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ADDIS ABABA UNIVERSITY

ADDIS ABABA UNIVERSITY

SCHOOL OF PUBLIC HEALTH

CONTRACEPTIVE UTILIZATION AND ASSOCIATED FACTORS AMONG HIV POSITIVE WOMEN ENROLLED IN HIV CARE IN HEALTH CENTERS OF ADDIS ABABA

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Abstract

Background : Increasing access to family planning and reducing unintended pregnancies among human immune deficiency virus (HIV) clients has a number of economic benefits, including low costs for prevention of mother to child transmission (MTCT), lower costs for pediatric treatment and reduced costs for mitigating the consequences (such as low birth weights) of unintended births. For women with HIV who do not wish to become pregnant, family planning is proven, cost effective strategy for preventing vertical transmission of HIV. Yet there are limited studies conducted in health centers to assess contraceptive use and factors affecting its use among HIV positive women.

Objective: To determine magnitude of contraceptive utilization and associated factors among HIV positive women that are enrolled for HIV care in government health centers in Addis Ababa.

Methods: A facility based cross-sectional study was carried out on a sample of 682 HIV positive women in the anti retroviral treatment (ART) follow up units of selected health centers in Addis Ababa. A systematic random sampling procedure was applied to select study participants. Data was collected through interview using structured questionnaires. Data was analyzed using SPSS version 20.Multiple logistic regression analysis was done to see the association between the outcome and predictor variables

Result: The magnitude of contraceptive use among sexually active study participant were 88.27%. The most commonly used method was injectable followed by implant. HIV positive women who had a higher chance of contraceptive use were those who have two children (Adjusted odd ratio (AOR): 2. 8; 95% CI: 1.2-6.3),those who have more than one sexual partner (AOR: 12.0; 95% CI: 3. 3-44.4)and those who disclose their status to their partner(AOR: 3. 4 95% CI: 1.52-7.55); Whereas women who were Protestant (AOR: 0.403; 95% CI: .191-.852),not currently married (separated /divorced/widowed) (AOR: 0.221 95% CI: .097-.501)were less likely to use contraceptive.

Conclusion and Recommendation: The study has shown that about two-thirds of participating HIV positive women use at list one contraceptive method. The most preferable contraceptive methods used were Injectables and implants. Among the long-term contraceptive methods, intra uterine contraceptive device (IUCD) were used in very low rate. Religion, marital status, number of living children, number of sexual partner and disclosure of HIV status to sexual partners were found to be related with current contraceptive use among study population. We would like to recommend that the regional health bureau has to work hard to increase coverage of contraceptive utilization by HIV positive women in order to prevent mother-to- child-transmission of HIV by strengthen the existing family planning services integration with ART clinics and particular emphasis should be given on encouraging women to disclose their HIV status to partners.

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LIST OF ACRONYM

AIDS	Acquired Immuno Deficiency Virus
ANC	Anti Natal Care
ARV	Anti-Retroviral
FP	Family Planning
HAART	Highly Active Anti-Retroviral Therapy
HIV	Human Immuno Deficiency Virus
IUD	Intra Uterine Device
MTCT	Mother to Child Transmission
NVP	Nevirapine
OC'S	Oral Contraceptives
PEPFAR	President's Emergency Plan for AIDS Relief
PLWHA	People Living With HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
RTI	Respiratory Tract Infection
STI	Sexually Transmitted Infection
SSA	Sub Saharan Africa
WHA	Women Living With HIV AIDS
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background

Access to safe, voluntary family planning is a human right. Family planning is central to gender equality and women's empowerment, and it is a key factor in reducing poverty. Yet some 225 million women who want to use safe and effective family planning methods are unable to do so because they lack access to information, services, or the support of their partners or communities. Most of these women with an unmet need for contraceptives live in 69 of the poorest countries on earth [1].

People shall be offered the opportunity to determine the number and spacing of their own children. Information about FP should be made available, and should actively promote access to FP services for all individuals desiring them. Fertility intentions of PLWH are varied. The Guidelines for Prevention of Mother-to-Child Transmission in Ethiopia recommends respect to the right of all women to decide the number and timing of children regardless of HIV status. Avoiding unwanted pregnancy in HIV positive women using FP is one of the four prongs of preventing mother-to-child transmission of HIV [2].

Every minute one young woman becomes infected with HIV; the infection rates among young women aged 15-24 are twice as high as in young men, highlighting the impact HIV is having on young women's lives. The disparity is most pronounced in sub-Saharan Africa, where 3% of young women are living with HIV [3].

Women living with HIV/AIDS (WHA), like other women, may wish to avoid unplanned or unwanted pregnancies. Women should be offered a wide range of contraceptive methods in order to make informed choices regarding reproduction. Twenty five percent of WHA worldwide have an unmet need for contraception [4].

Increasing access to family planning and reducing unintended pregnancies among HIV clients also has a number of economic benefits, including lower costs for PMTCT, lower costs for pediatric treatment and reduced costs for mitigating the consequences (such as lower birth weights) of unintended births. For women with HIV who do not wish to become pregnant, family planning is also a proven, cost strategy for preventing vertical transmission of HIV [5].

In a number of African countries, the rates of unintended pregnancy among women living with HIV range from 51 percent to 84 percent. Adding family planning services to the prevention of mother-to-child HIV transmission (PMTCT) services would have the cost of each infant HIV infection averted – from US$1,300 per infection averted with treatment to US$660 with family planning [5].

Africa are already preventing 173,000 HIV-positive births annually, even though contraception is not widely available in the region. An additional 160,000 HIV positive births could be averted every year if all women in the region who did not wish to get pregnant could get access to contraceptive services. A similar analysis of only the focus countries in the President's Emergency Plan for AIDS Relief (PEPFAR) found that contraception prevents a wide range of HIV-positive births every year—from 178 in Guyana to 120,256 in South Africa [6].

In a study in Uganda shows that contraceptive utilization among HIV positive women was 25% and factors significantly associated with the use of contraception were having ever gone to education and discussion of family planning with a health worker or with one's spouse [7]

1.2 Statement of the problem

Women of reproductive age comprise more than half of the 33 million people currently living with HIV around the world. The vast majority of these women live in Sub-Saharan Africa, and thus, it is not surprising that 90% of the 2.5 million children younger than 15 living with HIV live there as well. Almost all of these children became infected through their mothers during pregnancy, birth or breastfeeding. An estimated 137 million women worldwide currently want to avoid pregnancy but are not using any family planning method [8].Unmet need is often greatest in countries with high HIV prevalence. Additionally, several studies have found that unmet need for family planning is higher among women living with HIV than among women in the general population [9].

The unmet need for family planning services among women living with HIV continues to undermine efforts to eliminate new HIV infections among children. For women globally, unmet need for family planning is 12.3% in 2010, according to a recent review of nationally representative surveys. In East Africa and West Africa, however, more than 20% of women had an unmet need for family planning services, with no reduction in unmet need reported for 1990–2010. This means that more than one in five women in the region express the desire to delay or stop childbearing, but are not using contraception [10].

Many countries still experience high levels of unintended childbearing, particularly in countries with high HIV prevalence. In select African countries, unintended childbearing ranges from31% in Senegal to 55% in Kenya. Unintended pregnancies are the direct consequence of unmet need for contraception, and in sub-Saharan Africa, estimates of unmet need range from 18% in Niger to 42% in Togo with a regional average of 19.4%; Because family planning programs are struggling with limited resources, the negative consequences for women and families associated with unintended childbearing are likely to worsen if funding does not keep pace with increasing demand for contraception [11].

Each day, some 1500 children under 15 years of age become infected with HIV, an estimated 90% of whom live in sub-Saharan Africa. In 2005, there were 2.3 million (1.7–3.5 million) children living with HIV worldwide, most of whom acquired the virus in utero, during birth or while being breastfed, ways of contracting HIV that can be prevented [12].

A study of three PMTCT programs in South Africa reported that 84 percent of the pregnancies were unplanned. More than 90 percent of the pregnancies among women enrolled in a Ugandan antiretroviral treatment program were unintended. Such studies are indicative of a larger trend, which finds that unintended pregnancies account for 14 to 58 percent of all births in countries with the greatest burden of HIV [6].

