ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF PUBLIC HEALTH

Assessment of Intrauterine Contraceptive Device Utilization and associated factors for Low Utilization among clients of Family Guidance Association Clinics in Addis Ababa, Ethiopia.

By:

Mohammed Ali, BSc.

A Thesis Submitted to the School of Public Health, College of Health Sciences, Addis Ababa University in partial fulfillment of the Requirement for the Degree of Masters in Public Health (MPH).

Under the Supervision of:

Dr. Wubegzier Mekonnen, PhD

Addis Ababa

November, 2016

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This is to certify that the thesis prepared by *Mohammed Ali Mohammed*, entitled; **„Assessment of Intrauterine Contraceptive Device Utilization and associated factors for Low Utilization among clients of Family Guidance Association Clinics in Addis Ababa, Ethiopia.'** and submitted in fulfillment of the partial requirement of the Degree of Master of Public Health complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

Approved by the Board of Examiners:

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Examiner	Date	Signature
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Abstract

Introduction*: Although intrauterine contraceptive device (IUCD) method is the safest, very effective, long acting and reversible contraceptive method, it has been used at a very low rate in many developing countries compared to other modern contraceptive methods.*

Objective*: The objective of the study was to assess the utilization of IUCD method and factors associated with utilization among women of reproductive age in Addis Ababa family Guidance Association of Ethiopia (FGAE) clinics.*

Methods: *Facility based cross sectional study was conducted from March 1, 2016 to April 30, 2016, employing both quantitative and qualitative methods. Data for quantitative study was coded, entered and cleaned using Epi-info and transferred and analyzed by using SPSS version 21.0 for windows. Group comparison was assessed using Chi square analysis. Multivariate Logistic regression model was used to detect factors associate with IUCD utilization. All the tests were considered significant at $p < 0.05$. The qualitative data was analyzed using the qualitative thematic analysis approach.*

Results*: A total of 108 respondents were currently using IUCD making the utilization rate 35.2%. The median duration of IUCD use was 33 months (Range: 1 - 120 months). Group comparison showed that marital status ($p = 0.032$), knowledge score ($p = 0.010$), and being told about IUCD duration ($p = 0.044$) had statistically significant association with current IUCD use. Thus, it was found that larger proportions of married women (66.9%), clients with good knowledge score (70.1%) and those who have been told about the duration of contraception of IUCD (67.3%) were not to using IUCD. Logistic regression analysis showed that clients with high knowledge score were about 1.8 times less likely to use IUCD (AOR 1.779: 95% CI = 1.087-2.913, $p = 0.022$). Qualitative study showed that rumors about IUCD from other users and clients' perception about IUCD such as its side effects, including bleeding and infection, as well its possible effect to cause infertility were important barriers affecting the level of use of IUCD in the study area.*

Conclusion and recommendation: *The present study revealed that the proportion of IUCD use & duration of IUCD use was low in the study setup and clients with good knowledge level were less likely to use IUCD. The clients in this study population were much more influenced by the rumors and wrong perceptions about IUCD use, particularly towards side effects and other perceived untoward effect. Thus, Family guidance association of Ethiopia and other public and private health institutions should extend focused (method specific) education to their clients to remove misconceptions about IUCD use.*

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List of Acronyms and abbreviations

AA	Addis Ababa
AAAO	Addis Ababa Area Office
AAMC	Addis Ababa Model Clinic
AAU	Addis Ababa University
EC	Ethiopian Calendar
EDHS	Ethiopian Demographic and Health Survey
FP	Family Planning
FGAE	Family Guidance Association of Ethiopia
FGD	Focus Group Discussion
FMOH	Federal Ministry of Health
HB	Health Beauro
HC	Health Center
HEWs	Health Extension Workers
HSDP	Health Sector Development Program
IUCD	Intrauterine Contraceptive Device
LAPMS	Long Acting and Permanent Methods
MMR	Maternal Mortality Rate
MPH	Master of public Health
NGO	Non-Governmental Organization
PI	Principal Investigator
RH	Reproductive Health
RHB	Regional Health Bureau
STI	Sexually Transmitted Infection
SWFC	Sex Workers Friendly clinic
SWFC	Sex Workers Friendly Clinic
UNFPA	United Nations population fund
WHO	World Health Organization
YC	Youth center

1 Introduction

1.1 Back ground

Family planning (FP) is defined as the practice of controlling the number of children in a family and the intervals between their births, particularly by means of artificial contraception and voluntary sterilization. It allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births (1). Family planning (FP) is a process that usually involves a discussion between a woman, a man, and a trained FP service provider focusing on family health and the desires of the couple to either limit or space their children (1).

FP methods are generally divided in to two: the short acting contraceptive methods (SACMs) and the long acting methods (LACMs). Oral contraceptive pills and injectable such as Depo-Provera are considered to be the short acting methods due to their length of action are 1 to 3 months. On the other hand, Implants and Intrauterine contraceptive device (IUCD) are called long acting family planning methods due to their length of action lasts 1 to 12 years. Intra-uterine contraceptive device (IUCD) is inserted by trained health personnel into a woman‟s uterus which prevents pregnancy for about 12 years. In countries where an unintended pregnancy and unmet needs are higher, IUCD plays a greater role (2).

Although long acting contraceptive methods like IUCD is known to be safe, effective and long lasting, the proportion of users are very low as compared to short acting methods. Currently about 150 million women are using this method out of which 100 million of women are Chinese. Generally, 13% of world married women are using this method. The most widely used methods are injectable (21%) followed by implants (3.4%), pills (2.1%), and female sterilization (0.5%). However, the utilization rate of IUCD (0.3%) and male condom (0.2%) is very low. Moreover, the discontinuation rate of short term contraceptives was higher than that of long acting contraceptive methods (LACMs). The discontinuation rate for all methods was 37%, in which the highest was observed for pills (70%), followed by male condom (62%). Thus, such discontinuation rate of short term contraceptive methods will make inefficient and expensive to the FP program and resulted in many unintended pregnancies (3)

In addition, the failure rates in the first year of a typical use of the commonly used contraceptive methods are considerably high: 180 unintended pregnancies *per* 1,000 users of male condoms, 90 unintended pregnancies *per* 1,000 users of pills, and 60 unintended pregnancies *per* 1,000 users of the progestin-only injectable (Depo-Provera) have been documented. Thus, implants are 120 times more effective than injectable, 180 times more effective than the pill, and 360 times more effective than condom use. The effectiveness of Implant and IUCD are nearly the same. Long acting contraceptive methods are highly effective and have long lasting effect when they are compared with short term ones. After using the method if women want to get pregnant return of fertility is also rapid unlike short term contraceptive methods. They are also cost effective and have higher continuation rate. The majority of Intrauterine devices used are copper devices but reliable data on the use of different types of devices are not available. The LNG-IUCD has been used by over 10 million users in 113 countries, since it was first marketed in 1990 .The proportion of IUCD users among married or cohabiting women of reproductive age is nearly 2-fold higher in the developing world (14.5%) than the developed world (7.6%) (3,4).

The Ethiopian reproductive health strategy set provision of all FP methods with special emphasis on long term and permanent methods as a key strategy of achieving one of its primary goals of reducing unwanted pregnancies and enabling individuals to achieve their desired family size (Ethiopian National RH strategy, 2006). The proportion of married women for family planning declined from 15% to 12% in developed counties, whereas this proportion is higher in developing countries like African countries which is above 25% (4,5). According to the World Health Organization, more than 120 million women worldwide want to prevent pregnancy, but they are not using contraception. Reasons for not using it are many including (1) services and supplies are not yet available everywhere or choices are limited, (2) fear of social disapproval, (3) worries of side effects and other health concerns hold peoples from using family planning service and etc. In this regard, people should be offered the opportunity to determine the number and spacing of their own children. Information about FP should be made available, and access to FP services should be actively promoted for all individuals desiring them

A WHO 2012 report also indicated that, in many Sub-Saharan countries; there is high proportion of unmet need for family planning methods especially for long acting family planning methods

(2). Additionally, this report revealed that the proportion is even higher among rural women. Though, there is an intention to increase the utilization of long term methods including IUCD, still high proportion of women in Africa use short term FP methods. In Sub Saharan Africa, including Ethiopia, lots of efforts were done to increase the utilization of long acting contraceptive including IUCD, but still now, significant proportion of women are using short term family planning methods in the region (2). One study in 2013 in Mekele town of Tigray region has shown that, even though some long acting reversible contraceptive methods including IUCD are the world‟s most prevalent form of reversible contraception, the utilization rate of IUCD in Mekele town, was very low (6), that is consistent with the report for sub-Saharan Africa. In this regard, like other sub-Saharan African countries, Ethiopia and its different regional states were held at very small percent. Another study conducted in the same region of Tigray, Adigrat town in 2014 revealed that only low proportion (2.1%) of married women use the IUCD as their method of contraception, due to lack of information about the availability of the method (7).

