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Fertility desire and family planning demand among HIV positive men and women in follow up care in Addis Ababa antiretroviral treatment units.

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Theses 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.

Declaration

i, THE UNDERSIGNED DECLARE THAT THIS THESIS IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN THIS OR ANY OTHER UNIVERSITY AND THAT ALL SOURCE OF MATERIALS USED FOR THIS THESIS HAVE BEEN DULY ACKNOWLEDGED.

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List of Abbreviations

AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Syndrome
ALERT	All African Leprosy Rehabilitation and Training Center
ART	Assisted Reproductive Technology
ARV	Anti Retroviral
CI	Confidence Interval
DCH	Department of community health
HAART	Highly Active Anti Retroviral Therapy
HBC	Home Base HIV Care
HIV	Human Immune Deficiency Virus
IUD	Intrauterine Device
PLWHA	People Living With HIV/ AIDS
OCP	Oral contraceptive pill
OR	Odds ratio
PMTCT	Prevention Mother to Child HIV Transmission
SD	Standard Deviation
SPSS	Statistical package for social sciences
USAID	United States Agency For International Development

Abstract

Back ground: HIV positive individuals may or may not have desire to have children and want to use family planning. But the extent of theses desires and how it varies by individual, social, health and demographic characteristics is not well understood.

Objective: The aim of this study is to assess fertility desire and family planning demand in HIV positive men and women on follow up care in Addis Ababa ARV treatment units.

Method: The study was undertaken from January to February 2006, using quantitative cross-sectional study supplemented by qualitative in-depth interview on a sample of 461 PLWHA on follow up care. Study subjects were selected using stratified random sampling method. A pre- tested structured questionnaire was used to collect data and analyzed using spss version 11.

Result: One hundred nine (44.7%)of women and 76(35.2%)of men, over all 40.2%of HIV positive individuals receiving care in Addis Ababa desired to have children. Generally HIV positive individuals who desired children are younger (18-29) (adjusted OR: 3.05, 95%CI: 1.5-6.4), married/in relation ship(adjusted OR :3.4,95%CI :2.1-5.6), have no children(adjusted OR: 11.5 ,95%CI :5.3-24.9)and had partner who also desire children (adjusted OR: 38.7, 95%CI: 16.7-89.1)than those who do not desire children. Two hundred forty six (53.5%) HIV positive individuals are using and 85(39.7) want to use family planning in the future. Condom was the preferred method of family planning among HIV positive individuals after HIV diagnosis.

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Conclusion: A high proportion of HIV positive individuals who received medical care expressed a wish for parenthood and wants to use family planning. The extent of fertility desire and family planning needs of these people has implication for vertical, heterosexual transmission and the need for counseling.

In view of their wishes for children and family planning it is important for care providers to address such issue. Care providers should also desist from the conventional systematic advise against pregnancy but in addition to laying emphasis on the risk, provide adequate information on available practicable reproductive option for HIV positive individuals.

1 - Introduction

Since the introduction of highly active antiretroviral therapy (HAART) in 1996, the way in which human immunodeficiency virus (HIV) infected individuals confront the disease and their long term out look have changed considerably in industrialized countries (1,2).

Reproductive choice in HIV affected individuals are changing. Most recently fertility issue in HIV positive men and women are becoming increasingly important. Advance in treatment such as zidovudine and other drugs together with cesarean section and breast milk substitution has decreased vertical transmission to about 2%, making positive parenting a viable option at least in countries where anti retroviral (ARV) treatment is widely available. In these countries HIV positive or affected individuals are exercising their reproductive choice in ways that pose new medical, ethical and legal challenges (3, 4).

In a study done on 114 HIV positive heterosexuals in Switzerland 20% of HIV positive women and 22% of HIV positive men reported a current desire for children during the study period. An even larger proportion 47.5% of HIV positive women and 38% of HIV positive men stated they would like to have children in the future (1). In a similar study in Nigeria, 68.4% of the female and 53.8% of the male respondents expressed desire for children, giving a total of 63.3%of all respondents. Among those desiring children, only 4.3% did not intend to bear any children in the future (5).

Similarly a recent assessment of home based HIV care (HBC) project in Kenya found that over half of the HBC clients had been sexuality active in the past year, and 20% desire children and 31% had an unmet need for family planning (6).

The desire of HIV infected person to have children in the future has significant implication for the transmission of HIV to sexual partner and new born. In addition many children of infected parents are likely to need social services including income supplementation, housing, and child care and for those who lose one or both parents bereavement support, foster care or adoption(4).

Women who are infected with HIV needs family planning for the same reason as other women to prevent unintended pregnancy, to space and limite births (7, 8). Moreover preventing unintended pregnancy in HIV positive women is one method of reducing mother to child HIV transmission (6).

2- Literature Review

2.1. Global, Regional and National context of HIV /AIDS

The HIV/ AIDS pandemic continued to spread world wide. To day some 40 million people are living with the virus, and over 20 million have died since the first case of AIDS was identified in 1981. Sub Saharan Africa, with only 10% of the world population is carrying the burden of 80% of world HIV infection and AIDS cases (9, 10).

Ethiopia is one of the hardest hit Sub-Saharan African countries by the HIV pandemic with an estimated 1.5million people living with HIV/AIDS. National HIV/AIDS prevalence in Ethiopia estimated to be 4.4% (12.6% urban and 2.6% rural) (9, 10).

2.2. Effect of HIV on fertility

One effect of HIV/AIDS on individual and society at large is change in the fertility level (11, 12). Different Studies in Sub Saharan African countries have found that behaviors that have been largely influenced by AIDS education such as increased condom use, delayed on set of sexual relations, older age at first union and fewer premarital sexual relation have driven down fertility rates (11,12, 13).

In societies with high HIV/AIDS prevalence rates behavioral influences may led HIV positive couples to limit family size due to concern about living orphans behind after an early death or transmitting infection to the child, though others may desire large family to ensure survival of children (11,13).

Biological mechanism also influences fertility rates in HIV positive men and women. HIV may induce sterility, increase fetal mortality, decrease production of spermatozoa and sometimes decrease frequency of sexual intercourse all contributing to declining of fertility rates (11). HIV infected women experience reduced pregnancy rates, higher rates of menstrual irregularities, planed abortion and miscarriage (11, 12).

Women infected with HIV at the stage of AIDS may face lower fertility rates. In addition HIV may indirectly affect fertility due to co-infection with another sexual transmitted diseases and complications of HIV, such as increased risk of cervical carcinoma, early menopause and severe wasting may also contribute to infertility in women (11).

2.3. Desire for children

The optimization of antiretroviral therapy has led to great improvement in both the quality of life and life expectancy of people living with HIV/AIDS, at least in countries where HAART is widely available. Nowadays, HIV infection can be seen as a chronic but treatable disease. This "normalization" has encouraged many positive men and women to include perspectives in planning of their life that had previously seen as being impossible to fulfill. Planning a family is often among these perspectives (2).

The HIV cost and service utilization study ,which examined fertility desire of large sample of HIV positive men and women in the United States, reveled that 28% of HIV positive heterosexual men and 29% HIV positive women who received medical care desired children in the future (4).

Studies from African countries have shown fertility desire among African HIV positive men and women. In Zimbabwe among 16 interviewed HIV positive pregnant women 7 of the pregnancy were desired. In another study done in Yaoundé Cameroon one third of 40 HIV positive men and women responding to a questionnaire said that the primary reason they had unprotected sex was because they wish to have a child (14).

2.4. Who Desire Children

Different studies indicated that a high proportion of HIV positive men and women desire for children. However their fertility desire was dependent on different factors besides their HIV status. Study from United States and Nigeria on HIV positive women and men showed that the desire for children were more in those who were younger, married or had sexual partners, had fewer children and those who had partners who would like to have children(4,5). In terms of personal health those who desire children had higher self – rating of physical functioning and overall health (4).

For any women in developing nation child bearing is not only motherhood it is a primary sources of self esteem but HIV infected women have additional reasons for child bearing. In Kenya HIV positive women desired pregnancy to replace the child lost to AIDS. Pregnancy may provide hope for future or prospective of care for child may give HIV positive women a reason to go on living. On top of these some HIV positive women may not be able to accept their diagnosis, denying it, become pregnant. Others may become pregnant to conceal their HIV status from relatives, especially in- laws (14).

In Zimbabwe, as in most places, the desire of women to have children is rooted in context of a need for both love and financial security and some women find personal satisfactions in having children (14).

Individuals who experienced improved health while on HAART were significantly more likely to express a desire for parenthood (1). In addition providers play a large role in influencing how women feel about future child bearing (15).

2.5. Demands for Family Planning

Preventing unintended pregnancy among HIV positive women is an effective approach to reducing pediatric HIV infection and vital to meeting HIV positive women's sexual and reproductive health needs (6, 16, 17).Adding voluntary family planning service on PMTCT services can prevent an additional 55,000 child death and more than 150,000 unintended pregnancies in high prevalence countries (6).

Family planning for both HIV positive and negative women safeguard their health by enabling them to space births and also reduce HIV positive women's vulnerability to morbidity and mortality related to pregnancy and lactation. In addition reducing unintended pregnancy among HIV positive women through family planning reduces the number of children potentially orphaned when parents die of AIDS related illnesses (16).

All available methods of family planning such as oral contraceptives, Injectables, Implants, Intrauterine device (IUD), barrier methods and spermicides can be appropriate choice for all HIV positive women including those who do not have advanced disease and on effective

ARV treatment (6, 8). In one study done on HIV positive adults in the United States 81% of women and 89% of men reported using at least one contraceptive method. Seventy eight percent of women and 87% men used condoms, including 35% women and 47% men to prevent pregnancy. Thirty five percent of women reported having tubaligation and 15% men reported that their partner had had one. Eleven percent of women reported using oral contraceptive and 5% of men had a partner who used them. Other effective method of pregnancy prevention received little use (17).

A study done in Nairobi, Kenya among post partum PMTCT clients 82% of HIV positive women reported not intending to have another child. After controlling for the number of living children HIV positive women was 7.5 times more likely to not want another child compared to their HIV negative counter parts (15).

2.6. Who Demand Family Planning

Multiple factors contributes to how HIV infected women would decide to begin family planning or which method to use. In in-depth interview done in Kenya among 24 HIV positive women 20 out of 24 expressed why they would decide to begin family planning use or which method to use. Most common response were directive counseling from family planning providers, others want to use family planning because they were HIV positive or marked deterioration in their health. Women who did not intend to use family planning identified side effects as a major reason not to intend to use family planning (15).

2.7- Reproductive options for serodiscordant couple

Options for HIV-affected couples to realize the wish for parenthood theoretically vary from unprotected intercourse to several techniques of assisted reproduction, donor insemination or adoption (2). Consistent use of condoms can decrease HIV transmission risk in heterosexual relationships by 85% and abstention from condom use restricted to the time of ovulation has been proposed as an option for discordant couples. However available data can not support this option as a safe option for discordant couples (2).

To minimize the risk of HIV transmission the following options are recommended.

1- Self – insemination or assisted reproduction in case of infection in the female Partner.

2- Assisted reproduction with processed sperm in case of infection in male Partner.

Since HIV could theoretically remain undetected sperm washing is currently regarded as a very effective risk reduction, but not risk free method (2).

Donor insemination is an alternative safe option for a small number of couples, but due to legal restriction it is only offered in small countries. In addition most couples wish for a child that is the biological offspring of both parents, adoption in many countries is merely a theoretical option (2).

2.8 Legal and Ethical Consideration of Reproductive Choice of HIV Positive People

Since the early years of the HIV Epidemic, the treatment of infertility in HIV infected couples has been controversial among the issues that reproductive endocrinologist who treat infertile women with HIV infection have had had to confront are the possibility of mother to child transmission of HIV and the likelihood that the mother will die before her child grown

up. The recent advent of highly active antiretroviral therapy and protocols for the reduction of the risk of mother to child transmission of HIV justify a reconsideration of these issues (3).

The need for infertility services may be high among HIV infected women. There are at least two silent considerations with regard to involuntary infertility in such women: the direct effect of the virus and the effect of coincident infections (18). However despite an evident need for infertility service, until quite recently infected women were unlikely to be considered as a candidate for assisted reproduction techniques (3).

The idea of offering assisted reproductive technology (ART) to HIV discordant couples generate concern about transmitting the virus to uninfected partner and to the resulting child and raises questions such as: what is the acceptable level of risk to offspring's, should couples who want this assistance be subject to selection criteria, should they under go scrutiny about their suitability as parents when those who are able to conceive naturally face no such scrutiny. Even though the above questions are on argument offering ART to HIV discordant couples is likely to produce more benefit than harm and violates no ethical principles. Nevertheless a decision to deny treatment need not constitute unjustified discrimination (18).

3-Rationale for doing this study

In Ethiopia, HIV/ AIDS has been spreading throughout the country, cases have been reported from every region. About 1.5 million people are living with HIV/AIDS. Out of these 817,000 are women and 96,000 are children under 15 years of age. The major mode of HIV transmission in Ethiopia is unprotected heterosexual intercourse which accounts for 88% of HIV infection and mother or parent to child transmission accounts 10%. The majority of new infection occurs in reproductive age groups (15-49) which has negative implication for the

future of the family. Some 245,000 people living with HIV/ AIDS were in need of ARV treatment in 2003(9,10, 19). Nation wide 34,965 HIV positive individuals were on ARV treatment in May, 2006(20). Nowadays ARV and prevention of mother to child transmission (PMTCT) treatment services are expanding through out the nation.

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

An accurate description of desire to have children and demand for contraceptive among infected individuals is necessary to aid infected individuals who desire children and demand contraceptive to do so with out scarifying the health of the new born ,their partners and themselves and serves as a bench mark for gauging the fertility and contraceptive related counseling and service needs of HIV infected adults and future social support for children born to infected parents.

The extent of fertility desire, demand for family planning in HIV positive men and women on follow up care and how these decisions may vary by individual, social, demographic characteristics and health factors is not well understood. Moreover to our knowledge their have been no studies on HIV positive men and women desire to have children and demand for contraceptive in Ethiopia. Most of the studies on PLWHA were focused on ARV drug adherence (21, 22). In light of this the study is designed to asses fertility desire and demand

for contraceptive and to identify factors that influence these decisions in HIV positive individuals on follow up care at ARV treatment units.

