



**ADDIS ABABA UNIVERSITY  
COLLEGE OF HEALTH SCIENCES  
SCHOOL OF PUBLIC HEALTH**

**MAGNITUDE AND FACTORS AFFECTING FERTILITY DESIRE AMONG WOMEN  
LIVING WITH HIV IN ADDIS ABABA CITY ADMINISTRATION, ETHIOPIA.**

**BY**

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**ADVISOR: ALEMAYEHU MEKONNEN (MD, MPH)**

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS  
ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTERS OF PUBLIC HEALTH IN DEPARTMENT  
OF COMMUNITY HEALTH.**

**JUNE, 2010**

**ADDIS ABABA, ETHIOPIA**

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**JUNE, 2010  
ADDIS ABABA, ETHIOPIA**

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## 5. List of Abbreviations

AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted odds ratio
ART	Anti retro Viral Therapy
ARV	Anti Retroviral
COR	Crud Odds Ratio
DCH	Department of Community Health
DX	Diagnosis
ETB	Ethiopia Birr
EDHS	Ethiopian Demographic Health Survey
FBOs	Faith Based Organization
FDG	Focused Group Discussion
HAART	Highly Active Antiretroviral Therapy
HBC	Home Base HIV Care
HIV	Human Immune Deficiency Virus
IUD	Intrauterine Device
MOH	Ministry of Health
MTCT	Mother to Child Transmission of HIV
NGOs	Non Governmental Organizations
OCP	Oral Contraceptive Pill
PMTCT	Prevention Mother to Child HIV Transmission
PPTCT	Prenatal Prevention to Child Transmission
SRHR	Sexual Reproductive Health Rights
SRS	Simple Random Sampling
SNNPR	Southern Nations and Nationalities Peoples Region
STI	Sexually Transmitted Infection
UNAIDS	United Nations for HIV AIDS
U.S.A	United State of America
WHO	World Health Organization
WLHA	Women living with HIV

## 6. Abstract:

**Back ground:** Effective linkages between the sexual, reproductive health and the HIV interventions are essential to ensuring the reproductive rights of women living with HIV. The sexual and reproductive decisions faced by women with HIV involve their desire for pregnancy, their contraceptive practices, their choices about an unintended pregnancy, and their prenatal and postnatal options to reduce perinatal HIV transmission.

**Objective:**-The aim of the study was to assess the magnitude and factors affecting child desire of women living with HIV in the food distribution sites of four sub cities of Addis Ababa.

**Methods:** - A quantitative cross sectional survey on 414 HIV-positive women at four sub cities of Addis Ababa was conducted from February to April 2010. Data on socio-demographic characteristics and fertility needs were collected using structured and pre-tested interviewer administered questionnaire. This was supplemented by qualitative study (FGD). Descriptive analysis followed by binary and multivariate logistic regression was made to assess predictors of their desire to have future children.

**Result:** - Subjects had median age of 31 years and had been diagnosis with HIV for mean of 55 months. 39.9% of women in the food program have future child desire. Among those desiring children 90.6% of them were not having children currently. Majority women living with HIV and their partners have similar desire to have children in the future. As many as 63% of HIV positive women who desire children have a partner who does. Generally, women living with HIV who desire children are younger, not educated, have no children, having partner who have child desire and CD4 count  $>200\text{cell}/\text{mm}^3$ . Moreover lack of health professional's discussion about reproductive health increases future child desire of women. Respondents in the age group 40 years and above had less likely to desire future children (AOR: 0.06, 95% CI: [0.01-0.58] than the other age group. Having primary and secondary education were less likely to desire children (AOR: 0.14, 95%CI: [0.04-0.52] & AOR: 0.16, 95% CI: [0.05-0.47] respectively. Respondents having one or more children were less likely to desire children. Respondents with partners not having future child desire were less likely to have children in the future (AOR: 0.27,95% CI:[0.01-0.78] and those whose CD4 count is  $>200\text{cell}/\text{mm}^3$  and not discussed about reproductive health with the health professionals were more likely to have future child(AOR:4.48,95% CI:1.27-15.77 and AOR:6.2,95% CI:2.08,18.5)respectively.

**Conclusion:** Younger age, not educated, not having currently alive children, partner's future child desire, having current CD4 count of  $>200\text{cell/mm}^3$  and lack of discussion about sexuality with their counselors are factors associated with child desire of women living with HIV.

**Recommendations:** Women living with HIV and who desire children have numerous service needs in addition to future closely linked to medical care. The issues of mother with HIV need to be emphasizes at all levels including policy, programmatic and service level.

## **1. Introduction and statement of the problem**

AIDS is the major health, social and political problem worldwide which has taken a distressing toll in societies. It ranks fourth among the leading causes of death worldwide and first in sub-Saharan Africa. Available data indicated that the percentage of women among people living with HIV has remained stable at 50% for several years. Globally, there were an estimated 33 million people living with HIV in 2007<sup>(1)</sup>. HIV/AIDS still pose a threat to achieve MDGs and successful addressing of HIV/AIDS prevention and control program<sup>(2)</sup>.

Sub Saharan Africa still remains most heavily affected by HIV, accounting for 67% of all people. HIV infections are higher among women than men<sup>(3)</sup>. Regardless of HIV status the ability to express oneself sexually and the desire to experience parenthood are essential for many people<sup>(4)</sup>. The intersection between HIV status and child birth becomes complicated now. On one hand, HIV-positive men and women reported strong pressure from family members, people in their community and health care providers to give up the idea of having children, either because of the risk of prenatal HIV transmission or out of concern for the welfare of children raised by parents who may die prematurely of AIDS. On the other hand, childbearing in most societies play a central role in the social identity of both men and women, and couples are expected to have children<sup>(5)</sup>. However, there is limited understanding of the reproductive healthcare needs and the impact of infection on the fertility desires of women living with HIV/AIDS. Therefore, acknowledging these needs and aspirations was essential to maintain the basic human rights of HIV-positive women<sup>(4)</sup>.

Currently available researches on the relationship between fertility and HIV in Ethiopia are scanty and mainly facility based. In these studies counselors (health providers) were recruited as dates collectors and both sexes were addressed which might be liable to sample and social desirability biases. Therefore this research will try to focus on women living with HIV who were in food support program in the sub cities of Addis Ababa. Through this study the need to have a child/children and factors affecting fertility need of women living with HIV would be assessed. This study will serve as a guide to design possible intervention for women living with HIV in Addis Ababa city administration. Besides it would help to contribute the ongoing intervention to strengthen informed decision making of women living with HIV on reproductive health programs in the study area.

## **2. Literature review**

### ***2.1. Over view of HIV and AIDS in women of reproductive age***

The impact of HIV and AIDS on the lives of women is one of the most critical reproductive health concerns of our times. In sub-Saharan Africa, where the epidemic has spread to the general population mainly through sexual contact, women make up 59 percent of adults living with HIV. Young women ages 15 to 24 in the region are between two and six times as likely to be infected as young men of the same age. Women are especially at risk of contracting HIV because of the interplay of biological, economic and cultural factors<sup>(6)</sup>.

In Sub-Saharan Africa and in the Caribbean where the virus is spread predominantly through heterosexual contact, HIV infections are higher among women than men. Swaziland has the highest prevalence of HIV among females as compared to males followed by South Africa.

In Ethiopia, HIV prevalence indicated that females are more affected than males in the age group of 15-24 years<sup>(3)</sup>. The single point estimate report of Addis Ababa in 2007 showed 6,223 HIV positive pregnant women and 808 annual HIV positive births<sup>(7)</sup>.

The pandemic of HIV continues to spread worldwide despite prevention efforts and successes in a few countries. Comprehensive approaches to improve reproductive and sexual health will require continued commitment and investment<sup>(8)</sup>. Like other women of reproductive age, many HIV-positive women desire childbearing and parenthood despite having a chronic illness. WLHA want safe and effective contraception to prevent unintended pregnancies, prevent acquisition of sexually transmitted infections (STIs) and prevent transmission of HIV to their sexual partners<sup>(9)</sup>.

### ***2.2. Magnitude and factors associated with fertility desire of women living with HIV***

About 2.5 million women who become pregnant each year worldwide are HIV positive. The largest shares are from Sub-Saharan. HIV influences reproductive choices of women living with HIV. Regardless of HIV status, the ability to express oneself sexuality and the desire to experience parenthood are central for many people. Therefore, acknowledging these needs and aspirations is essential to maintain the basic human rights of HIV-positive people. At the same time, because the large majority of HIV infections worldwide occur as a result of sexual

intercourse, global HIV prevention efforts must address the sexual and reproductive health needs of people living with HIV to succeed<sup>(4)</sup>.

Another study in Uganda indicated that 93% to 97% of HIV-infected women reported not wanting more children and only 14% of these women actually reported using permanent or semi permanent family planning methods<sup>(18)</sup>.

Maternal HIV infection increases the risk of pregnancy outcome: some observational studies showed that, the risk of spontaneous abortion, stillbirth, prenatal mortality, infant mortality, low birth weight, growth retardation and pre term delivery were very high in those HIV positive women when compared to HIV negative women<sup>(5)</sup>.

UNAIDS, recommends that HIV positive women should be able to control their fertility or prevent HIV transmission prenatally if they decide to have children. According to UNAIDS/WHO report moving to words universal access to HIV prevention, cure and support is an important step in the direction of effective, sustainable HIV response, and Ethiopia is among countries having 25% coverage for universal access<sup>(18)</sup>. The national PMTCT guideline emphasizes HIV-positive pregnant women who do not have indication for HAART should receive ARV for Preventing Mother to child transmission (PMTCT) purposes<sup>(11)</sup>.

### ***2.3. Factors influencing fertility decision of women living with HIV***

HIV is an important influence on WLHA reproductive choices. Irrespective of whether the women had a child or not, reasons cited for not wanting to bear a/another child includes, concerns about imminent death, leaving the child orphaned and the financial implications of their status. While those who did not change their fertility intentions indicated that having a child, particularly a son, would give them a reason to live and ensure bonding between siblings<sup>(19)</sup>.

For women living with HIV who revised or continued their initial childbearing intentions, key distinguishing factors includes, family and husband's support, knowledge about and availability PMTCT and ART services<sup>(20)</sup>.

A crucial factor preventing WLHA from fulfilling their desire for motherhood was the fear of transmitting infection to the child. They were either unaware of or unconvinced about the doctors' advice/counseling about the possibility of bearing an HIV-negative child; indeed, these women decided either to undergo abortion or took precautions to ensure that they did not become pregnant. For women who decided to have a child or continue their pregnancy, service provider/counseling on available services played a key role in the final decision about childbearing<sup>(20)</sup>.

Husband's support was also considered a crucial factor underlying the decision on whether or not to have a child. It is not worthy that women living with HIV indicated that the final decision on whether to have a child or not, was taken jointly or only after convincing or being convinced by their husbands<sup>(20)</sup>.

According to EDHS 2005, gender difference in infection level of HIV has also large impact on positivity of women for HIV with the facts that biological factor, early initiation of sex; marry as much younger age than men and also their husbands tend to be older than them, powerlessness even to avoid unsafe sex, devoid of decision by themselves to control or regulate their fertility and pre dominant sexual violence and harmful traditional practice are some of the factors<sup>(21)</sup>.

A study done in Addis Ababa revealed that age group 18-29 and 30-39, being female, being married/ in relationship, having secondary education and above, having no children or 1-2 children, partner desire for fertility, improved health condition and maternal weight gain were main factors contributed desire to have children, on the other hand disclosure of sero status to partner/spouse was significantly associated with lower desire for children<sup>(14)</sup>.

Another study in Ethiopia, SNNPR revealed that younger age 15-34yrs, family size, the more family they have the less desire for more children, and for no desire to have a child/children or desire less number of children, the reasons were fear of health to have more or may not offered to bring them up, economic problem and fear of MTCT also another factor<sup>(15)</sup>. Study done in Bahir Dar revealed that women who follow their ART more than a year have more desire to have a child/children than those following their ART less than a year<sup>(22)</sup>.

#### ***2.4. Knowledge on MTCT and utilization of PMTCT among women living with HIV***

The risk of prenatal transmission of HIV is below 2% with antiretroviral treatments, safe delivery and safe infant-feeding, but in the absence of these critical interventions, the risk of HIV transmission ranges from 20-45%<sup>(23)</sup>.

Today, the push for universal access to life-saving drugs is a major focus of attention at global and national levels. As the prognosis for people living with HIV has improved worldwide, AIDS activists and the global public health communities have increased their focus on quality-of-life issues as well as length-of-life issues<sup>(24)</sup>.

Despite the relatively widespread availability of short-course antiretroviral regimens to prevent transmission of HIV from mother to child during pregnancy, labor, and delivery, it has been estimated that only 9% of HIV-positive pregnant women received antiretroviral prophylaxis in developing countries including Ethiopia 2006<sup>(25)</sup>. Even though there is high awareness of HIV in Ethiopia only 30% and 16% of men and women respectively have comprehensive knowledge of, how HIV transmission can be prevented<sup>(24)</sup>.

Though the reasons for this low use of services are insufficiently understood, many factors were attributed to the low uptake of the services. These include women's fear of toxic effects for themselves or their baby, fear of drug resistance, beliefs that treatment is not necessary if women are "healthy," interruptions in the drug supply, stigma, discrimination, and low rates of delivery in health care facilities. Women's use of services for the care and treatment of their own HIV infection following a diagnosis in antenatal care also remains low, lack of prevention tools including male and female condoms, services to support safe conception<sup>(26)</sup>.

Study in Ethiopia found that despite a high need for reproductive health services among women those who tested positive for HIV is very high the quality of counseling was low and few women were counseled on condom use or contraceptive methods and only less than half of HIV positive women were counseled for PMTCT<sup>(22)</sup>.

The main objective of PMTCT is to reduce the transmission of HIV infection from HIV infected mother to offspring. A sentinel surveillance report of sero-status of pregnant mother from five towns of southern Ethiopia revealed a prevalence of 7.8%. An increase incidence of HIV in pregnant mothers would ultimately lead to increased incidence of HIV in children. The reason for increasing MTCT of HIV might include lack of knowledge of mothers on the risk of MTCT, lack of access to VCT and the benefit of preventive interventions, like ART, infant feeding options, ARV prophylaxis and avoidably breast feeding are cornerstones of the strategy of PMTCT <sup>(27,28)</sup>.

The study from Addis Ababa Showed, 98.9% of participants know about transmission of HIV from mother to child. Out of these people 93.6% of them knew the availability of prevention medication. 20% have negative attitudes toward the effectiveness of preventive medications <sup>(14)</sup>.