1.2 Statement of the problem

More than 350 million couples worldwide have limited or no access to effective and affordable FP, especially to LACMs. According to World Health Organization, trends in Maternal Mortality, 1990 to 2008, an estimated 358 000 maternal deaths occurred worldwide in 2008, a 34% decline from the levels of 1990. Despite this decline, developing countries continued to account for 99% (355 000) of the maternal deaths. Sub-Saharan Africa and South Asia accounted for 87% (313,000) of global maternal deaths. Most of unintended pregnancies in developing countries end in unsafe abortion which contributes significantly to maternal morbidity and mortality (2).

The proportion of long acting contraceptive methods, for example IUCD users are generally very low as compared to short acting methods, despite LACMs known to be safe, effective and long lasting (8). For example, the failure rates in the first year of typical use of the commonly used contraceptive methods have been reported to be considerably high. Furthermore, the proportion of IUCD users among married or cohabiting women of reproductive age is nearly 2-fold higher in the developing world than the developed world (5).

Federal Ministry of Health initiated IUCD scale up in 2011 to prioritize the introduction and scale up of long-acting reversible methods, including Intrauterine Contraceptive Devices (IUCDs) . In addition to this, federal Ministry of Health is now expanding access to IUCD including immediate post-partum insertion. Also the Government of Ethiopia showing efforts by constructing new health centers in rural and underserved areas to increase access to long acting family planning services though the facilities require support to ensure the availability of these services. Consequently, according to mini Demographic and Health Survey final report of 2014, knowledge of contraceptive methods is universal in Ethiopia. However, only about 40% of married women were currently using modern contraceptive methods. The most popular method used by these women was injectable, which was about 31%. Interestingly, Implants and IUCD were used by 5% and 0.8% of them, respectively. The Ethiopian DHS report, (2014) further substantiates that, the prevalence of implant and IUCD users were only 8.5% and 7.5%, respectively, in the capital, Addis Ababa (8).

Consequently, there appears to be huge discrepancies in utilization of LACMs which could be attributed to several factors. A retrospective study conducted in India in 2012, showed that IUCD contraceptive users were only 3.8%. Lack of information about the method was the main reason for poor utilization in India FP clients (9). Another qualitative study conducted in Pakistan in 2012 showed that, only 13% percent of married women use the IUCD as their method of contraception (10). Reasons mentioned for low utilization of IUCD utilization were inadequate counseling about the method by service providers and misconception about the method. Thus, highly effective, more convenient method such as IUCD has been underutilized which is 2%. (10)

Many women in many care setups are using less effective „„resupply"" methods; which are short-acting that require users to continually replenish their supplies of the contraceptive. The short acting methods are also posing extra problems in users because clients are required to be strictly adherent or compliant to their schedules, which could be on daily or monthly basis. In addition, these methods may require repeat of health care visits for contraceptive refills. In Ethiopia, although the knowledge about FP programs has been reported to be adequate, most of them are actually using short acting contraceptive methods. The underlying reasons and factors for poor utilization of long acting options remains poorly elucidated. In addition, even though health management information system (HMIS) is being rolled out currently in Ethiopia, little information is available to document progress on FP in regions and health facilities; (1,3).

Thus, this study was designed to asses IUCD utilization in Addis Ababa FGAEs and pin point potential factors associated with low utilization to focus on so that possible targeted solutions or interventions could be made to increase the utilization of the method.

1.3 Significance of the study

This study measures the magnitude and pattern of IUCD use among the clients in Addis Ababa FGAEs. Thus, the outcome of the study would contribute to understand the level of IUCD use in the study setup and identify potential factors predicting low utilization of IUCD in Addis Ababa. The current data would be up-to-date information about IUCD (Cu T 380A) utilization so that it may show the status or level of use compared to previous works reported from similar study setups. Thus, it would be an input for program planners and policy makers to redesign their program and policies and to make targeted action on client specific, service specific factors to improve the utilization rate of IUCD. Consequently, it is possible that clients could be prevented from the undesired hormonal side effects of short acting contraceptive methods. Moreover, it is possible that many of the unplanned pregnancies and associated complications and maternal deaths could be reduced

2 LITERATURE REVIEW

2.1 Magnitude of IUCD utilization

IUCD is a reversible long-term contraceptive method that is suitable for women of all reproductive ages, and represents the most cost effective reversible method for preventing unwanted pregnancies. This method, for the purpose of preventing pregnancy, was first described in the scientific literature in the early 1900s. In the 1970s, it was discovered that the addition of copper to the plastic device improved contraceptive efficacy, thereby allowing it to be made smaller, which improved the ease of insertion and decreased some of its untoward side effects. Today, two types of IUCDs, containing either copper or progestin, have reemerged as effective, safe, and acceptable methods of contraception. The most widely available IUCD is the Copper bearing IUD (Cu T 380A). It is highly effective and long acting, easy to insert, and has a low complication rate (4,10). The intrauterine device (IUCD) is an ideal method because it facilitates adequate birth spacing and does not require repeat health care visits for contraceptive refills (4). A committee opinion by the American College of Obstetricians and Gynecologists (ACOG) recommends the IUCD as a first-line choice especially for adolescents (10). Even though IUCD has many positive attributes including high and long duration of effectiveness, it is not widely used in Africa (11).

An article published in 2010 by USA department of Obstetrics & gynecology School of Medicine, revealed that 22 to 33% of intrauterine Copper T-380A contraceptive device users discontinued the method after 3 years of insertion and 60 % of them discontinued after 5 years (11). A study conducted in exploring trends in IUCD usage among women in the United States in 2012 revealed that IUCDs are used less frequently than other forms of reversible contraception due to lack of knowledge and negative attitude towards the method by the users (12)

2.2 Factors associated with IUCD utilization

A Descriptive qualitative study was also conducted in Pakistan in 2012 to explore and understand the perception of women regarding the use of IUCD and to understand the challenges at the service providers‟ side using FGD and in-depth interview using the qualitative content analysis approach. The prevalence of IUCD utilization in this study was very low which was due

to clients reluctant to use the service due to many misconceptions related to this method. The same study in Pakistan has also revealed that family planning clients were reluctant to use IUCDs because of a number of myths and misconceptions associated with the method. For example most of respondents mentioned that IUCD causes infection and has interference with sexual intercourse (10).

Another retrospective study conducted in 2011 in India showed that, out of the total FP clients, only 3.8 % of them were IUCD users (13). A study conducted in 2014 to assess the factors affecting acceptance of intrauterine contraceptive device among rural women of Hirebagewadi of India showed also that socio-cultural factors were the main reasons for not accepting IUCD These included fear arising from the rumors and myths heard from their community, thinking that the IUCD might travel through the woman‟s body like heart or brain, the method acts as an abortificient. They also believed that IUCD interferes with sex, prevents from normal activity and causes infertility. Knowledge & psychological factors were also other factors for low acceptance of IUCD in India (14). This study also revealed misconception arose from the health workers. Some of the misconception among the health workers included spreads infections all over the women‟s body, it dislodges during sexual intercourse, it scares the fallopian tube and causes infertility, and it causes discomfort during sex. Generally the health workers think that this method is unsafe for the women.