It is also our expectation that findings generated from this study will contribute to understand the level and factors influence fertility desire and contraceptive demand and be useful in program designing to address counseling and service needs of such people. Moreover the data obtained from this study will be used by any interested organization working in this area.

4. OBJECTIVE

4.1. General objective:

To asses fertility desire and demand for family planning in HIV positive men and women on follow up care in Addis Ababa ARV treatment units.

4.2. Specific objective:

1- To asses fertility desire in HIV positive men and women on follow up care.

2 -To assess contraceptive demand in HIV positive men and women on follow up care.

3 -To identify factors that influence fertility desire in HIV positive men and women on follow up care .

4 -To identify factors that influence contraceptive demand in HIV positive

men and women on follow up care .

5- METHODOLOGY

5.1- Study area and period

The study was undertaken from January to February 2006 in six ARV treatment units in Addis Ababa, Ethiopia. Six public and three military hospitals were selected for free provision of ARV treatment by Regional Health bureau, Ministry of Health, Ministry of Defense and the Federal Police in Addis Ababa. The study was conducted in all six non military hospitals ARV treatment units. Due to the nature of their job military population are not stable in one residential place. Therefore their life style is different form civil population. Thus Military hospitals were excluded from the study.

Table1.General characteristics of hospitals Selected for the study Addis Ababa, Ethiopia,
2006.

No	Facility name	Hospital type	Responsible for	Approximate number of clients

				served in ARV treatment units
1	Zewuditu memorial hospital	Regional Hospital	Addis Ababa Regional health bureau	4,500 clients
2	Tikur Anbesa hospital	Specialized teaching hospital	Ministry of education	1100 clients
3	Yekatite 12 Hospital	Regional Hospital	Addis Ababa regional health bureau	1050 clients
4	St. Paulose Hospital	General specialized hospital	federal Ministry of health	1100 clients
5	ALERT Hospital	Leprosy training and rehabilitation hospital	federal Ministry of health	1600 clients
6	St. Peterose hospital	Tuberculosis specialized hospital	federal Ministry of health	250 clients

During the study period 4512 male and 5088 female a total of 9600 PLWHA were receiving the treatment in the selected ARV treatment units. All of the units provided free laboratory, counseling and ARV treatment to all clients. In ALERT hospital besides free ARV treatment service food expense support was provided for PLWHA who are unable to feed themselves.

5.2. Study design

A cross sectional study design that employed quantitative data collection method supplemented by qualitative in depth interview was carried out in Addis Ababa ARV treatment units.

5.3. Source and study population

5.3.1. The Source population

The source population was all PLWHA who were on follow up care in Addis Ababa ARV treatment units during the study period.

5.3.2. Study population

The study population was all PLWHA who had at least one visit to the selected hospitals ARV treatment units during the study period.

Inclusion criteria

People living with HIV/AIDS: those in reproductive age group (18-49 for women and 18-54 for men): and had at least one visit to the selected hospitals ARV treatment units.

Exclusion criteria

All PLWHA: who are 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 calculation

5.4.1 Quantitative method

The sample size was determined by assuming 50% of HIV positive individuals desired children , 5 %marginal error and 95% confidence ($\alpha = 0.05$).Based on this assumption, the actual sample size for the study was determined using the formula for single population proportion.

$$n = \frac{(Z\alpha/2)^2 P(1-P)}{d^2}$$

$$n = \frac{(1.96)^2 \times 0.05(1-0.05)}{(0.05)^2}$$

$n = 384$

None response rate 20% = 77

77+384= 461 required sample size

n= the required sample size

Z=Standard score corresponding to 95% confidence interval

p= Assumed proportion of fertility desire

d = the margin of error (precision) 5%

None response rate =20%

5.4.2 Qualitative method

For qualitative method the minimum number of people planed to be interviewed was 10 (five females and five males).But the selection continued until the point of redundancy. Fourteen respondents, equal number of males and females were interviewed.

5.5- Sampling procedure

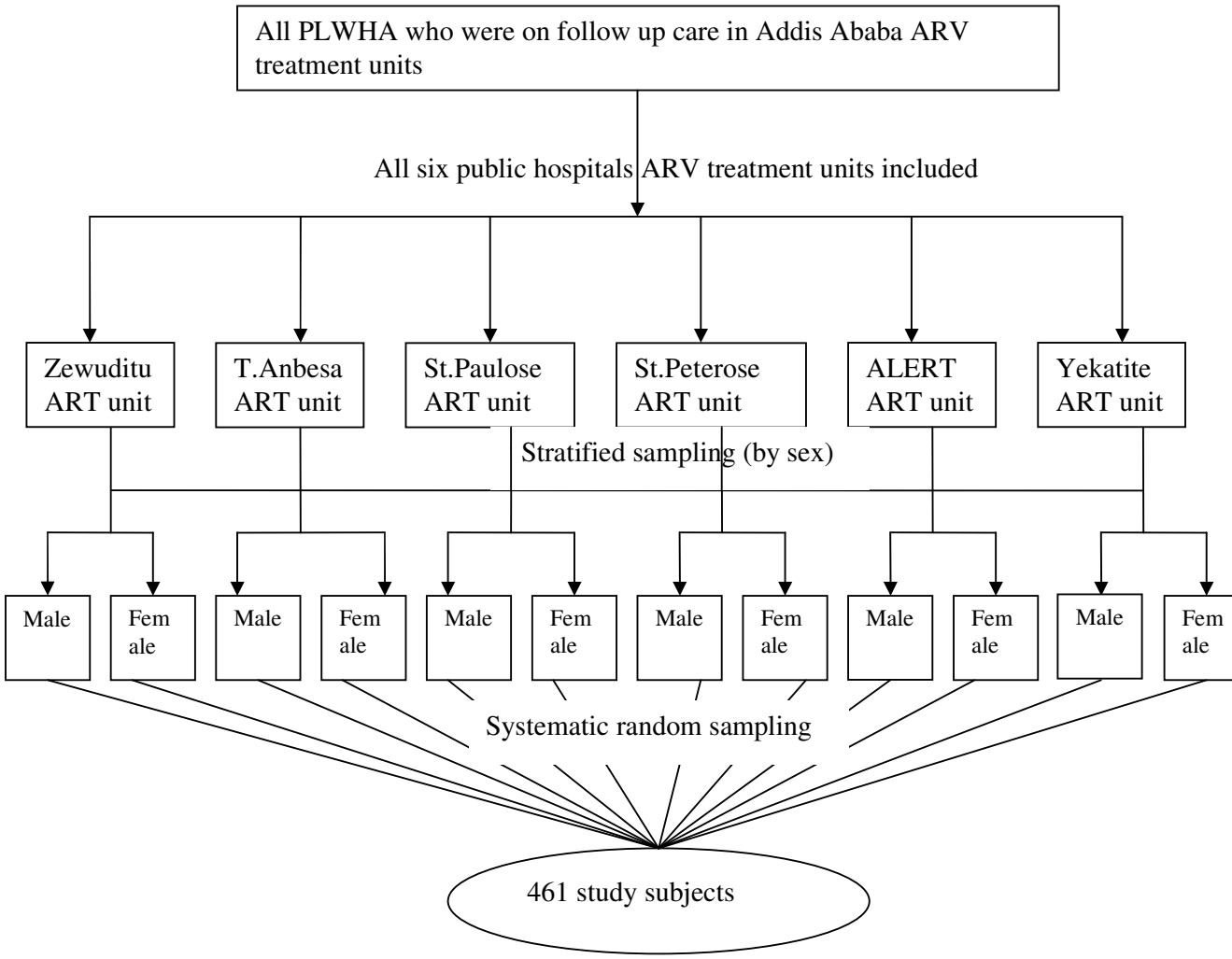
5.5.1-Quantitative study

For quantitative study stratified random sampling method was used. All six public hospitals those provide free ARV treatment were included in the study. The calculated sample size was used to recruit study subjects from the selected ARV treatment units proportional to the unit's client size. Study subjects in the selected ARV treatment units stratified by sex and sample size for each stratum proportionally allocated. To select study subjects within each stratum systematic random sampling was used. First the average numbers of clients who visit the ARV treatment units daily during data collection period was estimated based on the previous daily client flow of the units. This was obtained by referring client registration book/ record for a month prior to data collection. Thus on average 30 clients visit the ARV treatment units daily. Every 3rd clients were interviewed through out the data collection period.

5.5.2 Qualitative study

For the in-depth interview, purposive sampling was used to select the study subjects based on socio demographic characteristics of participants i.e. sex, marital status and number of children.

Figure1. Schematic presentation of the sampling procedure used in the study Addis Ababa, Ethiopia 2006.



5.6- Data collection instrument

A structured questionnaire was used for quantitative study. It was prepared in English, translated into Amharic and then translated back in to English to check for consistency. Main

points included in the questionnaire were socio demographic characteristics, HIV and treatment conditions, child desire information, reproductive characteristics and information about family planning use, choice and demand.

In addition, an open ended semi-structured interview guide was used for the qualitative study i.e. in depth interview. The main issue addressed was decisions on child desire, impact of HIV on child desire, community value for children, family planning use and impacts of HIV on use.

5.7- Pre-testing the questionnaire

The structured questionnaire was pre- tested in the ARV treatment units selected for the study and subjects who were involved in the pre-test were excluded from the study. The pre-test was done on 45 subjects which are about 10% of the total sample size. The questionnaire was then assessed for its clarity, length and completeness. Some skip patterns were then corrected, questions difficult to ask were rephrased and the consent form also modified.

5.8. Data collection

5.8.1. Quantitative data

The data were collected from 20, January to 15, February 2006. For administering the structured questionnaire, seven nurses (Counselors) working in the ARV treatment units was recruited. Training was given for two days (including half day of pretest) on the objective, relevance of the study, confidentiality of information, respondent's right, informed consent

and techniques of interview. Moreover class room practical demonstration of the interview was carried out.

Two Supervisors who had fist degree trained and supervised the data collection. They closely follow the data collection process through out the data collection period along with the principal investigator. All field questionnaires were reviewed each night and morning sessions were conducted every morning with the data collectors and errors were corrected.

5.8.2 Qualitative data

To compliment the quantitative study, 14 respondents were interviewed in all hospitals. Each interview was carried out by principal investigator. It was tape recorded and field notes were taken.

5.9 Variables

The independent variables were

- Socio demographic characteristics (age, sex, income, marital/relation ship status, education, religion, occupation, ethnicity)
- Number of alive children
- Partner's HIV status
- Partners desire for children
- Duration since HIV diagnosis
- Family planning use before and after HIV diagnosis and other variables, which are, related at list to one of the two outcome variables.

Dependent/out come/ variables: fertility desire and contraceptive demand.

5.10 Operational definition

PLWHA on follow up care – In these study all PLWHA who had at least one visit to the selected ARV treatment units for care who may be receiving ARV treatment or not.

Desire for a child /children–PLWHA on follow care would like to have a child in the future.

Demand for family planning – PLWHA on follow-up care who were not using but want to use Family planning methods in the future.

5.11- Data quality assurance

To ensure data quality the data collectors and the supervisors were appropriately trained for two days. Manuals prepared for field work were used by data collectors. Supervisors and principal investigator closely followed the data collection process. Filed questionnaires were checked daily for completeness and errors were corrected.

To ensure qualitative data quality privacy and confidentiality of the respondents as well as good interaction between respondent and interviewer was maintained.

5. 12 Data analysis

Quantitative data were entered and analyzed using SPSS version 11 computer soft ware. Errors related to inconsistency of data were checked and corrected during data cleaning. The univariate analysis such as proportions, percentages, ratios, frequency distributions and appropriate graphic presentations besides measures of central tendency and measures of dispersion were used for describing data. Bivariate analysis of demographic and HIV disease factors associated with desire for future child bearing and future family planning use were

used. Then logistic regression model were employed to control confounding. Variables included in the model were restricted to those significantly related at least to one of the two out comes at the bivariate level.

In the qualitative data all the audio taped interview were transcribed. The transcript then translated to English. The translated transcript reviewed and examined line by line and highlighted using different colors by hand then categorized in to primary codes or themes. Later data were reviewed and combined in to brooder concepts. The concepts were refined in to major themes.

5.13-Ethical consideration

Ethical approval of the research proposal was obtained from the ethical review committee of Addis Ababa University. A formal latter was written by the department of community health to the hospital administrator offices. The Hospitals medical director offices permitted us to conduct the study. In addition informed verbal consent was obtained from each respondent. It was planed to have informed written consent from individual participants. But during pre-testing the questionnaire participants were not comfortable to provide written consent. Therefore the consent form changed from written consent to informed verbal consent. Moreover the same counselors working in ARV treatment units were trained as data collectors and filled questionnaires. Thus ensured confidentiality during data collection since respondents were not exposed to other person.