Study in Addis Ababa showed that even though most women knows that HIV transmits from mother to child and availability of mother to child preventive medications but most do not know

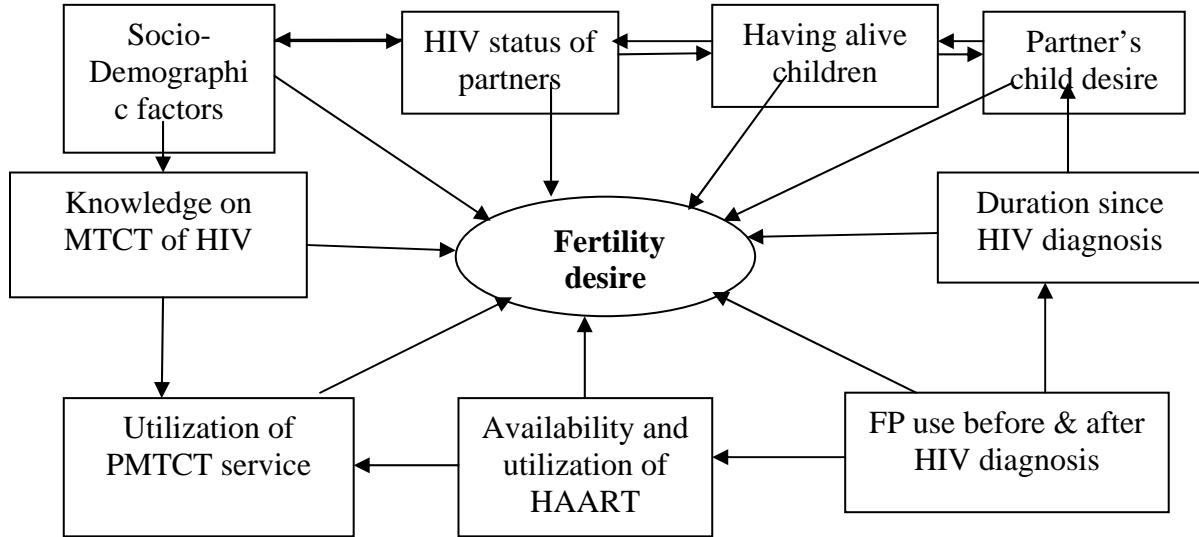
how and when mother to child transmission occurs, how much is the risk of transmission, when to seek preventive medication, and available mother to child preventive strategies<sup>(14)</sup>.

Studies done in different regions of Ethiopia including the study in Addis Ababa were facility based and liable to sample bias in which participants were recruited at ART treatment unit and participants those who were more adherent to ART, were more likely to enrolled which would affect to confidently generalize the study and this would hinder the external validity of the study findings.

In addition to this the counselors in the selected ART units were recruited as data collectors during the study time which is likely to predispose to social desirability bias and definitely affect the accuracy of the study findings. Considering all this, this study is a community based and will try to address these limitations and there by enhance the generaleizablity and accuracy of the study result.

### 3. Conceptual Framework

Conceptual Framework on magnitude and factors affecting fertility desire of HIV positive women .



## **4. Objectives**

### ***4.1. General objective***

To determine the magnitude and factors affecting fertility desire of women living with HIV in Addis Ababa city administration,

### ***4.2. Specific Objectives:***

- 1.** To assess the magnitude of fertility need among women living with HIV AIDS (WLHA) in Addis Ababa,
- 2.** To identify factors affecting fertility desire of women living with HIV AIDS in Addis Ababa,
- 3.** To assess the knowledge about MTCT of HIV, and fertility planning among WLHA in Addis Ababa,

## **5. Methodology**

**5.1. Study area:** The study was conducted in the food distribution sites of four sub cities of Addis Ababa city administration. Addis Ababa is the capital city of Ethiopia and the seat of the African Union and the Economic Commission for Africa. 73.4% of the population is between the ages of 15-49 years old and, 35% were between 15-24 years old. The city is reported to have a growth rate of 2.82% most of which is attributed to high rural to urban migration. It is among the most HIV/AIDS affected areas in Ethiopia, with prevalence rate of 7.5 in 2007. An estimated of 171,722 people in Addis Ababa were living with HIV which represents 7.9 % of the population. It is the largest cause of death in the city. Around 6,223 HIV positive pregnant women are present in the city with 808 annual HIV positive births in 2007<sup>(7)</sup>.

Different HIV/AIDS interventions efforts are ongoing in the city. Among which care and support services are provided for poor persons infected with HIV. Women and children infected with HIV are special groups in which these services are provided.

### **5.2. Study design**

A cross sectional quantitative study was conducted using interviewer administered questionnaire. Besides qualitative study assessment was also used to gather comprehensive information, to explore and understand some aspects of reproductive issues and factors affecting fertility desire of women living with HIV/AIDS, in which details were not addressed in the quantitative study, and the result was triangulated with the findings obtained in the quantitative assessment.

### **5.3. Source population and study population**

#### **5.3.1. Source population**

Women aged 18-49 years old who are living with HIV/AIDS and currently on food support in Addis Ababa city administration.

#### **5.3.2. Study population**

The eligible source population of the study was all women in the age group (18-49 years old) and living with HIV who was registered for food support in the sub cities of Addis Ababa city administration during the study period.

### **Inclusion Criteria**

All women age 18-49 years living with HIV and who are registered in the sub city for food support regardless of their ART utilization during the study period.

### **Exclusion criteria**

Women who were diagnosed as problem with infertility, those for whom hysterectomy was done and who were unable to hear, mentally disabled, seriously ill and those younger or older than the age specified in the inclusion criteria were excluded from the study.

## **5.4. Sample size determination**

### **Quantitative method**

The sample size was determined using single population proportion determination formula as shown below. Previous study conducted in Addis Ababa revealed the proportion of fertility desire of women living with HIV would be 44.7%, with expected margin of error (d) 5%, 95% confidence level ( $Z_{\alpha/2}$ ) and 10% of non-response rate.

**Adding a non response rate of 10%, the total sample was 418.**

$$n = \frac{(Z_{\alpha/2})^2 P (1-P)}{d^2} = \frac{(1.96)^2 (0.45) (0.55)}{(0.05)^2} = 380$$

### **Where:**

n= the required sample size

Z=Standard score corresponding to 95% confidence interval=1.96

p= Assumed proportion of HIV positive women fertility desire=0.45

d = the margin of error (precision) 5%

None response rate =10%

### 5.5. Sampling procedure

#### Quantitative study

The study was conducted in four sub cities. To determine the study subjects to be included into the study, the following steps were followed. First, four out of 10 sub cities were selected by simple random sampling. Second, the sampling frame (lists of HIV positive mothers) was obtained from food distribution sites of the respective sub cities. Third, the number of mothers to be included in to the study (sample) was determined proportionally in accordance with the total number of mothers in the sampling frame of the selected sub cities. Finally the respondents were selected by simple random sampling from the framed list (Fig.1).

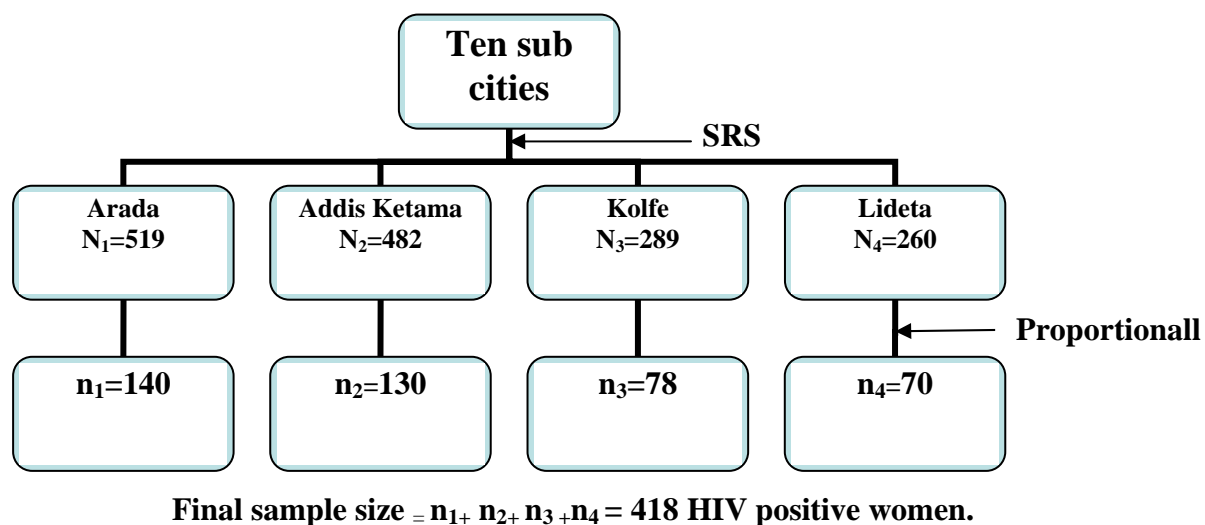


Figure 1. Schematic presentation of sampling procedure for quantitative method.

#### Qualitative study

A total of two focus group discussions were conducted in this study. These two FGD were held from the selected sub cities. Participants were selected by their homogeneity in their educational and economical back ground using purposive sampling method having 9 and 10 number of women, and those who were participated in the interview were not included in the FGD.

### 5.6. Data collection

#### Quantitative study

A standardized and structured questionnaire was developed based on previously available information, and adapted to local situation with certain modifications.

The questionnaire was prepared initially in English, and then translated to Amharic for interview and back to English.

Data collection in the field was conducted by 8 trained data collectors and 2 supervisors. A two days training were provided to data collectors and supervisors on the objective of the study and made them familiarized with the questionnaire by the principal investigator. Questionnaire was pre-tested in two sub cities in similar settings outside the study area.

### **Qualitative study**

Topics of discussion were developed aiming to explore and understand some aspects of reproductive health issues and their consequences for health and life of women with HIV/AIDS on their fertility desire. Identified topics of discussion include: the effect of HIV on fertility, the needs of women to have a child in the future, details of discussions held with health providers about informed decision making for future fertility, knowledge of MTCT and utilization of PMTCT program. Topics of discussion of FGD were translated to Amharic for ease of the FGD. The discussions were taped and notes taken at the same time. A discussion was facilitated by the principal investigator.

### **5.7. Variables for the study.**

**The independent variables were:-**

- Socio demographic characteristics,  
(Age, income, marital/relationship status, education, religion, occupation, ethnicity),
- Partner's HIV status,
- Number of children alive,
- Partners desire for children,
- Duration since HIV diagnosis,
- Long and short term family planning use before and after HIV diagnosis,
- Availability and utilization of HAART,
- Knowledge about MTCT and utilization of PMTCT service.

**Dependent/outcome/ variable**

- Fertility desire.

### ***5.8. Operational definition***

**Desired number of children:**-The no of children in the future WLHA wants to have in the future.

**Reproductive Decision:** -The intention of the individual to give birth or use of contraceptives or thinking of possibility of giving birth.

**Desire for a child /children:** - A wish or expression of women living with HIV to have Child/children in the future.

**Mother to child transmission:** - refers to the transmission of HIV from the mother to the child through various mechanisms like delivery, breast feeding and pregnancy.

**Unintended pregnancy:** - pregnancy that is mistimed or unwanted.

**Defacto union:** - sexual relationship of women without legal marriage.

### ***5.9. Data quality assurance***

To ensure the quality of data, training of data collectors and supervisors were undertaken and 10% of the sample size was pretested in non study area. The questionnaire was assessed for its clarity, consistency, completeness and skip patterns. Questions which were difficult to ask were then rephrased. In addition both principal investigator and supervisor had, undertaken daily monitoring for completeness, correcting mistakes, checking errors. FGD was held until the point of saturation and the discussion points were recorded to audio tape recorder and notes were taken simultaneously.

### ***5.10. Data analysis***

**Quantitative data:** Data were entered; cleaned and explored using statistical software of EPI\_INFO version 6, data's were cross checked and corrected during data cleaning process. Then it was exported for analysis to statistical SPSS version 11. The descriptive analysis such as proportions, percentages, frequency distribution and measure of central tendency mean and median were used. Logistic regression model was also employed to control confounding effect and measure strength of association.

**Qualitative data:** Focus group discussion was held until point of saturation and it was taped and noted. All the audio recorded discussion points and notes were transcribed and translated to English. The thematic approach analysis was utilized for the qualitative data. These include translated transcript were reviewed and examined thoroughly and categorized in to primary

themes and then the data was reviewed and combined in to broader concepts, finally the concepts were refined in to major themes.

### ***5.11. Ethical consideration***

Ethical approval was obtained from the institutional review board of Addis Ababa University Faculty of Medicine and School of Public Health .A formal letter of permission was written to Addis Ababa HAPCO, Addis Ababa Health Bureau and Addis Ababa City Administration, and a letter of permission was written by Addis Ababa city administration and HOPCO to all sub cities to get their permission for the study, and permission was obtained from each sub cities. Verbal consent was asked from each informant prior to the interviews and data were collected anonymously to ensure confidentiality. Consent form was written in Amharic and read to participants to seek their consent. Informants were assured that data were handled exclusively by the investigators and no one was able to recognize them in the report.

### ***5.12 Dissemination of results:***

Study results will be shared to the school of public Health, Addis Ababa University, Ethiopian Public Health association, Addis Ababa HAPCO, Addis Ababa Health Bureau and other concerned stakeholders and publication of the findings in journals.

## **6. Results**

### ***6.1. Socio-demographic characteristics of the study population***

A total of 418 women of aged 18-49 years were included from four subcities of Addis Ababa. 414 were interviewed making a response rate of 99%. One hundred forty (33.5%), 130 (31.1%), 74 (17.7%) and 70 (16.7%) of the respondents were from Arada, Addis ketama, Kolfe and Ledata subcities respectively.