In Ethiopia the national estimated adult HIV prevalence 2015 is 1.1% Male .8 and Female 1.5 (3.2% in urban and 0.5% in rural areas). 691,073 Ethiopians are living with HIV/AIDS (38.4% males, 61.6% females); an estimated 28,021 mother needing PMTCT and 20,368 HIV positive pregnant women in need of treatment anticipated in 2015[49]. In Addis Ababa estimated adult HIV prevalence 2015 is 3.9 % Male 2.6 and Female 5.2 83,393 people are living with HIV/AIDS (37% males, 63% females); an estimated 1337 mother needing PMTCT and 972 HIV positive pregnant women in need of treatment anticipated in 2015[49].

Prevention of unintended pregnancy in the general population is critical to prevention of transmission of HIV to children because many women and men do not know their HIV status. Increasing family planning to prevent unintended pregnancy among HIV-positive women is a major method of preventing of HIV infection in children and is cost effective [2].

In Ethiopia the total fertility rate (TFR) is 4.1 children per woman and among the highest worldwide. Further still contraceptive prevalence rate is very low at 29% for all age and 42% for currently married women[46]. With an unmet need for contraception of 25% [47] among women of reproductive age. A study in Addis Ababa's six government hospitals ARV units among women of reproductive age reported that unmet need for contraception was 31.1% [13]. All these together mean that the possibility of increasing number of children born to HIV infected women.

1.3 Rationale of the study

Preventing unintended pregnancies among HIV positive women is an important component of PMTCT .Ethiopian national strategy to Preventing unintended pregnancies among HIV positive women was by Providing family planning counseling and services integrated into all PMTCT and VCT service sites but there is a limitation in implementing this strategy. In addition to that millennium development goal six look at elimination of HIV to eliminate HIV among children and to have HIV free generation by 2020 contraceptive have a great value in preventing unintended pregnancies among HIV positive women; yet few data exist on contraceptive use and factors affecting among women entering HIV care in health centers. Hence, the present study aimed to fill such gap and show the magnitude of contraceptive use and factor affecting utilization among HIV +ve women who are enrolled in HIV care in health centers. Finally, the result of the study will help program implementation to get better family planning service need and access in order to make informed choice to HIV positive women.

CHAPTER TWO

LITERATURE REVIEW

2.1 Global regional and national overview of HIV

Since the beginning of the epidemic, almost 78 million people have been infected with the HIV virus and about 39 million people have died of HIV but now globally, 35.0 million people were living with HIV at the end of 2013,2.1 million people become newly infected with HIV 1.5 million people died from (Acquired Immuno Deficiency Syndrome)AIDS related illness . Worldwide, 240 000 children became newly infected with HIV in 2013 [14].

In 2013, there were 24.7 million people living with HIV Women account for 58% of the total number of people living with HIV, there were an estimated 1.5 million new HIV infections in sub-Saharan Africa. Sub-Saharan Africa accounts for almost 70% of the global total of new HIV infections. One million people died of AIDS-related causes in 2013. There were 210 000 new HIV infections among children in sub-Saharan Africa in 2013[14].

Ethiopia remains highly affected by HIV/AIDS with an estimated adult prevalence of 1.5%, (4.2% for urban and 0.6% for rural) and is higher among females (1.9%) than males (1%) (WHO 2014). A large number of people living with HIV (approximately 800,000) and one million AIDS orphans [15].

2.2 Contraceptive use

In Canada, the prevalence of contraceptive use is 75%. While there is a dearth of published data specific to women with HIVAIDS (WHA), a 2002 Canadian study reported the most frequently used methods were oral contraceptives (OCs) at 32%, condoms(21%), male sterilization (15%), and female. sterilization (8%). Copper-bearing intrauterine devices (IUDs) had the lowest prevalence of use at 1%. Nine percent of respondents used no contraception and researchers also have found that WHA used condoms more frequently than HIV-negative women [4].

In Kenya and Malawi only 26% and19% of the HIV positive women were using contraceptives respectively, yet about half (54%) of the women in Kenya and 40% in Malawi reported that their last child was either unplanned or unwanted. In study, nearly three-quarters did not want more children within the next two years or ever, but only one in three women in Kenya and one in five women in Malawi were using contraceptives. The continued high rates of unwanted and unintended pregnancies, especially among HIV infected women, may be attributed to a number of barriers, including fear of side effects, availability, accessibility, affordability and lack of male involvement [16].

Barrier methods such as condoms and diaphragms are the most commonly used forms of birth control among HIV positive women. Sterilization is the second most popular method and hormonal contraception is the third [17].

Some studies have pointed out that in the absence of HIV-related symptoms, the impact of having HIV on people's decisions regarding childbearing and contraceptive use is generally weak. A study evaluating PMTCT sites in Kenya and Zambia has shown that HIV positive women had similar contraceptive use rates to HIV negative women, while in Rwanda the demand for contraception was higher among HIV positive women. A much higher percentage of HIV positive women were using contraception in the Dominican Republic and Thailand than in African sites [18].

A study in Addis Ababa health institutions reported that contraceptive utilization among HIV positive enrolled in HIV care reported that 71% of women were using contraception [19].

2.3 Associated Factors

2.3.1Demographic factors

Study result in Uganda on contraceptive utilization and associated factors among HIV positive women in mulago Iss clinic shows that significant association was found between marital status and contraceptive utilization ; married women use more than unmarried with a p-value=0.00 and CI; 1.59-3.92 [20] .

Another study in Uganda shows that odds of contraceptive use among single and previously married women remained significantly lower than that among married women. Age (less than 24 years inclusive), education (completing secondary education), income (>250,000 Uganda shillings/month), and parity (having 3 or more living biological children) were independently associated with increased odds of contraception [21].

Study in Malawi shows that married women had a relatively higher odds of contraceptive use (OR 7.2, 95% C.1= 4.3,8.8) compared to single women (p <0.001); Women with primary education and secondary education had a relatively higher odds of contraceptive use(OR 3.3, 95% C.1= 2.3, 5.8 and 5.8, 95% C.1=3.4, 5.9) respectively compared to women without formal education [22].

A study in Nekemte Public Health Facilities, East Wollega Zone, Ethiopia shows that educational status of woman living with HIV displayed significant positive relationships with a woman's odds of utilizing a family planning service ($p<0.05$); women with some form of education had significantly greater odds of utilizing a family planning service [23].

2.3.2 Social Factors

Study in Taso Tororo Uganda results shows that statistically significant predictor factors to FP use to be; spouse approval. It was 9 times more likely that participants that reported approval of their spouse will use FP [95% CI 3.35-26.00: P<0.001] than those that didn't report approval of their spouse [24].

Study in Ghana Kumasi Metropolis Contraceptive Characteristics of Women Living with HIV in the disclosure of HIV status to partner was the only variable that significantly predicted contraceptive use, suggesting that women who have not disclosed their status to their partners were less likely to use contraceptive (AOR = 0.25; 95% CI = 0.07-0.87, p = 0.03)[25].

Another study in Nekemts on Family Planning Methods and Associated Factors among Women Living with HIV Attending ART Clinics finding of this study identified that discussion of reproductive health issues with partner including family planning have strong statistical association with current family planning practice ($p<0.001$). In multivariate analysis those women who were discussed about family planning issues with spouse were significantly greater odds of utilizing family planning compared to non-discussant [23]

Study done in Addis Ababa health institutions reported that disclosure of HIV status to husband, discussed with husband and discussed with health workers were significant predictors of contraceptive use among HIV positive women. [19]

2.3.3 Sexuality

A study done in Uganda Contraception among persons living HIV with infection attending an HIV care and support center in Kabale shows that Only 191 (53.1%) described their intimate relationships as stable, over 65% had a sexual partner in the previous 6 months, 330 (82.5%) were currently taking antiretroviral therapy and 106 (28.3%) had changed at least one sexual partner since their HIV diagnosis. number of sexual partners in the previous 6 months prior to the study and frequency of sexual intercourse were significantly associated with contraceptive use ($p<.005$)[27].