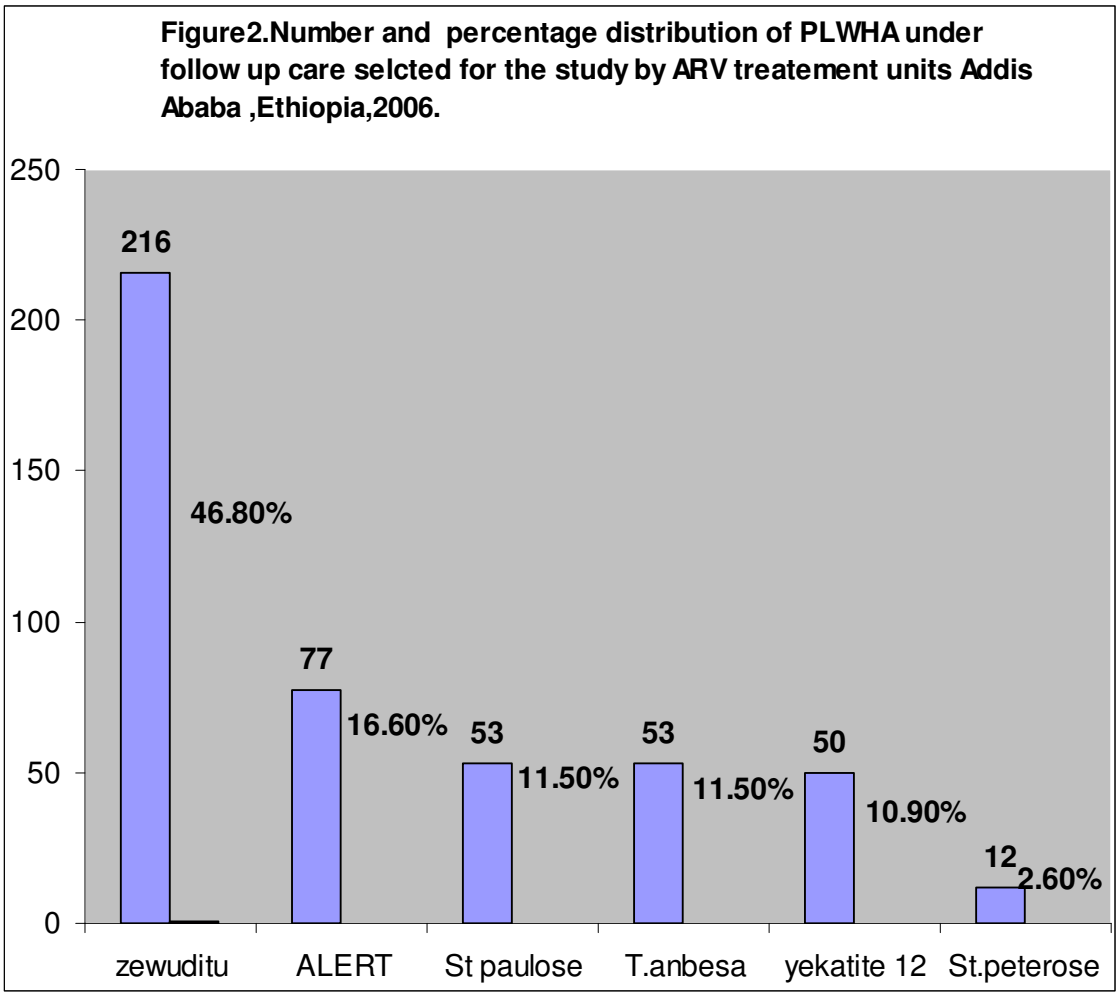
5.14 Dissemination of results

The study result will be presented at AAU, and a copy will be given to all responsible body and publication of the findings will be considered

6. Results

6.1. Quantitative study result

Out of 461 eligible clients seen in the ARV treatment units during the study period, 460 agreed to participate in the study, giving response rate of 99.7%.The majority 216(46.8%) of the respondents were from Zewuditu hospital ARV treatment unit and the smallest number of participants 12(2.6%) were from St Peter tuberculosis specialized hospital. The number and percentage distribution of participants by hospitals ARV treatment unit are shown in figure 2.



6.1.1- Characteristics of the study subjects

The socio demographic characteristics of the respondents are shown in Table 2.

The study subjects consisted of 244(53%) females and 216(47%) males. These were proportional to the average sex distribution of clients in the selected ARV treatment units. Two hundred seventeen (47.2%) of the respondents were in their 4th decay of life. The age range of the study subjects were 18-53 years. The average age (SD) of females and males was 31.9(6.3) and 34.7(7.4) years respectively. Respondents were mainly orthodox Christians 339(73.3%) by religion. Two hundred thirty-seven (51.5%) and 104(22.6%), of the study subjects were from Amhara and Oromo ethnic groups respectively.

The majority 210(45.7%) of the respondents were government/private employee, while 18.5% were jobless. The median monthly income among participants was 235 Ethiopian birr. Three-fourth of the participants had at list secondary education, while 42(9.1%) been illiterate or only able to read and write. Two hundred twenty eight (49.5%) of the respondents were married or in relationship, while 145(31.5%) were widowed or divorced (table2). One hundred seventy (37%) of the respondents had no children, while 201(43.7%) and 89(19.3%) had one to two and three or more children respectively.

Table2. Socio demographic Characteristics of PLWHA attending ARV treatment units, Addis Ababa, Ethiopia, 2006. N=460

Characteristics	n (%)
Sex	
Female	244(53.0)
Male	216(47.0)
Age (years)	
18-29	122 (26.5)
30-39	217(47.2)
≥ 40	121(26.3)
Religion	
Orthodox	339(73.7)
Other Christians	76(16.5)
Islam	45(9.8)
Educational status	
Illiterate/ read and write	42 (9.1)
Primary	77(16.7)
Secondary	255(55.4)

Postsecondary	86 (18.7)
Ethnicity	
Amhara	237(51.5)
Oromo	104(22.6)
Gurage	54(11.7)
Tigre	48(10.4)
Others	17(3.7)
Relationship status	
Never married	87(18.9)
Married / Non married partner	228(49.5)
Divorced / Widowed	145(31.5)
Estimated monthly income (in Eth birr)	
no income	117(25.4)
≤ 235*	113(24.6)
235-600	121(26.3)
>600	109(23.7)
Occupation /employment	
Government/privet employee	210(45.6)
Jobless	85 (18.5)
House wife	49 (10.7)
Merchants	38(8.3)
Others	41(8.9)
Daily laborers	37(8.0)

*235 Ethiopian birr median monthly income

Two hundred (87.7%) of those who were married or in relationship have disclosed their HIV serostatus to their spouse or partner. One hundred seventy eight (78.1%) of those who were married or in relationship have partners who had HIV test, while 50(21.9%) of partners were not tested. About two–third of those who had tested partners have concordant partners, while 56(31.5%) have discordant partners (Table3).

Recent CD4 count < 200 cells /mm^3 was reported by 309 (67.2%) of the respondents (Table3). The majority 422(91.7%) of the respondents were on HAART, while 38(8.3%) were not receiving the treatment. Three hundred ninety one (92.7%) of those who were on HAART described their health improved after the treatment, while 31(8.4%) said did not improve. Four hundred four (95.7%) of those on HAART obtained the drugs free from the ART units,

while 18(4.3%) were on self purchased drugs. The median duration since HIV diagnosis and receiving the treatment were 12 and 6 months respectively (Table3). Two hundred forty four (53%) of the respondent attended the ART unit for less than or equal to six month median duration (Table3).

One- third of the respondents have had psychosocial support, while 293(63.7%) claimed not to have support. The source of the support were mainly from the non-governmental organizations and families/relatives 78(46.7%) and 71(42.5%) respectively. The most commonly received kinds of support were money 91(54.5%), followed by counseling and/or home base care 85(50.8%)(Table3).

Table3.HIV related characteristics of PLWHA attending ARV treatment units Addis Ababa, Ethiopia, 2006.

n=460

Characteristics	n (%)
HIV diagnosis Duration	
≤12	245(53.3)
>12	215(46.7)
Recent CD4 count (cells/mm^3)	
< 200	309 (67.2)
≥200	151(32.8)
ART unit attendance duration	
≤6	244 (53)
>6	216 (47)
Treatment duration (n=422)	
≤6	225(53.3)
>6	197(46.7)
Psychosocial support from different groups	
Yes	167(36.3)
no	293(63.7)
Source of support (n=167)	
Non governmental organizations	78(46.7)

Relatives /friends	71(42.5)
Governmental organizations	18(10.8)
Kinds of support (n=167)	
Money	91(54.5)
Counseling/home based care	85(50.8)
Food and health care	66(39.5)
Other	8(4.8)
Disclosure to partner /spouse(n=228)	
Yes	200(87.7)
No	28(12.3)
Partners tested for HIV(n=228)	
Yes	178(78.1)
No	50(21.9)
Partners HIV status (n=178)	
Positive	122 (68.5)
Negative	56 (31.5)

Four hundred fifty five (98.9%) participants know about transmission of HIV from mother to child. Out of these people 426 (93.6%) of them knew the availability of mother to child HIV transmission prevention medication. Ninety-one (20%) have negative attitude towards the effectiveness of preventive medications. Public media 314(69%) and health professionals 212 (46.6%) were identified as major sources of information about mother to child transmission and prevention.

Two hundred thirty one (50.2 %) of the participants were sexually active within the past six months. One hundred seventy three (74.9%) of these individuals used condom while one fourth did not use. Out of those who reported condom use 138(79.8%) used it regularly, while 35(20.2 %) reported irregular use. The most common reason for non condom use was partners dislike for condom 15(25.8%). The most common reason for condom use was advice from health professionals 109 (63%) (Table4).

Eighty-nine (19.3%) of the respondents admitted to have been previously counseled or discussed on personal issues such as sexuality, family planning and child bearing with ART providers. Thirty-five (39.3%) of these people felt that the discussion did not sufficiently address personal issues such as sexuality, fertility desires and contraception. More than 50% of the total respondents needed to have discussion on fertility issues with their care providers.

Table4-Sexual behavior and condom use of PLWHA attending ARV treatment units Addis Ababa, Ethiopia, 2006. n=460

Characteristics	**n (%)**
Sexually active within the past six months	
yes	231(51)
no	229(49)
Used condom (n=231)	
yes	173(74.9)
no	58(24.1)
How often (n=173)	
always	138(79.8)
some times	35(20.2)
Reason for condom use(n=173)	
Advice from health professionals	109(63)
Having HIV negative partner	27(15.6)
To prevent pregnancy	52(30.1)
Others	21(12.1)
Reason for non condom use(n=58)	
Partners dislike for condom	15(25.8)

Want to have children	12(20.6)
Considering they already infected	13(22.4)
Others	8(13.8)
Forgot to use	10(17.2)

6.1.2- Fertility desires

One hundred nine (44.7%) of the female and 76(35.2%) of the male respondents expressed the desire for children, giving a total of 185(40.2%) of all respondents. Out of those desiring children 78(42.2%) desired to have one child while, 107 (57.8%) desire to have two or more children. Eighty one (43.8%) of the respondents planed to have a child within two years while, 104(56.2%) after two years.

Table5-Percentage distribution of HIV positive men and women by fertility Desire and number of children desired Addis Ababa, Ethiopia, 2005.

Characteristics	Women n (%)	Men n (%)	OR (95% CI)
Fertility desires			
Yes	109(44.7%)	76(35.2%)	1.48(1.02-2.17)***
no	135(55.3 %)	140(64.8 %)	1
Number of children desired*			
<2	55(50.5%)	23(30.3%)	2.3(1.27-4.35)***
≥2	54(49.5%)	53(69.7%)	1
Partner's fertility desire **	60(55.6%)	45(37.5%)	2.08(1.23-3.5)***
Yes	48(44.4%)	75(62.5%)	1
No			

***Among those who desire children (n=185): ** among those with partners (n=228)**

*** **Significant association (p<0.05**).

Women were significantly more likely to desire children compared to men. Men are less likely to desire any children, but if they desired any appear to be more likely to expect two or more children. Out of those participants who had partners, 60(55.6%) women and 45(37.5%) men have partners who also desire children (Table 5).

There was no statistically significant difference between the proportions of those who desire children among patients who were on HAART and who were not on HAART (90% Vs 90.2 %; p= 0.554). Similar finding was seen for recent CD4 count. No statistically significant difference was observed between those who had recent CD4 count < 200 and ≥200/mm^3 (65.4%Vs68.4%; p=0.508).

From bivariate analysis (shown in table 6), the characteristics age group 18-29 or 30-39, being female, being married/ in relation ship, having secondary education and above, having no children or 1-2 children and partner desire for fertility were positively and significantly associated with desire for children (p≤0.05). On the other hand, disclosure of serostatus to partner/spouse was significantly associated with lower desire for children (82.9%Vs 91.9%; p=0.043).

In a multivariate analysis (shown in table 6), respondents in age group 18-29 were more likely to desire children (adjusted OR: 3.05, 95%CI: 1.5-6.4). Those who were married or in relation ship were 3.4(95%CI: 2.1-5.6) times more likely to desire children than their counterparts. Study subjects who had no children were more likely to desire children than who had at list one child (adjusted OR: 11.5, 95%CI: 5.3-24.9). Moreover, those whose partners desired

children were more likely to desire children than those whose partners did not desire children (adjusted OR: 38.7, 95%CI: 16.7-89.1).

Table6- Association of desire for children by selected Characteristics, among PLWHA Under care in Addis Ababa, Ethiopia 2006.

characteristics	Desire Children n (%)	Do not desire children n(%)	Crude (OR) (95% CI)	Adjusted OR(95% CI)
Age (years)				
18-29	73(39.5)	49(17.8)	7.99(4.4-14.7)*	3.05(1.5-6.4) *
30-39	93(50.3)	124(45.1)	4.03(2.3-7.0) *	1.3(0.76-2.2)
≥ 40	19(10.2)	102(37.1)	1	1
Sex				
Female	109(58.9)	135(49.1)	1.5(102-2.2) *	1.15(0.72-1.9)
Male	76(41.1)	140(50.9)	1	1
Marital status				
Married /in relation ship	105(56.8)	123(44.7)	1.6(1.1-2.4) *	3.4(2.1-5.6) *
Widowed /divorced/single	80(43.2)	152(55.3)	1	1
Education				
Secondary and above	145(78.4)	196(71.3)	2.4(1.1-4.9) *	2.17(0.9-5.1)
Primary	30(16.2)	47(17.1)	2.0(0.8-4.8)	2.54(0.9-6.8)
Read and Wright/illiterate	10(5.4)	32(11.6)	1	1
Number of children alive				
0	122(65.9)	48(17.5)	18.0(8.8-36.8) *	11.5(5.3-24.9) *
1-2	52(28.1)	149(54.2)	2.4(1.2-5.1) *	1.9(0.91-3.9)
≥3	11(5.9)	78(28.4)	1	1
partners fertility desire				
yes	89(84.8)	16(13.0)	37.6(17.6-79) *	38.7(16.7-89.1)
no	16(15.2)	107(87.0)	1	1
disclosure to partner				
yes	87(82.9)	113(91.9)	0.4(0.19-0.97) *	0.41(0.13-1.2)
no	18(17.1)	10(8.1)	1	1
Duration clinic attendance(months)				
≤6	110(59.5)	134(48.7)	1.5(1.1-2.3) *	1.5(0.98-2.3)
>6	75(40.5)	141(51.3)	1	1
Receiving HAART				
Yes	168(90.0)	254(92.4)	0.8(0.42-1.6)	----------
No	17(9.2)	21(7.6)	1	

Self-reported change in health				
Improved				----------
Not improved	160(95.2)	231(90.9)	1.9(0.87-4.6)	
	8(4.8)	23(9.1)	1	
Recent cd4 count				
<200	121(65.4)	188(68.4)	0.88(0.58-1.3)	----------
≥200	64(34.6)	87(31.6)	1	

* **Significant association (p≤0.05**)

6.1.3. Family planning use and demand

Two hundred twenty five (48.9%) and 199(43.3%) of the respondents ever used at list one method of contraceptive before and after HIV diagnosis respectively. Oral contraceptive pill and injectables were most commonly used before HIV diagnosis 45.8% and 29.3% respectively. Condom and abstinence were most practiced after HIV diagnosis 131(65.8%) and 42(21.1%) respectively (Table 7).