Two hundred thirty eight (57.5%) and one hundred twenty nine (31.2%) were in the age group of 25-34 and 35-44years old respectively, with median age of 31years. Three hundred forty one (82.4%) of the participants were followers of Orthodox followed by Muslim and protestant with the frequency of 9.9% and 7.7% respectively. Ethnic composition of the respondents showed that; Amhara constitute 202(48.8%), Gurage 101(24.4%), Oromo 83 (20.0%) and others (Tigray, Dorze and Silti) were 28 (6.8%). Out of the respondents, 119 (28.7%) had never been to school, 74 (17.9%) could read and write only and 87 (21%) had primary education and 134 (32.4%) had secondary education. One hundred ninety one (46.1%) of the respondents were either married or having sexual partner, while 181 (47.3%) were either divorced or widowed and 42 (10.1%) were single. One hundred seventy one (41.3%) of the interviewed were unemployed while 95 (22.9%) and 49 (11.8%) were daily laborer and governmental/private employees respectively. One hundred forty (33.8%) and 192 (46.4%) of the subjects had monthly house hold income of less than 250.00 ETB and with no income respectively. The median monthly income of respondents was 200.00 ETB. (Table 1)

**Table1.Socio-demographic characteristics of women living with HIV; in food distribution sites of four sub cities of Addis Ababa city administration, Ethiopia, June 2010.**

<b>Characteristics/variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age (years)</b>	<b>n=414</b>	
15-24	20	4.8
25-34	238	57.5
35-44	129	31.2
45 & above	27	6.5
<b>Mean± SD</b>	<b>31±(6)</b>	
<b>Religion</b>		
Orthodox	341	82.4
Muslim	41	9.9
Protestant	32	7.7
<b>Ethnicity</b>		
Amhara	202	48.8
Gurage	101	24.4
Oromo	83	20.0
Others(Tigray, Dorsea and Selta)	28	6.8
<b>Educational status</b>		
Illiterate	119	28.7
Read & write only	74	17.9
Grade 1-7	87	21.0
Grade 8-12	134	32.4
<b>Marital status</b>		
Single	42	10.1
Married/Cohabitation	191	46.1
Divorced/Widowed	181	47.3
<b>Occupation/Employment</b>		
Unemployed	171	41.3
Daily laborer	95	22.9
Governmental/private employ	49	11.8
House wife	33	8.2
Pity trade	22	5.3
Others	43	10.4
<b>Estimated total monthly income(ETB)</b>		
No income	192	46.4
≤ 250	140	33.8
251-500	39	9.4
Others	43	10.4
<b>Mean ±SD</b>	<b>200.00 ±(102)</b>	

## ***6.2. Fertility desire of women living with HIV***

Two hundred twenty (53.2%) of the study population had 1-2 and 145 (35%) had 3-4 live births, while 49 (11.8%) had no live birth in their life. Two hundred thirty two (56%) had 1-2 and 115 (27.8%) had  $\geq 3$  children who are currently alive, where as 67 (16.2%) haven't. One hundred sixty five (39.9%) had desire to have children in the future but the rest don't have future child desire. Out of those who desired to have children, 135 (81.8%) wanted to have  $\leq 2$  children, while 26 (15.8%) desire to have  $>2$  children and 4 (2.4%) they were not clear of it.

Eighty four (50.9%) of the study subjects who desire to have children planned to have a child within less than two years, 34 (20.6%) of the mothers desire to have children two years later and 47 (28.5%) didn't know the exact time when to have birth.

Of those married and in any form sexual relationship, 103 (53.9%) reported that their partners want to have children in the future while 67 (35.1%) reported their partners don't like to have and 21 (11.0%) didn't know their partner's future child desire. (Table 2)

**Table2. Distribution of women living with HIV by fertility desire in food distribution site of four sub cities of Addis Ababa city administration, Ethiopia 2010**

<b>Characteristics</b>	<b>Number</b>	<b>Valid %</b>
<b>Number of alive birth</b>	<b>n=414</b>	
No birth at all /no live birth	49	11.8
1-2 live births	220	53.2
3 and above live births	145	35.0
<b>Mean <math>\pm</math> SD</b>	<b>2<math>\pm</math>1.5</b>	
<b>Number of children currently alive</b>		
Have no children	67	16.2
1-2 Children	232	56.0
3 and above children	115	27.8
<b>Mean <math>\pm</math> SD</b>	<b>2<math>\pm</math>(1.5)</b>	
<b>Future child desire</b>		
Yes	165	39.9
No	249	60.1
<b>No of children to add/have in the future</b>	<b>n=165</b>	
1-2 children	135	81.8
3-4 children	26	15.8
Didn't know the exact number	4	2.4
<b>Time plan when to bear a child</b>	<b>n=165</b>	
$\leq$ 2 years	84	50.9
> 2 years	34	20.6
Don't know the exact time	47	28.5
<b>Husband/Partner future child desire</b>	<b>n=191</b>	
Yes	103	53.9
No	67	35.1
Don't know	21	11.0

### 6.2.1. Reasons mentioned for not having children in the future

Two hundred forty nine (60.1%) of the respondents had no future child desire. Reasons given for not having future child desire were, 103 (41.4%) don't have adequate income to add more children, 52 (20.9%) already attained the desired number of children, 47 (18.9%) believed that their health condition were compromised due to childbearing, 39 (15.6%) reported due to fear of MTCT of HIV and 8 (3.2%) had received advice from health workers not to bear a child. (Fig.2)

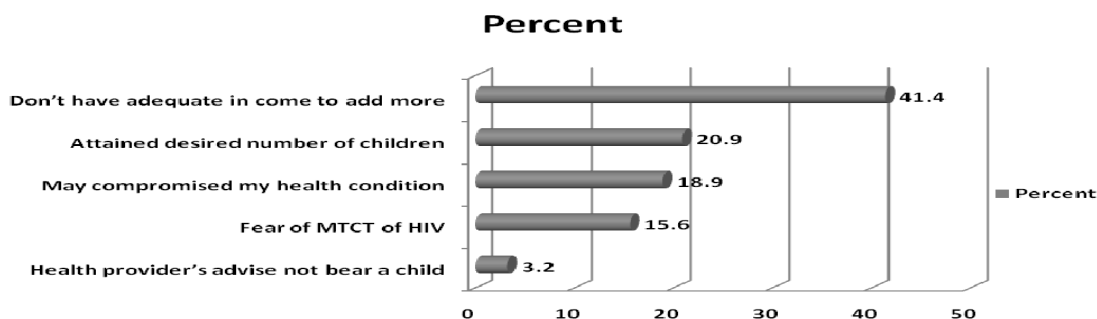


Fig. 2: Reasons mentioned for not having children in the future.

### 6.3. Family planning demand, choice and use among women living with HIV

Three hundred seventy nine (91.5%) respondents had knowledge about family planning. Out of which, 255 (67.3%) and 165 (43.5%) of the respondents had ever used at list one type of contraceptive method before and after HIV diagnosis respectively. Currently 129 (34%) of the respondents had reported that they were using different methods of contraception. Reasons spelled for the current choices were health professional advice and suitability of the methods to their health 49.6% and 41% respectively. Two hundred fifty (66%) of the respondents were not using contraception. Out of the 66 % not using contraceptive currently, 51 (20.4%) of them want to use family planning in the future, while 192 (76.8%) of the respondent didn't want to use any method even for the future. Reasons given include; 92 (47.9%) of the respondents believed that the methods were not suitable with the ART, 42 (21.9%) wants to be pregnant, 32 (16.7%) had no sexual relationship and 26 (13.5%) had other reasons not to use family planning. ART units were the preferred site of contraceptive provision for 80.6% of current users. Of those 129 current contraceptive users, 120 (93%) of the respondents disclosed their serostatues to their contraceptive providers while 9 (7%) did not disclose their serostatues. Main reason for not disclosing their serostatues were fear of stigma and discrimination. (Table 3)

**Table3. Contraception demands, choice and use among women living with HIV, in food distribution site of four sub cities of Addis Ababa city administration, Ethiopia, June 2010.**

Characteristics/Variables	Number	Percent
<b>Know about FP</b>	<b>(n=414)</b>	
Yes	379	91.5
No	35	8.5
<b>Ever use prior to HIV diagnosis</b>	<b>(n=379)</b>	
Yes	255	67.3
No	124	32.7
<b>Ever use after HIV diagnosis</b>		
Yes	165	43.5
No	214	56.5
<b>Current use</b>		
Yes	129	34.0
No	250	66.0
<b>Reason for current use?</b>	<b>(n=129)</b>	
Health professionals advice	64	49.6
Suites with my health	53	41.1
Others	12	9.3
<b>Future contraception need</b>	<b>(n=250)</b>	
Yes	51	20.4
No	192	76.8
Don't know	7	2.8
<b>Preferred place for FP service</b>	<b>(n=180)*</b>	
ART unit	145	80.6
Out of ART unit	35	19.4
<b>Reason for no use FP in the future</b>	<b>(n=192)</b>	
Want a child/children	42	21.9
Not suit with the ART drags	92	47.9
Have not sexual relation	32	16.7
Others	26	13.5
<b>Disclosure of serostatus to FP provider</b>	<b>(n=129)*</b>	
Yes	120	93.0
No	9	7.0
<b>Reason for not disclose serostatus</b>	<b>(n=9)</b>	
No trust on the health provider	1	11.1
Fear of stigma/Discrimination	6	66.7
Others	2	22.2

\*current and future contraception user's

\*current FP method user's

### 6.3.1. Contraception use among HIV positive women by time and method;

Three hundred seventy nine of the mothers had ever used at list one type of contraceptive method before and after HIV diagnosis. The most common methods used before HIV diagnosis were oral contraceptive pills (57%) and injectables (51.6%). Condoms and injectables constitute the most practiced method after HIV diagnosis, with the frequency of 47.3% and 38.7% respectively.

Among the 129 current contraception users, condom, injectable, pills and implantation constitute 76 (58%), 35 (25.5%), 13 (9.9%) and 11 (8.4%) respectively. Two hundred fifty of the mothers were not current contraceptive users. Out of which 51(50.4%) want to use contraception for the future and the most preferred methods were condom 48.1%, injectables 28.6%, and oral contraceptive pill 9.9%. (Table 4)

**Table4. Distribution of women living with HIV contraceptive use by method and time; at food distribution site of four sub cities of Addis Ababa city administration, Ethiopia, 2010.**

Method choice	Contraceptive use/Need							
	Use prior to Dx*		Use after Dx*		Current users*		Future need*	
	N	%	N	%	N	%	N	%
	(n=255)		(n=165)		(n=129)		(51)	
Abstained from sex	1	0.4	1	0.6	3	2.3	1	1.3
Condoms	17	6.6	80	47.3	76	58.0	37	48.1
Pills	147	57.4	24	14.2	13	9.9	6	7.8
Injectable	132	51.6	65	38.7	35	26.5	22	28.6
IUD	7	2.7	3	1.8	4	3.1	3	3.9
Implants	3	1.2	10	6	11	8.4	4	5.2
Tubalegation/vasectomy	1	0.4	2	1.2	4	3.1	0	-

\* Variables having multiple answers.

#### ***6.4. Knowledge on mother to child transmission HIV***

Three hundred ninety six (95%) of the respondents had ever heard about mother to child transmission of HIV and the most common source of information about MTCT was from health workers (91.2%) and mass media (37.4%). One hundred sixty four (41.8%) of the respondents answered mother to child transmission occurred during pregnancy, 269 (68.1%) during labor and 294 (74.2%) during breast feeding. Three hundred fifty six (89.9%) and 304 (85.9%) of the study subjects knew about PMTCT and had positive attitude towards PMTCT respectively.

One hundred ninety (53.7%) of the mothers had the perception of all children who were born from affected mother would acquire the virus if the mothers were not taking PMTCT during their pregnancy. Seventy (19.7%) of the mothers had the perception of MTCT were 50% without PMTCT and 96 (27%) respondents didn't know the exact figure. Forty (11.2%) of the respondent did not believed that PMTCT prevents mother to child HIV transmission. (Table 5)

**Table5. Knowledge on MTCT and utilization of PMTCT service; among women living with HIV in food distribution sites of four sub cities of Addis Ababa city administration, Ethiopia, June, 2010.**

<b>Characteristics/Variables</b>	<b>Number</b>	<b>Percent</b>
<b>Heard about HIV MTCT</b>	<b>(n=414)</b>	
Yes	396	95
No	18	5
<b>Source of information about MTCT*</b>	<b>(n=396)*</b>	
Mass media	148	37.4
Health care provider	361	91.2
Friends	24	6.1
Other	17	4.5
<b>knowledge about the ways/time of MTCT*</b>		
During pregnancy	165	41.8
During labor	269	68.1
Through breast feeding	294	74.2
Don't know	26	6.6
<b>Awareness about PMTCT</b>		
Yes	356	89.9
No	40	10.1
<b>Extent of MTCT HIV without PMTCT service</b>		
All children born	190	53.7
About 50% of children	70	19.7
Don't know the exact figure	96	27.0
Others	24	6.7
<b>Attitude towards medication to PMTCT</b>	<b>n=356</b>	
Positive	306	86.0
Negative	40	11.2
Don't know	10	2.8

\* Variables having multiple answers.

### ***6.5. HIV/AIDS diagnosis, treatment, care and support***

Three hundred seventy eight (91.3%) of the respondents reported that they had been more than two years since HIV diagnosis. Twenty seven (6.5%) had less than two years since diagnosis and 9 (2.2%) didn't remember the exact time of HIV diagnosis. 373 (90.1%) of them started ART and 41 (9.9%) have not yet started. Out of those who started ART, 282 (75.6%) had been more than two years since ART started. Mean duration of HIV diagnosis and receiving ART was 55 and 32 months respectively. Two hundred twenty (54.8%) and 75 (14.7%) of the respondents reported a recent CD4 count of  $>200$  cell/mm<sup>3</sup> and less than 200 cells/mm<sup>3</sup> respectively, with mean CD4 count of 350cell/mm<sup>3</sup>.

Three hundred fifty nine (96.2%) of the study subjects reported improvement after ART while 10 (2.7 %) had no shown improvement. Three hundred sixty nine (98.9%) of them received the drug free from government ART units. Four hundred nine (98.8%) of the respondents have had socio-economic support, while 5 (1.2%) were claimed not having support. The source of support were mainly from NGOs 313 (75.7%) and 107 (26.0%) from FBOs. The most commonly provided support were food 387 (93.9%) and counseling 78 (18.9%). Out of these who were on ART 333 (80.4%) want to have a discussion about reproductive health with their ART providers while 293 (88%) had the discussion. Of those having the discussion, 207 (70.6%) of the respondents claimed that the discussion was adequate. (Table 6)

**Table-6 HIV related characteristics among women living with HIV; in food distribution sites of four sub cities of Addis Ababa city administration, Ethiopia June, 2010.**

<b>Characteristics /Variables</b>	<b>Number</b>	<b>Percent</b>
<b>Duration since HIV diagnosis(months)</b>	<b>n=414</b>	
≤ 24 moths	27	6.5
>24 moths	378	91.3
Didn't remember	9	2.2
<b>Mean<sub>±</sub>SD</b>	<b>55±(48.2)</b>	
<b>Did you start treatment?</b>		
Yes	373	90.1
No	41	9.9
<b>Duration since treatment started (months)</b>	<b>n=373</b>	
≤ 24 moths	83	22.3
> 24 moths	282	75.6
Didn't remember	8	2.1
<b>Mean<sub>±</sub>SD</b>	<b>32±(18.7)</b>	
<b>Recent CD4 count (cell/mm<sup>3</sup>)</b>	<b>n=414</b>	
≤ 200	75	18.1
> 200	220	53.2
Didn't remember	119	28.7
<b>Mean<sub>±</sub>SD</b>	<b>350±(173.7)</b>	
<b>Health condition after ARV initiation</b>	<b>n=373</b>	
Improved	359	96.2
No change	10	2.7
Deteriorated	4	1.1
<b>Cost of the ART drug covered by</b>		
Free from Government	373	100
<b>Support from different groups</b>	<b>n=414</b>	
Yes	409	98.8
No	5	1.2
<b>Kind of support obtained *</b>	<b>n=409</b>	
Food and health care	387	93.9
Counseling	78	18.9
Home based care	36	8.7
Financial	23	5.6
<b>Need to discuss on RH with health providers</b>	<b>n=414</b>	
Yes	333	80.4
No	81	19.6
<b>Discussed about RH with health providers</b>	<b>n=333</b>	
Yes	293	88.0
No	40	12.0
<b>Was the discussion adequate?</b>	<b>n=293</b>	
Yes	207	70.6
No	86	29.4

\* Variable with multiple responses.

