportion of HIV positive people who want children decreases in reference to table 11. The qualitative study also showed that, men/women with at least one child were less likely to desire children than were men/women with no children (Chen et al.)

Income, an economic variable, was found to have statistically significant association with childbearing ( $\chi^2=9.524$ ,  $p<0.01$ ). As the income of the respondents increased the proportion of the respondents who desire children decreases from 77.4% to 0% as indicated in table 11. While, in the qualitative study, most respondents said that, if they were economically well, then they would have more children. Literacy status of the respondents also found to have strong significant association with childbearing desire ( $\chi^2=4.596$ ).

#### **4.8.5. Health Related Factors and Childbearing Desire**

Respondents, that have husband/wife/partner with fertility desire, have more desire for children (88.1%) than those respondents whose husband/wife/partner without fertility desire (10.53%) (table 12). In the qualitative study it is also showed that majority of the respondents agreed that if their husband/wife/partner desire for children, then they are motivated to have a child in future.

Current contraceptive use also has significant association with fertility desire ( $\chi^2=3.363$ ,  $p<0.001$ ). The proportion of the respondents who desired children and were using contraceptive (68.25%) were more than non-users (31.75%) (table 12). It seems the two ideas are contrary; it's not the case here. Since contraceptive users are useful to limit or to space childbearing, in this study the respondents may use contraceptive for spacing their future children.

Most respondents in the qualitative study responded a better CD4 count is vital for their childbearing desire than other variables. Although CD4 count is strongly agreed health related variable to have effect on childbearing desire by respondents of qualitative study, it had no significant association with childbearing desire ( $\chi^2=0.345$ ,  $p>0.05$ ) (table 12).

In support of the above, the desire for children was not significantly related to HIV progression (either the lowest CD4 count or viral load) in either men or women (Chen et al., 2001).

## **4.9. Qualitative Findings**

Here in this sub-section quantitative studies are supplemented by qualitative study using findings from FGD and in – depth interview.

### **4.9.1. Factors affecting the desire to have children**

Like the findings from the quantitative study, the result of the qualitative study similarly demonstrates that health related factors, economic, and cultural factors were the major causes to affect fertility desire of people with HIV/AIDS. In the following sub- sections all the factors described here are discussed in detail below.

#### **A. Health related factors**

The discussants in the FGD and in –depth interview said that their health status affect their fertility desire than other factors. This is supported by a number of those who participated in the depth interview.

An unmarried woman aged 27, said that “Even if I will have a husband in the future, I don’t want to have any child since my CD count is low and I want to survive”.

A31 years old unmarried man stated “My CD4 count is in a good situation I feel I have the capacity to have a child ‘”.

A54 years old married man who was on ART, said that ‘my CD4 count is more than one thousand, I believe that is very important factor than any other factor to have a child’”.

Moreover, 4 of the discussants believe that, their perception towards health status when compared with previous one is a very important parameter to decide their future child bearing.

A very important factor a gain on health related factor is knowledge of PMTCT. Five of the six discussants in which three females and two males expressed that there is a positive relation between knowledge of PMTCT and desire to have a child in future.

A married woman aged 27 said that, ‘‘thanks to the technology of PMTCT, nowadays most HIV positive people want to have a child including me since it’s safer to have a negative child than before.’’

Fifty four years old married man said that, ‘‘ I didn’t have an interest to have a child before but now I know about PMTCT and I realize that I can have a negative child which increases my interest on having a baby’’.

Almost every interviewees and discussants knew that HIV can be transmitted from mother- to- child through breast feeding and during labor. Moreover they knew that PMTCT services exist in health institutions including the referral hospitals. Although parents follow PMTCT services some believe that a child may be born being positive and expressed their fears as follows:

A 25 years old married woman with one child said that, ‘‘ Even though I know about the existing PMTCT services, I am not totally certain whether I can have HIV free child so I prefer not to have a child’’.

The other important parameter is attitude of health workers and all interviewees and discussants agree that health workers discourage HIV positive people from having children. In support of

this, A married woman aged 40 said that, ‘‘I always hear every health workers saying that it’s better not to have sex since it deteriorates your health condition’’.