Table7. Distributions of PLWHA under follow up care by contraceptive ever use before and after HIV diagnosis Addis Ababa, Ethiopia, 2006.

Contraceptive ever use	**Before n (%)**	**After n (%)**
Yes	225(48.9%)	199(43.3%)
No	235(51.1%)	261(56.7%)
Method	**Before n (%)** †	**After n (%)** ††
OCPs	103(45.8%)	19(9.5%)
Injectables	66(29.3%)	14(7.0%)
IUD	12(5.35%)	------
Implants	5(2.2%)	1(0.5%)
Tubale legation or vasectomy	1(0.4%)	3(1.5%)
Condom	35(15.6%)	131(65.8%)
abstinence	12(5.3%)	42(21.1%)
Others	4(1.8%)	--------

†Among those who ever used contraceptive before HIV diagnosis (n=225)
†† Among those who ever used contraceptive after HIV diagnosis (n= 199)

During the survey period 246(53.5%) of the respondents were using different forms of family planning. Out of these people 150(61%) used condom, while 83(33.7%) practiced abstinence. The most common reason for current method choice was health professional's advice (30 %).

Out of those who were not using family planning method during the survey period 85(39.7%) wants to use family planning in the future. The most preferred method of contraceptive was condom and injectables 72.9% and 21.2 % respectively (Table8). The preferred site for family planning service delivery was antiretroviral treatment units (27.5%).

Table8. Distributions of study participant by Current contraceptive use and future Contraceptive desire Addis Ababa, Ethiopia, 2006.

Contraceptive use n (%)	**Current use n (%)**	**Future desire for use n (%) ****
Yes No	Yes 246(53.5%) No 214(46.5%)	Yes 85(39.7) No /don't know 129(60.3)
method	Current *	Future ***
OCP	11(4.5%)	9(10.6%)
Injectables	6 (2.4%)	18(21.2%)
IUD	-----	1(1.2%)
Implants	1(0.4%)	-------
Tubal legation or vasectomy	3(1.2%)	1(1.2%)
Condom	150(61%)	62(72.9%)
abstinence	83(33.7%)	1(1.2%)
Others	--------	3(3.5%)

***among current contraceptive users (n=246): **among current contraceptive non users (n=214): ***among those who want to use contraceptive in the future (n=85)**

From bivariate analysis (shown in table9), Sex, marital status and future child desire have significant association with future family planning use ($p \leq 0.05$).Whereas, education, disclosure of serostatus and partners HIV status have no association with future family planning use ($p > 0.05$).

In multivariate analysis (shown in table 9), respondents who were married /in relationship (OR: 2.2, 95% CI: 1.1-4.4) were more likely to want to use future family planning than others. Study subjects who desired children were more likely to want to use family planning in the future than those who did not desire children (OR: 2.8, 95% CI: 1.4-5.5). Females are less likely want to use future family planning than males (OR: 0.27, 95% CI: 0.13-0.57).

Table9. Association of future family Planning need/demand by selected variables among PLWHA under care, Addis Ababa, Ethiopia, 2006.

Characteristics	Need Future FP	Do not need Future FP	OR(95CI)	Adjusted OR(95%CI)
Sex				
Female	42(49.4)	89(69.0)	0.44(0.25-0.77) *	0.27(0.13-0.57) *
Male	43(50.6)	40(31.0)	1	1
Age				
18-29	29(38.7)	32(32.0)	1.3(0.7-2.5)	----------
30-40	46(61.3)	68(68.0)	1	
Marital status				
Married/in relation ship	38(44.7)	26(20.2)	3.2(1.7-5.9) *	2.2(1.1-4.4)*
Others	47(55.3)	103(79.8)	1	1
Educational status				
Primary and below	23(27.1)	41(31.8)	0.61(0.26-.4)	----------
secondary and above	62(72.9)	88(68.2)	0.35(0.12-1.0)	
Future child desire				
Yes	54(63.5)	42(32.6)	3.6(2.0-6.4) *	2.8(1.4-5.5) *
No	31(36.5)	87(67.4)	1	1
Number of children desired				
<2	22(40.7)	14(33.3)	1.4(0.59-3.2)	----------
≥2	32(59.3)	28(66.7)	1	
Disclosure to partner				
Yes	32(84.2)	21(80.8)	1.3(0.34- 4.7)	----------
No	6(15.8)	5(19.2)	1	
Partners HIV status				
Positive	19(73.1)	11(52.4)	2.4(0.73-8.3)	
Negative	7(26.9)	10(47.6)		

* **Significant association (p≤0.05)**

6.2. Qualitative study result

Fourteen respondents, equal number of male and female, participated in the interview. The respondent's age ranges from 25-44 years. Respondent's educational status varied from illiterate to first degree graduates. Seven respondents were orthodox Christian from Amhara ethnic back ground. Five out of 14 had children. Two of the respondents had HIV positive children.

6.2.1. Desire children

Respondents' reasons for child desire were varied. Out of 14 respondents, 4 female and 2 male, total of six respondents reported child desire. Most described availability of ARV treatment, mother to child HIV transmission prevention mechanism and improved health after treatment enabled them to plan for children. A man explained

"After the treatment my health condition is getting improved from time to time. Now my CD4 count is 1,117, I am fully healthy, working like my friends and earn adequate income. Thus I started planning things which I did not think of before like continuing my education, marriage and having children. Because I have the capacity to care for a wife as well as the child ----- decided to get married and have children with the help of medication."

36 yeas old man with no children

Most who desire children had strong desire for parenthood and they want to take risk to have children. A woman expressed

"I love kids, so I want to have one after my CD4 and weight improved what ever the out come will be."

30 years old female with no children

The idea also captured in the following citation from male respondents

"I love kids, having children gives me reason to work and to go on living. Caring for my own children, keep them happy and healthy makes me happy and hopeful ---decided to have a child."

37 years old man with no children

Other HIV positive men and women desire children to conceal their HIV status from the community especially relatives and get social position as by being a father or a mother. A woman explained

"I am the only child for my parents, they pressurized me to marry and have children. They don't know my HIV status and I don't want to tell them. What I planned is to marry HIV positive husband and have a child with the help of preventive medications."

26 years old female with no children

Other HIV positive individuals may not be able to accept the seriousness of their illness denying it and want to have a child. One woman explained it

"I knew I am HIV positive but I considered it like any illness such as diabetes. It has nothing to do with my child desire. I will have a child when I get married."

31years old female with no children

Most of respondents who desired children reported use of PMTCT medication as vertical transmission risk reduction strategy and have trust in the medication. Very few of these people mentioned a wide array of vertical transmission redaction strategy. These were besides using PMTCT medications avoiding breast feeding, hospital delivery and taking ART drugs strictly and regularly to improve CD4 and health in general. Those who desire children have no children, in good health condition and have strong desire for parenthood.

6.2.2. Did not want to have a child

Seven out of 14 respondents explicitly reported not desiring children. One male respondent, still contemplating the decision. Out of those who do not desire children 3 were females and 4 males. Many of respondents who did not want to have a child considered risk of vertical transmission when making decisions about child bearing. A woman expressed

"I knew I'm positive, I'm quite sure the baby's going to be positive. The medication, that is said to be available to reduce the chance of transmission, in capable to eliminate the virus totally from my blood. So, how can it be possible to protect the child from getting infected since I carry and feed the fetus for nine months in my womb?"

32 years old female married and have two children.

Some have more accurate information about preventive medication benefit but they had strong feeling that any risk of transmission to the child unacceptable. Two women felt that any possibility of predisposing a child to infection and Psychosocial problems associated with HIV is a sin. Therefore their decision against child bearing is a forgone conclusion.

Others considered potential risk of their failing health and longevity for such decision. These people believe that HIV infection will shorten their own life and they are concerned that if their health failed their child would grow up with out a parent and worried about leaving orphans. A woman expressed

"Of course, I heard about preventive medication to protect the child from getting infected. But for me that is not the point, I am afraid of being sick, dying early and leave the child to

suffer for life alone ------- no I don't want to let it happen to my child. I decided not to have child living with this problem. "

28 years old female divorced and have no children.

Others worried that having unprotected sex for pregnancy to occur will expose them to new type of virus and they also believe that pregnancy compromise further the women health. In the words of one male interviewee

"My wife is not in good health thus pregnancy will further compromise her health. In addition if we had unprotected sex for the sake of pregnancy we will end up exchanging different kinds of viruses."

34 years old male married and have one child

Others cited non HIV/AIDS related reason for their decision. These were having desired family size, poor economic status/income and caring for a child considered as a burden. A man expressed

"I am satisfied with the number of children I have. I don't want to add more because I have no secured job, and adequate income to care for my self, my partner and the existing children. Having additional child is a burden for me."

39 Years old man married and with two children.

Respondents who did not desire children also have strong negative opinion for HIV positives who desired to have a child. Most who do not desire children have desire for parent hood irrespective of their decision. One woman thought adoption as a means of satisfying these

need while avoiding risk and she adopted her nephew. Most of those who did not want to have a child had had children prior to diagnosis. Therefore their need for parent hood may have been satisfied.

6.2.3. Community valued children

Most of the respondents agreed that child bearing is necessary and valued by the community. Every body is expected to have children particularly after they get married and have their own income. However child bearing out side marriage is unacceptable. Child bearing is believed to be good if it is happen at an early age. But some expressed that the desire for large family decreased nowadays. People started to look in to and consider their income and caring capacity for children to determine their family size.

6.2.4. Family planning need and methods choice

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

6.2.5. Family planning desire and methods choice

Most of the respondents are using and planned to use family planning method in the future regardless of their fertility desire, demonstrated broad need for family planning. The most

used and preferred method of family planning was condom because of it's role in re-infection prevention and /or as contraception. In addition it is the commonest method recommended by care providers (counselors).As one woman depict it

"The sister advised me that I have to use condom consistently not to get pregnant and re-infected with another type of virus from my husband"

26 years old women married and with one HIV positive child

Some of the respondents have experience in combined method use condoms for re-infection and other contraceptive method for pregnancy prevention. They mentioned their experience in condom failure for such decision. One woman explained it

"I was using condom but it failed and I ended up with pregnancy. Then after that pregnancy, I started using combined method condom for re-infection prevention and injectable for pregnancy prevention."

32 years old female with two children

Some of the respondents were not using family planning due to various reasons. Some discontinued use of the contraceptive due to fear of family planning and ARV medication interaction. Some did not use due to the perceived side effect of contraceptives. For those who did not disclose their serostatus to their partner condom may not be the possible option. A woman expressed

"I was using injectable contraceptive but discontinued it when I started receiving ARV treatment. I worried the two drugs may interact and cause harm to my health. The

counselors advised me to use condom to prevent pregnancy but it can not be practical in my condition since my husband does not now my HIV status.

30years old female with one child

Others who were not using modern family planning during the interview period did not want to use family planning in the future too and preferred to abstain. They have varied explanation for their choice. These were partners' death, partners' health condition, and concern that sex may further compromise their health. A woman explained

"My husband is dead; I don't want to start new relationship with other man. I'm patient know ……..for the time that I will be living I need to take care of my self and my children. I don't want to use any family planning method, I abstained from sex."

33 years old female with three children

6.2.6. Knowledge and experience about mother to child HIV transmission and prevention

Almost all of the respondents know that HIV transmits from mother to child and availability of mother to child preventive medications. Most heard this information from the media and health professionals. Two women expressed that they learned from their experience that their children born HIV positive. 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. One man expressed his wife had previous experience in use of mother to child preventive medication.

6.2.7. Counseling on fertility issues

Most felt that discussion on sexuality, family planning and child bearing with the health care provider is very important. They believed that it will enable them to know the available reproductive options and to decide the right decision on their reproductive health needs. Irrespective of their need most felt that health care providers did not address their reproductive health needs in sufficient manner. Some claimed the previous counseling did not consider individual patient conditions and some times biased by care providers (counselors) personal opinion. A woman expressed

"I have so many questions in my mind which needs to be answered so do other positives. Like any body else as human we have so many desires desire for sex, for children, to prevent unplanned pregnancy and space births. But we don't have the right information to act according to our needs in healthy manner. Health professionals have responsibility to do this because ever thing comes from them and have the knowledge. But they didn't give us time to listen to our problems and for discussion on such issue which is very important for us .Only prescribing drugs may not be enough. We need the right information to live positively with the virus."

7. Discussion

This study tried to assess fertility desire and family planning demand in HIV positive men and women in follow up care. One hundred eighty five (40.2%) HIV positive individuals 109(44.7%) women and 76(35.2%) men within the reproductive age in Addis Ababa desire children and 246(53.5%) using and 85(39.7 %) want to use family planning in the future.

The proportion of the present study population who desire children was higher than those reported in studies from developed nations. In one study, conducted in United States 28 % of HIV positive men and 29 % women desired children (4). These numbers is lower than our finding, which is 35.2% men and 44.7% women desired children. On the other hand our finding is lower than the findings reported in other African countries. In a study done in Nigeria 68.4% of women and 53.8 % of men HIV positive individuals receiving care desired children (5).These may be due to socio cultural difference between these countries with Ethiopia. It is also important to note that unlike in other studies, we recruited subjects within wide reproductive age limits because child bearing among Ethiopians tend to continue within much of their reproductive life span. Since the wish and capacity for parenthood often declines with increasing age, this implies that our finding on fertility desire would be higher by about 8% if the age limits for analysis were restricted to less than 40 years for women and less than 45 years for men like in other pervious studies (4, 5**).**

Despite the fact that, 63 % of respondents already had one or more children 40.2% of study subjects desired children. This is a cause for concern considering its implication for controlling vertical as well as heterosexual transmission. Moreover in our study population 69.3 % of women reported recent CD4 count less than 200/mm^3. Within the range recommended for ARV treatment. These low CD4 count which may be a reflection of high viral load, would place at risk for near term clinical prognosis for women and in vitero transmission for fetus. Therefore the potential implication for vertical transmission of HIV appears high from this study.