2.3.4 Clinical factors

A study in U.S.A on contraceptive use among women with HIV the result shows that hormonal contraceptive use was linked to higher CD4 counts (OR 1.12, 95% CI 1.03-1.23, $p = 0.01$) [26].

Study in Uganda shows that Partner HIV status significantly associated with contraceptive use a women who have HIV positive partner use contraceptive than HIV negative partner and whether the respondent had been treated for STD since their HIV diagnosis had association with contraceptive use $p<.005$[27].

Another research done in Uganda on Highly Active Antiretroviral Therapy(HAART) and Increased Use of Contraceptives Among HIV-Positive Women During Expanding Access to Antiretroviral Therapy in Mbarara, Uganda the result of the study shows that HAART users remained significantly more likely to use barrier contraceptive methods compared with non-users (AOR=3.62; 95%CI=1.54, 8.55). Similarly, not wanting more children also remained strongly associated with using barrier contraceptive methods (AOR=2.66; 95% CI=1.27, 5.59). Women receiving HAART were significantly more likely to use contraceptive methods overall and more likely to use barrier contraceptive methods compared with women not receiving HAART [28].

A study done in Soweto south Africa on contraceptive use and method preference among women in Soweto the result of the study shows that HAART users were also significantly more likely to report using condoms (with or without hormonal/permanent methods) (68%) and hormonal/permanent methods (with or without condoms) (58%) compared with HAART-naïve ($p<0.0001$)[29].

A study in Ethiopia Tigray region women currently on HAART were 3.23 times more likely to utilize modern methods (AOR: 3.23; 95% CI: 1.49–7.01)[30].

2.3.5 Reproductive factors

A study done in Soweto South Africa on Contraceptive Use and Method Preference among Women: The Influence of Expanding Access to HIV Care and Treatment Services the result shows that Younger age, having two or more living children, and expressing an intention not to have more children remained most strongly associated with contraceptive use [29].

A study in West Ethiopia, Gimbie town shows that respondents who have family size ≤ 4 are 50% less contraceptive users than those who have family size >4 [31]

In general the result of most studies shown that contraceptive use among HIV positive women is low and affected by different factors .It is also our expectation that the findings generated from this study will contribute to predict the level of contraceptive use and factor affecting among HIV positive women and be useful in program implementation to address the need of HIV positive women .Hence, this study assess contraceptive use and factor affecting among HIV positive women with the following general and specific objective.

CHAPTER THREE

OBJECTIVE

3.1 General objective

To assess the magnitude of contraceptive utilization and associated factors among HIV positive women who are enrolled in HIV care in government health centers in Addis Ababa.

3.2 Specific objective

1. To determine the Contraceptive Prevalence Rate among HIV positive women enrolled in HIV care in government health centers in Addis Ababa

2. To describe the types of contraceptive methods preferred by HIV positive women enrolled for HIV care in Government health centers in Addis Ababa

3. To identify factors associated with contraceptive utilization among HIV positive women enrolled in HIV care in government health centers in Addis Ababa

CHAPTER FOUR

METHOD

4.1 Study area and period

The study was done in Addis Ababa governmental health centers ARV treatment units. Addis Ababa is the capital city of Ethiopia; having three layer of government: city government at the top, 10 sub-city administration in the middle, and 116 woreda (district) administration at the bottom. The city has a total population of 3,273,000 with more female proportion [34]. It has 62 health center[35] Number of health facility providing ART service were 58 in number and People living with HIV currently on ARV were 63,108[36]. HIV prevalence in Addis Ababa is 3.9 % [49]. This study was conducted from December 2015 to January 2016.

4.2 Study design

Facility based cross sectional study design that employed quantitative data collection method in ARV treatment units of the selected government health centers Addis Ababa.

4.3 Source population

All HIV positive women who were on ART units during the study period.

4.4 Study population

The study population were women of reproductive age who enrolled in HIV care in a selected health centers' ARV treatment units during the study period.

4.5 Inclusion and exclusion criteria

Inclusion criteria

HIV positive women aged 15-49 years enrolled in ART treatment unit of the selected health centers, who had at list one visit to ARV treatment unit.

Exclusion criteria

Women enrolled in ART treatment unit who are mentally disturbed, unable to communicate, and severely ill were excluded.

Dependent /outcome variable

Current contraceptive use (Use of any modern contraceptive method by women to delay or avoid pregnancy currently).

Independent/exposure variables

Socio demographic characteristics; age, marital status , educational levels, occupation and religion, employment status of participant , number of children, education level, monthly income, religion.

Reproductive factors; number of living children, child death and contraceptive ever use.

Social factors; disclosure, income levels, and social habits (drinking alcohol).

Sexuality factor; number of sexual partners, frequency of sexual intercourse, change of sexual partners were assessed.

Clinical factors; ART status, duration on ART, CD4 cell count, and spouse's HIV status.

4.7. Sample size determination

Determination of sample size were according to a previous study done in Addis Ababa among HIV positive women, considering the prevalence of contraceptive use to be 72%(33). The actual sample size were calculated using a single population formula of:

$$n = \frac{(z_{\alpha/2})^2 p(1-p)}{d^2} = \frac{(1.96)^2 .72(1-.72)}{(0\ .05)^2}$$

Where:

n= the required sample size

p= the proportion of contraceptive use

Zα/2=the critical value at 95% confidence level of certainty

d=the margin of error between the sample and the population 5%.

Considering a design effect (2*) and non-response rate of 10%. The total calculated sample size were 682 women.

4.8 Sampling procedures

The study were conducted in ten health centers ART service in Addis Ababa. The ten health centers were selected by simple random sampling method i.e. one health center from each sub city. The calculated sample size was proportionally allocated into each health center based on the client load. The calculated sample size were used to recruit study subjects from the selected ARV treatment unit's client size. Systematic sampling procedure was used to select eligible participants from each ARV units. Every k women in the reproductive age group coming for HIV care was selected. "k" were calculated by expected total number of women coming for HIV care within a month prior to data collection in ten health centers by the sample size allocated to that specific health center.