From the above data, it is possible to see the fertility needs of interviewees and discussants being directly linked with availability of and knowledge about PMTCT. However, the data on the other hand indicates that the poorer the level of CD4 counts of an HIV patient, the lesser the need to have a child. The quantitative data also verifies the same result.

## **B. Economic Factors**

Most (9 out of 11) of the interviewees and discussants agree that there is a positive relation between average income and childbearing desire. Discussants both in FGD and in-depth interviews agreed that people living with HIV/AIDS repeatedly caught with different diseases and this has a serious impact on their earning capacity to help themselves and their new born children. Almost all participants of the in-depth interview stated that due to the current situation of price increase, not only feeding a new born, educating, taking care of his/her health but it is also difficult to maintain past health status. More importantly, too much expensiveness of formula milk ‘‘made unthinkable to desire for a baby’’.

From the in-depth interview, an interview with a man who currently is married and only had one living child described how income insufficiently affects his future fertility said, I have one child due to scarce financial resource and I decided to raise my child rather than adding another one’’. My wife is a volunteer worker in the association. If I were negative, I would have additional children. Being HIV positive has a negative influence on my source of income as well.

A 27 years old woman who participated in an in-depth said: If I were to have a child, I have to afford to buy a formula milk and other items for around 270 birr for three days of consumption

and the schooling fees which escalates more than doubled within few years, which I can't even imagine to afford it. So, I prefer not to have a child''.

Another participant who was currently married and had 4 living children said, '' I have 4 children, even if I need to have more children it's economically more difficult to raise children nowadays than before, therefore I choose to raise the one I already had''.

### **C. Cultural Factors**

It is equally important to study cultural factors as any other factors that affect childbearing desire of PLWHA since in our country the familial influence and to a lesser extent the societal influence was high to decide to have or not to have a child in the future. Even though nowadays the attitude of the community was being changed positively, the respondents in the interview agreed that most community members discourage HIV positive people to have a child. This finding is supported with such explanation from the interviewees and discussants.

An interviewee from the in-depth interview aged 31 who is not married and had no child said that, '' The community believes that,

HIV positive people can't do anything. They relate being HIV positive with immediate death''.

This idea was shared by married woman aged 27 who had one child said that, ''Not only me but also my families are in rough relation with the neighbors especially with the elderly because of my HIV status''.

In contrast to this, a married woman aged 40 with 4 children from the in-depth interview said, '' GOD willing I need to have another child. The community has no effect on my interest to have future birth''.

## **CHAPTER FIVE**

### **5. SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1. Summary**

In Ethiopia, HIV/AIDS has been spreading throughout the country and cases have been reported from every regions of the country as its impact is seriously affecting the lives of women and children among the different groups of the society in general. The major mode of HIV transmission in Ethiopia is unprotected heterosexual intercourse and mother or parent- to- child transmission. The majority of new infection occurs in reproductive age groups (15-49) which hinders to attain the Millennium Development Goals (MDGs) of the country as a whole and the future of the family in particular.

HIV positive men and women may have fertility desires and may intend to have children. The extent of these desires and how they may vary by individuals' Socio-economic, health related issues, demographic and cultural characteristics are not understood. But this study has clearly indicated the outcomes in relation to these factors to a large extent and open up doors for PLWHA to decide and take measures with respect to the study at hand.

Fertility desires of PLWHA would vary by age, risk group, fertility history, health related issues, relationship status and HIV status of the primary partner in accordance with their reproductive decisions. Additionally, fertility desires differ by sex, women desiring more children than men. Personal health status significantly affects women's desire for children in the future but not men's, while health status more strongly influences men's expectations to have children.



The study area Bahir Dar town is situated in the Northern part of Ethiopia, Amhara region about 598 kilometers away from Addis Ababa. In Bahir Dar town there are associations of PLWHA that are working in different streams for the wellbeing of PLWHA and for the society as a whole. Tesfa-Goh association is one of them with great number of members. The participants for the study were 100 and selected randomly for the study. These participants live in different areas and have a difference in their educational background, age, health status, economic backgrounds, in culture and in others.