In the absence of medical intervention the risk of mother to child transmission of HIV is up to 25-40% in Africa (23).Though combination antiretroviral treatment, breastfeeding substitution and elective caesarean section have been shown to reduce the risk of transmission to less then 2%, its use is still limited to developed countries (3, 4). Therefore in resource poor setting like ours, the risk of prenatal transmission of HIV can only be reduced by 50% or less when pre partum nevirapine is administered to both the mother and neonates as recommended (24). This residual risk after nevirapine treatment causes serious concern in the light of the present study findings. Further more, more than 50% of our study population has monthly income less than 235 Ethiopian birr which is near to the government lowest salary of 200 Ethiopian birr. This shows that many of these people are from low socio economic status and also are not able to access optimal care for themselves and to reduce the likely hood of transmission to the new borne. This implies fertility desire of HIV positive women have important implications on their health and that of their new borne.

An important factor associated with fertility desire identified in this study was the age of the respondent. Similar to studies done in United States and Nigeria the age of the respondents was an important predictor of fertility desire (4, 5)**.**The present study shows that age groups (18-29) desired children more than the other age groups. These may be attributed to the expected norms of Ethiopian society. That is child bearing preferred and believed to be good if it happened at younger age. However this relationship between age and fertility desire has significant consequence on a disease that is most prevalent among youths (9, 10).

Other significantly associated factor with fertility desire among these PLWHA was marital or relationship status. Those who were married or in relationship were more likely to desire children than other groups. Similar to studies done in United States and Nigeria (4, 5).This is also attributed to the socio cultural norms of Ethiopians. This result is supported by the qualitative study findings. That child bearing out side marriage is unacceptable therefore people tend to choose to have children after they get married. This finding also shows implication for vertical as well as heterosexual transmission of HIV. Because a large number 31.5 % of study subjects had discordant partners and others 21.9% did not know their HIV status. On top of these 12.3% of those married or in relation did not disclose their serostatus to their partners. The result of the qualitative study also elaborate on these issue that those who did not disclose their serostatus face difficulty in their reproductive health decisions. They are prone to take risk to conceal their serostatus from their partner or relatives. Therefore they are less likely to take optimal care for themselves as well as to reduce vertical transmission to the new borne.

Number of children is one of the factors identified from this study associated with child desire. Those who had no children were more likely to desire children than who had one or more children. This finding is in agreement with the result from the qualitative study. This finding also consistent with the result of other previous studies in Nigeria and United States (4, 5).It may be explained that those who had no children had strong desire for parent hood and desire children to achieve their social status by being a father or a mother.

In the present study family planning use and future need to use was assessed together with fertility desire. Family planning is important for HIV positive individuals to space and limit births and to prevent unintended pregnancy irrespective of their fertility desire. Avoiding unintended pregnancy among HIV positive women is one way of vertical transmission reduction. The study shows that 48.9% of study subjects ever used at list one method of family planning before HIV diagnosis. This number reduced to 43.3% after HIV diagnosis. It may be due to reaction for sero positive result and immediate behavioral change that might occur after HIV diagnosis. However a large proportion of (53.5%) of study subjects were using family planning method during the survey period and (39.7 %) who were not using family planning during the study period did want to use family planning in the future. It may show a decision after people get stabilized from post test emotional reactions. This finding has implication for the timing of family planning counseling which indicated that these people needs more help especially immediately after they identified their HIV status.

The most common preferred method of family planning after HIV diagnosis was condom. However, more than 20% of sexually active individuals in the past six months used condom irregularly. Some respondents reported condom failure. This improper use of condom has implication for vertical as well as heterosexual transmission of HIV. It also has implication

for the chance of unintended pregnancy among the study participants. The most preferred family planning service delivery site is ARV a treatment unit by 27.5% which has programmatic implication that the clients need to get the family planning services along with their HIV care.

An important factor associated with future family planning need were sex, males were more likely want to use family planning in the future than females. This may be attributed to the lack of decision power among females.

The other most important factor associated with future family planning use was marital status. Those who were married /in relationship were more likely want to use family planning in the future than the other groups. Most of those who didn't have partners are less likely to be sexually active therefore they may not want to use family planning. But those who were married or in relationship were likely to be sexually active and want to use family planning to control their fertility.

The other most important factors associated with future family planning use were future desire for children. Those who desired children were more likely want to use future family planning than those who did not desire children. In the present study 56.2% of those who desired children want to have a child after two years. In addition to these 57.8% of those who desired children want to have two or more children. Therefore these results show possible desire to space and limit the number of children among those who desired children. Results from the qualitative date also show that some of the respondents want to have children after their CD4 and weight improved. These all shows desire for planned pregnancy among study

population who desire children. Therefore they are more likely to want to use future family planning.

With respect to counseling 19.3% of study subjects reported discussion on fertility issues like fertility desire, family planning, and sexuality with their care providers. More than 50% of total study subjects needed discussion on such issue. However, a large percentage (39.3%) of those who had discussion felt that their care providers have not sufficiently addresses such issue. Besides 30% identified their reason for current family planning method choice was health professional's advice which shows some of the respondents received directive family planning counseling. This finding is supported by the qualitative result of this study. Some times the advise provided by the counselors was, biased by the counselor's personal opinions and did not take in to account individual PLWHA situation (conditions). Such kinds of advice therefore discourage HIV infected individuals from free and open discussion about their reproductive health needs.

Under circumstances which a number of HIV positive individuals were sexually active, continue to desire children and want to use family planning not dealing openly with their reproductive needs makes it difficult to optimally meet with reproductive health care needs of these people. In addition discussion on reproductive health needs of HIV affected individuals with out considering the complexity of reproductive decisions making among PLWHA, especially when they did not disclose their sero statues and not providing practicable reproductive options has no use to promote responsible reproductive decision making and risk free behavior among infected individuals.

8. Strength and Limitation of the study

8.1. Strength of the study

- Study used qualitative method to supplement the result and also to explore factors that are not addressed by quantitative survey.

- Our study is the first in exploring fertility desire and family planning demand among HIV positive individual under care, in Ethiopia .It will be helpful to give insight on the issue for further studies.

8.2. Limitation of the study

- Sample bias –Study participants recruited at visit to ARV treatment units thus more adherent are more likely to be enrolled. Thus the result may not be generalized to all HIV positive individuals in Addis Ababa.

- Social desirability bias-Counselors in the selected ARV treatment units were trained and recruited as a data collector to ensure confidentiality of the study subjects. Even though the counselors were trained appropriately on confidentiality and respondent's right and also the data collectors explained well to the respondents the study has no link with the service provided, to minimize social desirability bias, the respondents may still provide desired answers by their counselors especially on high risk behaviors. Therefore social desirability bias may be totally unavoidable in this study.

9. Conclusion

- The present study showed that a high number of HIV positive men and women desired children.
- Reproductive decisions in HIV positive individuals are not only affected by their HIV status but depend on different factors.

- In general those who desire children are younger, have no children, married or in relation ship and have partners who also desire children.
- Large numbers of HIV positive individuals are using and want to use family planning in the future, which shows broad need.
- The most prevalent method of family planning among HIV positive individuals were condom.
- In general those who need future family planning were males, married /in relation ship and have future child desire.
- A number of HIV positive individuals under care felt that their reproductive counseling needs were not sufficiently addressed by their care providers.

10. Recommendation

- The counseling services should emphasize on the meaning of the fertility desire within the particular context of being sero positive and the need to take in to account not only the risk of transmission to the child but also of the difficulty of combining being a parent with the constraint of their illness. However considering the high premium put on child bearing by Ethiopian society and the percentage of this study population with no children and desired children, it may be wise to desist from conventional systematic advise against pregnancy, but in addition to laying emphasis on the risk, provide adequate information

on practicable reproductive options for individuals affected by HIV. This would assist them in making an informed reproductive choice rather than risk taking behavior.

- The counseling service should emphasize on couples counseling to promote open discussion and responsible reproductive decision among partners.
- The family planning counseling should promote on consistent and proper utilization of condom to reduce condom failure. Other contraceptive methods should also come in to discussion to provide varied options for PLWHA.
- Relevant stakeholders should involve in promoting and strengthening the family planning and other reproductive health counseling within the HIV care units.
- Further studies should be conducted in the hospital and out side the hospital set up and in different parts of the country to come up with more representative findings. In addition the issue should also need to be assessed from different community group's perspectives i.e care providers, policy makers, community leaders to understand the situation in a better way and design interventional activities accordingly.

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Annex -I

Addis Ababa university faculty of medicine department of community health individual consent form for the study on fertility desire and demand for family planning in HIV positive men and women on follow up care in Addis Ababa ARV treatment units.

My name is ----------. I am working with the research team of Addis Ababa University. Hear at -------Hospital ARV treatment unit we are interviewing men and women PLWHA on follow up care to evaluate their fertility desire and demand for family planning .We believe that this study would help to bring change in fertility and family planning services for HIV positive people on ARV treatment.

We would like to assure you your name will not be mentioned in the questionnaire and the information that you will give us will be kept confidential and only used for research purpose. You have full right to refuse to take part or to interrupt the interview at any time. But the information that you will give us is quite useful to achieve the objective of the study and to bring change in the fertility and family planning service provision for HIV positive people on ARV treatment.

Are you willing to participate in the study?

1- Yes 2 - No

If the answer is yes, thanks! Conduct the interview.

If the answer is no, Thanks!

Don't force or reinforce an individual to participate in the survey

Interviewer's code ---------name ---------- signature -------

Date of interview ---------- date ----------month/1998 E. C.

Supervisor's name ----------signature ----------

Checked on ---------- date----------month/1998 E.C.

Complete 1

Incomplete 2

Other (specify) -----

Addis Ababa university faculty of medicine department of community health structured questionnaire on fertility desire and demand for family planning in HIV positive men and women on follow up care in Addis Ababa ARV treatment units.

PART I – Socio - Demographic characteristics

NO	Questions	Categories
101	How old are you?	------ Years (age in completed years)
102	What is your Sex?	Male -------- 1 Female -------- 2
103	What is your religion?	Orthodox ---------- 1 Catholic ---------- 2 Muslim ---------- 3 Protestant ---------- 4 Others (specify) ---------- 89
104	What is the highest Educational level you completed?	---------- Grade completed Able to read and Wright ---------- 86 Un able to read & Wright ---------- 87 No response ----------99 Other specify ----------89
105	What Ethnic group do you belong to?	Oromo ---------- 1 Amhara ---------- 2 Gurage ---------- 3 Tigray ---------- 4 Other (Specify) ----------89
106	What is your Current Marital / relation ship status?	Married---------- 1 Single ---------- 2 Widowed ---------- 3 Divorced ---------- 5 Non married partner ---------- 6 No response ----------99
107	What is your total Monthly in come?	--------- Eth.Birr No income ---------- 1 Don't know ---------- 2 No response ---------- 99 Other (specify)----------89

108	What is your current Occupation?	Unemployed ---------- 1 Student ---------- 2 House wife ---------- 3 House servant ---------- 4 Daily laborer ---------- 5 Merchant ---------- 6 Sex worker ---------- 7 Government employ ---------- 8 Private employ ---------- 9 Other (specify)---------- 89

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 ------- 97 I do not have any live birth -------- 98 No response ----- 99 Other (specify) -----89
110	How many alive children do you have now?	No of alive children -------- I do not have children at all ------97 I do not have alive children ------ 98 No response --------- 99 Other (specify) -------89
111	Would you like to have children in the future?	Yes ---------- 1 No ---------- 2 Don't know -------- 3 No response --------- 99 Other (specify) -------89
112	If the answer for Q 111 yes, when do you prefer to have a child?	----------months /----------years Don't know---------98 No response --------- 99 Other (specify) -------89

113	If the answer for Q 111 yes, How many (more) children would you like to have in the future?	No of children desired ---------- None ---------- 97 Don't know ---------- 98 No response ---------- 99 Other (specify) -------89
114	(If the answer for question 111 no) why do you not want to have children in the future?	have desired number of children --1 fear of mother to child HIV transmission risk ------ 2 don't have adequate income to add another child ---------- 3 Health care providers advise not to have a child ---------- 3 Child bearing may further compromise my/my partner health ---------- -- 5 No response -------- 99 Other (specify) ----------89
115	Does your husband /wife/ partner want to have a child in the future?	Yes ---------- 1 No ---------- 2 Don't know ----------3 Don't have partner ------- 4 No response ---------- 99 Other specify ----------89

PART III –Information on contraceptive use, demand and choice

116	Have you (your partner) ever used family planning method before HIV diagnosis?	Yes ---------- 1 No ---------- 2 Don't remember --------- 3 Don't know --------- 4 No response ---------- 99 Other specify ----------
117	If yes for Q116 specify the method you /your partner used? (More than one answer can be possible)	Abstained from sex --------- 1 Condom ---------- 2 Pill (Ocp) ---------- 3 Injectable ---------- 4 IUD ---------- 5

		Implants --------- 6 Tubalegation /Vasectomy -----7 No response ---------99 Other (specify) ---------89
118	Have you (your partner) ever used family planning method after HIV diagnosis?	Yes ---------- 1 No ---------- 2 Don't remember --------- 3 Don't know --------- 4 No response ---------- 99 Other (specify)-------- 89
119	If yes for Q 118 specify the method you /your partner used? (More than one answer can be possible)	Abstained from sex --------- 1 Condom ---------- 2 Pill (Ocp) ---------- 3 Injectable ---------- 4 IUD ---------- 5 Implants --------- 6 Tubalegation /Vasectomy -----7 No response ---------99 Other (specify) ------89
120	Are you/your partner/ using Family planning method currently (during the study period)?	Yes ---------- 1 No ---------- 2 I don't know ---------- 3 No response ---------- 99
121	If yes for question 120, specify the method you are using? (More than one answer can be possible)	Abstained from sex -------- 1 Condom ---------- 2 Pill(Ocp) ---------- 3 Injectable ---------- 4 IUD ---------- 5 Implants --------- 6 Tubalegation /vasectomy -----7 No response ---------99 Other (specify) -----89
122	Why do you choose the current family planning method?	Health professionals advise ----1 Because it suites with my health---2 From my friends experience /advise ---3