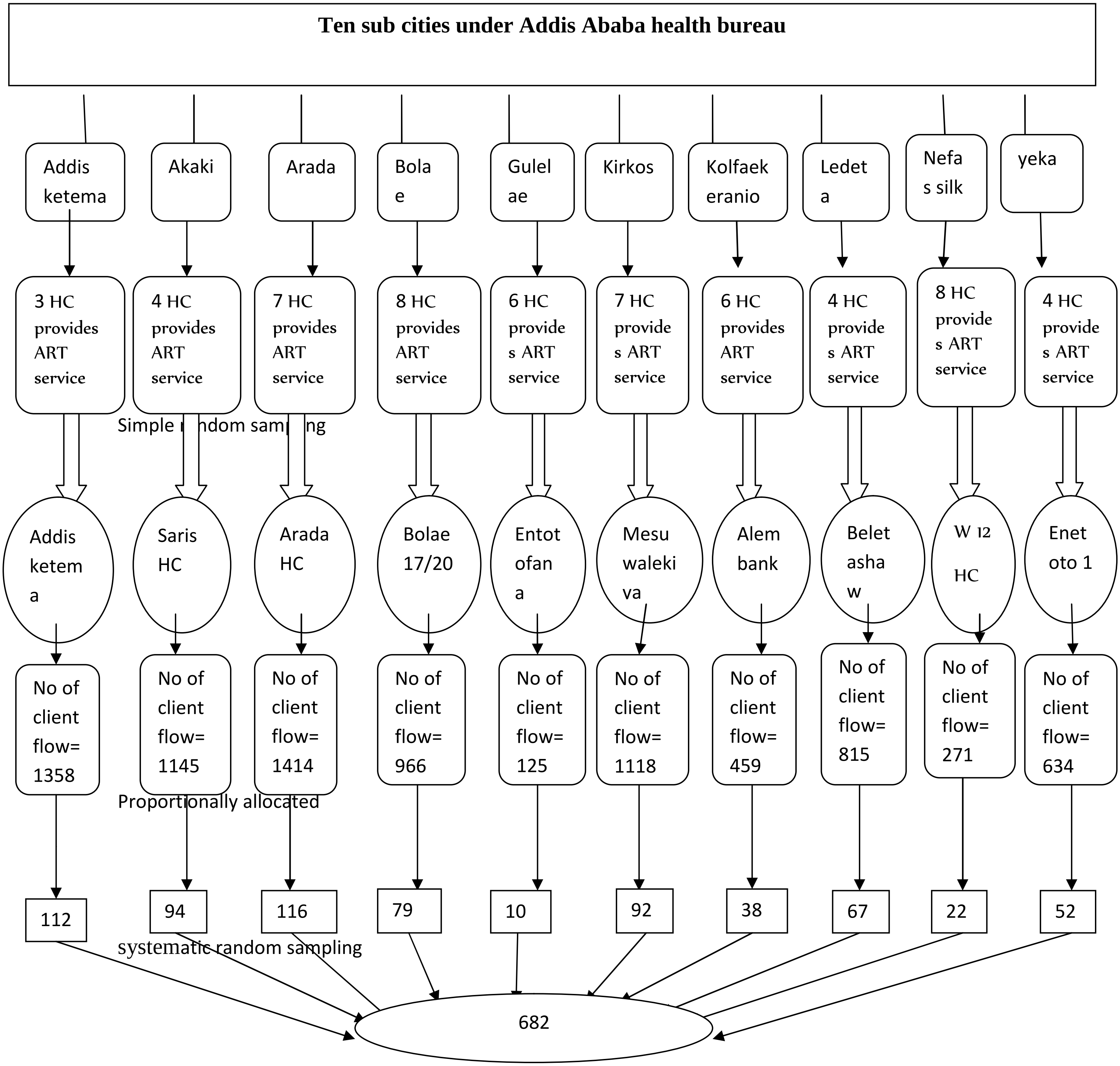

Figure 1: Schematic presentation of the sampling procedure that were used in the study Addis Ababa, Ethiopia, 2015.

4.9 Data collection instrument

Data were collected by interviewing study subjects using structured questionnaire which were adopted from similar study [2].The questionnaire was initially prepared in English and then translated in to Amharic and back to English to ensure its consistency.

4.10 Data analysis and processing

EPI info 5.3.1 and SPSS version 20 were used for data entry, editing and analysis, respectively. Frequencies and percentage of different variables were computed for description as appropriate. In a bivariate analysis, Odds ratio with 95% confidence interval was computed to assess the presence and degree of association between the dependent versus socio demographic, reproductive and other factors; variables found to be significant at bivarate levels p (<0.05) were included in to multiple logistic regression to calculate odd ratio with 95% confidence interval to estimate association and control for potential confounders.

4.11Data quality management

To ensure data qualities one day training were given to data collectors and their supervisors by principal investigator. The principal investigator closely follow data collection along with supervisor. Ten nurses working in respective health center ART units were used as data collectors. Three supervisors were supervise the data collection. The questionnaire were checked daily for completeness, inconsistency and error were corrected at the spot.

4.12 operational definition

Contraceptive Use- Current use of any modern method by women to delay or avoid pregnancy for the last one month.

Modern methods- Pills, IUD, injectable, implants, male condom, female condom ,female and male sterilization.

Stable sexual relationship – A women who have one sexual partner .

4.13Ethical consideration

Ethical clearance was obtained from the research and ethical committee (REC) of school of public health and by the research and ethical committee of Addis Ababa health bureau. During the data collection, informed consent was obtained from each respondent by first explaining the objective of the study and the right of the respondents to participate or not in the study. To maintain confidentiality identifiers like name or cods were not be taken in the questionnaire

.More over the same counselor working in the ART treatment units were used as data collectors and this was helpful in ensuring confidentiality during data collection since respondents will not be exposed to different persons .The information given by respondents were kept by placing data in the safe place after it is collected and were used for the purpose of study only. Dissemination of the result of the study were not be in referent with specific respondent but the general source of population. Finally, the result of the study will help through program implementation to improve family planning service needs and access to WHA.

5-RESULTS OF THE STUDY

5.1 Over view of socio demographic characteristics of study population

Among 682 eligible clients approached in ARV treatment units during the study period 636 agreed to participate in the study giving the response rate of 93.2 %.

Regarding the socio demographic characteristics of the study participants three hundred fifty five (55.8%) were in the age group 25- 34 years. The mean (±SD) age of the respondents were 31(±6). The majority of the respondents 419(65.9%) were orthodox christens by religion .Many of the respondents 232(36.5%) had completed primary level education.

Concerning marital status of respondents majority were Married/cohabited 337(53%) while 155 (24.4%) were never married. Hundred seventy five (27.5 %) of the study participant were unemployed (Table 1).

Table 1. Socio-demographic characteristics of women attending ART service and care units in Addis Ababa Ethiopia, November 2015

Characteristics	Frequency	Percent
Age years		
15- 24	79	12.4
25-34	355	55.8
≥35	202	31.7
Mean **31±6**		
Religion		
Orthodox	419	65.9
Muslim	116	18.2
Others	101	15.9
Marital status		
Single	155	24.4
Married/cohabited	337	53
Widowed /Divorced / Separated	144	22.6
Educational status		
Illiterates	88	13.8
Able to read and write	93	14.6
Primary	232	36.5
Secondary	150	23.6
Tertiary or university	73	11.5
Occupational status		
House wife	175	27.5
Government employ	96	15.1
Private organization employ	182	28.6
Day laborer	87	13.7
Commercial sex workers	24	3.8
Other	72	11.3
Monthly income		
< 500	43	12.2
500-1000	136	38.5
1000-3000	139	39.4
>3000	35	10

5.2 Reproductive and sexual history of women attending ARV treatment unit.

Out of 636 respondents 208(32.7 %) women reported having no children, 154(24.2%) one child and 153(24.1%) two children. Majority of the respondents 337(53%) reported that they were in a stable relationship. Four hundred sixty-nine (73.7%) of participants had a sexual partner in the previous 6 month; out of these three hundred ninety three (84%) had one sexual partner and 138(21.7%) had changed at least one sexual partner since their HIV diagnosis. Forty four (31.9%) reported that the reasons for changing their sexual partner were due to rejection.

Table 2. Reproductive and sexual history of women attending ART service and care units in Addis Ababa Ethiopia, November 2015

Characteristics	Frequency N=636	Percent
Number of living children		
0	208	32.7
1	154	24.2
2	153	24.1
≥3	121	19
Child death		
Yes	78	12.3
No	558	87.7
Stable sexual relationship		
Yes	337	53
No	299	47
Sex within the last 6 months		
Yes	469	73.7
No	167	26.3
Frequency of sex in the last 6 months N=469*		
At least 3 times per week	111	
Around once a week	208	17.3
About once a month	122	32.7
Less frequently than once a month	28	19.2
		4.4
Number of sexual partners in the last 6months n=469*		84
One	393	16
More than One	76	
Changed regular sexual partners since HIV diagnosis.		
Yes	138	21.7
No	498	78.3
Reasons for changing sexual partner n=138		
Partner died	23	
Divorced	36	16.7
Rejected by spouse	44	26
Other reasons	35	31.9
		25.5

*This excludes all those who responded that they were not sexually active.

5.3. Contraceptive use among the study population.

Among sexually active women four hundred fourteen (88.27%) of women were using at least one method of contraception. The most frequently used method were injectable 133 (32%). Five hundred thirty four (84 %) of the respondents reported past history of contraceptive use.

Among four hundred fourteen women who use contraceptive two hundred twenty three (53.9%) reported use of dual contraception. Among women who reported condom use in the last six months 154(57.1%) use condom consistently (Table 3).