2.3 Barriers for IUCD use

A qualitative study conducted in two urban localities of Nigeria in 2012 showed that even though many participants were familiar with the method they believe that it is prone to infection causing stomach ache & waist pain. Other participants also believed that the method caused cervical infection, weight gain and high blood pressure (15). A descriptive cross sectional facility based study involving women of reproductive ages 15-49 years on IUCD uptake at Mbagathi & Mama Lucy Y Kibaki Hospitals in Nairobi , Kenya in 2015 showed that 70% of sampled women were current IUCD users for one year or less(16). In the same study, 26% of sampled women said that IUCD might travel to other body organs, 19.6% said it causes infection, 13.2% causes infertility & 9.9% said that IUCD causes cancer. Similar research conducted in Kenyatta University of Kenya showed that fear about IUCD (fear of side effects, fear of what people say about it and

fear of the procedure) was the most frequently mentioned reason for not using IUD (16). Similarly, a study conducted in South Africa revealed that barriers which have inhibited the wide spread use of IUCD in South Africa are safety concerns, myths regarding IUCD and provider training. Another common misconception is that the IUCD can cause abortions by preventing implantation of the embryo prevented many women from getting an IUCD and providers from suggesting the method (17).

In Ethiopia, several practice pattern studies tried to assess FP utilization methods in some regional states of Ethiopia. A case control study conducted in Debre Markos town of western Ethiopia revealed that short term FP methods were more dominant which was 92.5% (18) . Another cross-sectional study conducted in Mekele town of Tigray region, in 2012, revealed that the overall prevalence rate of long term contraceptive method was 12.3% (19). The reason of low acceptance rate, according to this study include fear of side effects, partner disapproval and misconceptions, fear of delaying pregnancy, causing cervical cancer and interferes sexual intercourse. In this study, 65% of study participants described that insertion and removal of IUCD is shameful. A community based cross sectional study conducted in 2009 in Goba town of southern Ethiopia indicated that the utilization of IUCD method is found to be very small (1.5%). The main reasons for the low utilization in the town of Goba were inconvenience of the method and disapproval of partners (20).

A community based cross sectional study conducted in Arba Minch town of Ethiopia in 2014 among child bearing age women revealed that 3.4% of them were IUCD users (21). In this study, 38.5% participants agreed that privacy was not kept during IUCD insertion and 47.2% said that IUCD prevents from performing daily activities (21). In another study conducted in South Wello zone of Amhara regional state, the factors associated for low acceptance of IUCD were unavailability of the method, lack of trained personnel to provide the method, provider‟s bias towards the method as it needs pre procedure special preparation & time taking procedure (22).

A cross sectional survey conducted in 2008 by family health international in 16 FGAE and 12 Marie stops international clinics in four regions and two administrative councils of Ethiopia to determine the reasons for IUCD removal; the assessment revealed that the main reasons for early removal of implant & IUCD were misconception about the method side effects, provider perceptions of client reservations, inadequate counseling by providers and work load. The low

acceptability of long acting contraceptive methods like IUCD is mostly resulted from non-supportive attitude of family planning users. Some of the reasons are side effects like fear of infertility after using the method (22, 23).

A study conducted in Adama town in 2014 highlighted that early discontinuation of IUCD usage was a common practice in Adama town, with about 41% of women discontinued within 5 years after insertion which is much higher than documented in many other literatures. A related community based study conducted in Adama town (2014) of Ethiopia revealed that misconception related to side effects like infertility, it moves through other body parts, it brings about cancer & blocks ordinary activity were the factors for low utilization of IUCD. In addition, this study also showed that 59.6% respondents perceived that insertion of IUCD exposed once own privacy and 82.3% perceived that IUCD block ordinary activity (23) According to a community based study conducted in Bale zone of Oromiya regional state, inconvenience of the IUCD method and partner disapproval were reasons mentioned for low utilization of IUCD (24). An institutional based cross sectional study conducted in 2012 in Mekele town of northern Ethiopia to assess associated factors on acceptance of long acting FP methods shows that the acceptance of long acting FP methods were very low. Main reason mentioned for not accepting the method were fear of infertility after using the method & husbands disapproval (19). A quantitative, cross sectional descriptive study conducted in 2013 on socio-demographic and service related factors influencing intra-uterine contraceptive device (IUD) utilization in Addis Ababa revealed regarding the benefits of IUCD demonstrated that 12.8% of them mentioned that IUCD is hormone free and 7.8% of them mentioned that it is reversible (26).

In addition to this patient specific and service related factors, in many developing countries, there are lots of barriers which affect the utilization of IUCD. Some of barriers at policy and service delivery level are the following allowing: (1) only for senior service providers, (2) limiting time of insertion when the women is menstruating, (3) not providing until 6 weeks of post-partum instead of providing the service within 48 hours of delivery (4) requiring unnecessary and frequent follow ups and many restrictions which were no relevant of use also mentioned as barriers for the utilization of IUCD (7). These could also be potential barrier fir IUCD utilization in clients of FGAEs in Addis Ababa.

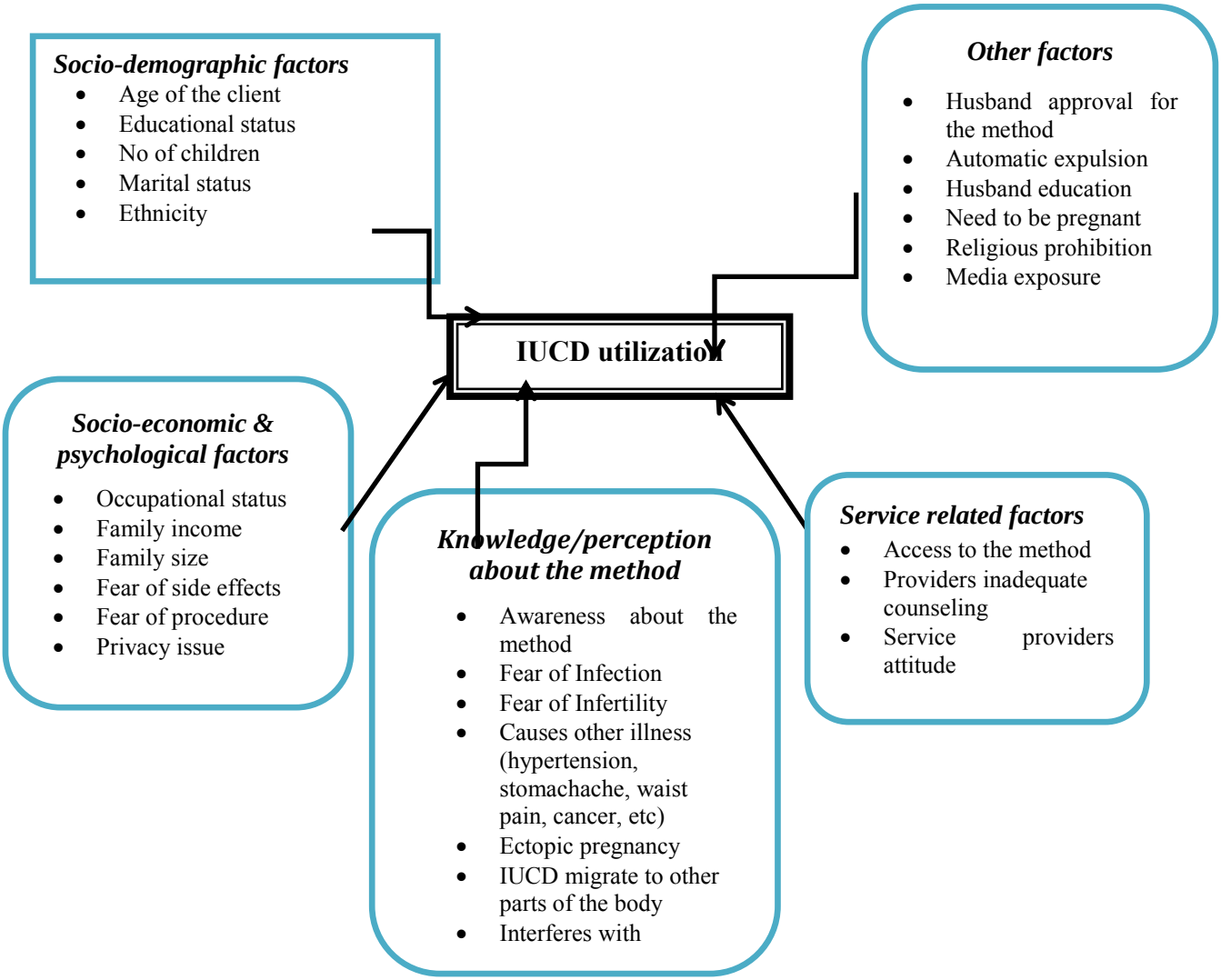

Figure 1 conceptual framework: compiled from (20,23and 24)

3. OBJECTIVES OF THE STUDY

3.1 General objective

- The objective of the study was to assess the utilization of IUCD method and factors associated with low utilization and barriers for its use among women of reproductive age in Addis Ababa family Guidance Association of Ethiopia (FGAE) clinics

3.2 Specific objectives

- To measure the current proportion of utilization of IUCD among FGAE clients
- To identify factors associated with IUCD utilization among FGAE clients
- To explore common misconceptions potentially preventing IUCD utilization among FGAE clients.