		Other (specify)-------89
123	(If the answer for Q120 No) would you like to use family planning method in the future?	Yes ---------- 1 No ---------- 2 Don't know ---------- 3 No response --------- 99 Other (specify) ------- 89
124	If yes for question 123, specify the method you intend to use? (More than one answer can be possible)	Abstained from sex --------- 1 Condom ---------- 2 Pill(Ocp) ---------- 3 Injectable ---------- 4 IUD ---------- 5 Implants --------- 6 Tubal legation /vasectomy -----7 Other (specify) -------89
125	Where do you want to get the service?	At ARV treatment units --------- 1 In government health facility (FP unit) -2 In private clinics --------- 3 In counseling units --------- 4 Other (specify) ----------89
126	If the answers for question 123no, why don't you wan to use family planning?	want to have a child ---------- 1 fear that family planning drugs may create complication with ARV treatment -----2 I abstained from sex ----------3 No response ---------- 99 Other specify----------89
127	If you are using family planning methods did you disclose your serostatus to your family planning provider?	Yes ---------- 1 No ---------- 2 No response -----99 Other (specify) -------89
128	If the answer for question 127 no, why din't you disclose your serostatus to your family planning providers	I don't trust the providers ------1 I feared stigma and discrimination-2 No response---------- 99 Other (specify)--------- 89

PART IV Information on Knowledge and Attitude on MTCT and PMTCT

129	Dose HIV transmit from mother to child?	Yes ---------- 1 No ---------- 2 Don't know ---------- 3 No response ---------- 99 Other (specify) -------89
130	IF yes when dose HIV transmissions occur from mother to child?	During pregnancy ---------- 1 During labor ---------- 2 Through breastfeeding ------- 3 I don't know ---------- 4 No response ---------- 99 Other (specify) ---------- 89
131	Is there any medication, which may help to prevent mother to child HIV transmission?	Yes ---------- 1 No ---------- 2 Don't know ---------- 3 No response ---------- 99 Other (specify) ----------89
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----------1 About 50% children acquire the infection 2 I don't now ---- 3 I don't know the exact figure ------ 4 No response -------99 Other specify ----------
133	From where did you get the information about mother to child HIV transmission?	Mass media ---------- 1 Health care provider ------- 2 From friends ---------- 3 Home based care givers ---------- 4 No response ---------- 99 Other (specify) ----------
134	Do you think medication provided to reduce mother to child HIV transmission actually reduce the transmission?	Yes ---------- 1 No ---------- 2 Don't know---------- 3 No response ---------- 99 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 ---------- 1 No response ---------- 99 Other (specify) -------
136	Did you start Receiving ARV treatment?	Yes ---------- 1 No ---------- 2 No response ---------- 99 Other (specify) -------
137	When did you start receiving ARV treatment?	Before -------- month or------years Don't remember ---------- 1 No response ---------- 99
138	Who cover the cost of the Drugs?	My self ------- 1 Free access from the Government ---- 2 Covered by care and support NGO's-- 3 My parents/ Relatives ---------- 4 No Response ---------- 99 Other (specify) ----------
139	How is your over all health condition after you start receiving ARVT?	Improved ----------1 No change ----------2 Deteriorated ---------- 3 No Response ---------- 99 Other (specify) -------
140	How much is your recent CD4 count?	----------
141	How long did you attend in this ARV treatment unit?	---------- Months and ------- years Don't remember ---------- 1 No response ---------- 99 Other specify ----------
142	Did you get support from different community groups?	Yes ---------- 1 No ---------- 2 No Response ---------- 99 Other specify ----------
143	From where did you get the support?	Relatives/neighbors and friends ----------1 NGO's ---------- 2

		GO' s ---------- 3 FB'Os---------- 4 Other (specify) ----------
144	If yes for question 142, What kind of support did you get?	Money ---------- 1 HBC (Home Based Care) ---------- 2 Counseling ---------- 3 Food/ Health care ---------- 4 No Response ---------- 99 Other (specify) ----------
145	Did Your counselor /ART provider discuss about sexuality, child bearing and family planning?	Yes ---------- 1 No ---------- 2 No response ---------- 99
146	Would you like to discuss with your counselor/ART provider about sexuality, child bearing and family planning?	Yes ---------- 1 No ---------- 2 Don't know ---------- 3 No response --------- 99
147	If yes for question 145, did your counselor/ART provider adequately cover issues like child bearing, sexuality and family planning	Yes ---------- 1 No---------- 2 Don't know ----- 3 No response --------- 4 Other specify ----------89

PART VI – Information on reproductive characteristics

148	Have you had sexual Intercourse In the past six months?	Yes ---------- 1 No ---------- 2 No response ---------- 99 Other (specify) ----------89
149	(If yes for Q 148) Have you used condom?	Yes ---------- 1 No ---------- 2 I don't remember ---------- 3 No response ---------- 99 Other (specify) ----------89
150	If yes for Q149 how often?	Always ---------- 1 Some times ---------- 2 No response ---------- 99 Other (specify) ----------89

151	If the answer for question 149 yes, why do you used condom?	To prevent pregnancy ---- 1 Because my partner HIV status is negative 2 Health care providers advised me to use condom --- 3 No response ---------- 99 Other (specify) ----------89
152	If the answer for question 149 no, why didn't you used condom?	I want to have children ------- 1 My partner did not like it ------- 2 No response ---------- 99 Other (specify) ----------89
153	Did you disclose your serostatus to Your partner?	Yes ---------- 1 No ---------- 2 No partner ---------- 3 No response ---------- 99 Other (specify) ----------89
154	Dose your partner had HIV test?	Yes ---------- 1 No ---------- 2 No partner ---------- 3 I don't know---------- 4 No response---------- 99 Other (specify) ----------89
155	What was his/her test result?	Positive ---------- 1 Negative ---------- 2 I don't now ----------3 No response ---------- 99 Other (specify) ----------89

Annex -II

በአዲስ አበባ ዩኒቨርሲቲይ የህክምና ትምህት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩና በአዲስ አበባ የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ጣቢያዎች ተከታታይ ህክምና የሚያደርጉ ወንዶችና ሴቶች የመዉለድና የቤተሰብ ምጣኔ አገልግሎት ፍላጎታቸዉን ለማጥናት ቃለ መጠይቅ ለማድረግ የግለሰቦች ፈቃደኝነት መጠየቂያ ፎርም ::

ስሜ----------ይባላል:: እኔ ከአዲስ አበባ ዩኒቨርስቲ የጥናት ቡድን ጋር አብሬ እየሰራሁ ነው:: አሁን በዚህ በ ---------- ሆስፒታል የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ክፍል ተከታታይ ህክምና የሚያደረጉ ከኤች አይ ቪ ቫይረስ ጋር የሚኖሩ ወንዶችና ሴቶችን የመውለድ እና የቤተሰብ ምጣኔ አግልግሎት ፍላጎታቸዉን ለማጥናት ቃለ መጠይቅ እያደረግን ነዉ ::ይህ ጥናት ከኤች አይ ቪ ቫይረስ ጋር ለሚኖሩና የፀረ ኤች.አይ.ኤድስ ህክምና ክትትል ለሚያደርጉ ሰዎች የወሊድና የመከላከያ አገልግሎት አሰጣጥ ላይ ለውጥ ያመጣል ብለን እናምናለን :: ስምዎ በዚህ መጠይቅ ውስጥ የማይጠቀስ መሆኑንና በቃለ መጠይቁ የሚሰጡን መረጃ ሁሉ በሚስጥር ተይዞ ለጥናት አገልግሎት ብቻ የሚዉል መሆኑን ላረጋግጥልዎ እወዳለሁ :: እርስዎ በዚህ ጥናት ላይ የመሳተፍ፣ያለመሳተፍ ወይንም በማንኛዉም ወቅት ቃለ መጠይቁን የማቋረጥ ሙሉ መብት አልዎት :: ነገር ግን እርስዎ በጥናቱ ተሳትፈዉ የሚሰጡን መረጃ ጥናቱን ዉጤታማ ለማድረግ እና ከኤች. አይ.ቪ ቫይረስ ጋር ለሚኖሩ ሰዎች የወሊድና የቤተሰብ ምጣኔ አገልግሎት አሰጣጥ ላይ ለዉጥ ለማምጣት ከፍተኛ ጠቀሜታ አለዉ ::

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

1-አዎን 2- አይደለሁም

መልሱ አዎን ከሆነ አመስግነዉ ቃለ መጠይቁን ያካሒዱ

መልሱ አይደለሁም ከሆነ አመስግነው ወደ ሌላ ተጠያቂ ይለፉ

ግለሰቡን በመጠይቁ ለማሳተፍ ምንም አይነት ማስገደጃ ወይም ጫና መደረግ የለበትም

የጠያቂው ኮድ ---------- ስም----------ፊርማ ----------

ቃለ መጠይቁ የተከሄደበት ቀን --------- ወር ----------1998 ዓ.ም

የገምጋሚዉ ኮድ------- ስም ---------- ፊርማ ---------

የተመረመረበት ቀን --------- ወር -------- 1998 ዓ.ም

የተሟላ *1*

ያልተሟላ *2*

ሌላ ካለ ይገለጽ----

በአዲስ አበባ ዩኒቨርሲቲይ የህክምና ትምህት ክፍል የህብረተሰብ ጤና ትምህርት ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩና በአዲስ አበባ የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ጣቢያዎች ተከታታይ ህክምና የሚያደርጉ ወንዶችና ሴቶች የመዉለድና የቤተሰብ ምጣኔ አገልግሎት ፍላጎታቸዉን ለማጥናት የተዘጋጀ መጠይቅ::

ክፍል አንድ - መረጃ ስለ ማህበራዊ ሁኔታ

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ዝርዝሮች
101	እድሜዎ ስንት ነዉ ?	----------አመት(እድሜ በሙሉ አመት ይገለፅ)
102	ፆታዎ ምንድነዉ ?	ወንድ---1 ሴት-----2
103	ሐይማኖትዎ ምንድነዉ?	ኦርቶዶክስ----1 ከቶሊክ-------2 ሙስሊም------3 ፕሮቴስታንት ----4 ሌላ ከለ ይገለጽ----------89
104	ተምረዉ ያጠናቀቁት ከፍተኛዉ የትምህርት ደረጃ ስንት ነዉ ?	--------- ክፍል ያጠናቀቀ ማንበብና መጽሃፍ የሚችል ----1 ማንበብና መጽሃፍ የማይችል -----2 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ----------89
105	ብሔርዎ/ዘርዎ ምንድነዉ ?	ኦሮሞ--------1 አማራ-------2 ጉራጌ---------3 ትግራይ--------4 ሌላ ከለ ይገለጽ---------- -89
106	በአሁኑ ወቅት የጋብቻ ሁኔታዎ አንዴት ነዉ?	ያገቡ---------- 1 ያላገቡ ---------- 2 ባል /ሚስት የሞተባቸዉ---------- 3 የተፋቱ---------- 4 ያልተጋቡ ጥንዶች/የጸታ ጓደኛ ያላቸዉ/---5 መልስ የለም--------99 ሌላ ከለ ይገለጽ --------- 89
107	ጠቅላላ የወር ገቢዎ ስንት ነዉ ?	--------- የኢ.ብር ገቢ የሌለዉ---------1 አላዉቅም---------- 2 መልስ የለም---------- 99 ሌላ ከለ ይገለጽ --------- 89

108	በአሁኑ ወቅት ያሉበት የስራ አይነት ምንድነዉ?	ስራ የሌለዉ--------- 1 ተማሪ ---------- 2 የቤት አመቤት ---- 3 የቤት ሰራተኛ------- 4 የቀን ሰራተኛ ------- 5 ነጋዴ --------- 6 የቡና ቤት ሰራተኛ --- 7 የመንግስት ሰራተኛ ----- 8 የግል ሰራተኛ ---------- 9 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ -------- 89

ክፍል ሁለት - መረጃ ስለ መዉለድ ፍላጎት

109	በእድሜዎ ምን ያህል ልጆች በህይወት ወልደዋል ?	------- በህይወት የተወለዱ ልጆች ቁጥር ምንም ልጅ አልወለድኩም ------- 97 ምንም በህይወት ያለ ልጅ አልወለድኩም -- 98 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ----------89
110	በአሁኑ ጊዜ ምን ያህል በህይወት ያሉ ልጆች አልዎት?	---------- በህይወት ያሉ የልጆች ቁጥር ምንም ልጅ አልወለድኩም ------ 97 ምንም በሂወት ያለ ልጅ የለኝም ---------- 98 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ---------- 89
111	ለወደፊቱ ልጅ እንዲኖርዎ ይፈልጋሉ?	አዎን -------1 አልፈልግም------2 አላዉቅም --------- 3 መልስ የለም -------99 ሌላ ከለ ይገለጽ----------89
112	ለጥያቄ ቁጥር 111 መልሱ አዎን ከሆነ መቼ ነዉ ልጅ መዉለድ የሚፈልጉት ?	ከ ------- ወራት ወይም--------- አመት በኋላ አላዉቅም ---------- 98 መልስ የለም -------99 ሌላ ከለ ይገለጽ----------89
113	ለጥያቄ ቁጥር 111 መልሱ አዎን ከሆነ ምን ያህል (ተጨማሪ) ልጅ እንዲኖርዎ ይፈልጋሉ?	የልጆች ቁጥር ------- ምንም ---- 97 አላዉቅም -------- 98 መልስ የለም -----99

		ልላ ከለ ይገለጽ--------89
114	ለጥያቄ ቁጥር 111 መልሱ አልፈልግም ከሆነ ለምንድነዉ (ተጨማሪ) ልጅ መዉለድ የማይፈልጉት ?	የምፈልገዉን ያህል ልጅ ስላለኝ-------- 1 የኤች.አይ.ቪ ኤድስ ከናት ወደ ልጅ መተላለፍን ፈርቼ2 ያለኝ የገቢ መጠን ተጨማሪ ልጅ ለማሳደግ ስለማይበቃኝ -----3 የጤና ባለሙያዎች ልጅ መዉለድ አንደሌለብኝ ስለሚመክሩኝ ---4 ልጅ መዉለድ የጤናዬን ሁኔታ ያባብሰዋል ብዬ ፈርቼ5 መልስ የለም -----99 ሌላ ከለ ይገለጽ-------89
115	የትዳር /የጾታ ጓደኛዎ ልጅ እንዲኖራቸዉ ይፈልጋሉ ?	አዎን ------ 1 አትፈልግም /አይፈልግም ----- 2 አላዉቅም ------ 3 የትዳር/የጾታ ጓደኛ የለኝም ----- 4 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ-------89
ክፍል3 - መረጃ ስለ ቤተሰብ ምጣኔ አጠቃቀም ምርጫና ፍላጎት		
116	የኤች. አይ .ቪ ኤድስ የደም ምርመራ ዉጤትዎን ከማወቅዎ በፊት እርስዎ /የትዳር/የጾታ ጓደኛዎ የቤተሰብ ምጣኔ አገልግሎት ተጠቅመዉ ያዉቃሉ ?	አዎን ----------1 አልተጠቀምኩም ----------2 አላስታዉስም ---------- 3 አላዉቅም ---------- 4 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ ----------89
117	ለጥያቄ 116 መልሱ አዎን ከሆነ የትኛዉን የወሊድ መከላከያ አይነት ነበር የተጠቀሙት ? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ)--1 ኮንዶም ---------- 2 የወሊድ መቆጣጠሪያ አንክብል ------- 3 በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ----4 በማህጸን የሚገባ የወሊድ መቆጣጠሪያ ---- 5 በክንድ የሚቀበር የወሊድ መቆጣጠሪያ ---- 6 መሃጸንማስቋጠር/የዘር ፍሬን መስቋጠር -------7 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ----------89
118	የኤች. አይ .ቪ ኤድስ የደም ምርመራ ዉጤትዎን ከወቁ በኃላ እርስዎ /የትዳር/የጾታ	አዎን ---------- 1 አልተጠቀምኩም ---------- 2