Table 3.Contraceptive and condom use of women attending ART service and care units in Addis Ababa Ethiopia, November 2015

Characteristics	Frequency (N=636)	Percent (%)
Ever used contraceptives		
Yes	534	84.0
No	102	16.0
Current use of contraceptives N= 469* **		
Yes	414	88.27
No	55	11.7
Used dual contraception method N=414*		
Yes	223	53.9
No	191	49.6
Type of contraceptive methods used N=414*		
Pills	39	9.4
Injection	133	32.0
Implant	102	24.7
Condom	88	21.3
IUDs	40	9.8
Other	12	2.8
Reason for choosing particular method N=414*		
Convenience	74	18
Cost (it is cheap)	1	0.3
Can be used secretly	65	15.8
No longer want more children	119	28.8
Protect from HIV and pregnancy	105	25.0
Others	50	12.0
Condom ever use		
Yes	469	73.7
No	167	26.3
Condom use in the last 6 months		
Always use (consistently use)	154	57.1
Often use	83	15.6
Sometimes use	140	22.7
Rarely use	49	4.4
Reason for condom use**		
Prevent re-infection	276	43.4
Prevent STDs	273	42.9
Prevent infecting their sexual partners	195	30.7
Other	59	9.0

*This excludes all those who responded contraceptive non use. ** Multiple response

*** Excludes who are not sexually active

5.4 HIV related characteristics of women attending the ARV treatment units

Five hundred seventy seven (90.7%) of women were currently taking antiretroviral therapy and the median duration since the start of HAART were 36 months. Recent CD4 count was ≤350 cells/mm3 for 125(32.5%) of the respondents while 180 (46.7%) were having CD4 count of >350 cells/mm3.

A total of 425(66.8%) of the respondents know HIV status of their partners among them 337 (79.3%) had concordant HIV test result while 88 (20.7%) had discordant results. Four hundred sixty (72.3%) of the respondents have disclosed their sero status to their partners. Eighty seven (13.7%) of respondents were treated for STD since HIV diagnosis (Table 4).

Table 4.HIV related features of women attending ART service and care units in Addis Ababa Ethiopia, November 2015

Characteristics	Frequency (N=636)	Percent %
Currently on ARVs treatment		
Yes	577	92.2
No	59	7.8
Duration on ARV N=538		
<36 months	284	52.8
≥36 months	254	47.2
Recent CD4 count (cells/mm3)		
<200	31	6.5
200-349	97	20.2
350-500	114	23.8
≥500	237	49.5
Partner tested for HIV		
Yes	425	66.8
No	211	33.2
Partner HIV status N=425		
Positive	337	79.3
Negative	88	20.7
Disclosure of HIV status to sexual partners n=636		
Yes	460	72.3
No	176	27.7
Treated for STD since HIV diagnosis n=636		
Yes	87	13.7
No	549	86.3

5.5 Bivariate analysis

5.5.1 Socio demographic factor associated with contraceptive use among HIV positive women

From the table shown below educational status, religion, marital status, drinking habit were significantly associated with contraceptive use ($p < 0.05$). Whereas Age, did not have significant association with contraceptive use ($p > 0.05$) (Table 5).

Table 5. Bivariate analysis of Socio demographic factors with contraceptive use among HIV positive women in the ART units Addis Ababa, November 2015

Characteristics	Contraceptive use Yes	No	COR
Age			
15- 24	56	23	1
25-34	234	121	0.794(.466-1.353)
≥35	124	78	0.653(.372-1.145)
Educational status			
Illiterate	45	43	1
Able to read and write	61	32	1.822(1.002-3.313)*
Primary	148	84	1.684(1.025-2.766)*
Secondary	111	39	2.720(1.562-4.737)*
Post-Secondary	49	24	1.951(1.026-3.710)*
Religion			
Orthodox	228	131	1
Muslim	42	34	0.562(.342-.924)*
Protestant	69	47	0.668(.437-1.021)
Other christens	15	10	0.682(.299-1.559)
Marital status			
Single	94	61	1
Married/ cohabiting	261	57	2.971(1.931-4.573)*
Widowed Divorced Separated	59	104	0.368(0.234-0.580)*
Drinking habit			
yes	71	15	2.857(1.594,5.118)*
No	343	207	1

5.5.2 Reproductive and other factor associated with contraceptive use among HIV positive women

From the bivariate analysis shown in table below number of living children, being in a stable relationship, number of sexual partners in the last 6 months, Frequency of sex in the last 6 months, ARV use ,duration on ARV, Disclosure of HIV status to sexual partner and Ever treated for STD since HIV diagnosis were significantly associated with contraceptive use ($p < 0.05$). Whereas Child death, CD4 count ,Partners HIV test result and Changed sexual partners since HIV diagnosis did not have significant association with contraceptive use ($p > 0.05$)(Table 6).

Table 6. Bivariate analysis of reproductive and other factors associated with contraceptive use among HIV positive women in the ART units Addis Ababa, November 2015

Characteristics	Contraceptive use		COR
	Yes	No	
Number of living children			
0	116	92	1
1	107	47	1.803(1.164-2.800)*
2	106	47	1.789(1.153-2.775)*
≥3	85	36	1.873(1.163-3.015)*
Child death			
Yes	45	33	.698(.431-1.131)
No	369	189	1
ARV use			
Yes	384	193	1.923(1.122-3.297)*
No	30	29	1
Duration on ARV N=339			
<36 months	204	80	1
≥36 months	56	98	.624(.435-.896)*
Recent CD4 count (cells/mm3)N=			
0-199	20	11	1
200-349	51	46	.610(.264,1.408)
350-500	64	50	.704(.309-1.604)
>500	177	60	1.622(.735-3.582)
In a stable relationship			
Yes	280	57	6.049 (4.200-8.711)*
No	134	165	1
Number of sexual partner in the last 6 months*			
One	319	74	1
More than 1	69	7	2.287 (1.010-5.179)*
Frequency of sex in the last 6 months*			
At least 3 times per week	103	8	9.656(3.419-27.268)*
Around once a week	166	42	2.964(1.304-6.740)*
About once a month	103	19	4.066(1.663_9.943)*
Less frequently than once a month	16	12	1
Disclosure of HIV status to sexual partner	347	113	4.996(3.447-7.240)*
Yes	67	109	1
No			

Partners HIV test result			
Positive	256	81	1.118(.654-1.914)
Negative	65	23	1
Changed sexual partners since HIV diagnosis			
Yes	92	46	1.093(.734-1.629)
No	322	176	1
Ever treated for STD since HIV			
diagnosis	69	18	2.207(1.312-3.916)*
Yes	345	204	1
No			

*This excludes all those who responded that they were not sexually active.

5.6 Multivariate analysis for contraceptive use

From multivariate logistic regression analysis shown in table 6 the variable that had significant association were Religion status**,** Marital status ,Number of living children**,** Number of sexual partner in the last 6 months **,**Disclosure of HIV status to sexual partner remained significantly associated with contraceptive utilization (Table 7).

Table 7: Multivariate analysis of variables associated with contraceptive use among HIV positive women in the ART units Addis Ababa ,Ethiopia , November 2015.

Characteristics	**Contraceptive use**		**COR**	**AOR**
		No		
	Yes			
Educational status	45	43	1	1
Illiterate	61	32	1.822(1.002-3.313)*	0.907(0.318-2.586)
Able to read and write	148	84	1.684(1.025-2.766)*	0.945(0.406-2.202)
Primary	111	39	2.720(1.562-4.737)*	1.398(0.529-3.697)
Secondary	49	24	1.951(1.026-3.710)*	0.913(0.316-2.640)
Post-Secondary				
Religion				
Orthodox	228	131	1	1
Muslim	42	34	0.562(.342-.924)*	.715(.328-1.560)
Protestant	69	47	0.668(.437-1.021)	.403(.191-.852)*
Other christens	15	10	0.682(.299-1.559)	1.965(.483-7.992)
Marital status				
Single	94	61	1	1
Married/ cohabiting	261	57	2.971(1.931-4.573)*	.940(.362-2.439)
Widowed Divorced Separated	59	104	0.368(0.234-0.580)*	.221(.097-.501)*
Drinking habit				
yes	71	15	2.857(1.594,5.118)*	1.009(0.360-2.828)
No	343	207	1	1
Number of living children		92	1	1
0	116	47	1.803(1.164-2.800)*	1.382(.666-2.867)
1	107	47	1.789(1.153-2.775)*	2.772(1.217-6.311)*
2	106	36	1.873(1.163-3.015)*	2.232(.929-5.364)
≥3	85			
ARV use				
Yes		193	1.923(1.122-3.297)*	4.413(0.213-91.557)
No	384	29	1	1
	30			
Duration on ARV N=339	204	80	1	1
<36 months	56	98	.624(.435-.896)*	0.724 (0.417-1.256)
≥36 months				
				1