4. METHODS

4.1 Study area/setting and period

The study was conducted in Addis Ababa Family Guidance Association of Ethiopia (FGAE) clinics from March 1, to April 30, 2016.

4.2 Description of the study set up

Addis Ababa is the capital city of Ethiopia, the second populous country in Africa (The current population of Ethiopia is 101,883,320 by the year 2016, based on the latest United Nations estimates). According to the office of the Central Statistics Agency (CSA, 2012) of Ethiopia, the population of Addis Ababa city by the year 2012 was 3.049 million. Women of reproductive age from 15 to 49 years of age are estimated to be more than one million. Administratively, the city is divided into 10 sub cities (Addis Ketema, Akakibkality, Arada, Bole, Gulele, Lideta, Kirkos, Kolfekaranyo, Nefas Silk/ Laphto and Yeka). There were 88 functional health centers & 12 hospitals in AA city administration. In addition to these there were also 816 NGO & private health institutions in the capital.

Family Guidance Association of Ethiopia (FGAE), established in 1966, is a pioneer for modern FP services in Ethiopia. It has been contributing to the national effort to meet the growing demand for family planning and reproductive health services in the country for half a century. Currently, it has one specialty, eight model, twelve medium and six Confidential Sex-workers Friendly SRH Clinics. In addition, it has 22 youth centers, more than 200 outreach sites and 300 private franchised clinics under its 8 Area offices. Addis Ababa Area office is one of the 8 area offices under the head quarter which covers ten sub cities of Addis Ababa city administration. Under this area Office, there are two youth centers in the capital Addis namely Akaki and Ferensay, which are located in Akaki kality and Yeka sub city respectively. There are also four reproductive health clinics located in Arada, Addis Ketema and Nefasilk lafto sub-cities which are providing different reproductive health services.

4.3. Study design

A facility based cross sectional study design involving both quantitative and qualitative methods was employed.

4.4 Population

4.4.1 Source population

All women of reproductive age 15 to 49 years of age who got any forms of FP service in FGAE clinics in Addis Ababa.

4.4.2 Study population

The study population was women of reproductive age group (18 to 49 years) who come to FGAE clinics for all family planning services during the study period

4.4.3 Exclusion criteria:

- Women who were not willing to participate and
- Women who were not able to give verbal consent

4.5 Study variables

4.5.1 Dependent variables

- IUCD utilization

4.5.2 Independent variables

- Socio-demographic (Age, marital status, total living children, educational status, ethnicity, religion)
- Socioeconomic (occupation, family income, number of living children, family size)
- Psychological **(**fear of side effects, fear of procedure, privacy issue etc).
- Service related (access to the method, information about the method, providers attitude, provide counseling, etc)
-

- Client Knowledge status **(**fear of Infection, fear of infertility, causes other illness (infection, hypertension, stomachache, waist pain, cancer, ectopic pregnancy, IUCD migrate to other parts of the body, interferes with intercourse, causes of abortion, reduces normal activity, etc).
- **Other factors** (partner approval, partner educational level, media exposure, etc)

4.6 Sample size determination and sampling design

4.6.1 Sample size for quantitative research

The sample size required for the quantitative study was determined using the formula for single population proportion (confidence interval approach) (Dean et al., 2015**)**. The sample size, n, for 95% two-sided confidence interval for a proportion would be:

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

Where;

n = required sample size

$Z_{1-\alpha/2}$ = the $100(1-\alpha/2)^{th}$ percentile of the normal (or Gaussian) distribution. For the commonly used two-sided 95% confidence interval, $Z_{1-\alpha/2} = 1.96$,

p = proportion rate of IUCD use

According to the Mini DHS 2014 report, the proportion of IUCD method users in Addis Ababa was 7.5%. Thus, we would use *p* to be 7.5% = 0.075 and thus,

q = 1 – p = 0.925

d = the margin of confidence interval = 0.04

Because the study involves multi stage sampling, and to account for that we considered a design effect (DE) (for cluster survey), = 2

Accordingly, $n = ((1.96)^2 \times 0.075 \times 0.925)/(0.04)^2 \times DE$ = 167 X2

= **334**

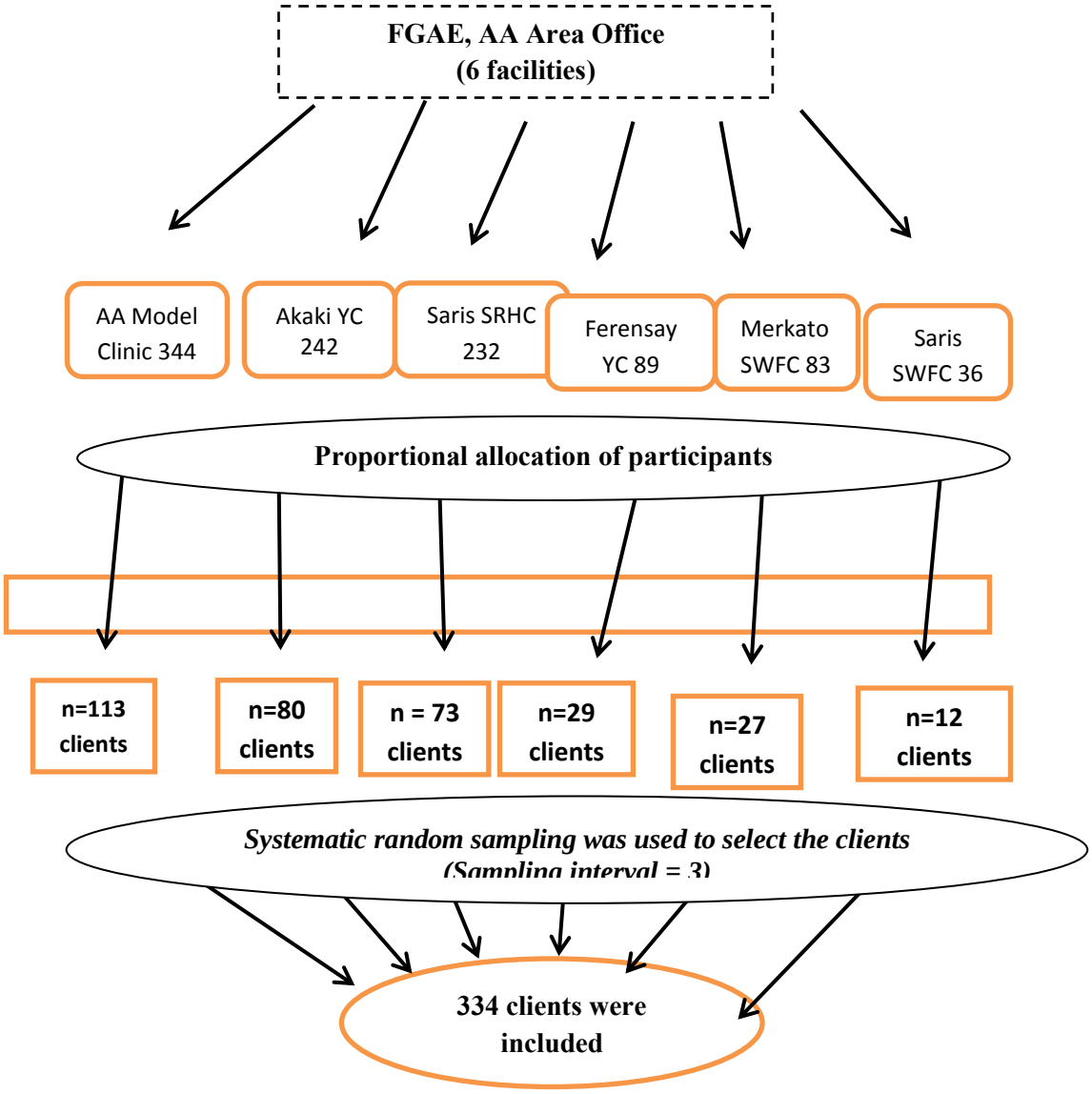

Figure 2: Sampling procedure for the selection of family planning clients of reproductive age group (18 –49) Years of age, Addis Ababa, Ethiopia, 2016.