## ***6.6. Sexual behavior and condom use***

One hundred fifty two (36.7 %) of the participants were sexually active within the past six months, of which 111 (73%) of these individuals used condom while 41 (27%) did not. Out of those who reported condom use 85 (76.6%) used it regularly, while 26 (23.4%) reported irregular use. Reason for condom use was advice from health professionals, having HIV negative partner, to prevent pregnancy and others; with the frequency of 64.9%, 13.5%, 9.9% and 11.7% respectively. Most common reasons for not using condoms were 19 (46.3%) need to have children and 22 (53.7%) husbands did not want to use. Among married and who have any form of sexual relationship, 180 (94.2%) have disclosed their HIV serostatus to their partner. Whereas 11 (5.8%) didn't disclose their serostatus. 98.3% of them mentioned fear of divorce and stigma as a main reason. One hundred fifty seven (81.3%) of the partners of positive women undergone HIV test. However, 20 (10.4%) of the partners didn't conduct testing. Among those who have tested partners, 110 (70.1%) and 46 (29.3%) were concordant and discordant respectively. (Table7)

**Table7. Sexual behavior and condoms use, among women living with HIV; in food distribution sites of four sub cities, of Addis Ababa city administration, Ethiopia, June 2010.**

<b>Characteristics/Variables</b>	<b>Number</b>	<b>Percent</b>
<b>Sexually active in the past 6 months</b>	<b>(n=414)</b>	
Yes	152	36.7
No	262	63.3
<b>Currently use of condoms</b>	<b>(n=152)</b>	
Yes	111	73
No	41	27
<b>Frequency of condoms use</b>	<b>(n=111)</b>	
Always	85	76.6
Some times	26	23.4
<b>Reason for condoms use</b>		
Health professional's advice	85	76.6
My partner is negative	15	13.5
To prevent pregnancy	11	9.9
<b>Reason for not using condoms</b>	<b>(n=41)</b>	
Want to have child	19	46.3
My partner don't like it	22	53.7
<b>Disclosures of HIV status to partner</b>	<b>(n=191)</b>	
Yes	180	94.2
No	11	5.8
<b>Partner tested for HIV</b>	<b>(n=191)</b>	
Yes	157	81.3
No	20	10.4
Didn't know	14	8.3
<b>Partner test result</b>	<b>(n=157)</b>	
Positive	110	70
Negative	46	29.3

### ***6.7. Factors associated with fertility need among women living with HIV***

In this survey respondents were asked different questions to assess factors that determine their future fertility desire based on their socio-demographic, reproductive and selected HIV/AIDs characteristics.

Univariate results showed significant association between ages, religion, educational status, number of alive children, partner's future child desire. When we come to see the specifics, respondents with age 30-39 and  $\geq 40$  years have significantly lower desire to have children in the future than those of younger age 18-29 years). (COR: 0.37, 95% CI = [0.24, 0.58] for age 30-39 years and COR: 0.034, 95% CI = [0.01, 0.13] were for age  $\geq 40$  years). Similarly, respondent with elementary and secondary school were less likely to desire for children than those who were illiterate and able to read and write (Elementary education; COR: 0.33, 95% CI = [0.19, 0.56] and (Secondary education; COR: 0.17, 95% CI= [0.13,0.32]. Characteristics being having one and above currently alive children;(COR:0.06 95% CI= [0.03,0.15] for those having 1-2 children and COR:0.02,95% CI=0.01,0.06 for those having three and more children),having partner who would not like to have children; (COR:0.16,95% CI=[0.84,0.34]and lack of respondents knowledge about their husband's future child desire (COR:0.26, 95% CI=[0.11,0.68] were less likely to desire children in the future. But characteristic like marital status, knowledge and utilization of family planning methods and intention to use family planning method for the future had showed no association with the future child desire of women living with HIV/AIDs (Table 8).

**Table8: The relationship between selected socio-demographic and reproductive characteristic and women fertility desire among HIV positive women in the food distribution site of four sub cites of Addis Ababa city administration, Ethiopia, June 2010.**

Variables	Yes	No	COR (95% CI)
	Freq (%)	Freq (%)	
<b>Age(years)</b>			
30-39	71(34.6)	134(65.4)	<b>0.37(0.24,0.58)*</b>
40 & above	7(11.5)	54(88.5)	<b>0.034(0.01,0.13)*</b>
18-29	87(58.8)	61(41.2)	1
<b>Religion</b>			
Muslim	18(43.9)	23(56.1)	1.30(0.68,2.51)
Protestant	19(59.4)	13(40.6)	<b>2.43(1.16,5.11)*</b>
Orthodox	128(37.5)	213(62.5)	1
<b>Educational status</b>			
Elementary school	27(31)	60(69)	<b>0.33(0.19,0.56)*</b>
Secondary school	26(19.4)	108(80.6)	<b>0.17(0.13,0.32)*</b>
Illiterate/able to read &write only	112(58)	81(42)	1
<b>Marital status</b>			
Married /cohabitation	89(46.6)	102(53.4)	1.57(0.79,3.14)
Divorced/widowed	61(33.7)	120(66.3)	0.92(0.45,1.85)
Single married	15(37.7)	27(64.3)	1
<b>Number of children currently alive</b>			
1-2 children	85(37.6)	141(62.4)	<b>0.06(0.03,0.15)*</b>
3 and above children	22(17.7)	102(82.3)	<b>0.02(0.01,0.06)*</b>
None	58(90.6)	6(9.4)	1
<b>Partners future child desire</b>			
No	15(22.4)	52(77.6)	<b>0.16(0.84,0.34)*</b>
Don't know	7(30.4)	16(69.6)	<b>0.26(0.11,0.68)*</b>
Yes	65(63.1)	38(36.9)	1
<b>Knowing about family planning</b>			
No	11(31.4)	24(68.4)	(0.32,1.41)
Yes	154(40.6)	225(59.4)	1
<b>Current contraceptive users</b>			
Yes	101(40.9)	146(59.1)	1.02(0.66,1.57)
No	53(40.5)	78(59.5)	1

In univariate analysis of HIV/AIDS related characteristics, respondent's knowledge on mother to child transmission rate of HIV without medical intervention, current CD4 count, and discussion about RH issue with counselors, having adequate discussion and women who were sexually active in the last six months showed significant association with future child desire.

Hence, respondents who believed that mother-to-child HIV transmission is about 50% without PMTCT, (COR: 2.01, 95% CI= [1.16, 3.5]) respondents with current CD4 count  $>200\text{mm}^3$  with (COR: 4.07, 95% CI= [2.3, 7.2] and participants not having discussion about reproductive health issue with their health providers/counselors with (COR: 2.6, 95% CI= [1.7, 3.94] have positive and significant association with future child desire. Besides, respondents not having sex in the last six months were less likely to desire for children in the future with (COR: 0.49, 95% CI= [0.33, 0.74]. Variables like respondent's current knowledge of MTCT, attitude towards PMTCT service, duration since HIV diagnosis and duration since treatment started were not associated with future child desire.

**Table9. The relationship between selected HIV/AIDS related characteristics and fertility desire among HIV positive women in food distribution sites of four sub cities of Addis Ababa city administration, Ethiopia, June 2010.**

Variables	Fertility Desire		COR:95% CI
	Yes	No	
<b>Know about MTCT of HIV</b>			
No	3(16.7)	15(83.3)	0.29(0.08,1.01)
Yes	162(40.9)	234(59.1)	1
<b>know about PMTCT</b>			
No	17(42.5)	23(57.5)	1.08(0.56,2.08)
Yes	145(40.7)	211(59.3)	1
<b>Degree of MTCT without PMTCT</b>			
50%	37(52.9)	33(47.1)	<b>2.012(1.16,3.51)*</b>
Don't know the exact figure	40(41.7)	56(58.3)	1.28(0.78,2.12)
100%	68(35.8)	122(64.2)	1
<b>Attitude towards PMTCT</b>			
Negative	16(32.0)	34(68.0)	0.65(0.34,1.22)
Positive	129(42.9)	177(57.8)	1
<b>Duration since HIV Diagnosis</b>			
> 24 months	149(39.4)	229(60.6)	0.81(0.37,1.79)
Didn't remember	4(44.4)	5(55.6)	1.00(0.22,4.56)
≤ 24 months	12(44.4)	15(55.6)	1
<b>Started ART</b>			
No	19(46.3)	22(53.7)	1.34(0.68,2.57)
Yes	146(39.1)	227(60.9)	1
<b>Duration since treatment started</b>			
> 24 months	111(39.4)	172(60.6)	0.94(0.57,1.54)
Didn't remember the exact time	1(12.5)	7(87.5)	0.21(0.24,1.75)
≤ 24 months	34(41)	49(59)	1
<b>Health condition after treatment</b>			
Not changed	3(30.0)	7(70.0)	0.66(0.17,2.58)
Deteriorated	2(50.0)	2(50.0)	1.55(0.22,11.12)
Improved	141(39.3)	218(60.7)	1
<b>Current CD4 count</b>			
>200cell/mm <sup>3</sup>	120(56.3)	93(43.7)	<b>4.07(2.3,7.20)*</b>
Didn't remember	25(21.2)	93(78.8)	0.85(0.43,1.65)
≤ 200cell/mm <sup>3</sup>	20(24.1)	63(75.9)	1
<b>Discussed RH issue with counselors</b>			
No	88(53.7)	76(46.3)	<b>2.6(1.7,3.94)*</b>
Yes	77(30.8)	173(69.2)	1
<b>Adequate discussion</b>			
No	44(51.2)	42(48.8)	<b>1.733(1.04,2.88)*</b>
Yes	78(37.7)	129(62.3)	1
<b>Sexually activities within 6 moths</b>			
No	88(33.6)	174(66.4)	<b>0.49(0.33,0.74)*</b>
Yes	77(50.7)	75(49.3)	1

In multivariate analysis variables which were having significant association in univariate analysis were fitted to the multivariate model to determine independent predictors of the future

child desire. Accordingly; age, education, having alive children, partner's future child desire, current CD4 count and having discussion with counselors about reproductive issues were found to be independent predictors of future child desire. Respondents aged  $\geq 40$  years were less likely to desire children for the future (AOR: 0.064, 95% CI = [0.007, 0.58]). The study subjects who were elementary and secondary school education were less likely to desire children in the future than those who were illiterate/informal education.

(AOR: 0.14, 95% CI: [0.04, 0.52] and AOR: 0.16, 95% CI: [0.05, 0.47]). As the number of current alive children increases, future desire of women to have more children decrease significantly and therefore, women having 1 or 2 children and for those women having three and more children showed (AOR: 0.27, 95% CI: [0.09, 0.78] and AOR: 0.04, 95% CI: [0.005, 0.324] respectively. Respondents whose partner don't want to have children were less likely to desire children in the future (AOR: 0.27, 95% CI: [0.09, 0.78]). Respondents with current CD4 count  $> 200 \text{mm}^3$  were more likely to desired children in the future (AOR: 4.48, 95% CI: [1.27, 15.77]). Furthermore, participants who had not discussed reproductive health issues with their counselors were more likely to desire children in the future (AOR: 6.2, 95%, CI: [2.08, 18.5]). (Table 10)

**Table10: Multivariate analysis of future child desire among women living with HIV in food distribution sites of four sub cities of Addis Ababa city administration, Ethiopia 2010.**

Characteristics	Frequency/percent		Adjusted OR 95% CI
	Yes	No	
<b>Age(years)</b>			
18-29	58.5	41.2	1
30-39	34.6	65.4	0.41(0.15,1.13)
≥40	11.5	88.5	<b>0.064(0.01,0.58)*</b>
<b>Religion</b>			
Orthodox	37.5	62.5	1
Muslim	43.9	56.1	1.7(0.36,8.10)
Protestant	59.4	40.6	3.67(0.58,23.12)
<b>Educational status</b>			
Illiterate/read & write only	58.0	42.0	1
Elementary school	31.0	69.0	<b>0.14(0.04,0.52)*</b>
Secondary school	19.4	80.6	<b>0.16(0.05,0.47)*</b>
<b>Currently alive children</b>			
None	90.6	9.4	1
1-2 children	37.6	62.4	<b>0.09(0.012,0.62)*</b>
≥3	17.7	82.3	<b>0.04(0.01,0.32)*</b>
<b>Partner's need to have children</b>			
Yes	63.1	36.9	<b>1</b>
No	22.4	77.6	<b>0.27(0.09,0.78)*</b>
Don't know	30.4	69.6	0.27(0.06,1.14)
<b>Degree of MTCT without Rx</b>			
100% the child was infected	35.8	64.2	1
50% the child was infected	52.9	47.1	3.34(0.98,11.57)
Didn't know the exact %	41.7	58.3	2.36(0.76,7.37)
<b>Current CD4 count(cell/mm<sup>3</sup>)</b>			
≤200	24.1	75.9	1
>200	56.3	43.7	<b>4.48(1.27,15.77)*</b>
Didn't remember the exact number	21.2	78.8	1.69(0.37,7.63)
<b>Discussion with counselor</b>			
Yes	30.8	69.2	1
No	53.7	46.3	<b>6.2(2.08,18.5)*</b>
<b>Having sex in the past 6 months</b>			
Yes	50.7	49.3	1
No	33.6	66.0	10.386(0.11,1.424)

### **6.8. Qualitative study result**

A total of two sessions were conducted in the two areas of the study with ten and nine participants from Arada and kolfa sub city respectively, with a total number of 19 participants. The respondent's age ranges from 22-40 years old. Out of all the respondents 7 had no child at all, 8 were having 1-2 children and 4 respondents had three and more children. Out of those respondents with children three had HIV positive children.

#### **Future child desire**

Most of those without children and few of those with children have future child desire.

The reasons for their child desire were varied among the respondents. Among those the most described reasons were improvement of their health condition and availability of PMTCT which encouraged them to have children and help them to build their confidence to have healthy child. Other reasons stated for child desire were to build up bonding among partners relationship, to get care and support from their child at the end, to fulfill their partner's need and having child gave them satisfaction.