In a stable relationship				
Yes	280	57	6.049 (4.200-8.711)*	2.057(0.985-4.298)
No	134	165	1	1
Number of sexual partner in the last 6 months*				
One	319	74	1	1
More than 1	69	7	2.287 (1.010-5.179)*	12.008(3.247-44.401)*
Frequency of sex in the last 6 months*				
At least 3 times per week	103	8	9.656(3.419-27.268)*	3.129(0.879-11.143)
Around once a week	166	42	2.964(1.304-6.740)*	1.875(0.612-5.734)
About once a month	103	19	4.066(1.663_9.943)*	2.350(0.714-7.778)
Less frequently than once a month	16	12	1	
Disclosure of HIV status to sexual partner				
Yes	347	113	4.996(3.447-7.240)*	3.388(1.521-7.547)*
No	67	109	1	1
Ever treated for STD since HIV diagnosis				
Yes	69	18	2.207(1.312-3.916)*	1.787(0.739-4.325)
No	345	204	1	

*This excludes all those who responded that they were not sexually active.

6. DISCUSSION

This study has shown that contraceptive utilization among HIV positive reproductive age women was 88.27% previous studies from Tanzania and Ghana reported low use 68.5% and 42.6% respectively [37, 39] in addition to that several studies from different part of Ethiopia shows , a low contraceptive use Nekemt , Gondar ,Tigray, Gimbi and Debremarkos 66.4%, 69.5% ,46.3%, 56.7% and, 47.9% respectively [23,42,30, 31,38] the reason might be promotion of family planning method (especially on long term and condom) by using mass media and integration of family planning service to HIV care and might be due to study time and setting.

However ;Very high contraceptive prevalence rate reported from South Africa (95%) this might be due to geographical variation and due to the active promotion of contraceptives during the pre-initiation counseling class and subsequent follow up visit and educational level of attainment (43).

The most preferable method of contraceptive were injectible 32%. High injectible preference was reported from Baher Dar and Tigray 54.7 and 70.7 respectively [41,44] Women were interested in using injectable because it can be used without their partners' awareness and injectable has less tension than pills like swallowing and remembering of timing of pills swallowing [44].

Implant was the second preferable method of contraceptive among HIV positive women 24.7% which is higher than Gimbi town 9.4% [31]. IUCD users were found to be 9.8% which is higher than Gimbi 2.7% and south Africa 4.5% [31, 43] and no IUCD use was reported in Tigray [30] .This difference might be due to advertisement of long term contraception using mass media and strong counseling on long term contraceptive methods. Large number of the women had misconception about IUCD and its side effects such as interference with sexual intercourse, cancer and delays pregnancy (31).

The prevalence of dual contraceptive method use by HIV positive women were 53.9% which is higher than other studies in different part of the country Keffa, Fichae and Tigray 19.8%, 32% and 47.6% respectively[40, 44,48] this discrepancy may be due to active promotion of condom by mass media and availability and free distribution of condom in HIV care unit .

The main reason for use of condom was to prevent re- infection 43.4% ,to prevent STD 42.9% ,to prevent infecting sexual partners 30.7% Even if they have different intention for use of condom most 57% use condom consistently. High constant use of condom were reported from Tigray 70% [30].

Dual protection is critical in reducing transmission of STIs and HIV. For PLWH, dual method use helps to prevent transmission of HIV to an uninfected partner. In addition, dual method use helps PLWH to avoid acquiring other strains of HIV that could be drug-resistant [45].

Utilization of modern family planning was significantly associated among women who had two children the odd of using modern family planning methods 2.7 times higher among women who had two children than who had no child this finding go in line with previous findings from Debre Markos and Addis Ababa [39, 19]. Women who had no children might have a high future fertility desire and their intention to use family planning methods might be low [38].

Disclosure of HIV status to sexual partner strongly associated with contraceptive utilization the women who disclose their status use contraceptive three times more than who didn’t disclose similar findings reported from Addis Ababa and Ghana [19,39].

Disclosure of one’s status to partner would ensure that both parties would understand the importance of using condom and other modern contraceptive methods to prevent unintended pregnancies .Women living with HIV could their fore be counseled and encouraged to disclose their HIV status to partner since it may improve their contraceptive use to prevent unintended pregnancies and the transmission of HIV /STI [25] .

Our findings has also showed that a women who have more than one sexual partner have reported contraceptive use than those who have one partner this may be due to they do not have stable relationship and may have high risk perception.

Religion had shown to have association with contraception use women who were protestant were less likely to contraceptive use than orthodox we can’t justify this association in this study .

7. LIMITATION

- Social desirability bias is likely since HIV positive people highly recommended to use dual contraceptive method and since the data collectors were ART service providers this result may be over emphasized
- Recall bias is likely

8. CONCLUSION

The study has shown that more two third women with HIV use at list one contraceptive method. The most preferable contraceptive method used was Injectable. Among long term contraceptive methods IUCD were used in very low rate. The chance of being current users of contraceptive by a women increase with disclose HIV status to their partner ,who had two children and women who had more than one sexual partner , however women who were protestant religion followers, divorced, widowed and separated had low chance of contraceptive use.

9. RECOMMENDATION

- The regional health bureau has to work hard to increase coverage of contraceptive utilization by HIV positive women in order to prevent mother-to- child-transmission of HIV.
- Women living with HIV should be encouraged to disclose their HIV status to their partners. Reasons for non-disclosure should be assessed and managed accordingly.
- Additional effort should be made on women who were widowed, separated, divorced and women who have no child.
- Focus should be given to women who have one sexual partner and to a women who were protestant.

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ANNEX –I CONCENT AND INFORMATION SHEET

Addis Ababa University

School Of Public Health

Study on "Contraceptive Utilization and Associated Factors among HIV positive women enrolled in HIV care in Government Health center in Addis Ababa "

Information sheet

Greeting

My name is---------------------------

First of all I would like to thank you for your time.

I am working in the research team which is conducted by Addis Ababa University .On HIV positive women who enrolled in HIV care.

This study includes all women 15-49 years of age enrolled in ART clinic in Addis Ababa government health center and intend to assess contraceptive utilization among HIV positive women.

The main purpose of the study is to determine the Contraceptive utilization among HIV positive women, to identify the preferred contraceptive methods and to assess factors associated with contraceptive utilization among HIV positive women enrolled in HIV care in government health centers in Addis Ababa. Therefore your participation and genuine response is important for achievement of the objective of the study. This study will not cause any harm to you.

We are inviting HIV positive women enrolled in HIV care between the ages15-49 years to contribute for the study. The study were conducted through interview which might take 20-30 minute .It might also involve intimate and private life questions but the information you are giving will help through program implementation to improve appropriate family planning service .

Your name will not be recorded and all the information you give were kept strictly confidential and is to be used only for the purpose of this study .you have the right not to respond to any questions you don't want to or you can interrupt the interview any time without any consequence your participation is completely voluntary.

Are you willing to participate?

☐ Yes ☐ No

If you agree to participate, I will ask you.

If you have questions regard to this study you can ask immediately the interviewer or late the investigator.

Contact address of the investigator

Name TsedaleSentayehu

Tel. 0911039236

E-Mail tsedalesentayehu37@gmail.com

ANNEX- II QUESTIONNAIRE

Part One : Demographic variable of participant

No	Questions	response	code	skip
101	How old are you?	--------- years(age in complete years)		
102	Religion	1. Orthodox 2. Catholic 3. Protestant 4. Moslem 5. Others		
103	Educational level	1. Illiterate(can't read and write) 2. Able to read and write (no grade) 3. Primary 4. Secondary 5. Tertiary or university		
104	Marital status	1. Single 2.Married 3. widowed 4. Cohabiting partner 5. Divorced 6.Separated		
105	Main Occupation	1. Unemployed 2. Government employ 3. Private organization employ 4. Day laborer 5. Commercial sex workers 6. Student 7. Other ------------		
106	Do you have monthly income?			108
107	Total monthly income			
108	Drink alcohol	Yes……………………………………1 No……………………………………2		

Part two : Contraceptive and condom use among the study participants.