4.6.2 Sampling design and sampling procedure

Six representative health facilities of FGAE, Addis Ababa Area office providing IUCD services were selected randomly using lottery method in accordance with their provision of family planning service, namely AA model clinic, Akaki Youth center, Saris reproductive health clinic, Ferensay youth center, Merkato sex workers friendly clinic and Saris sex workers friendly

clinic were selected (figure 2). After the selection of these facilities, the sample size of the study were proportionally allocated to each selected facilities based on their total number of eligible on their average 3 months performance coverage. This corresponds to 113 subjects for Addis Ababa model clinic, 80 subjects for Akaki Youth center, 73 subjects for Saris medium reproductive health Clinic, 29 subjects for Ferensay Youth Center, 27 subjects for Merkato Sex workers friendly clinic and 12 subjects for Saris Sex workers friendly clinic. Average monthly family planning client flow rate, according to service statistics report of work units were 1024.

To enroll individual participants in the study, systematic random sampling technique was used. Accordingly, the sampling interval was calculated by using the formula:

$$K = N/n = 1024/334 = 3.$$

Thus, we interviewed every 3rd clients during clients exit until we got a total sample size of 334.The first client in each facility was selected by using lottery method.

4.6.3 Sample size for qualitative research

Four FGDs (Focus Group Discussions) were conducted in two youth centers and two clinics. Purposive sampling strategy was used to select individuals in the FGD, taking into consideration sex and educational status for convenient individuals during FGD. The number of participants in each FGD were eight; with sex and homogeneity of group members in reproductive age group (18 to 49 years of age) women who were family planning clients of the facilities of the study area and their selection was by investigator in collaboration with health professionals of the respective health care units.

Special attention was paid to maintaining privacy and confidentiality during the discussions. During the FGDs, participants were informed about the purpose and process of the FGD to obtain informed consent of each participant. Tape recorded as well as hand notes were taken both by the principal investigator and assistants during focus group discussion. Data collection continued till information gathered became saturated so that new ideas no longer emerge.

4.7 Data collection instruments and method

For the quantitative study, structured questionnaire was prepared in English language and was translated into Amharic version and then back translated to English by principal investigator and other personnel who was fluent on both languages to prevent possible miss-understanding and misinterpretation. The questionnaire constituted information on socio-demographic, economic, reproductive and other variables. The questionnaire contains mainly closed ended questions, but also incorporates some open ended items.

For the qualitative study, guiding questions were prepared to reflect their view and attitudes towards the IUCD usage, why the clients are not using it, common psychosocial and behavioral and socio-cultural issues. The principal investigator was a moderator for the qualitative study assisted by a note taker.

4.8 Training of data collectors

For the purpose of data collection, data collectors involving, diploma nurses and supervisor (PI) were recruited. Additional a note taker was employed for qualitative study. The data collectors were oriented for half a day on how to approach clients, the principles of consenting and other ethical issues, study procedures and meanings of the questions included in the questionnaire, how to raise probing questions, and note taking .

4.9 Data quality management

Before the actual data collection commences, the questionnaire was pre-tested on 5% (17 clients) of the sample size on similar setting that was randomly selected health facilities, outside the study area. After the pretest, the questionnaire was accordingly modified for any missing variables. The data obtained from pretesting was not included in the final analysis.

The pretest was conducted to ensure completeness of the data collecting instrument. Training was given for the data collectors and supervisors before the actual data collection on the contents of the questionnaires and how to maintain confidentiality and privacy of the study subjects. Every day after data collection, questionnaires were reviewed and checked for completeness,

accuracy and clarity by the supervisors and data collectors. The data were stored in a secured place for confidentiality and in time of need for a backup of the data.

4.10 Data analysis

4.10.1 Quantitative Data analysis

Before data analysis the data were validated by visual inspection for omission and inconsistencies. Then the returned questionnaires was checked immediately for completeness, edited and entered in to EPI INFO Version 7 statistical software and then exported to SPSS windows version 21.0 for analysis. Descriptive statistics was computed to explore the socio-demographic, socio-economic, and other related characteristics. Categorical variables were reported as percentages. Knowledge and attitude evaluative variables were diagnosed for normality of the distribution and presented as mean ± standard deviations (SD) or median with inter quartile range (IQR). Chi-square test was used for group comparisons of dependent variables (IUCD utilization) against independent categorical variables (age group, income category, psychological factors, service related factors, knowledge related factors, etc). Multivariate binary logistic regression analysis was used to see the association of independent variables with IUCD utilization. The data were analyzed using SPSS for windows, version 21.0. A p-value < 0.05 was considered significant.

4.11.2 Qualitative data analysis

Focus group discussions (FGD) of participants involving married women and men were randomly selected from clients of the facilities. During the FGDs, participants were informed about the purpose and process of the FGD to obtain informed consent of each participant. FGDs consisting of 8 participants in the age group of 18 to 49 years were conducted in two clinics and two youth centers with the purposively selected participants. The FGD guide was prepared to explore misconceptions for lower use of IUCD in Addis Ababa context.. The interviewer took note through writing and recorded using tape-recorder. The various ideas were compared based on differences and similarities and sorted into categories. Finally, based the underlying meaning, categories were formulated into a theme.

4.12 Ethical consideration

The study was conducted after ethical clearance was granted from the research ethics committee of the School of Public Health, College of Health sciences, Addis Ababa University. Approval to conduct the study was also obtained from Addis Ababa health bureau and responsible bodies of the studied health care units. Written Information sheet, prepared both in Amharic and English, was provided to study participants. The clients were explained about the aims and purpose for conducting the study, how their involvement will contribute, and what their rights are within the study. They were also explained about the expected benefits of the study and the possible or incidences or inconvenience that might occur to them. After that informed verbal consent was obtained from individual clients prior to participation in the study. Participants were contacted in a privacy room. During the investigation, all client records were kept confidential (except for those involved in the study) such that each participant was identified only by a code. Otherwise, the name of respondents and other identifier were not written in the questionnaire.

4.13 Operational definitions

Client: shall mean women of reproductive age group who come to the FGAE seeking family planning methods.

Factors: shall mean socio-demographic, socio-economic, psychological, service and knowledge related, characteristics that could hinder the acceptance and utilization IUCD.

Family Size: total number of family members who live together including relatives and nonrelatives such as house maids

IUCD users: shall mean those reproductive age women who visited the FGAEs during the study period and received IUCD service.

IUCD utilization: shall mean accepting and use of IUCD service in the FGAE during the study period.

Knowledge score for IUCD: clients are defined to have good knowledge if they have knowledge score at or above the mean knowledge score

Attitude score: clients are defined to have good attitude towards IUCD if they have attitude score at and above the mean attitude score.