A 26 years old woman who had one child and desire to have more children, from Arada sub city expressed,

*“I want to have a child to be a brother or sister of my kid, if I make a follow-up by my doctor; it will be possible to have HIV free child ”.*

Another woman from Kolfe sub city aged 22 years with no child and having child for the future, said,

*“I had a great need to have a child to replace myself in this world, even though I had no sexual partner .Currently I don't have sexual partner, for the future I planned to have two children with different sex .”.*

A woman, with age 31years old and having three children from Arada sub city expressed her child desire to full fill her husband's need and said,

*“My first partner was died and my new husband had no child in his life, and he wants to be a biological child, and married me to get a child so that, I should have to bear a child.....”*

A twenty five years old woman having one child from Arada sub city expressed her child desire to get satisfaction by saying,

*“I am human being; I want to have three children in my life .Having HIV virus in my*

*blood means nothing, it was the matter of CD4 count which measures my health condition. If my CD4 count is good and I follow my health condition during my pregnancy and respected the advice given from my doctor, I can have a healthy child....”.*

The idea also captured in the following citation from woman age 22 and having one child.

*“Now day’s my health condition is getting improved and my CD4count is above 400cell/mm<sup>3</sup> and I can have the capacity to be pregnant and to care for my kid”.*

Most of respondents who desired children reported, use of PMTCT medication as vertical transmission risk reduction strategy and having trust on the medication. Besides using PMTCT same respondent explain that exclusive breast feeding for six months and avoiding breast feeding after six months, hospital delivery and taking ART strictly.

Reasons for those who did not want to have children includes economic problem, fear of becoming orphans to their children, fear of MTCT and they thought that they had enough number of children based on their income.

Some woman believed that HIV infection will shorten their own life and they are concerned that if their health failed their child would grow up without a mother and warned about leaving orphans. A thirty five years old woman from Arada sub city expressed,

*“I am afraid of being sick, dying early and living my child to suffer for life alone and becoming orphans. No! I don’t want to let it happen to my child and I decided not to have a child”.*

Some discussants mentioned non HIV/AIDS related reasons for their decision not to have children. These were poor economic status/income and having desire family size. A woman from Kolfe sub city with age 28 years old having two children expressed.

*“I am satisfied with the number of children I have; I have no adequate income to add more children and it is not only HIV/AIDS affect the health of a child; poor nutrition also another problem, if I can’t feed my child properly.”*

Another woman from Kolfe sub city with age 30 years and having two children, expressed her future child desires,

*“My families don’t encourage me to bear a child. They think that it will worsen my health status and it leads me to death. They said to me that they don’t*

*like to miss me due to labor and pregnancy and due to this reason I don't like to have birth".*

Another woman from Kolfe sub city with age 35 years and having three children who desire to have future child bearing expressed.

*"My counselor told me that not to bear a child, even I myself didn't want to bear a child, even though mother to child transmission is low and many children's were born HIV free, I still have fear of my child may be HIV positive; so that; I don't want to have HIV positive child."*

Respondents who did not desire children also have strong negative opinion for HIV positive women who desire to have children. A 35 years old woman with 3 children cited.

*"Bearing a child may further complicated own health condition so, let alone to bear a child for myself, my advice is not to bear a child to those HIV positive women".*

### **Family planning use and need**

Most agreed that family planning is necessary for HIV positive individuals like anybody else and not only related to their HIV status. Irrespective of their child desire both groups agreed on the importance of FP to prevent unintended pregnancy to space and limit the number of children. The majority had experiencing at list one method of family planning before HIV diagnosis. The most commonly used family planning methods was Injectable and oral contraceptive pills.

Most of the respondents are using and planned to use family planning method in the future regardless of their fertility need expressed brood need for family planning and the most used and preferred method of FP was condom because of its role in re infection prevention and as a contraception. In addition it is also the commonest method recommended by health providers.

One of the respondents with age 30 years old and having sexual partner who needs to use condom expressed,

*"I am using condom because my counselor told me that it has multiple effects, to prevent pregnancy, prevent from the virus as well as it prevents other sexually transmitted disease".*

One of the respondents from kolfe sub city with age 29 who need to use contraceptive expressed,

*"I like to use both condom and Injectable because of its suitability with my health condition, safe to prevent pregnancy and convenient to use*

*and I also discussed with the health professionals for my choices”.*

Some of the respondents were not using family planning due to various reasons some discontinued use of contraceptives due to fear of FP and ART medication interaction, some did not use because their husband did not like to use ,so condom may not be the possible option a woman explained,

*“I was using Injectable contraceptive but discontinued it when I started receiving ART I worried the two drugs may interact and harm to my health”.*

Other women with age 30 years who never use contraceptive from Arada sub city expressed,

*“I want to use contraceptive but my husband deprived me not to use any type of contraceptive method and he refused to use condom because he want to have child”.*

Others who were not using modern contraception method during the interview period did not want to use FP in the future too and preferred to abstain; they have varied explanation for their choice. These were partner’s death and health condition .A woman said,

*“My husband is dead sometimes ago, I don’t want to start new relationship with other man I need to take care of myself and I don’t want to use any family planning methods., I abstained from sex”.*

### **Knowledge about MTCT and use of PMTCT**

Almost all of the respondents know that HIV transmitted from mother to child and availability of mother to child prevention medication. Most of the respondents were heard this information from media and form health professionals. Two of the respondents know that HIV was transmitted from mother to child but, they did not know how it is transmitted while one of the respondents did not know even HIV was transmitted from mother to child. A30 year’s old women expressed.

*“I didn’t believe that PMTCT really prevents MTCT because, I know mothers who were taking drugs to prevent mother to child transmission but give birth to an HIV positive child”.*

### **Counseling on fertility issues**

Most felt that discussion on sexuality ,family planning and child bearing that it will enable them to know the available reproductive options and to deiced the right decision on the their reproductive health needs. However the only issue health care providers tried to address were HIV positive women should not be pregnant and she must use condom during sexual contact.

A 32 years old woman from Kolfe sub city having two children expressed,

*“Health care provider strictly advised me not to bear a child,  
to use condoms in a regular base”.*

A twenty six years old women not having a child and planned to have two children explained,

*“Once time my counselor told me that bearing a child might affect my health  
and she gave me many condoms, after advising me to use it regularly. But,  
since I had a plan to have a child, I didn’t use the condoms and after that  
I didn’t discuss about my future plan with her”.*

## 7. Discussion

The study population, women living with HIV in the food support program areas, of Addis Ababa, appears to have reproductive history and plans similar to HIV-negative mothers. This study found that among the study subjects, (39.9%) expressed a desire to have children in the future. This will have a considerable potential risk for mother-to-child transmission of HIV.

Factors associated with child desire in the future were: younger age, not educated, not having currently alive children, partner's future child desire, having current CD4 count of  $>200\text{cell}/\text{mm}^3$  and lack of discussion about sexuality with their counselors. These factors reflect cultural, social and personal as well as HIV specific issues for women considering when planning future pregnancy<sup>(29)</sup>. The findings of these factors is similar to studies done in other areas, like studies done in Ethiopia, Lesotho, Nigeria, Brazil and U.S<sup>(14,12,38,37,31)</sup>. The proportion of respondents who had future desire to have child (39.9%) is similar to the findings of Lesotho (38.7%) and Brazil (40%)<sup>(12,37)</sup>. However, this study is lower than those reported in Northern Nigeria (64.4%), Addis Ababa (44.7%) and SNNPR (43.5%)<sup>(14,15)</sup> but it was higher than the proportion of women living with HIV that were desired of future child in Bair Dar (18.2%) and USA (29%)<sup>(22,29)</sup>. The lower proportion in the present study compared with the Addis Ababa, SNNPR and Nigeria studies might be attributed to increased awareness of women due to the massive and robust comprehensive HIV/AIDS interventions going on in the country in the last 5years and behavioral change through time<sup>(24)</sup> besides, cultural differences with Nigeria.

The higher proportion of child desire in the present studies compared to USA can be explained by their socioeconomic differences but with finding of Bahir Dar, the present study was done in an organization with setting providing only food support missing other HIV/AIDS interventions. In the present study among the socio-demographic variables, age and educational status of respondents are important factors significantly associated with child desire. As age increases the desire to have children in the future declines. This is similar to studies done in Addis Ababa, SNNPR, Bahir Dar and USA<sup>(14,15,22,29)</sup>. This might be attributed to the expected norms of most mothers that they would prefer and finish child births at earlier ages of their reproductive time or respondents might already have attained their family size at their older age.

Educational status was also significantly affecting future child desire of HIV positive women. Women with primary and secondary levels of education were less likely to have child desire in

the future than mothers who were illiterate and with no formal education. This result is in line with EDHS; education influences positively the health seeking behavior of women due to an increased awareness which contributes and empowers women decision capacity for their health<sup>(21)</sup>.

Surprisingly, marital status of HIV positive women did not significantly affect their child desire; this is in line with other studies done in Nigeria. But this variable is a very detrimental factor of fertility in EDHS and other studies in Ethiopia, Lesotho and USA<sup>(21,14,15,12,31)</sup>. In the present study 47.3% of respondents were divorced/widowed this may be due to death of their partners or divorced as a reason of their HIV infection which leads them for long time widowhood, as it has its own problem to remarry another man because of many reasons. This has an implication these women need special attention in their sexuality and other reproductive health issues.

Absence of child/children in women living with HIV was significantly associated to have future child desire. EDHS also revealed that 72% of these women not having children have strong desire to have children. The qualitative result of this study supports this idea<sup>(21)</sup>. Other studies also support this evidence<sup>(14,15,22,29,38)</sup>. This shows that being HIV positive did not remove their reproductive desires and diversities. Reasons attributed may be strong desire to experience parenthood mediated by prevailing social and cultural norms besides raising a child was considered as a way to give purpose to life and to regain their sense of womanhood and sexuality. In spite of these findings, the present study indicated that of these mothers with one or more children, 55.3% of them desired to have more children for the future. This finding is supported by the qualitative results and is also in line with study done in Northern Nigeria<sup>(38)</sup>. This is due to the fact that mothers want to enhance sisterhood or brotherhood of their child and having more children is considered as a big asset in a family.

Women with partners showing the interest to have future child are also associated with desire to have children in the future. Among women who were married or had a heterosexual partner and having future child desire, 63.1% of respondents also had partner who desire children in the future. This result is higher than the study done in U.S where 46 % of women have partner who desire children in the future and this is in agreement with the result of qualitative study, women having future child desire were to satisfy their partner's need, to become a biological father.<sup>(31)</sup> This may be due to lack of decision power and decreased power of women to challenge their partner in Ethiopian setup. However it needs further exploration whether women living with HIV influenced by their partners to bear a child or not.

Another variable identified to predict future child desire was number of current CD4 count. 53% of the respondents whose CD4 count > than 200cell/mm<sup>3</sup> were more likely to have future child desire than those CD4 count ≤ 200cell/mm<sup>3</sup>. This is similar to a study done in USA (57.9%) (29). Having a higher CD4 count will indicate improved health status of the HIV positive women. These would contribute to plan future pregnancy. HIV positive women who had improved their health condition feel more comfortable to consider their physical and emotional challenges of pregnancy and new motherhood. Moreover those with higher CD4 count might have good state of emotional health so that their sexual and social demand might be enhanced. Hence they would have a plan to have a future child. This idea was supported by the qualitative study. However, this study revealed no association between future child desire and HIV diagnosis as well as period of ART follow-up. This has similar findings with that in USA (29). Respondents who had no discussion about reproductive health with their counselors are having strong association to desire a child in the future than those who had a discussion with their counselors. This was in line with the findings of Addis Ababa and USA (14,29). It is obvious that those who got proper counseling guide informed decision making in their life with the disease. The study also showed that 67.3% of the study population had ever used at least one method of family planning before HIV diagnosis and 44.1% after HIV diagnosis. This decrease in proportion could be due to the reaction and behavioral change of the mothers to their sero positive result and lead to decrease uptake of family planning services. The study indicated that 66% of the participants were not using family planning currently. Out of which 79.5 % have reported they will not be using family planning even for the future. Individuals in such situation are less likely to take the necessary care to protect their partners or themselves from HIV infection and re-infection, or to prevent vertical transmission of HIV as well as to prevent unintended pregnancy. Surprisingly, 20.6% of women who show a desire to have children, explained want to have two years later. This indicates that they want to space their births. The most commonly preferred method of family planning before HIV diagnosis was condoms, pills and Injectable constitute 6.6%, 57.4% and 51.6 % respectively. After diagnosis, condom utilization has dramatically increased to 47.3%. This may be related to the promotion of condoms by different actors such as religious leaders and behavioral change on condom utilization as a dual method to protect from unwanted pregnancy and HIV/STI transmission. This was in line with other studies in Ethiopia and Nigeria (22,38).

Among these who exercise sex during the last six months, 44% of respondents mentioned condom were not ever used or used it irregularly. In this case according to WHO recommendation, condom protective value is higher if it is used 100% regularly <sup>(32)</sup>. Reasons mentioned include, desire to have children (46.6%) and their partners didn't like it (53.7%).

With respect to mother to child transmission of HIV, 52.9% of respondents had the belief of MTCT of HIV was 50% without medical treatment and had a desire to have a child. The result is in agreement with the qualitative study result. This could be due to lack of HIV positive women's universal knowledge regarding mother to child HIV transmission.

Concerning counseling, 53.7% had never conducted a discussion on reproductive health matters like fertility desire, family planning and sexuality with their care provider/counselor and they had more desire to have children in the future. However, 49.6% have reported as their reason for current family planning method choice and 64.9% of condom use due to health professional's advice which shows contradictory result. This might be the advice given by the counselors was biased and did not address the feelings of woman living with HIV which may discourage them to have free and open discussion. The qualitative result was also in line with this result.

This research has shown these women having future desire 63% of their partner also like to have. However, it couldn't indicate whether this is due to mutual understanding or due to the influence by their partners. Therefore, this needs further exploration.

## **8. Strength and limitation of the study**

### ***8.1. Strength***

Utilization of both quantitative and qualitative methods aiming to supplement the result with missing ideas and to explore more issues that were not addressed by quantitative survey is one of the strengths of the study. Besides the study tried to address most vulnerable groups (women) reproductive health need which may help to give insight for further studies done on the gender specific reproductive health issues of people living with HIV.

### ***8.2. Limitation***

The nature of the study is cross sectional which don't allow making definite conclusion. Secondly, the study subjects did not include mothers who didn't come to the food distribution which might contribute to selection bias. Thirdly their might be also recall bias because subjects were asked to remember past events. Moreover data collectors were selected from the distribution site for data collection and this might contribute to social desirability bias. All these factors are possible limitations of the study.