209	Have you ever use contraception	Yes……………………………………1 No…………………………………….2		
210	Are you currently using a family planning method?	Yes……………………………………1 No…………………………………….2		214
211	Do you use more than one method of contraception?	Yes……………………………………1 No…………………………………….2		
212	What main contraceptive methods are you using?	Pills……………………………1 Injection…………………………..2 Implant…………………………3 Condom…………………………..4 Periodic…………………………5 Abstinence………………………6 Withdrawal……………………….7		
213	Why was that particular method chosen?	Convenience……………………..1 Cost (it is cheap)………………2 Can be used secretly……………3 No longer want more children……4 Other………………………………..5		
214	Would you recommend contraception to others?	Yes………………………………………1 No……………………………………….2 Not certain……………………………….3		
215	Have you ever used condoms?	Yes……………………………………1 No…………………………………….2		218
216	How would you best describe your use of condoms in the last 6 months?	1.Always use (consistently use) 2.Often use 3.Sometimes use 4.Rarely use		
217	When do you often use condoms?	1. With regular sexual partners 2. With casual sexual partners		
218	Have you ever heard of dual protection?	Yes……………………………………1 No…………………………………….2		
219	Do you think HIV positive couples should consistently use condoms?	Yes……………………………………1 No…………………………………….2		321
220	Why should HIV positive persons use condoms?	1. Prevent re-infection 2. Prevent STDs 3. Prevent infecting their sexual partners		

Part three: Clinical and social factor of participants

321	Are you currently is on ARVs?	Yes……………………………………1 No…………………………………….2		323
322	Duration on ARVs	Write number…………………………1 I can't remember……………………...2 I don't know…………………………..3		
323	Your CD4 number is	Write number………………...…………1 I can't remember………………………..2 I don't know…………………………….3		
324	Do you know the HIV status of your regular Partner /partners?	Yes……………………………………1 No…………………………………….2		326
325	If yes what was the result?	Positive……………………………….1 Negative………………………………2		
326	Did you disclose your status to your sexual partner?	Yes……………………………………1 No…………………………………….2		
327	Have you changed regular sexual partners since HIV diagnosis?	Yes……………………………………1 No…………………………………….2		329
328	If they have changed partners, what were the reasons?	Partner died……...……………………1 Divorced……….…………………….2 Rejected by spouse……………………3 Other reasons………….………………4		
329	Are you treated for STD since HIV diagnosis?	Yes……………………………………1 No…………………………………….2		

Part four: Reproductive and sexual factor of participant

No	Questions	Response category	code	skip
430	How many children do you have?	__________		
431	Have any of your children died?	Yes……………………………………1 No……………………………………..2		
432	Do you intend to have any more children?	Yes……………………………………1 No……………………………………..2		
433	Do you have stable sexual relationship?	Yes……………………………………1 No……………………………………..2		
434	Did you had sex in the last 6 months?	Yes……………………………………1 No……………………………………..2		**437**
435	On average, how often did you have sex in the last 6 months?	At least 3 times per week……………1 Around once a week………………....2 About once a month…………………3 Less frequently than once a month….4 Never had……………………………5		
436	How many sexual partners have you had in the last 6months?	None…………………………………1 One…………………………………..2 Two…………………………………..3 Three…………………………………4 More than 3…………………….……5		
437	Does your regular partner know your HIV status?	1.Yes 2.No 3.Don't know		

ANNEX- III የግንዛቤእናፈቃደኝነትመጠየቂያቅጽ

በአዲስአበባዩኒቨርሲቲህክምናፋኩልቲበህብረተሰብጤናሳይንስትምህርትቤትለጥናቱተሳታፊዎችበግንዛቤላይየተመሰረተየፈቃደኝነትመጠየቂቅጽ

የወሊድመቆጣጠሪያንአስመልክቶያላቸውንእዉቀት፣ዝንባሌእናልምድለመገምገምበአዲስአበባከተማበሚገኙየመንግስትሆስፒታሎችየፀረኤች.አይ. ቪ.መድሀኒትክትትልበማድረግላይባሉእናየመውለድእድሜክልልውስጥበሚገኙሴቶችላይየሚደረገውንጥናትለማካሄድየተዘጋጀየፈቃድመጠየቂያፎርም፡፡

እንደምንአደሩ/ዋሉ? እንደምንነዎት?

እኔስሜ ------------------------------ ይባላል፡፡

የምሰራውምበአዲስአበባዩኒቨርስቲበህብረተሰብጤናትምህርትቤትጥናትአድራጊቡድንውስጥነው፡፡ስለጡሰኝጊዜበጣምአመሰግናለሁ፡፡ይህጥናትተሳታፊየሚያደርገውእድሜያቸውከ15-49 እድሜክልልውስጥየሚገኙከቫይረሱጋርለሚኖሩእናበመንግስትጤናጣቢያውስጥየፀረኤች.አይ.ቪ.መድሃኒትክትትልየሚያደርጉሴቶችንየሚመለከትነው፡፡ጥናቱበእርስዎላይምንምየሚያደርሰውጉዳትየለም፡፡

የዚህጥናትዋናአላማኤች.አይ. ቪ.በደማቸውውስጥያለባቸውእናየየፀረኤች.አይ. ቪ.መድሃኒትክትትልበማድረግላይያሉሴቶችስለወሊድመቆጣጠሪያመጠቀምን፣መምረጥንእናከመጠቀምእናካለመጠቀምጋርየተያያዙምክንያቶችንአስመልክቶያላቸውንእውቀትእናዝንባሌለመዳሰስነው፡፤ስለዚህየእርስዎመሳተፍእናትክክለኛመልስየዚህንጥናትአላማለማሳካትበጣምጠቃሚነው፡፡

መጠይቁከ20እስከ 30 ደቂቃሊወስድይችላልቃለመጠይቁምንአልባትሚስጥርእናየግልጉዳይንየሚመለከቱጥያቄዎችንሊያነሳይችላል፡፡ነገርግንከእርስዎየምናገኘውትክክለኛመረጃበጥናታችንማወቅለምንፈልገውውጤትከፍተኛጠቀሜታአለው በተጨማሪምየቤተሰብእቅድአገልግሎትፕሮግራምአፈጻፀምንማሻሻልበማድረግከቫይረሱጋርለሚነኖሩሴቶችንተጠቃሚያደርጋል ፡፡

ከዚህምሌላላረጋግጥሎትየመምፈልገውእርስዎየሚሰጡትማንኛውምመረጃሚስጥራዊነቱየተጠበቀእናለዚህጥናትዐላማብቻየሚውልመሆኑንነው፡ስምዎአይጻፍም፡በጥናቱመሳተፍምሆነያለመሳተፍወይምየማይፈልጉትንጥያቄያለመመለስመብትዎየተጠበቀነው፡፡ቃለመጠይቁንጀምረውመቀጠልካልፈለጉበማንኛውምሠዐትማቆምይችላሉይህምበወደፊትህይወትዎወይምስራዎላይየሚያመጣውችግርአይኖርም

በዚህጥናትላይለመሳተፍፍቃደኛነዎት?