4.14 Definition of some terms

Barriers to IUCD uptake: any system or policy or program related factors that prevent/hinder uptake of the IUCD

Nulliparous woman: a woman that doesn‟t have experience pregnancy**.**

Unwanted pregnancy: is defined as a pregnancy that the woman would have

Preferred to have at another time

Women of reproductive age group: women who are in the age group between 15 and 49 years old

5. RESULTS

A total of 307 women were included in this study, which makes the response rate to be 92%. The socio-demographic characteristic of the respondents is displayed in table 1. The mean age of the respondents was 33.98 years (± SD 6.56), with larger proportion belongs to the age group ≥ 35 years (46.3%).

Out of all respondents, 102 (33.2%) of them were Amhara, followed by Oromo 93(30.3%). Regarding their religious background, 179 (58.3 %), 72 (23.5%), 54(17.6%) of them were Orthodox, Muslim, and protestant, respectively. The majority of the women 272 (88.6%) were married, and larger proportions of the respondents were house wives 134 (43.6%), followed by self-employees 91 (29.6%) and government or private employees 74 (24.1%). When we see the educational status, majority of respondents attended elementary/junior school (grade 1-8), 116 (37.8%) or secondary school (grades 9-12) 137 (44.6%). In addition, the majority of the female respondents 246 (80.1%) had a monthly income 2000 Birr and above . The mean family size of the respondent was 3.9 with the larger proportion of the respondents 204 (66.4%) had a family size of 4-6 members within their household (Table 1).

Table 1: Socio-demographic characteristics of FGAE clients in Addis Ababa, Ethiopia, 2016 (N = 307)

	Frequency	Percentage
Age group		
20-24	17	5.5
25-29	69	22.5
30-34	79	25.7
>=35	142	46.3
Ethnicity		
Amhara	103	33.6
Oromo	93	30.3
Tigre	41	13.7
Gurage	40	13
Others (Wolaita, Silte, etc)	29	9.4
Religion		
Orthodox	179	58.3
Muslim	72	23.5
protestant	54	17.6
other	2	0.7
Marital status		
Single	9	2.9
married	272	88.6
widowed	9	2.9
divorced	17	5.5
Educational status		
Illiterate (could not read and write)	24	7.8
1-8	116	37.8
9-12	137	44.6
Higher education (dip or deg)	13	9.8
Family size		
1-3	82	26.7
4-6	204	66.4
>=7	21	6.8
Occupational status		
House wife	134	43.6
self employed	91	29.6
employed	74	24.1
daily laborer	5	1.6
student	3	1.0
Monthly income		
< 1999	61	19.9
2000-3999	157	51.1
4000-5999	58	18.9
>=6000	31	10.1

This study shows that 198 (64.5%) and 90 (29.3%) of the study respondents had a history of 1-2 and 3-4 live births, respectively. In addition, 215 (70%) and 80 (26.1%) of these respondents had 1-2 and 3-4 children who are alive, respectively at the time of the study period. On the other hand, 223 (72.6%) respondents said that they want to have more children in the future (Table 2).

Table 2: Reproductive characteristics of FGAE clients, Addis Ababa, Ethiopia, 2016

Number of child born of the respondents	**Frequency**	**Percent**
1-2	198	64.5
3-4	90	29.3
>=5	19	6.2
Number of alive children		
1-2	215	70.0
3-4	80	26.1
>=5	12	3.9
Number of children they want to have more in the future		
1-2	208	67.7
3-4	15	4.85
Do not want any more child	84	27.36

The figure below (Figure 3) depicts majority of respondents have got information about IUCD through different sources. However, larger proportions of them got information about IUCD through health professionals 35.5% or through their friends 14.33%. And 13.68 % of them had got information through health professional and friends. In addition to this 11.73 of them got the information from health professionals and mass media. Otherwise, the role of partners, neighbors, youth centers or school was less significant in this study.

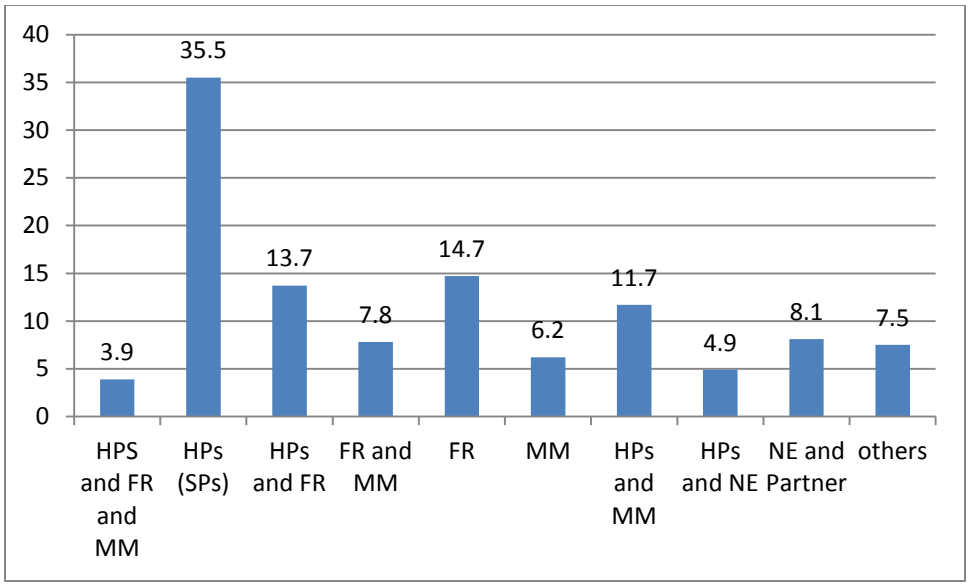

Figure 3: Source of information on IUCD among FGAE clients in Addis Ababa Ethiopia, 2016. (HPs (health professional) SP (service providers), MM (Mas media), ,FR (friends), NE (neibour),Others (school, youth center, partner ,…….)

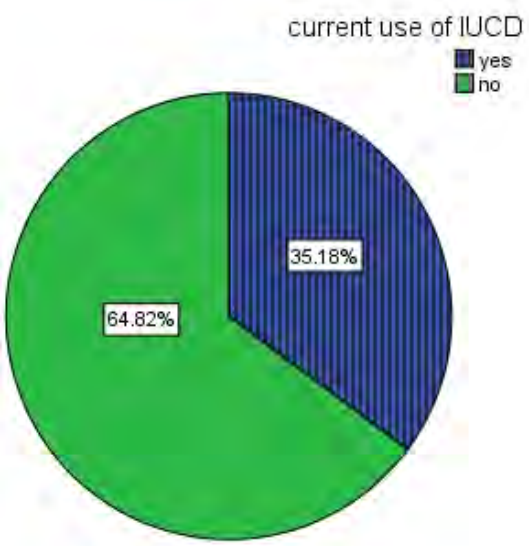

Figure 4: The current use of IUCD among FGAE clients in Addis Ababa Ethiopia, 2016

In this study, 108 clients, representing for 35.2% of the respondents, described that they are currently using IUCD (figure 4) with a median duration of 33 months (minimum 1 month and maximum of 120 months). About 270 (88%) of the study participants were counseled about the advantages of IUCD (figure 5)

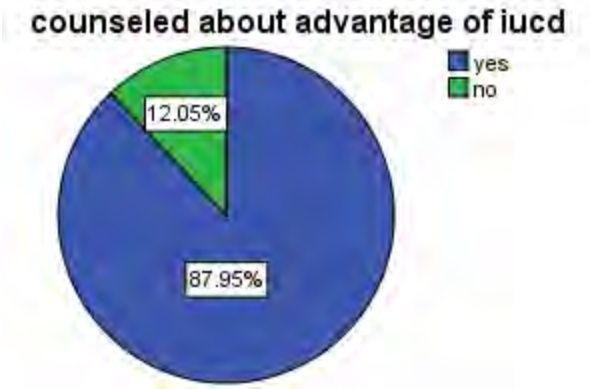

Figure 5: Respondents reaction if they were counseled about advantage of IUCD

In this study, it was found that the majority 263 (85.67%) of the clients were claimed that professionals in the clinics facilitated the use of IUCD. (Figure 6A). However, there were

moments where the supply of IUCD was out of stock. It was found that 39 (12.7%) of the clients said tha there was no IUCD supply in the clinic during their visit (figure 6B).