## **9. Conclusion and recommendation**

### ***9.1. Conclusion***

The result of this study revealed important finding with regard to sexual and reproductive health need of women living with HIV/AIDS. The most important factors affecting future child desire of women includes age, education, having children, partner's future child desire, current CD4 count of  $>200\text{cell}/\text{mm}^3$  and discussion about sexuality with their counselors. This reflects that reproductive decisions of HIV positive women are not only affected by their HIV status but also by cultural, social and personal factors considering when planning future pregnancy.

Quite a large portion of HIV positive individuals had shown a desire to have children. Moreover, there are a large proportions who don't use contraception and who don't want to use even for the future, which indicates unmet need for reproductive health and family planning. Besides as compared to EDHS, the study indicated that HIV positive women behave similarly in many respect to uninfected women in their child bearing decisions. They have similar desire for motherhood at similar point in their lives .But the family life choice made by these women is influenced by their serostatus. Balancing these competing interests for mother hood with desire to protect vertical HIV transmission and protect children from suffering is complicated and emotionally taxing process.

### ***9.2. Recommendations***

The following recommendations are provided to address reproductive health issues of women living with HIV by level:

#### ***Policy level***

- Though there are documented polices which favor these vulnerable groups (women affected by HIV/AIDS), they lack proper monitoring of their implementation. Hence there is a need to monitor the implementation of the developed policies.
- Empowering women and enabling them to negotiate to demand reproductive health is very essential element in reaching informed decisions.

#### ***Programme level***

- Creating linkage between reproductive health service with HIV/AIDS intervention programmes,
- There is a need to develop comprehensive and integrated reproductive health services,

- Training of counselors how to approach HIV women who need a child.

*Service level*

- Reproductive counseling by care providers and counselors need to be sensitive to all the issues and concerns of HIV positive women. A client-centered approach may be most useful in counseling regarding reproductive decision making,
- Reproductive services at the ART units need to fulfill the needs and demands of women living HIV,
- Counselors should give accurate information to women living with HIV who wants childbearing on the risks of mother to child HIV transmission and insure informed decision to conceive than risk taking,
- The counseling service should emphasize on couples counseling to promote family planning use and responsible reproductive decision among partners,
- The family planning counseling should promote on consistent and proper utilization of condom and for dual protection method. Besides other contraceptive methods should also come in to discussion to provide varied options for women living with HIV,
- Appropriate information, education and communication materials and effective family planning counseling and services should be provided for women living with HIV at the clinics and other areas where HIV services are undertaken like food distribution sites.

Furthermore, additional studies should be conducted in the city and in other parts of the country including from different community group's perspectives to come up with more representative findings.

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## 11.ANNEXSES

**Annex1:** Addis Ababa University Faculty of Medicine Department of Community Health, individual information sheet for the study of magnitude and factors affecting fertility desire of women living with HIV in Addis Ababa City Administration.

### INFORMATION SHEET

Good morning/afternoon, my name is\_\_\_\_\_ and I am health professional working in\_\_\_\_\_. I am also a part of a team carrying out study on magnitude and factors affecting fertility desire of women living with HIV among women registered for food support in the sub cities of Addis Ababa city administration. The purpose of this study is to identify the magnitude and possible factors contributing to fertility need of women living with HIV and who are low socioeconomic status. We believe that the study findings will help in order to improve health care service and fulfill reproductive health need of women living with HIV and low socioeconomic status in Addis Ababa city administration.

If you participate in the study, it will not take us more than 15 minutes. Your name will not be written on this form, thus the information you provide will not be known to others. There is no risk involved in participating in the study. Your participation is purely voluntary, and you can withdraw any time after you get involved in the study without compromising the services you ought to get from any place you want to get it. However, we hope that you will participate in this study since your views are important.

Do you have any questions?

If you have any question you can contact the principal investigator at any time convenient for you using the following address:

**Name of Principal Investigator-**

Almaz Hadgu Debesay

**Address-**

Addis Ababa, Ethiopia

Cell phone: 09-13-33-20-56

E-mail:almazhit@yahoo.co

**For you need more information please contact: Addis Ababa University Faculty of Medicine Institutional Review Board.(FOM IRB)**

**ADDRESS \_ Tel 0115538734, POBOX 9086, E.mail [aaumfirb@yahoo.com](mailto:aaumfirb@yahoo.com)**

**Annex 2:** Addis Ababa University Faculty of Medicine Department of Community Health, Individual consent form for the study of magnitude and factors affecting fertility desire of women living with HIV in Addis Ababa city Administration.

### Informed Consent Form

You have been already briefly informed about the study and clearly understand the objective. Now please tell me if you agree to participate in the interview.

The Participant:

1. Agreed
2. Did not agree

	→ End the interview

Signature of interviewer which indicates that the respondent has consented to participate in the study:-

Interviewer Name: \_\_\_\_\_-Signature\_\_\_\_\_ 2010.  
Supervisor Name: \_\_\_\_\_ Signature\_\_\_\_\_ 2010

**Name of Principal Investigator-  
Address-**

Almaz Hadgu Debesay  
Addis Ababa, Ethiopia  
Cell phone: 09-13-33-20-56  
E-mail:almazhit@yahoo.co

**If you need more information please contact: Addis Ababa University Faculty of  
Medicine Institutional Review Board.(FOM IRB)**

**ADDRESS \_ Tel 0115538734, POBOX 9086, E.mail aaumfirb@yahoo.com**

**Annex 3: Addis Ababa University Faculty of Medicine Department of Community Health.**

Structured questionnaire on magnitude and factors affecting fertility desire of women living with HIV in Addis Ababa City Administration,

**PART I – Socio -Demographic characteristics,**

NO	Questions	Categories
101	How old are you?	Years (age in completed years)_____
102	What is your religion?	Orthodox_____ Catholic_____ Muslim____ Protestant_____ Others (specify) _____
104	What is the highest Educational level you completed?	____Grade completed, Able to read and write____, Unable to read & write _____, No response____ Other specify_____
105	What Ethnic group do you belong to?	Oromo____ Amhara ____ Tigray ____ Gurage ____ Other (Specify)_____
106	What is your Current Marital / relation ship status?	Married_____ Single_____ Widowed____ Divorced____ Separated_____ No response____
107	What is your total Monthly in come? Eth.Birr	No income____ Don't know____ No response_____ Other (specify)_____
108	What is your current occupation?	Unemployed_____ Student _____ House wife_____ House servant_____ Daily laborer_____ Pity thread_____ Sex worker_____ Government employ_____ Private employ_____

**PART II-Information on child desire,**

109	How many live births have you had in your life?	_____Live births. I did not give birth at all____. I do not have any live birth____ No response____ Other (specify)_____
110	How many alive children do you have now?	No of alive children_ ___I do not have children at all ____ I do not have alive children____ No response____ Other (specify)_____
111	Would you like to have children in the future?	Yes___ No___ Don't know___ No response__ Other (specify)_____
112	If the answer for Q 111 yes, when do you prefer to have a child?	___months /__years Don't know__ No response ____ Other (specify)_____
113	If the answer for Q 111 yes, How many (more) children would you like to have in the future?	_____Number of children desired
		Don't know_____
		No response _____
		Other (specify)_____
114	(If the answer for question 111 no) why do you not want to have children in the future?	have desired number of children___ Fear of mother to child HIV transmission risk_____
		don't have adequate income to add another child____
		Health care providers advise not to have a child_____
		Child bearing may further compromise my/my partner health _____
		No response _____,Other (specify) _____
115	Does your husband /wife/ partner want to have a child in the future?	Yes _____, No _____,
		Don't k now _____, Don't have partner____
		No response _____, Other specify_____

**PART III –Information on contraceptive use, demand and choice**

116	Have you ever use family planning method	Yes _____ No _____ Don't remember _____ Don't know _____ No response _____ Other(specify) _____
117	If yes for Q 116 specify the method you/ Your husband used More than one answer can be used	Abstained from sex _____ Condoms _____ Pills(OCP) _____ Inject able _____ IUD _____ Implant _____ Tubal ligation(Vasectomy) _____ No response _____ Others(specify) _____
118	Have you (your partner) ever used family planning method after HIV diagnosis?	Yes _____ No _____ Don't remember _____ Don't know _____ No response _____ Other (specify) _____
119	If yes for Q 118 specify the method you /your husband used? (More than one answer can be possible)	Abstained from sex _____ Condom _____ Pill(Ocp) _____ Injectable _____ IUD _____ Implants _____ Tubalegation /Vasectomy _____ No response _____ Other (specify) _____
120	Are you/your husband/ using Family planning method currently (during the study period)?	Yes _____ No _____ I don't know _____ No response _____
121	If yes for question 120, specify the method you are using? (More than one answer can be possible)	Abstained from sex _____ Condom _____ Pill(Ocp) _____ Injectable IUD _____ Implants _____ Tubalegation /vasectomy _____ No response _____ Other (specify) _____
122	Why do you choose the current family planning method?	Health professionals advise _____ Because it suites with my health _____ From my friends experience /advise _____ Other (specify) _____
123	(If the answer for Q120 No) would you like to use family planning method in the future?	Yes _____ No _____ Don't know _____ No response _____ Other (specify) _____
124	If yes for question 123, specify the method you intend to use? (More than one answer can be possible)	Abstained from sex _____ Condom _____ Pill(Ocp) _____ Injectable _____ IUD _____ Implants _____ Tuballegation /vasectomy _____ Other (specify) _____
125	Where do you want to get the service?	At ARV treatment units _____ In government health facility (FP unit) _____ In private clinics _____ In counseling units _____ Other (specify) _____
126	If the answers for question 123no, why don't you want to use family planning?	want to have a child _____ fear that family planning drugs may create complication with ARV treatment _____ I abstained from sex _____ No response _____ Other specify _____
127	If you are using family planning methods did you disclose your serostatus to your family planning provider?	Yes _____ No _____ No response _____ Other (specify) _____
128	If the answer for question 127 no, why don't you disclose your serostatus to your family planning providers	I don't trust the providers _____ I feared stigma and discrimination _____ No response _____ Other (specify) _____

**PART IV- Information on Knowledge and Utilization on MTCT and PMTCT,**

129	Dose HIV transmit from mother to child?	Yes____ No____ Don't know____ No response____ Other (specify)____
130	IF yes when dose HIV transmissions occur from mother to child?	During pregnancy____ During labor____ Through breastfeeding ____ I don't know____ No response ____ Other (specify)____
131	Is there any medication, which may help to prevent mother to child HIV transmission?	Yes____ No____ Don't know____ No response____ Other (specify)____
132	How much do you think the risk of HIV transmission from mother to child, if the mothers do not use any preventive medication?	All children borne to infected mother acquire the infection____. About 50% children acquire the infection____. I don't now____ .I don't know the exact figure____. No response____. Other specify_____.
133	From where did you get the information about mother to child HIV transmission?	Mass media____. Health care provider____. From friends____ .Home based care givers _____.No response _____. Other (specify) _____.
134	Do you think medication provided to reduce mother to child HIV transmission actually reduce the transmission?	Yes____. No____. Don't know____. No response _____.Other (specify)_____.

**PART V-Information on HIV /AIDS and treatment conditions,**

135	How many years / months since HIV diagnosis?	_____Months or _____years Don't remember____ No response____ Other (specify) _____
136	Did you start Receiving ARV treatment?	Yes____ No____ No response____ Other (specify)____
137	If the answer Q136 is yes when did you start receiving ARV treatment?	Before____ month or____ years Don't remember____ No response_____
138	Who cover the cost of the Drugs?	My self____ Free access from the Government____ Covered by care and support NGO's_____ My parents/ Relatives____ No Response____ Other (specify)_____
139	How is your over all health condition after you starts receiving ARVT?	Improved____ No change _____ Deteriorated____ No Response____ Other (specify) _____
140	Do you know your CD4 count?	Yes____ No____ No response____
141	If answer Q 140 is yes, How much is your recent CD4,count	_____
142	How long did you attend in this ARV treatment unit?	_____Months an____-years Don't remember____ No response____Other specify _____
143	Did you get support from different community groups?	Yes____ No____ No Response____ Other specify _____
144	From where did you get the support?	Relatives/neighbors and friends____ NGO's_____ FBO's____ other(specify
145	If yes for question 142, What kind of support did you get?	Money _____, HBC (Home Based Care) ____ Counseling_____, Food/ Health care _____ No Response____ Other (specify) _____
146	Did Your counselor /ART provider discuss about sexuality, child bearing and family planning?	Yes _____ No _____ No response_____
157	Would you like to discuss with your counselor/ART provider about sexuality, child bearing and FP?	Yes____ No ____ Don't know ____ No response____
148	If yes for question 145, did your counselor/ART provider adequately cover issues like child bearing, sexuality and family planning	Yes _____ No____ Don't know _____ No response _____ Other specify _____

**PART VI – Information on reproductive characteristics,**

149	Have you had sexual Intercourse In the past six months?	Yes_____ No_____ No response____ Other (specify)_____
150	(If yes for Q 148) Have you used condom?	Yes_____ No _____ I don't remember____ No response____ Other (specify)_____
151	If yes for Q149 how often?	Always_____ Some times____ No response ____ Other (specify)_____
152	If the answer for question 149 yes, why do you used condom?	To prevent pregnancy_____ Because my partner HIV status is negative____ Health care providers advised me to use condom__ No response____ Other (specify)_____
153	If the answer for question 149 no, why didn't you used condom?	I want to have children____ My partner did not like it____ No response____ Other (specify) _____
154	Did you disclose your serostatus (positivity for HIV) to Your partner?	Yes___ No___ No partner___ No response ___ Other (specify)_____
155	Dose your partner had HIV test?	Yes_____ No_____ No partner_____ I don't know____ No response____ Other (specify)_____
156	What was his/her test result?	Positive____ Negative____ I don't now_____ No response ____ Other (specify)_____

**Thank you!**

***Annex 4: Focus group discussion***

**Topics for discussion:**

**Part I - Socio demographic information**

- How old are you (age in completed years)
- What is your marital status?
- What is your current occupation?
- What is your Ethnicity?
- What is your Religion?
- What is your total Monthly income? -----Eth. Birr.
- What is the highest educational level you completed? -----

**Part II: Information on child desire and in reproductive characteristics**

- Let us discuss how many children did you have currently?
  - Their age -----
  - Their sex -----
  - Their HIV/status-----
- Let us again discuss how do we see/appreciate the important of having a child or having more? Why?
  - How your partner will be feeling towards to have or not to have (more) children?
  - What effect, if any, does HIV have on your desire to have or not to have (More) children?
  - How many more children would you like to have? Why?
  - How important are children in your community?

**Part III: Knowledge about family planning, MTCT and utilization of PMTCT**

- Have you discussed about fertility, sexuality and family planning with your counselor or ART provider? If yes:
- What lessons have you captured from the discussion that you held with your counselor about fertility, sexuality and family planning?

**Part IV: Information on family planning choice**

-Would you explain the importance of family planning on your behalf and your partner? Why?

-What method of family planning do you want to use /are using?

-How and why do you choose the method you want to use/you are using?