	ጓደኛዎ የቤተሰብ ምጣኔ አገልገሎት ተጠቅመዉ ያዉቃሉ ?	አላስታዉስም ---------- 3 አላዉቅም ---------- 4 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ---------- 89
119	ለጥያቄ 118 መለሱ አዎን ከሆነ የትኛዉን የወሊድ መከላከያ አይነት ነበር የተጠቀሙት? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ) -1 ኮንዶም ---------- 2 የወሊድ መቆጣጠሪያ አንክብል ------- 3 በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ-- 4 በማህጸን የሚገባ የወሊድ መቆጣጠሪያ ------- 5 በክንድ የሚቀበር የወሊድ መቆጣጠሪያ ---- 6 መሃጸን ማስቋጠር/የዘር ፍሬን ማስቋጠር -----7 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ---------- 89
120	አሁን ጥናቱ በሚከሄድበት ወቅት እርስዎ /የትዳር/የጸታ ጓደኛዎ የወሊድ መቆጣጠሪያ ይጠቀማሉ (እየተጠቀሙ ነዉ)?	አዎን ---------- 1 አልጠቀምም--------- 2 አላዉቅም---------- 3 መልስ የለም--------- 99 ሌላ ከለ ይገለጽ------ 89
121	ለጥያቄ 120 መልሱ አዎን ከሆነ የትኛዉን የወሊድ መቆጣጠሪያ አይነት ነዉ አየተጠቀሙ ያሉት ? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ(መታቀብ)-- 1 ኮንዶም ---------- 2 የወሊድ መቆጣጠሪያ አንክብል ------- 3 በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ----4 በማህጸን የሚገባ የወሊድ መቆጣጠሪያ ----- 5 በክንድ የሚቀበር የወሊድ መቆጣጠሪያ ---- 6 መሃጸን ማስቋጠር/የዘር ፍሬን ማስቋር ----- 7 መልስ የለም --------- 99 ልላ ከለ ይገለጽ---------- 89
122	ለምን አሁን በመጠቀም ላይ ያሉትን የወሊድ መቆጣጠሪያ መረጡ	የጤና ባለሙያዎች እንድጠቀም ስለመከሩኝ----1 ለጤናዬ ይስማማኛል ብዬ ---------- 2 ጓደኞቼ ሲጠቀሙበት አይቼ/በጓዋደኞቼ ምክር-3 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ----------89
123	ለጥያቄ 120 መልሱ አልጠቀምም ከሆነ ለወደፊት የወሊድ መቆጣጠሪያ መጠቀም ይፈልጋሉ ?	አዎን --------1 አልፈልግም ----------2 አላዉቅም ---------- 3 መልስ የለም---------- 99 ሌላ ከለ ይገለጽ ---------- 89

124	ለጥያቄ 123 መልሱ አዎን ከሆነ ለመጠቀም የሚፈልጉትን የወሊድ መቆጣጠሪያ አይነት ይግለጹ? (ከአንድ መልስ በላይ መመለስ ይቻላል)	የግብረ ስጋ ግንኙነት አለማድረግ (መታቀብ)- 1 ኮንዶም ---------- 2 የወሊድ መቆጣጠሪያ አንክብል ------- 3 በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ----4 በማህጸን የሚገባ የወሊድ መቆጣጠሪያ ----5 በክንድ የሚቀበር የወሊድ መቆጣጠሪያ ---- 6 መሃጸን ማስቋጠር/የዘር ፍሬን ማስቋጠር -- 7 መልስ የለም ---------- 99 ልላ ከለ ይገለጽ---------- 89
125	የቤተሰብ ምጣኔ አገልግሎቱን የት ማግኘት ይፈልጋሉ?	በፀረ ኤች. አይ. ቪ ኤድስ ህክምና መስጫ ጣቢያ --1 በመንግስት የጤና ተቋማት የቤተሰብ ምጣኔ አገልግሎት መስጫ ጣቢያ ----------2 በግል የጤና ተቋማት ---------- 3 በምክክር አገልግሎት መስጫ ጣቢያ ------4 ሌላ ከለ ይገለጽ -------- 99
126	ለጥያቄ ቁጥር 123 መልሱ አልጠቀምም ከሆነ ለምንድነዉ የቤተሰብ ምጣኔ አገልገሎት የማይጠቀሙት ?	ልጅ እንዲኖረኝ ስለምፈልግ ---------- 1 የወሊድ መቆጣጠሪያ መድሀኒቶችከፀረ ኤች .አይ .ኤድስ መድሃኒቶች ጋር አይስማሙም ብዬ ፈርቼ ---- 2 ከግብረ ስጋ ግንኙነት ስለ ታቀብኩ ------- 3 መልስ የለም --------- 99 ሌላ ከለ ይገለጽ------- 89
127	የቤተሰብ ምጣኔ የሚጠቀሙ ከሆነ የኤች. አይ .ቪ ኤድስ የደም ምርመራ ዉጤትዎን ለቤተሰብ ምጣኔ አግልግሎት ሰጪ ሀኪምዎ አሳዉቀዋል ?	አዎን---------- 1 አላሳወቅሁም ---------- 2 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ --------- 89
128	ለጥያቄ ቁጥር 127 መልሱ አላሳወቅሁም ከሆነ የኤች. አይ .ቪ ኤድስ የደም ምርመራ ዉጤትዎን ለምን አላሳወቁም?	ስለማላምናቸዉ ---------- 1 ያገሉኛል ብዬ ፈርቼ -------- 2 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ-------- 89

ክፍል 4 መረጃ ከናት ወደ ልጅ የኤች ኤቪ ኤድስ ስርጭትን እና መከላከልን በተመለከተ እዉቀትና አመለካከት

129	ኤች. አይ .ቪ ኤድስ ከናት ወደ ልጅ ይተላለፋል?	አዎን--------- 1 አይተላለፍም---------- 2 አላዉቅም ----------3 መልስ የለም---------- 99 ሌላ ከለ ይገለጽ ----------89
130	ለጥያቄ 129 መልሱ አዎን ከሆነ መቼ /በምን ጊዜ/	በእርግዝና ወቅት -------- 1

	ነዉ የኤች አይ. ቪ. ኤድስ ከናት ወደ ልጅ የሚተላለፈዉ? (ከአንድ መልስ በላይ መመለስ ይቻላል)	በወሊድ ጊዜ --------2 ጡት በማጥባት ጊዜ----------3 አላዉቅም -------- 4 መልስ የለም ---------99 ሌላ ከለ ይገለጽ ----------89
131	የኤች. አይ .ቪ. ኤድስ ቫይረስ ከእናት ወደ ልጅ እንዳይተላለፍ ለማድረግ የሚረዳ መድሀኒት(ህክምና) አለ ?	አዎን -------- 1 የለም---------2 አላዉቅም ----------3 መልስ የለም---------99 ሌላ ከለ ይገለጽ ----------89
132	በኤች .አይ. ቪ. የተያዘች እናት ምንም መከላከያ መድሃኒት ሳትጠቀም ቫይረሱን ለልጅዋ የማስተላልፍ እድል ምን ያህል ነዉ ብለዉ ያስባሉ ?	በኤች.አይ.ቪ. የተያዘች እናት የምትወልዳቸዉ ልጆች በሙሉ በቫይረሱ ይጠቃሉ ----------1 ከምተወልዳቸዉ ልጆች ግማሽ ያህሉበቫይረሱ ይጠቃሉ -----2 አላዉቅም--------3 ምን ያህል አንደሆነ አላዉቅም ግን ይተላለፋል --4 መልስ የለም ------99 ሌላ ከለ ይገለጽ --- 89
133	የኤች. አይ .ቪ. ኤድስ ከናት ወደ ልጅ መተላለፍን በተመለከተመረጃ ከየትነዉ የሚያገኙት?	ከመገናኛ ብዙሃን ----1 ከጤና ባለሙያዎች ------2 ከቤት ለቤት እንክብከቤ ሰጪዎች -----3 ከጓደኞቼ---------- 4 መልስ የለም ----- 99 ሌላ ከለ ይገለጽ-------- 89
134	ከእናት ወደ ልጅ የኤች. አይ .ቪ. ኤድስ ቫይረስ እንዳይተላለፍ ለማድረግ የሚደረገዉ ህክምና የኤች. አይ .ቪ. ኤድስ ቫይረስ ከእናት ወደ ልጅ መተላለፍን በእርግጠኝነት ይቀንሳል ብለዉ ያምናሉ?	አዎን-----1 አላምንም-----2 አላዉቅም------3 መልስ የለም ----- 99 ሌላ ከለ ይገለጽ-----89

ክፍል 5 ስለ ኤች አይ .ቪ. ኤድስ እና የህክምና ሁኔታ መረጃ

135	የኤች. አይ .ቪ. ኤድስ ቫይረስ እንዳለብዎ ተመርምረዉ ከወቁ ምን ያህል ጊዜ ሆንዎት?	---------ወር/-------አመት አላስታዉስም------- 1 መልስ የለም----- 99 ሌላ ከለ ይገለጽ------89
136	የፀረ ኤች. አይ .ቪ. ኤድስ መድሃኒት መጠቀም ጀምረዋል ?	አዎን -------1 አልጀመርኩም-----2 መልስ የለም----- 99 ሌላ ከለ ይገለጽ--------- 89
137	ለጥያቄ 136 መልሱ አዎን ከሆነ መቼ ነዉ የፀረ ኤች. አይ .ቪ. ኤድስ መድሃኒት መጠቀም የጀመሩት?	ከ---------ወራት/-------አመት በፊት አላስታዉስም------- 1 መልስ የለም----- 99 ሌላ ከለ ይገለጽ ------89
138	የመድሃኒቱን ዋጋ ማነዉ የሚሸፍነዉ ?	እኔ ራሴ ----1 ከመንግሰት በነፃ የሚታደል ------2 በእንክብከቤና ድጋፍ ሰጪ ድርጅቶች ---3 ከቤተሰቦቼ/ዘመዶቼ----4 ሌላ ከለ ይገለጽ ------- 89
139	በእርሰዎ አመለከከት/ምዘና የፀረ.ኤች.አይ ኤድስ መድሃኒት መጠቀም ከጀመሩ ጀምሮ በአጠቃላይ የጤናዎ ሁኔታ እንዴት ነዉ?	ተሻሽሎዋል ---1 ምንም ለዉጥ የለዉም---2 እየተባባሰ ነዉ ------3 መልስ የለም----- 99 ሌላ ከለ ይገለጽ-------- 89

140	የቅርብ ጊዜ የ CD4 መጠንዎ ስንት ነዉ?	---------- በቁጥር ይገለጽ አላወቅም---------97 መልስ የለም----- 99 ሌላ ከለ ይገለጽ-------- 89
141	በዚህ የፀረ ኤች .አይ .ቪ. ኤድስ ህክምና መስጫ ጣቢያ ክትትል ሲያደርጉ ስንት ጊዜ ሆንዎት ?	------ወር/-------- አመት አላስታዉስም---------- 1 መልስ የለም ---------- 99 ሌላ ከለ ይገለጽ-------- 89
142	ከተለያዩ የህብረተሰብ ክፍሎች ድጋፍ ይደረግልዎታል ?	አዎን ----1 አይደረግልኝም ----2 መልስ የለም----- 99 ሌላ ከለ ይገለጽ---- 89
143	ለጥያቄ 142 መልሱ አዎን ከሆነ ድጋፉን ከየት ነዉ የሚያገኙት?	ከዘመዶቼ----1 መንግስታዊ ከልሆኑ ተቋማት ----------2 መንግስታዊ ከሆኑ ተቋማት ----------3 መልስ የለም----- 99 ሌላ ከለ ይገለጽ ---------- 89
144	ምን አይነት ድጋፍ ነዉ የሚያገኙት ?	የገንዘብ---1 የቤት ዉስጥ አንክብከቤ---2 የምክር---3 የምግብና የጤና አገልግሎት ----4 መልስ የለም----- 99 ሌላ ከለ ይገለጽ ----------89
145	ከአማከሪዎ/ ከ ፀረ ኤች. አይ .ቪ. ኤድስ ህክምና ሰጭ ሃኪምዎ ጋር ስለ ልጅ መዉለድ እና የቤተሰብ ምጣኔ አገልግሎት ተወያይተዉ ያዉቃሉ?	አዎን-----1 አላዉቅም ---2 መልስ የለም----- 99 ሌላ ከለ ይገለጽ --- 89
146	ከአማከሪዎ/ ከ ፀረ ኤች. አይ .ቪ. ኤድስ ህክምና ሰጭ ሃኪምዎ ጋር ስለ ልጅ መዉለድ እና የቤተሰብ ምጣኔ አገልግሎት መወያየት ይፈልጋሉ ?	አዎን-----1 አልፈልግም ---2 አላዉቅም ------- 3 መልስ የለም----- 99 ሌላ ከለ ይገለጽ ---- 89
147	ለጥያቄ ቁጥር 145 መልሱ አዎን ከሆነ ከአማከሪዎ ጋር ስለ ልጅ መዉለድና የቤተሰብ ምጣኔ አገልግሎት ጉዳዮች ላይ የሚያደርጉት ዉይይት በቂ ነዉ?	አዎን---------- 1 አይደለም ---- 2 አላዉቅም -- 3 መልስ የለም----- 99 ሌላ ከለ ይገለጽ --------- 89