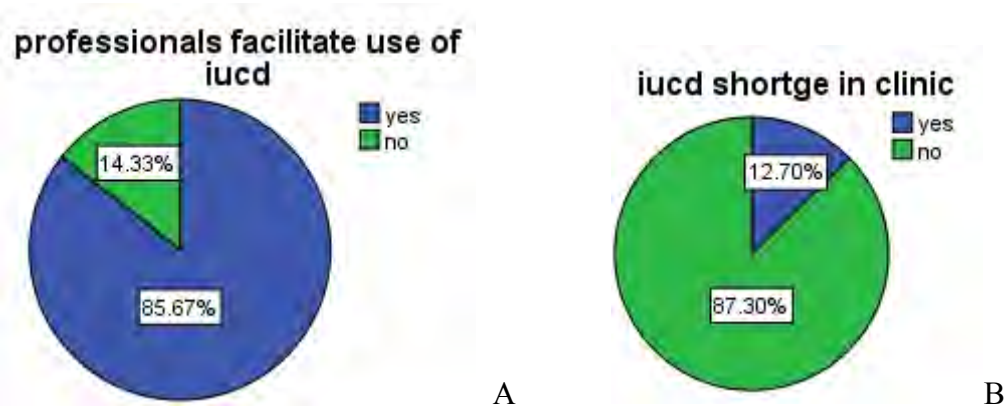

Figure 6: Pattern of Professionals facilitation for IUCD use (A) AND IUCD stock outs in the clinics (B)

The knowledge of the respondents was assessed using core question items about IUCD as displayed in table 3. Out of all study subjects, majority of them described that IUCD is used for prevention of unwanted pregnancy 270 (87.9%), IUCD limits family size 162 (52.8%), IUCD helps child spacing 199 (64.8%), or IUCD is reversible 192 (62.5%) (Table 3). As indicated in table 3 below, out of 307 respondents 284(80.8%) of them knew IUCD can prevent unwanted pregnancy for 12 years. The majority 264(86%) of the clients also perceived that IUCD method is not appropriate for women at risk of sexually transmitted diseases. However, significant proportion of patients does not know the role of IUCD in preventing maternal and child mortality or it has no hormonal side effect. Moreover, regarding the IUCD‟s interference with sex, 78 (25.4%) of respondents said that it interferes with sex. In addition, there were significant number of clients 115 (37.5%) who mentioned that IUCD use is not reversible immediately and makes delay for pregnancy after its removal 39 (12.7%)) or who do not know whether IUCD is reversible or not and 76 (24.8%)). In general, the overall knowledge status of the clients showed that 196 (63.8%) of them had high (good) knowledge on IUCD, whereas 111(36.2%) of them had low (poor) knowledge on IUCD.

Table 3: Knowledge on IUCD among FGAE clients in Addis Ababa, Ethiopia, 2016

Variable		Frequency	Percent
Use of IUCD			
IUCD prevents unwanted pregnancy	yes	270	87.9
	No	37	12.1
IUCD prevents maternal and child mortality	yes	**6**	2.0
	No	**3**	1
	DK*	**298**	97
IUCD limits family size	yes	162	52.8
	No	145	47.2
IUCD helps child spacing	yes	199	64.8
	No	96	31.3
IUCD has no hormonal side effect	yes	63	20.5
	No	3	1
	DK	241	78.5
IUCD prevents unwanted pregnancy for 12 years			
	yes	248	80.8
	No	59	19.2
IUCD is appropriate for woman at risk of STI			
	yes	43	14.0
	No	264	86.0
IUCD has no interference with sex			
	yes	229	74.6
	No	78	25.4
IUCD is reversible			
	yes	192	62.5
	No	39	12.7
	DK	76	24.7

*DK do not know

The overall mean knowledge score of the study participants was 5.17±1.78 (median score = 6). Moreover, 71% of the study participants had knowledge score of 5 or above indicating that majority of the participants had good knowledge.

Table 4 below depicts results of the perception of respondent about issues related to IUCD use. As it is indicated, larger proportion of respondents 209 (68.1%) agreed that IUCD does not migrate to other body parts after insertion (mean score 1.55 favoring agreement). It was also found that 121 (39.4%) of the respondents perceive that IUCD might cause irregular menstrual bleeding (mean score 2 implying not sure).

The study result also revealed that 239 (77.2%) clients disagreed that IUCD method decreases sexual desire (libido) (mean score 2.69 favoring disagreement), and113 (36.8 %) of the clients agreed that IUCD does not expose privacy (mean score 2.13 favoring disagree). Similarly, higher proportion 123 (40.1%) of the clients believed that the method might cause infection if IUCD is used (mean score 2.03 favoring disagreement). Small fraction of the clients has agreed that IUCD might cause infertility 16 (5.2%) (Mean score 2.79), or interferes with sex 21 (6.8%), (mean score 2.73). On the other hand, 40 (13%) of respondents said that device might automatically be expelled from the uterus (mean score 2.59).

Table 4: Attitude (Perceptions) of women to IUCD method among FGAE clients Addis Ababa, 2016

Variables	Frequency	Percent	Mean score
IUCD does not migrate to other body parts			
Agree	209	68.3	
not sure	26	8.5	1.55
Disagree	71	23.2	
IUCD might cause irregular menstrual bleeding			
Agree	121	39.4	
not sure	64	20.8	2
Disagree	122	39.7	
IUCD decreases libido			
Agree	27	8.8	
not sure	41	13.0	2.69
Disagree	239	77.2	
IUCD does not cause loss of privacy			
Agree	113	36.8	
not sure	41	13.4	2.13
Disagree	153	49.9	
IUCD causes infection			
Agree	123	40.1	
not sure	51	16.6	2.03
Disagree	133	43.3	
IUCD causes infertility			
Agree	16	5.2	
not sure	31	10.1	2.79
Disagree	260	84.7	
IUCD causes cancer			
Agree	6	2.0	
not sure	39	12.7	2.81
Disagree	262	85.3	
IUCD interferes with sex			
Agree	21	6.8	
not sure	40	13.0	2.73
Disagree	246	80.1	
IUCD spontaneously expelled from uterus			
Agree	40	13.0	
not sure	45	14.7	2.59
Disagree	222	72.3	

The overall mean attitude (perception) score of the study participants was 10.7 ±1.91 (median score = 11). Moreover, 167 (54.4 %) of the study participants had attitude score at or above the mean score indicating that larger proportion of the clients had good attitude towards IUCD.

Table 5: Results of Chi square analysis of covariates and Current IUCD utilization among FGAE clients Addis Ababa, 2016

		Current IUCD use			*p-value*
		yes	no	Total	
Marital status	married	90 (33.1%)	182 (66.9%)	272	0.032
	Not in union	18 (51.4%)	17 (48.6%)	35	
	Total	108 (35.2%)	199 (64.8%)	307	
Knowledge score	low	49 (44.5%)	61 (55.5%)	110	0.010
	high	59 (29.9%)	138 (70.1)	197	
	total	108(35.2%)	199 (64.8%)	307	
Told about IUCD duration of contraception for 12 years	yes	83 (32.7%)	171 (67.3%)	254	0.044
	no	25 (47.2%)	28 (52.8%)	53	
	total	108 (35.2%)	199 (64.8%)	307	

Group comparison using chi square analysis showed that marital status (p = 0.032), knowledge score (p = 0.010), and being told about IUCD duration (p = 0.044) had statistically significant association with current IUCD use. Thus, it was found that larger proportions of married women 182 (66.9%), clients with high knowledge score (71%) and those who have been told about the duration of contraception of IUCD 171 (67.3%) are not currently using IUCD. And this was statistically significantly associated (p value < 0.05) (table 5). Other potential variables of participants such as age group, educational status of client, reproductive characteristics, source of

information, monthly income, family size, educational status of the partner, ever opposed by partner, were not associated with IUCD utilization

On the other hand, the binary logistic regression analysis showed the association of different independent variables with the utilization of IUCD Accordingly, clients with good knowledge score were about two times more likely not to use IUCD (AOR 1.779: 95% CI = 1.087-2.913, p = 0.022) (Table 6).