-Have you ever discussed about your serostatus to your family planning provider? Why?

-Have you ever discuses about your serostatus to your partner /your family?

-Do you want to discuss about fertility, sexuality and family planning with your counselor and ART provider? Why?

**NOTE:-For all questions probe as needed for more information.**

**Thank you!**

**እዝል 5: በአዲስ አበባ ዩንቨርሲቲ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩ በነጭቸው ዝቅተኛ ደረጃ ላይ በሚገኙ ሴቶች የመወለድ ፍላጎታቸውን ለማግኘት ቃለ መጠይቅ በማድረግ የግለሰቦችን ፈቃደኝነት መጠየቂያ ፎርም።**

ስሜ \_\_\_\_\_ ይባላል። እኔ \_\_\_\_\_ ከአዲስ አበባ ዩንቨርሲቲ የጥናት ቡድን ጋር አብራ እየሰራሁ ነው። አሁን በዚህ በ \_\_\_\_\_ ክ/ከተማ ከኤች አይ ቪ ቫይረስ ጋር ለሚኖሩና በነጭቸው ዝቅተኛ ደረጃ ላይ የሚገኙ ሴቶች የመወለድ ፍላጎታቸውን ለማግኘት ቃለ መጠይቅ ለማድረግ ነው። ይህ ጥናት ከኤች አይ ቪ ጋር ለሚኖሩና ዝቅተኛ ደረጃ ላይ የሚገኙ ሴቶች የስነ ተዋልዶ ጤና አገልግሎት አሰጣጥ ለውጥ ያመጣል ብለን እናምናለን። ስምዎ በዚህ መጠይቅ ውስጥ የማይጠቀስ መሆኑንና በቃለ መጠይቁ የሚሰጡንን መረጃ ሁሉ በሚስጥር ተይዞ ለጥናት አገልግሎት ብቻ የሚውል መሆኑን ላረጋግጥልዎ እወዳለሁ። እርስዎ በዚህ ጥናት ላይ የመሳተፍ ፣ያለመሳተፍ ወይንም በማንኛውም ወቅት ቃለ መጠይቁን የማቋረጥ ሙሉ መብት አለዎት። ነገር ግን እርስዎ በጥናቱ ተሳትፈው የሚሰጡን መረጃ ጥናቱን ውጤታማ ለማድረግ እና ከኤች አይ ቪ ኤድስ ቫይረስ ጋር ለሚኖሩና በነጭ ዝቅተኛ ደረጃ ላይ የሚገኙ ሴቶች የስነ ተዋልዶ ጤና አገልግሎት አሰጣጥ ላይ ለውጥ ለማምጣት ከፍተኛ ጠቀሜታ አለው።

ይህን በሚመለከት ጥያቄ አለዎት ?

ጥያቄ ካለዎት በማንኛውም ጊዜ ለጥናቱ ተመራማሪ ጥያቄዎን መጠየቅ ይችላሉ ?

**አድራሻ**

- የተመራማሪው ስም- አልማዝ ሐድጉ ደበሳይ
- አዲስ አበባ - ሞባይል ቁጥር- 0913- 33 20 56
- E-mail:- [almazhit@yahoo.com](mailto:almazhit@yahoo.com)

**ለተጨማሪ-ማበራርያ-የአዲስአበባ-ዩንቨርሲቲ-የህክምናትምህርት-ክፍል- ይጠይቁ**  
**አድራሻ**

0115538734 9086 [aaumfirb@yahoo.com](mailto:aaumfirb@yahoo.com)

**እዝል 6: በአዲስ አበባ ዩንቨርሲቲ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች አይ ቪ ቫይረስ ጋር የሚኖሩና በኑሮአች ዝቅተኛ ደረጃ ላይ ለሚገኙ ሴቶች የመውለድ ፍላጎታችን ለማጥናት ቃለ መጠይቅ ለማድረግ የግለሰቦች ውል መዋዋያ ፎርም።**

**የጥናቱ አላማና የሚኖረው ጥቅም በአጭሩ የተረዱ ይመስለኛል።**

**በጥናቱ ለመሳተፍ ፍቃደኛ ነዎት ?**

- 1. አዎ \_\_\_\_\_
- 2. አይደለም \_\_\_\_\_

መልሱ አዎን ከሆነ አመስግነው ቃለ መጠይቁን ያካሂዱ፡

መልሱ አይደለም ከሆነ አመስግነው ወደ ሌላ ተጠያቂ ይለፉ፡

ግለሰቡን በመጠይቁ ለማሳተፍ ምንም ዓይነት ማስገደጃ ወይም ጫና ማድረግ የለብዎትም።

የጠያቂው ፊርማ ተጠያቂው ጥናቱ ላይ ለመሳተፍ ፍቃደኛ መሆኑን ያመለክታል፡

የጠያቂው ኮድ -----ስም ----- ፊርማ-----

ቃለ መጠይቅ የተካሄደበት ቀን -----ወር-----2002 ዓ.ም

**አድራሻ**

- የተመራማሪው ስም- አልማዝ ሐድጉ ደበሳይ
- አዲስ አበባ - ሞባይል ቁጥር- 0913- 33 20 56
- E-mail:- [almazhit@yahoo.com](mailto:almazhit@yahoo.com)

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**አድራሻ**

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**እዝል 7: በአዲስ አበባ ዩንቨርሲቲ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩና ዝቅተኛ የኑሮ ደረጃ ያላቸው ሴቶች የመውለድ ፍላጎታቸውን ለማጥናት የተዘጋጀ መጠይቅ፡፡,2002**

**ክፍል 1:-መረጃ ስለ ማህበራዊ ሁኔታ:**

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ዝርዝሮች
101	አድሜዎ ስንት ነው?	----- አመት (እድሜ በሙሉ አመት ይገለጹ)
102	ሐይማኖትዎ ምንድነው?	ኦርቶዶክስ _____ ካቶሊክ _____ ሙስሊም _____ ፕሮቴስታንት _____ ሌላ ካለ ይገለጹ _____
103	ተምረው ያጠናቀቁት ከፍተኛው የትምህርት ደረጃ ስንት ነው?	_____ ክፍል ያጠናቀቁች ማብብና መፃፍ የሚችሉ _____ ማንበብና መፃፍ የማይችሉ _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
104	ብሔርዎ/ዘርዎ ምንድነው?	ኦሮሞ _____ አማራ _____ ጉራጌ _____ ትግራይ _____ ሌላ ካለ ይገለጹ _____
105	በአሁኑ ወቅት የጋብቻ ሁኔታዎ እንዴት ነው?	ያገቡ _____ ያላገቡ _____ ባል የሞተባቸው _____ የተፋቱ _____ ያልተጋቡ ጥንዶች/የፆጸ ጓደኛ ያላቸው _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
106	ጠቅላላ የወር ገቢዎ ስንት ነው?	_____ የኢት. ብር ገቢ የሌለው _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
107	በአሁኑ ወቅት ያሉበት የስራ አይነት ምንድነው?	ስራ የሌለው _____ ተማሪ _____ የቤት እመቤት _____ የቤት ሰራተኛ _____ የቀን ሰራተኛ _____ ካጋይ _____ የቡና ቤት ሰራተኛ _____

		የመንግስት ስራተኛ _____ የግል ስራተኛ _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
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**ክፍል 2:-መረጃ ስለ መውለድ ፍላጎት:**

109	በእድሜዎ ምን ያህል ልጅ በህይወት ወልደዋል?	_____ በህይወት የተወለዱ ልጅ ቁጥር ምንም ልጅ አልወለድኩም _____ ምንም በህይወት ያለ ልጅ አልወለድኩም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
110	በአሁኑ ጊዜ ምን ያህል በህይወት ያሉ ልጆች አልዎት?	_____ በህይወት ያሉ የልጆች ቁጥር ምንም ልጅ አልወለድኩም _____ ምንም በህይወት ያለ ልጅ የለኝም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
111	ለወደፊቱ ልጅ እንዲኖርዎት ይፈልጋሉ?	አዎን _____ አልፈልግም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
112	ለጥያቄ ቁጥር 111 መልሱ አዎን ከሆነ መቼ ነው ልጅ መውለድ የሚፈልጉት?	ከ _____ ወራት ወይም _____ -አመት በኋላ አላውቅም-- _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
113	ለጥያቄ ቁጥር 111 መልሱ አዎን ከሆነ ምን ያህል (ተጨማሪ) ልጅ እንዲኖርዎ ይፈልጋሉ?	የልጆች ቁጥር _____ ምንም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
114	ለጥያቄ ቁጥር 111 መልሱ አልፈልግም ከሆነ ለምንድነው (ተጨማሪ) ልጅ መውለድ የማይፈልጉት?	የምፈልገውን ያህል ልጅ ስላለኝ _____ የኤች. አይ.ቪ. ኤድስ ከናት ወደ ልጅ መተላለፍን ፈርቼ _____ ያለኝ የገቢ መጠን ተጨማሪ ልጅ ለማሳደግ ስለማይበቃኝ _____ የጤና ባለሙያዎች ልጅ መውለድ እንደሌለብኝ ስለሚመክሩኝ _____ ልጅ መውለድ የጤናዬን ሁኔታ ያባብሰዋል ብዬ ፈርቼ _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
115	የትዳር /የጾታ/ ጓደኛዎ ልጅ እንዲኖራቸው ይፈልጋሉ?	አዎን _____ አይፈልግም _____ አላውቅም _____ የትዳር/የጾታ ጓደኛ የለኝም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____

**ክፍል 3- መረጃ ስለ ቤተሰብ ምጣኔ አጠባበቅ ምርጫና ፍላጎት:**

116	የኤች .አይ.ቪ ኤድስ የደም ምርመራ ውጤትዎን ከማወቅዎ በፊት እርስዎ የትዳር /የጾታ/ ጓደኛዎ የቤተሰብ ምጣኔ አገልግሎት ተጠቅመው ያውቃሉ?	አዎን _____ አልተጠቀምኩ _____ አላስታውስም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፁ- _____
117	ለጥያቄ ቁጥር 116 መልሱ አዎን ከሆነ የትኛውን የወሊድ መከላከያ አይነት ነበር የተጠቀሙት? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ) _____ ኮንዶም _____ የወሊድ መቆጣጠሪያ እንክብል _____ በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ _____ በማህፀን የሚገባ የወሊድ መቆጣጠሪያ _____ በክንድ የሚቀበር _____
118	የኤች አይ ቪ ኤድስ የደም ምርመራ ውጤትዎን ካወቁ በኋላ እርስዎ /የትዳር/የጾታ ጓደኛዎ የቤተሰብ ምጣኔ አገልግሎት ተጠቅመው ያውቃሉ?	አዎን _____ አልተጠቀምኩም _____ አላስታውስም - _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፁ - _____
119	ለጥያቄ 118 መልሱ አዎን ከሆነ የትኛውን የወሊድ መከላከያ አይነት ነበር የተጠቀሙት? (ከአንድ መልስ በላይ መመለስ ይቻላል )	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ) _____ ኮንዶም _____ የወሊድ መቆጣጠሪያ እንክብል _____ በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ _____ በማህፀን የሚገባ የወሊድ መቆጣጠሪያ _____ በክንድ የሚቀበር የወሊድ መቆጣጠሪያ _____ መሃፀን ማስቋጠር /የዘር ፍሬን ማስቋጠር _____ መልስ የለም _____ ሌላ ካለ ይገለፁ _____
120	አሁን ጥናቱ በሚካሄድበት ወቅት እርስዎ /የትዳር/የጾታ ጓደኛዎ የወሊድ መቆጣጠሪያ ይጠቀማሉ (እየተጠቀሙ ነው)?	አዎን _____ አልጠቀምም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፁ _____
121	ለጥያቄ 120 መልሱ አዎን ከሆነ የትኛውን የወሊድ መቆጣጠሪያ አይነት ነው እየተጠቀሙ ያሉት? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ) _____ ኮንዶም _____ የወሊድ መቆጣጠሪያ እንክብል _____ በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ _____ በማህፀን የሚገባ የወሊድ መቆጣጠሪያ _____ በክንድ የሚቀበር የወሊድ መቆጣጠሪያ _____ መሃፀን ማስቋጠር /የዘር ፍሬን ማስቋጠር _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
122	ለምን አሁን በመጠቀም ላይ ያሉትን የወሊድ	የጤና ባለሙያዎች እንድትጠቀሙ ስለ መከራኝ _____

	መቆጣጠሪ መረጡ ?	ለጤናዬ ይስማማኛል ብዬ _____ ንደኞቼ ሲጠቀሙበት አይቼ /በንደኞቼ ምክር _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
123	ለጥያቄ 120 መልሱ አልጠቀምም ከሆነ ለወደፊት የወሊድ መቆጣጠሪ መጠቀም ይፈልጋሉ?	አዎን _____ አልፈልግም- _____ አላውቅም _____ መልስ የለም _____ ሌላ ላለ ይገለጽ _____
124	ለጥያቄ 123 መልሱ አዎን ከሆነ ለመጠቀም የሚፈልጉትን የወሊድ መቆጣጠሪያ አይነት ይግለጹ? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ) _____ ኮንዶም _____ የወሊድ መቆጣጠሪያ እንክብል _____ በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ _____ በማህጸን የሚቀበር የወሊድ መቆጣጠሪያ _____ በክንድ የሚቀበር የወሊድ መቆጣጠሪያ _____ ማህጸን ማስቋጠር/የዘር ፍሬን ማስቋጠር _____ መልስ የለም _____ ሌላ ካለ ይግለጹ _____
125	የቤተሰብ ምጣኔ አገልግሎቱን የት ማግኘት ይፈልጋሉ?	በፀረ ኤች አይ ቪ ኤድስ ህክምና መስጫ ጣቢያ _____ በመንግስት የጤና ተቋማት የቤተሰብ ምጣኔ አገልግሎት መስጫ ጣቢያ _____ በግል የጤና ተቋማት _____ በምክክር አገልግሎት መስጫ ጣቢያ _____ ሌላ ካለ ይገለጹ _____
126	ለጥያቄ ቁጥር 123 መልሱ አልጠቀምም ከሆነ ለምንድን ነው የቤተሰብ ምጣኔ አገልግሎት የማይጠቀሙት?	ልጅ እንዲኖረኝ ስለምፈልግ _____ የወሊድ መቆጣጠሪያ መድሃኒቶች ከፀረ ኤች አይ ቪ ኤድስ መድሃኒቶች ጋር አይስማሙም ብዬ ፈርቼ _____ ከግብረ ስጋ ግንኙነት ስለ ታቀብኩ _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
127	የቤተሰብ ምጣኔ የሚጠቀሙ ከሆነ የኤች አይ ቪ ኤድስ የደም ምርመራ ውጤትዎን ለቤተሰብ ምጣኔ አገልግሎት ሰጪ ሀኪምዎ አሳውቀዋል ?	አዎን _____ አላሳውቅኩም _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____
128	ለጥያቄ ቁጥር 127 መልሱ አላሳውቅኩም ከሆነ የኤች አይ ቪ ኤድስ የደም ምርመራ ውጤትዎን ለምን አላሳውቁም?	ስለማላምናቸው _____ ያገሉኛል ብዬ ፈርቼ _____ መልስ የለም _____ ሌላ ካለ ይገለጹ _____