ክፍል 6 - መረጃ ስለ ስነ ተዋልዶ ሁኔታ

148	ባለፉት ስድስት ወራት የግብረ ስጋ ግንኙነት አድርገዉ ያዉቃሉ ?	አዎን -----1 አላደረኩም----2 መልስ የለም----- 99 ሌላ ከለ ይገለጽ ----- 89
149	ኮንደም ተጠቅመዉ ነበር ?	አዎን ---1 አልተጠቀምኩም ---2 አላስታዉስም----3 መልስ የለም------ 99 ሌላ ከለ ይገለጽ ----- 89
150	አዎን ከሉ ምን ያህል ጊዜ ?	ሁልጊዜ -----1 አንዳንድ ጊዜ---2 መልስ የለም----99 ሌላ ከለ ይገለጽ -----89
151	ለጥያቄ ቁጥር 152 መልሱ አዎን ከሆነ ኮንደም የተጠቀሙት ለምንድ ነዉ?	ርግዝናን ለመከላከል---------- 1 የትዳር/ የያታ ጓዋደኛዬ ከኤች.አይ.ቪ. ቫይረስ ነፃ ስለሆነች--2 የጤና ባለሙያዎችኮንደም እንድጠቀም ስለሚመክሩኝ- --- 3

		መልስ የለም------ 99 ሌላ ከለ ይገለጽ -----89
152	ለጥያቄ ቁጥር 150 መልሱ አልተጠቀምኩም ከሆነ ለምንድ ነዉ ኮንደም ያልተጠቀሙት?	ልጅ እንዲኖረኝ ስለምፈልግ-------- 1 የትዳር /የያታ ንዋደኛዬ መጠቀም ስለማይፈልግ/ትፈልግ-------2 መልስ የለም------ 99 ሌላ ከለ ይገለጽ -----89
153	የኤች. አይ .ቪ. ኤድስ የደም ምርመራ ዉጤትዎን ለትዳር/ለጸታ ንደኛዎ አሳዉቀዋል ?	አዎን----1 አላሳወኩም ----2 የትዳር/የጸታ ንደኛ የለኝም ----3 መልስ የለም----99 ሌላ ከለ ይገለጽ
154	የትዳር/የጸታ ንደኛዎ የኤች. አይ .ቪ. ኤድስ የደም ምርመራ አድርገዋል ?	አዎን ----1 አላደረጉም-----2 የትዳር/የጸታ ንደኛ የለኝም ----3 አላዉቅም ---4 መልስ የለም----99 ሌላ ከለ ይገለጽ -----89
155	ለጥያቄ 157 መልሱ አዎን ከሆነ የኤች. አይ .ቪ. ኤድስ የደም ምርመራ ዉጤታቸዉ ምን ነበር ?	ፖዝቲቭ/ቫይረሱ ያለባቸዉ.---1 ኔጋቲቭ /ከቫይረሱ ነፃ----2 አላዉቅም ---3 መልስ የለም----99 ሌላ ከለ ይገለጽ ----- 89

Annex –III: In depth interview guide

Addis Ababa university faculty of medicine department of community health individual consent form for the study on fertility desire and demand for family planning in HIV positive men and women on follow up care in Addis Ababa ARV treatment units.

My name is ---------- .I 'm working with the research team of Addis Ababa University. Hear at -------Hospital ARV treatment unit we are interviewing men and women PLWHA on follow up care to evaluate their fertility desire and demand for family planning .We believe that this study would help to bring change in fertility and family planning services for HIV positive people on ARV treatment .We would like to assure you your name will not be mentioned in the interview. I will use a tape recorder to ensure accuracy of the data collection but the information that you will give us will be kept confidential and will be used only for research purpose. You have full right to refuse to take part or to interrupt the interview at any time. But the information that you will give us is quite useful to achieve the

objective of the study and to bring change in the fertility and family planning service provision for HIV positive people on ARV treatment.

Are you willing to participate in the interview?

1- Yes 2-No

If the answer is yes, thanks!

Conduct the interview.

If the answer is no, Thanks!

Don't force or reinforce an individual to participate in the survey

Part I - **<u>Socio demographic information</u>**

How old are you (age in completed years)? ----------

What is your sex? ----------

What is you marital status? ---------

What is your current occupation? ----------

What is your Ethnicity? ----------

What is your Religion? ----------

What is your total Monthly in come? ----------Eth. Birr.

What is the highest educational level you completed? ----------

Part II- <u>Information on child desire and in reproductive characteristics</u>

Q1-How many current alive children did you have?

Their age ----------

Their sex --------

Their HIV/status----------

Q2- How important is it for you to have /not to have (more) children?

Q3 - What are some of the reasons for the way you feel about this?

Q4 - How important is it for your partner to have or not to have (more) children?

Q5-What effect, if any, does HIV have on your desire to have or not to have (More) children

Q6- How many more children would you like to have? Why?

Q7-How important are children in your community?

Q8- Do you think HIV changed the way people in your community think about The number of children you want to have ? EXPLAIN

PART III– <u>Information on family planning choice</u>

Q9- How important is it for you to use or not to use family planning?

Q10- How important is it for your partner to use or not to use family planning?

Q11- What are some of the reasons for the way you feel about this?

Q12- What effect, if any, does HIV have on your demand to use or not to use family Planning?

Q13-What method of family planning do you want to use /are using?why

Q14-How and why do you choose the method you want to use/you are using?

Q15- Have you ever discussed about your serostatus to your family planning provider ? Why?

Q16- Have you ever discuses about your serostatus to your partner /your family? why?

Q17- Do you want to discuss about fertility, sexuality and family planning with your counselor and ART provider? Why?

Q18 -What do you now about MTCT? Explain.

Q19- What do you now about PMTCT services? Explain.

Q20 – Do you think/believe medications used to prevent MTCT of HIV reduce the chance of transmission? WHY?

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

Annex-IV

በአዲስ አበባ ዩኒቨርሲቲይ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት
ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩና በአዲስ አበባ የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ጣቢያዎች ተከታታይ ህክምና የሚያደርጉ ወንዶችና ሴቶች የመዉለድና የቤተሰብ ምጣኔ አገልግሎት ፍላጎታቸዉን ለማጥናት የተዘጋጀ የግለሰቦች ፈቃደኝነት መጠየቂያ ቅጽ::

ስሜ----------ይባላል:: እኔ ከአዲስ አበባ ዩኒቨርስቲ የጥናት ቡድን ጋር አብሬ እየሰራሁ ነው:: አሁን በዚህ በ ---------- ሆስፒታል የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ክፍል ተከታታይ ህክምና የሚያደረጉ ከኤች አይ ቪ ቫይረስ ጋር የሚኖሩ ወንዶችና ሴቶችን የመውለድ እና የቤተሰብ ምጣኔ አግልግሎት ፍላጎታቸዉን ለማጥናት ቃለ መጠይቅ እያደረግን ነዉ ::ይህ ጥናት ከኤች አይ ቪ ቫይረስ ጋር ለሚኖሩና የፀረ ኤች.አይ.ኤድስ ህክምና ክትትል ለሚያደርጉ ሰዎች የወሊድና የመከላከያ አገልግሎት አሰጣጥ ላይ ለውጥ ያመጣል ብለን እናምናለን :: ስምዎ በዚህ ቃለ መጠይቅ ውስጥ የማይጠቀስ መሆኑን ላረጋግጥልዎ እወዳለሁ ::የመረጃ ስብሰባዉን እርግጠኛ ለማድረግ የተፕ ሪኮርደር አጠቀማለሁ ነገር ግን በቃለ መጠይቁ የሚሰጡን ማንኛዉም መረጃ ሁሉ በሚስጥር ተይዞ ለጥናት አገልግሎት ብቻ ይዉላል :: እርስዎ በጥናቱ የመሳተፍ ያለመሳተፍ እና በማንኛ ዉም ጊዜ ቃለ መጠይቁን የማቋረጥ መብት አልዎት ነገር ግን እርስዎ በጥናቱ ተሳትፈዉ የሚሰጡን መረጃ ጥናቱን ዉጤታማ ለማድረግ እና ከኤች. አይ.ቪ ቫይረስ ጋር ለሚኖሩ

ሰዎች የወሊድና የቤተሰብ ምጣኔ አገልግሎት አሰጣጥ ላይ ለዉጥ ለማምጣት ከፍተኛ ጠቀ ሜታ አለዉ ::

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

1-አዎን 2- አይደለሁም

መልሱ አዎን ከሆነ አመስግነዉ ቃለ መጠይቁን ያካሒዱ ::

መልሱ አይደለሁም ከሆነ አመስግነው ወደ ሌላ ተጠያቂ ይለፉ ::

ግልስቡን በመጠይቁ ለማሳተፍ ምንም አይነት ማስገደጃ ወይም ጫና መደረግ የለበትም::

በአዲስ አበባ ዩኒቨርሲቲይ የህክምና ትምህርት ክፍል የህብረተሰብ ጤና ትምህርት

ዘርፍ ከኤች.አይ.ቪ ቫይረስ ጋር የሚኖሩና በአዲስ አበባ የፀረ ኤች.አይ.ቪ/ኤድስ የህክምና መስጫ ጣቢያዎች ተከታታይ ህክምና የሚያደርጉ ወንዶችና ሴቶች የመዉለድና የቤተሰብ ምጣኔ አገልግሎት ፍላጎታቸዉን ለማጥናት የተዘጋጀ የዉይይት መምሪያ::

<u>ክፍል - 1 መረጃ ስለ ማህበራዊ ሁኔታ</u>

- እድሜዎ ስንት ነዉ ?(በሙሉ አመት ይገለጽ)
- ያታዎ ምንድነዉ ?
- በአሁኑ ወቅት ያሉበት የጋብቻ ሁኔታ ምንድነዉ?
- በአሁኑ ጊዜ ስራዎ ምንድነዉ ?
- ዘርዎ ምንድነዉ?
- ሐይማኖትዎ ምንድነዉ ?
- መቅላላ የወር ገቢዎ ስንት ነዉ?
- ተምረዉ ያጠናቀቁት ከፍተኛዉ የትምህርት ደረጃ ስንት ነዉ?

ክፍል 2 መረጃ ስለ መዉለድ ፍላጎት

1- ምን ያህል በሂዎት ያሉ ልጆችአልዎት ?

አድሜያቸዉ----------

ጾታቸዉ ----------

የኤች. አይ .ቪ. ኤድስ የደም ምርመራ ዉጤታቸዉ -----

2- ለእርስዎ (ተጨማሪ)ልጅ መዉለድ /ያለመዉለድ ምን ያህል አስፈላጊ ነዉ ?

3- አንዲህ አንዲሰማዎት ያደረግዎ ምክንያት ምንድነዉ?

4- ኤች አይ ቪ በእርስዎ ልጅ የመዉለድ/ያለመዉለድ ፍላጎትዎ ላይ ተጽዕኖ ከደረገ ምን አይነት ተጽእኖ አለብዎ ?

5- ለእርስዎ የትዳር /የጾታ ጓደኛ (ተጨማሪ)ልጅ መዉለድ /ያለመዉለድ ምን ያህል አስፈላጊ ነዉ ?

6- ምን ያህል ተጨማሪ ልጅ ይፈልጋሉ? ለምን?

7- ልጅ መዉልድ/ያለመዉለድ እርስዎ ባሉበት ህብረተሰብ ዉስጥ ምን ያህል አስፈላጊ ነዉ ?

8- ኤች. አይ .ቪ. ኤድስ እርስዎ የሚኖሩበት ማህበረተሰብ አርስዎ ሊኖርዎ ስለሚገባዉ የልጅ ቁጥርና የመዉለጃ ጊዜ ያለዉን አመለከከት ቀይሮታል ብለዉ ያስባሉ?

<u>ክፍል 3 መረጃ ስለቤተሰብ ምጣኔ አገልግሎት ፍላጎትና ምርጫ</u>

9 - ለእርስዎ የቤተሰብ ምጣኔ መጠቀም /ያለመጠቀም ምን ያህል አስፈላጊ ነዉ ?

10 - ለእርስዎ የትዳር /የጾታ ጓደኛ የቤተሰብ ምጣኔ መጠቀም /ያለመጠቀም ምን ያህል አስፈላጊ ነዉ ?

11--አንዲህ አነዲሰማዎት ያደረግዎ ምክንያት ምንድነዉ?

12- ኤች አይ ቪ የቤተሰብ ምጣኔ መጠቀም /ያለመጠቀም ፍላጎትዎ ላይ ተጽዕኖ ከደረገ ምን አይነት ተጽእኖ አለብዎ ?

13- ምን አይነት የወሊድ መከላከያ አይነት መጠቀም /ይፈልጋሉ/እየተጠቀሙ ነዉ ?

14-የመረጡትን የወሊድ መከላከያ አይነት እንዴትና ለምን መረጡት ?

15-ስለ ኤች. አይ .ቪ. ኤድስ የደም ምርመራ ዉጤትዎ ከቤተሰብ ምጣኔ አግልግሎት ሰጪ ሀኪምዎ ጋር ተወያተዋል?ለምን ?

16- ስለ ኤች. አይ .ቪ. ኤድስ የደም ምርመራ ዉጤትዎን ከቤተሰብዎ /ከትዳር /ከጾታ/ ጓደኛዎጋር ተወያተዋል?ለምን?

17- ስለ ልጅ መዉለድ እና የቤተሰብ ምጣኔ አገልግሎት ከአማከሪዎ/ የፀረ ኤች አይ ቪ ኤድስ ሀኪምዎ ጋር ተወያይተዉ ያዉቃሉ ?

18-ስለ ኤች. አይ .ቪ. ኤድስ ከናት ወደ ልጅ ስርጭት ምን ያዉቃሉ ?

19-- ስለ ኤች. አይ .ቪ. ኤድስ ከናት ወደ ልጅ ስርጭት ስለ መከላከል ምን ያዉቃሉ ?

20- ስለ ኤች. አይ .ቪ. ኤድስ ከናት ወደ ልጅ ስርጭት ለመከላከል የሚደረግ ህክምና የኤች.አይ .ቪ. ኤድስን ስርጭት ይቀንሳል ብለዉ ያስባሉ ?ለምን?

ማስታወሻ- ለሁሉም ጥያዎች እንደ አስፈላጊነቱ ማብራሪያ ይሰጥ ::