ፈቃደኛነኝ ☐ ፈቃደኛ አይደለሁም ☐

ፈቃደኛከሆኑአመስግኖስምምነትእንዲፈርሙማድረግ

ፈቃደኛካልሆኑአመስግኖወደሚቀጥለውሰውመሄድ

በጥናቱእንዲሳተፉማስገደድአይቻልም

ጥናቱንበተመለከተጥያቄካለዎትወዲያውኑመጠየቅወይምዘግይተውከሆነተመራማሪውንበሚከተለውአድራሻመጠየ ቅይችላሉ፡፡

ስምፀዳለስንታየሁ

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ANNEX -IV የአማርኛመጠይቅ

ክፍልአንድ ፡የማህበራዊናኢኮኖሚያዊሁኔታንየሚዳስሱመጠይቆች

No	ጥያቄ	መልሶች	ኮዶች	ዝለል
101	እድሜዎስንትነው?	( ) ዓመት		
102	ሀይማኖትዎምንድነው ?	1.ኦርቶዶክስ 2. ካቶሊክ 3. ፕሮቴስታንት 4. ሙስሊም 5. ሌላ		
103	የትምህርትደረጃዎ	1. ማንበብ ና መጻፍየማይችል 2.ማንበብ ና መጻፍየሚችል 3.የመጀመሪያደረጃ ትምህርትያጠናቀቀ 4.ሁለተኛደረጃ ትምህርትያጠናቀቀ 5. ከፍተኛትምህርትያጠናቀቀ		
104	የጋብቻሁኔታ	1. ያላገባች 2. ያገባች 3. ባልየሞተባት 4. የፈታች 5. አብረውየሚኖሩ 6.የተለያዩ		
105	በአሁንጊዜየሚተዳደሩበትየስራአይነት	1.የመንግስት ሰራተኛ 2.የግል ስራተቀጣሪ 3.የቤት መቤት 4.የቀን ሰራተኛ 5.ሴተኛ አዳሪ 6.ተማሪ 7.ሌላ ካለይጠቀስ------------		
106	የወርገቢአለዎት?	1.አዎን		108

		2.የለኝም		
107	ጠቅላላየወርገቢ.ምምንያህልነው?	1. ------------- የኢት.ብር 2. አላውቅም		
108	አልኮልይጠጣሉ ?	1. አዎን 2. አልጠጣም		

ክፍልሁለት፡የወሊድመቆጣጠሪያእናኮንዶምመጠቀምንየተመለከቱመጠይቆች

209	የወሊድመቆጣጠሪያተጠቅመውያውቃሉ?	1. አዎን 2. አላውቅም		
210	አሁንየወሊድመቆጣጠሪያእየተጠቀሙነው ?	3. አዎን 4. አልጠቀምም		21 4
211	ከአንድበላይየወሊድመቆጣጠሪያይጠቀማሉ?	1.አዎን 2.አልጠቀም		
212	በዋናነትየትኛውንመቆጣጠሪያይጠቀማሉ?	1.እንክብ(ፒልስ) 2.መርፌ 3. በክንድስርየሚቀበር 4.ሉፕ 5.ኮንደም 6.የወርአበባጊዜንበመቁጠር 7.በመታቀብ 8.ወንድየዘርፍሬን ከማህጸንውጭበማፍሰስ 9.ሌላ ካለይገለፅ		
213	አሁንየሚጠቀሙበትንየወሊድመቆጣጠሪያለምን መረጡት?	1.በቀላሉስለሚገኝ 2.ርካሽስለሆነ 3.በሚስጥርመጠቀምስለሚቻል 4.ተጨማሪልጅስለማልፈልግ 5.እርግዝናን እናኤች.አይ.ቪ.ንስለሚከላከል 6.ሌላ ካለይገለጽ---------		

214	የወሊድመቆጣጠሪያሌሎችእንዲጠቀሙትመክሪያለሽ?	1.አዎን 2. አልመክርም 3.አልፎአልፎ		
215	ኮንደምተጠቅመውያውቃሉ?	1.አዎን 2. አላውቅም		21 8
216	ባለፉትስድስትወራትየኮንዶምአጠቃቀምሽንእንዴ ትትገልጭዋለሽ?	1.ሁልጊዜእጠቀማለሁ 2.በአብዛኛውን ጊዜእጠቀማለሁ 3.አልፎአልፎእጠቀማለሁ 4.በጥቂቱእጠቀማለሁ		
217	ኮንዶምሁልጊዜየምትጠቀሚውመቼነው?	1.ከመደበኛየፍቅርጓደኛዬጋር 2.መደበኛካልሆነየፍቅርጓደኛዬ ጋር		
218	ሁለትአይነትመከላከያንስለመጠቀምሰምተውተውቂያለሽ?	1.አዎን 2.አላውቅም		
219	ከቫይረሱጋርየሚኖሩጥንዶችሁልጊዜኮንዶምመጠቀምያለባቸውይመስልዎታል?	1.አዎን 2.አይመስለኝም		32 1
220	ቫይረሱበደሙውስጥያለሰውኮንዶምመጠቀምያለበትለምንድነው?	1.በድጋሜመበከልን ለመከላከል 2.ከአባላዘርበሽታለመከላከል 3.የፍቅርጓደኛንለመጠበቅ		

ክፍልሶስት፡የጤናእናየማህበራዊግኑኝነትሁኔታዎች

321	የፀረኤች.አይ.ቪ.መድሃኒትጀምረዋል?	1. አዎን 2. አልጀመርኩም		323
322	የፀረኤች.አይ.ቪ.መድሃኒትመውሰድከጀመሩምንያህልጊዜሆኖዎታል?	1. ቁጥሩንይጻፉ------- 2. አላስታውስም 3. አላውቅም		

323	የቅርብጊዜየሲዲፎርቁጥርምስንትደርሶዋል?	1. ቁጥሩንይጻፉ------- 2. አላስታውስም 3. አላውቅም		
324	የመደበኛየፍቅርጓደኛዎ/ጓደኞችዎኤች.አይ.ቪየደም ምርመራውጤትያውቃሉ?	1. አዎ 2. አላውቅም		326
325	መልስዎአዎከሆነየፍቅርጓደኛዎ/ባለቤትዎየደምምር መራውጤትምንነበር?	1. ፖዘቲብ 2. ነጌቲብ		
326	የኤች.አይ.ቪየደምምርመራውጤትዎንለፍቅርጓደ ኛዎ/ባለቤትዎአሳውቀዋል?	1.አዎን 2. አላሳወቅኩም 3. መልስየለም		
327	ቫይረሱበደምዎእንዳለካወቁበኂላየፍቅርጓደኛቀይረዋ ል?	1.አዎን 2.አልቀየርኩም		329
328	መልስዎአዎንከሆነየፍቅርጓደኛየቀየሩትለምነድነው?	1.ጓደኛዬስለሞተ 2.በፍቺምክንያት 3.ትቶኝ ስለሄደ 4.ሌላምክንያት		
329	ቫይረሱበደምዎከተገኘበኂላየአባላዘርበሽታይዞዎትያ ውቃል ?	1. አዎን 2. አያውቅም		

ክፍልአራት ፡የስነተዋልዶእናጾታዊግንኘትንየተመለከተመጠይቅ

430	ስንትልጆችአሉዎት ?			
431	ልጅሞቶብዎትያውቃል ?	1. አዎ 2.አያውቅም		
432	ተጨማሪልጅእንዲኖርዎይፈልጋሉ?	1.አዎ 2. አልፈልግም		
433	የተረጋጋየፍቅርግኑኙነትአለዎት?	1.አዎ 2.የለኝም		
434	ባለፉት 6 ወራትየግብረስጋግኑኙነትአድርገውያውቃሉ	1.አዎ 2.አላደረኩም		437
435	ባለፉት 6 ወራትበግምትበየስንትጊዜውየግብረስጋግኑ ኙነትአድርገዋል?	1.በሳምንተሶስትጊዜ 2.በሳምንትአንድጊዜ 3.በወርአንድጊዜ 4. በወርከአንድጊዜያነሰ		
436	ባለፉትስድስትወራትስንትየፍቅርጓደኞችነበ ርዎት ?	1. ምንምአልነበረኝም 2. አንድ 3. ሁለት 4.ሶስት 5.ከሶስትበላይ		
437	መደበኛየፍቅርጓደኛዎቫይረሱበደምዎእንዳ ለያውቃል?	1.አዎን 2.አያውቅም 3.አላውቅም		

ANNEX VI : ASSURANCE OF PRINCIPAL INVESTIGATOR

I undersigned here agrees to accept responsibility for scientific ethical and technical conduct of the research project and for provision of required progress reports as per terms and the condition of the research. I will communicate to my advisor and other stakeholders involved in this research.

Person undertaking the project

Name of the student: Tsedale Sentayehu.

Signature ___________________ Date _________________

Approval of the primary Advisor

Name of the primary advisor: Dr. Assefa Seme (MD, MPH)

Signature ___________________ Date _________________