This study used both primary and secondary data sources. The primary data sources are collected from questionnaire, Focus Group Discussion (FGD) guideline and in-depth interview guideline. The secondary data sources are collected from Books, Journals and related literatures.

Qualitative and Quantitative methods are used in the study. The quantitative parts are collected using questionnaire and the qualitative ones by focus group discussion and in-depth interview guidelines. The qualitative data were categorized into different major themes, sub-themes and summarized manually.

A total of 98 people living with HIV/AIDS were the study participants with 98% response rate. Chi-square significant test is used to analyze the association between each independent variable and childbearing desire of PLWHA, whereas logistic regression is used to analyze the association between the association between each independent variable and childbearing desire, controlling the effect of other independent variables.

In Chi-square significant test: Age, Literacy status, estimated monthly income, and number of living children were found to have significant association with childbearing intention and desire but not with marital status. On other selected variables: receiving ART, HIV-diagnosis duration,

current Contraceptive use and Husband/Wife/Partner childbearing desire have statistically significant association with the dependent variable (Childbearing intention and desire of PLWHA) while recent CD4 count, knowledge of PMTCT and Self Reporting Health status found to have no significant association.

In binary logistic regression, there were two models. Model I describes about all respondents in the study while Model II describes only about living with partner/married men and women living with HIV/AIDS in the association. In Model I, Age, Contraceptive use, Health professionals attitude towards HIV-positive people and number of living children have significant association with the dependent variable (childbearing intention and desire of PLWHA) controlling for effects of other variables but Marital status, estimated monthly income, knowledge of PMTCT, Self-reporting health status and Literacy status had no significant association with Childbearing intention and desire. In Model II : Age, Number of living children, and Husband/Wife/Partner Childbearing desire had an association with fertility desire and estimated monthly income, Contraceptive use and Self reporting health status had no significant association with childbearing intention and desire. From these two models, Age and Number of living children had a significant association with childbearing desires in both models while Contraceptive use, Health professionals' attitude towards HIV-positive people and Husband/Wife/Partner childbearing desire had a significant association with fertility desire in one of the two models.

Generally, age, estimated monthly income and number of living children had a negative relationship with childbearing intention and desire, and also those in union had more desire than those not in union, the literates had more desire than the illiterate ones from socio-economic and demographic variables. From the selected characteristics: recent CD4 count and HIV diagnosis duration had a negative relation with childbearing desire, those using contraceptives had more

desire for children than non-users, those who didn't receive ART had more desire than those who receive ART, and those respondents whose Husband/Wife/Partner with fertility desire have more desire to have children than those whose Husband/Wife/Partner with no fertility desire.

## **5.2. Conclusion**

The result of this study in general showed that, majority of HIV-positive men and women in Tesfa-Goh PLWHA association-Bahir Dar have desire for children and it is influenced by age, number of living children, contraceptive use and health professional attitude towards childbearing of HIV-positive peoples.

The fact that many HIV adults desire and expect to have children has important implications for the prevention of vertical and heterosexual transmission of HIV, the need for counseling to facilitate informed decision making about childbearing and the future demand for social services for children born to infected parents is so crucial.

### **5.3. Recommendations**

In this study (especially in the FGD) it has been found that, Income is the most frequently raised reason for people living with HIV/AIDS to influence their childbearing desires. Therefore, Income generating activities should be introduced.

- In this study, Husband/Partner fertility desire had a great impact on childbearing desires of the respondents. Therefore, involvement in fertility counseling among husbands should be started.
- As the study showed, the knowledge of people living with HIV/AIDS about prevention from Mother to Child transmission is high, but there is a problem of the required activities to prevent their child from being HIV-positive. Therefore, Information, Education and Communication (IEC) strategies are required to change HIV-positive peoples' behavior towards PMTCT.
- Integrating family planning services and HIV/AIDS testing and counseling reduce the stigma associated with HIV, and increase access to Voluntary Counseling and Testing (VCT) services and therefore it made People Living with HIV/AIDS (PLWHA) capable of making informed choices that will enable them to safeguard their wellbeing.
- Finally, more diversified and detailed study should be done on effect of family planning variables (like Contraceptive use) on childbearing intention and desire of people living with HIV/AIDS in Ethiopia in general.