**ክፍል 4:-መረጃ ከእናት ወደ ልጅ የኤች አይ ቪ ኤድስ ስርጭት እና መከላከልን በተመለከተ እውቀትና አመለካከት:**

129	ኤች. አይ. ቪ. ኤድስ ከናት ወደ ልጅ ይተላለፋል ?	አዎን - _____ አይተላለፍም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
130	ለጥያቄ 129 መልሱ አዎን ከሆነ መቼ /በምን ጊዜ/ ነው የኤች አይ ቪ ኤድስ ከእናት ወደ ልጅ የሚተላለፈው? (ከአንድ መልስ በላይ መመለስ ይቻላል)	በእርግዝና ወቅት _____ በወሊድ ጊዜ _____ ጡት በማጥባት ጊዜ _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
131	የኤች አይ ቪ ኤድስ ቫይረስ ከእናት ወደ ልጅ እንዳይተላለፍ ለማድረግ የሚረዳ መድሃኒት (ህክምና) አለ ?	አዎን _____ የለም _____ አላሳውቅኩም- _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
132	በኤች አይ ቪ የተያዘች እናት ምንም መከላከያ መድሃኒት ሳትጠቀም ቫይረሱን ለልጅዋ የማያስተላልፍ እድል ምን ያህል ነው ብለው ያስባሉ ?	በኤች.አይ.ቪ. የተያዘች እናት የምትወልዳቸው ልጆች በሙሉ በቫይረሱ ይጠቃሉ _____ ከምትወልዳቸው ልጆች ግማሽ ያህሉ በቫይረሱ ይጠቃሉ _____ አላውቅም _____ ምን ያህል እንደሆነ አላውቅም ግን ይተላለፋል _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
133	የኤች አይ ቪ ኤድስ ከናት ወደ ልጅ መተላለፍን በተመለከተ መረጃ ከየት ነው የሚያገኙት ?	ከመገናኛ ብዙሃን _____ ከጤና ባለሙያዎች _____ ከቤት ለቤት እንክብካቤ ሰጪዎች _____ ከንደኞቹ _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
134	ከእናት ወደ ልጅ የኤች አይ ቪ ኤድስ ቫይረስ እንዳይተላለፍ ለማድረግ የሚደረገው ህክምና የኤች አይ ቪ ኤድስ ቫይረስ ከእናት ወደ ልጅ መተላለፍን በእርግጠኝነት ይቀንሳል ብለው ያምናሉ ?	አዎን _____ አላምንም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____

**ክፍል 5:- ስለ ኤች አይ ቪ ኤድስ እና የህክምና ሁኔታ መረጃ:**

135	የኤች አይ ቪ ኤድስ ቫይረስ እንዳለብዎ ተመርምረው ካወቁ ምን ያህል ጊዜ ሆንዎት?	_____ ወር _____ አመት አላስታውስም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
136	የፀረ ኤች አይ ቪ ኤድስ መድሃኒት መጠቀም ጀምረዋል ?	አዎን _____ አልጀመርኩም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
137	ለጥያቄ 136 መልሱ አዎን ከሆነ መቼ ነው የፀረ ኤች አይ ቪ ኤድስ መድሃኒት መጠቀም የጀመሩት?	ከ _____ ወራት _____ አመት በፊት አላስታውስም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
138	የመድሃኒቱን ዋጋ ማነው የሚሸፍነው?	እኔ ራሴ _____ ከመንግስት በነፃ የሚታደል _____ በእንክብካቤና ድጋፍ ሰጪ ድርጅቶች _____ ከቤተሰቦቼ ዘመዶቼ _____ ሌላ ካለ ይገለጽ _____
139	በእርስዎ አመለካከት /ምዘና የፀረ ኤች አይ ቪ ኤድስ መድሃኒት መጠቀም ከጀመሩ ጀምሮ በአጠቃላይ የጤናዎ ሁኔታ እንዴት ነው?	ተሻሻሎታል _____ ምንም ለውጥ የለውም _____ እየተባባሰ ነው _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
140	የቅርብ ጊዜ CD4 መጠንዎ ስንት ነው?	_____ በቁጥር ይገለፅ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
141	በዚህ የፀረ ኤች.አይ.ቪ ኤድስ ህክምና መስጫ ጣቢያ ክትትል ሲያደርጉ ስንት ጊዜ ሆነዎት ?	_____ ወር _____ አመት አላስታውስም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
142	ከተለያዩ የህብረተሰብ ክፍሎች ድጋፍ ይደረግሎታል?	አዎን _____ አይደረግልኝም _____ መልስ የለም _____ ሌላ ካለ ይገለፅ _____
143	ለጥያቄ 142 መልሱ አዎን ከሆነ ድጋፉን ከየት ነው የሚያገኙት?	ከዘመዶቼ _____ መንግስታዊ ክልሆኑ ተቋማት _____ መንግስታዊ ክልሆኑ ተቋማት- _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____

144	ምን አይነት ድጋፍ ነው የሚያገኙት?	የገንዘብ _____ የቤት ውስጥ እንክብካቤ- _____ የምክር _____ የምግብና የጤና አገልግሎት _____ መልስ የለም- _____ ሌላ ካለ ይገለጽ- _____
145	ከአማካሪዎ/ ከፀረ ኤች.አይ.ቪ. ኤድስ ህክምና ሰጭ ሃኪምዎ ጋር ስለ ልጅ መውለድ እና የቤተሰብምጣኔ አገልግሎት ተወያይተው ያውቃሉ?	አዎን _____ አላውቀም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ- _____
146	ከአማካሪዎ/ ከፀረ ኤች.አይ.ቪ. ኤድስ ህክምና ሰጭ ሃኪምዎ ጋር ስለ ልጅ መውለድ እና የቤተሰብ ምጣኔ አገልግሎት መወያየት ይፈልጋሉ?	አዎን _____ አልፈልግም _____ አላውቅም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____
147	ለጥያቄ ቁጥር 145 መልሱ አዎን ከሆነ ከአማካሪዎ ጋር ስለ ልጅ መውለድና የቤተሰብ ምጣኔ አገልግሎት ጉዳዮች ላይ የሚያደርጉት ውይይት በቂ ነው?	አዎን _____ አይደለም _____ አላውቅም _____ መልስ የለም- _____ ሌላ ካለ ይገለጽ- _____

**ክፍል 6:-መረጃ ስለ ስነ ተዋልዶ ሁኔታ:**

148	ባለፉት ስድስት ወራት የግብረ ስጋ ግንኙነት አድርገው ያውቃሉ?	አዎን _____ አላደረሱም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ- _____
149	ኮንዶም ተጠቅመው ነበር?	አዎን _____ አልተጠቀምኩም _____ አላስታውስም- _____ መልስ የለም _____ ሌላ ካለ ይገለጽ _____

150	አዎን ካሉ ምን ያህል ጊዜ?	ሁልጊዜ- _____ አንዳንድ ጊዜ _____ መልስ የለም _____ ሌላ ካለ ይገለጽ- _____
151	ለጥያቄ ቁጥር 152 መልሱ አዎን ከሆነ ኮንደም የተጠቀሙት ለምንድነው?	እርግዝናን ለመከላከል _____ የትዳር/የጾታ ጓደኛዬ ከኤች.አይ.ቪ ቫይረስ ነፃ ስለሆነ _____ የጤና ባለሙያዎች ኮንደም እንድጠቀም ስለሚመክሩኝ- _____ መልስ የለም- _____ ሌላ ካለ ይገለጽ _____
152	ለጥያቄ ቁጥር 150 መልሱ አልተጠቀምኩም ከሆነ ለምንድነው ኮንደም ያልተጠቀሙት?	ልጅ እንዲኖረኝ ስለምፈልግ _____ የትዳር/የጾታ ጓደኛዬ መጠቀም ስለማይፈልግ _____ መልስ የለም- _____ ሌላ ካለ ይገለጽ _____
153	የኤች.አይ.ቪ ኤድስ የደም ምርመራ ውጤትዎን ለትዳር/ለጾታ ጓደኛዎ አሳወቀዋል ?	አዎን- _____ አሳወኩም- _____ የትዳር /የጾታ ጓደኛ የለኝም _____ መልስ የለም _____ ሌላ ካለ ይገለጽ- _____

154	የትዳር /የጾታ/ ጓደኛዎ የኤች.አይ.ቪ ኤድስ የደም ምርመራ አድርገዋል ?	<p>አዎን-  አላደረጉም- _____  የትዳር/የጾታ ጓደኛ የለኝም- _____  አላውቅም _____  መልስ የለም _____  ሌላ ካለ ይገለጽ _____</p>
155	ለጥያቄ 157 መልሱ አዎነም ከሆነ የኤች.አይ.ቪ ኤድስ የደም ምርመራ ውጤታቸው ምን ነበር?	<p>ፖዘቲቭ/ቫይረሱ ያለባቸው- _____  ኔጋቲቭ/ከቫይረሱ ነፃ- _____  አላውቅም- _____  መልስ የለም- _____  ሌላ ካለ ይገለጽ- _____</p>

**አመሰግናለሁ!**

**እዝል 8: በአዲስ አበባ ዩንቨርሲቲ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች አይ ቪ ቫይረስ ጋር ለሚኖሩና በጉሮ ዝቅተኛ ደረጃ ላይ ለሚገኙ ሴቶች የመውለድ ፍላጎታቸውን ለማጥናት የተዘጋጀ የውይይት መመሪያ:-**

**ክፍል አንድ:- መረጃ ስለ ማህበራዊ ሁኔታ:**

- እድሜዎት ስንት ነው? (በሙሉ አመት ይገለጽ)
- በአሁኑ ወቅት ያሉበት የጋብቻ ሁኔታ ምን ይመስላል ?
- ዘርዎ ምንድን ነው ?
- ሐይማኖትዎ ምንድን ነው ?
- ጠውላላ የወር ገቢዎ ስንት ነው ?
- ተምረው ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው ?

**ክፍል ሁለት:- መረጃ ስለ መውለድ ፍላጎት:**

1. ምን ያህል በሕይዎት ያሉ ልጆች አልዋት ?

- እድሜያቸው -----

- ያታቸው -----

- የኤች አይቪ ኤድስ የደም ምርመራ ውጤታቸው :

2. ለእርሶዎ (ተጨማሪ) ልጅ መውለድ/የመውለድ ምን ያህል አስፈላጊ ነው?

- ለምን ?

3. ኤች አይቪ የእርሶዎ ልጅ የመውለድ/ያለመውለድ ፍላጎትዎ ላይ ተፅዕኖ አለው ይላሉ?

- ምን አይነት ?

4. ለእርሶዎ የትዳር/የግብ ጋደኛ (ተጨማሪ) ልጅ መውለድ /ያለመውለድ ምን ያህል

- አስፈላጊ ነው ?

5. ምን ያህል ተጨማሪ ልጅ እንዲኖርዎት ይፈልጋሉ?

- ለምን ?

6. ልጅ መውለድና ያለመውለድ እርሶዎ ባሉበት ህብረተሰብ ውስጥ ምን ያህል አስፈላጊ ነው?

7. ኤች አይቪ ኤድስ እርሶዎ በሚኖሩበት ማህበረሰብ እራስዎ ሊኖርዎ ስለሚገባው የልጅ ቁጥር የመውለድ ጊዜ ያለውን አመለካከት ቀይሮታል ብለው ያምናሉ ?

**ክፍል ሦስት :- መረጃ ስለ ኤች አይ ቪ ከእናት ወደ ልጅ የመተላለፍ የመከላከልና ስለቤተሰብ ምጣኔ ያላቸው ዕውቀት የሚመለከት:**

1. ከጤና ባለሙያው ወይም የምክር አገልግሎት ከሚሰጡት ስለ ኤች አይ ቪ በእርግዝና ወቅትም ሆነ ከወሊድ በኋላ እንዴት እንደሚተላለፍ በሚገባ ተወያይተው ያውቃሉ ? አዎ ካሉ መተላለፊያ መንገዶቹ ምን ምን ናቸው ?
2. ከእናት ወደ ልጅ እንዳይተላለፍ መከላከያ ዘዴዎችስ ተወያይተው ያውቃሉ ? አዎ ካሉ መከላከያ መንገዶቹ ምን ምን ናቸው ?
3. ስለ ኤች አይ ቪ ኤድስ ከእናት ወደ ልጅ ስርጭት ለመከላከል የሚደረግ ህክምና ስርጭቱን ይቀንሳል ብለው ያስባሉ ? ለምን እንዴት ?

**ክፍል አራት:- መረጃ ስለ ቤተሰብ ምጣኔ አገልግሎት ፍላጎትና ምርጫ:**

1. ለእርሶዎና ለባለቤቶ የቤተሰብ ምጣኔ መጠቀም ወይም ያለመጠቀም ምን ያህል አስፈላጊ ነው ይላሉ ? ለምን ?
2. ምን አይነት የወሊድ መከላከያ መጠቀም ይፈልጋሉ ? ወይም እየተጠቀሙ ነው ?
3. የመረጡት የወሊድ መከላከያ አይነት እንዴትና ለምን መረጡት ሽ
4. ስለ ኤች አይ ቪ ኤድስ የደም ምርመራ ውጤቶ ከቤተሰብ ምጣኔ አገልግሎት ሰጪ ሃኪም ጋር ተወያይተዋል ? ካልተወያዩ ለምን ?
5. ስለ ኤች አይ ቪ ኤድስ ከቤተሰብ ወይም ከትዳር አጋሮ ጋር ተወያይተዋል ? ካልተወያዩ ለምን ?
6. ስለ ልጅ መውለድና ስለ ቤተሰብ ምጣኔ አገልግሎት ከአማካሪዎ ወይም ከፀረ ኤች አይ ቪ ኤድስ ሃኪም ጋር ተወያይተው ያውቃሉ ካልተወያዩ ለምን ?

**አመሰግናለሁ!**

## **12.Declaration**

I, the undersigned, declare that this is my original work, has never been presented in this or any other university and that all the source materials used for the thesis have been duly acknowledged.

**Name: Almaz Hadgu (BSc, Public Health)**

**Signature** \_\_\_\_\_

Place: Addis Ababa University, School of Public Health, Faculty of Medicine

Date of submission:

### **Approval of the primary advisor**

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

**Name: Dr. Alemayehu Mekonnen**

**Signature** \_\_\_\_\_

Date: June, 2010