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## APPENDIXES

In this part, tools that are used in seeking information from the respondents or participants during the study are arranged accordingly. The questionnaires used for Interview session and for Focus Group Discussions (FGD) are presented separately as a sample below.

### INTERVIEW SCHEDULE FOR SEEKING INFORMATION FROM MEN AND WOMEN LIVING WITH HIV/AIDS

#### 1. Personal Information of the respondents

Age	15-24 yrs	25-34 yrs	35 and above
Sex	Male	Female	
Religion	Orthodox	Protestant	Muslim
Ethnicity	Amhara	Agew	Oromo/Tigre
Marital Status	Married	Not married	Consensual union
Income	Below 200 br.	201br. and above	
Living children	0	1-2	3 or more
Literacy status	Illiterate	Literate	

#### 2. Are there health centers around you?

- i. Yes                      ii. No

#### 3. How often do you go to Hospitals/Clinics to check up your health status?

- i. Monthly                      iii. When you got sick                      iii. Not at all

#### 4. What is your current health status with respect to HIV?



- i. Positive
- ii. Negative
- iii. Do not know

5. What is your CD4 count?

- i. 350 and below
- ii. 351 and above

6. Do you think that you are open to your husband/wife/partner?

- i. Yes
- ii. No

7. Have you told your HIV test result for your partner/Husband/wife?

- i. Yes
- ii. No

8. When did you know that you are HIV positive?

- i. During pregnancy
- ii. During non pregnancy period

9. What was fate of pregnancy?

- i. To give birth
- ii. To abort

10. Is your pregnancy intentional?

- i. Yes
- ii. No

11. Is your pregnancy i. wanted ii. Not wanted?

12. Are you receiving ART?

- i. Yes
- ii. No

13. When did you start ART?

i 1-3 years ago

ii. 3.5 and above years ago

14. Have you given birth to an HIV positive child?

i. Yes

ii. No

iii. Do not know

15. How did you know that you are HIV-positive?

i. By making voluntary check ups

ii. After getting seriously sick

iii. To go abroad

iv. Other reasons, please mention-----

16. Do you have a child?

i. yes

ii. No

If yes, is it wanted or unwanted?

If No, please mention your reasons

17. Are you using Contraceptives?

i. Yes

ii. No

18. How many Children do you have even after knowing your HIV status?

i. 0

ii. 1

iii. 2

19. Do you feel that people are rejecting you because of your HIV status?

i. Yes

ii. No

iii. Do not know

20. Do you think that HIV can affect -

- i. Social interactions
- ii. Economy
- iii. Demography
- iv. Culture
- iv. All of them

**QUESTIONNAIRES USED DURING FOCUS GROUP DISCUSSIONS (FGD) FOR SEEKING INFORMATION FROM THE PARTICIPANTS INCLUDE THE FOLLOWING AS A SAMPLE**

1. What will you say about your interest in giving birth to a new born baby?
2. What affects more when you are thinking of having a baby?
3. Do you want to have a baby in the future? Discuss in details
4. What makes you worry when you think of having a baby in the future?
5. Do you think that the attitude of Health workers towards you has a significant effect on your decision to have/not to have a baby? Discuss in details
6. Are your families/friends/community discouraging you because you are HIV-positive?
7. What are the best methods used to handle your conditions in situations like when you are discouraged by some individuals, families or even from the community?
8. Which one affects you more when you think of having a baby? CD4 count, Economic problems or others? Discuss
9. Do you have the access in getting the treatments like ART from Health centers? If yes, discuss about the benefits; and if no, mention the problems associated with it?
10. Discuss about pregnancy with respect to HIV-positive Women and Men in details
11. Compare and discuss about the possibilities of giving birth to an HIV-positive/negative baby?

12. Do you think that HIV can limit your interest from having a baby? If yes, in what way?

Please discuss in details

13. Mention the ways how HIV can affect you culturally, socially, economically and your health status in general. If possible support your discussion with real moments that have happened to you personally?

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