Table 6: **Results of logistic regression analysis of covariates and Current IUCD utilization among FGAE clients Addis Ababa, 2016**

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	single	-	-	-	-	-	1		
	married	.815	.699	1.357	1	.244	2.258	.573	8.892
	divorced	.823	.995	.683	1	.408	2.276	.324	16.005
	widowed	-.278	.851	.107	1	.744	.757	.143	4.016
	know_score(high)	.575	.253	5.182	1	.023	1.778	1.083	2.917
	iucddur(yes)	.531	.315	2.849	1	.091	1.700	.918	3.150
	Constant	.905	.737	1.507	1	.220	.405		
Step 2[a]	know score(high)	.583	.250	5.450	1	**0.020**	**1.791**	**1.098**	**2.921**
	Constant	-.181	.305	.353	1	.552	.834		

5.1 Result for qualitative data

The following themes were identified in the data as specific concerns that young people suggested as barriers for their not seeking or using RH services;

- Fear
- Myths
- Rumor
- Misconception

Fear

During the FGD most of the respondents said they have developed fear on the method side effect and cause of infection.

Based on the checklist that was developed to guide the discussion, relevant information was obtained. Four focus group discussions were held, participants were group of married women and men involving different educational status groups. Each group consisted of 8 members. They discussed about why they are not using IUCD. Most of the participants explained that they know about IUCD. They said that they have heard of the method from different sources including *via* friends, relatives, health institutions, health professionals and radio. A 38 years old mother said "*I heard about the "Loop" (IUCD), for example I am using it from the last two years"*.

A 29 years old women also added information on the use of IUCD. She said "*I have heard about IUCD but I fear to use it because those who are using IUCD have severe bleeding and IUCD may go up in to the uterus"*. Another 36 years old female participant added that *"it is good to use long acting method but, I fear that this long acting method could be make me infertile or "mehan" and also my neighbor told me that sometimes it may cause infection and back pain. So, that I couldn't prefer the method."*

The majority of participants raise important misconception about the use of IUCD including its side effects, such as bleeding, infection, infertility etc., and thus, they are not using the method. A 32 years old lady using IUCD said that *"after I used IUCD I had abdominal pain and back ache for some time.* Most family planning clients who had never used an IUCD reported a

negative impression about the method, mainly because of the fear arising from the rumors and myths they had heard of in their community.

A 45 year old male participant said "*IUCD might causes infertility because a friend of mine told me that after using this method his wife didn't conceive".* A 46 old male key informant mentioned" rumors, myths and misconceptions as the main barriers to IUD uptake as she reported; Some of the misconceptions mentioned by the participants were *IUCD will cause infertility, interferes with sex*, *IUCD might travel through the women's body, Women who haven't had children so far, couldn't use IUCD, during intercourse, the IUCD can cause pain and discomfort. This has been hindering most of them from using IUCD; however with counseling some of the women are using the method"* Other 36 years old participant that *"nowadays there is regular supply of IUCD and we could get the service free of charge in every government health institutions".*

A 29 years old women also added information on the use of IUCD. She said "*I have heard about IUCD but I fear to use it because those who are using IUCD have severe bleeding and IUCD may go up in to the uterus".* Another 36 years old female participant added that *"it is good to use long acting method but, I fear that this long acting method could be make me infertile or "mehan" and also my neighbor told me that sometimes it may cause infection and back pain. So, that I couldn't prefer the method."*

Myths

Most family planning clients who had never used an IUCD reported a negative impression about the method, mainly because of the fear arising from the rumors and myths they had heard of in their community. A 45 year old male participant said "*IUCD might causes infertility because a friend of mine told me that after using this method his wife didn't conceive".* Some of the misconceptions mentioned by the participants were *IUCD will cause infertility, interferes with sex*, *IUCD might travel through the women's body, Women who haven't had children so far, couldn't use IUCD, during intercourse, the IUCD can cause pain and discomfort. This has been hindering most of them from using IUCD; however with counseling some of the women are using the method*

6. DISCUSSION

The results of the present study showed that the current utilization rate of IUCD among women in the Addis Ababa FGAs was 35.2%. The majority of the women who were using IUCD in this study were 272 (88.6%) were married, and 74 (24.1%) of employees. The study also showed that clients with good knowledge score about IUCD and married women were using the method at a lower rate. Moreover, it was also found from qualitative study that clients‟ misconceptions and rumors were potentially influencing the use of IUCD negatively.

The current utilization rate of IUCD among women observed in Addis Ababa FGAs, 35.2%, was comparable to the studies conducted in Shashemene town (28.4%) (27) and southern Ethiopia (29.7%) (Kabalo, 2016)(28). However, our result is higher compared to the studies conducted in Tigray region (12.3%) (6), Debre Markos town, Amhara Regional State, (19.5%) (18), Wollega, western Ethiopia (20%) (29). This may explain the better availability of the method or relatively better information about the method in our study setups. It might also be true that short acting contraceptive methods could be commonly used in the under IUCD utilized reports above.

The use of long acting contraceptive methods should be promoted for its several advantages particularly in developing nations like Ethiopia. Global health has improved considerably over the last four decades, but everywhere the health status of the poor compares unfavorably with that of the more affluent sectors of society (11). In Africa, one in 26 women of reproductive age dies from maternal cause, as opposed to one in 9400 in Europe (9). Parallel disparities in fertility and in contraceptive use are found between poor and wealth countries. The world‟s total fertility rate has dropped dramatically, from 5 children per woman in the early 1950s to 2.6 children per woman today, largely owing to more widespread use of modern contraceptives (17). Furthermore, in 1960 only around 9% of married women in the developing world practiced any form of contraception; currently, this figure is 62%. Yet, in less developed countries, modern contraceptive methods are used by only 43% of women of reproductive age (9).

The majority of the women who were using IUCD in this study were 272 (88.6%) were married, and 74 (24.1%) of employees. The study has similarity with study conducted in Adama town which shows (89%) of the women were married and employees (17.4%), respectively (23) It is

clear that these segments of the population are using IUCD to reducing unwanted pregnancies and achieve their desired family size (30). However, as a key strategy of achieving one of its primary goals of reducing unwanted pregnancies, IUCD use among not married women needs a focus.

The study also showed that clients with good knowledge score about IUCD were using the method at a lower rate. It was also found from qualitative study that clients" misconceptions and rumors were potentially influencing the use of IUCD negatively. The study revealed that 121 (39.4%) of the respondents perceive IUCD might cause irregular menstrual bleeding. Similarly, 123 (40.1%) of the clients believed that the method might cause infection. On the other hand 78(25.45) of respondents believe that IUCD use has interference with sex. A community based study conducted in Adama town (2014) of Ethiopia revealed that misconception related to side effects like infertility, it moves through other body parts, it brings about cancer and blocks ordinary activity were the factors for low utilization of IUCD (23) . Similar research conducted in Kenyatta University of Kenya showed that fear about IUCD (fear of side effects, fear of what people say about it and fear of the procedure) was the most frequently mentioned reason for not using IUD (16). Similarly, in a study conducted in South Africa also revealed that barriers which have inhibited the wide spread use of IUCD were myths regarding IUCD (17). These findings substantiate the significance of or bad attitude towards IUCD due to rumors about the side effects and its negative consequence on the utilization of the method. The quality of knowledge that the clients need to have appears to be very important not to be influenced by side effects claimed or perceived by other clients. A related study conducted in exploring trends in IUCD usage among women in the United States in 2012 revealed that IUCDs are used less frequently correctional study conducted in Oromiya region of Shashemene revealed that women education, partner discussion and proper client counseling were found the main factors associated women LAPMs utilization (27). On the other hand, the report from Wollega, western Ethiopia showed

that women's education, women's occupation, number of live children, joint fertility related decision, having radio/TV, and discussion with health care provider about long acting contraceptive methods were strongly associated with utilization of long acting contraceptive methods (including IUCD) (29).

This was verified from our study that the clients in FGAEs of Addis Ababa were having good knowledge about IUCD, yet, majority of them are not using it. This contradicts with the finding observed in Tigray region. As implied in this region report by Alemayehu et al., mothers who had high knowledge were 8 times more likely to use LAPMs (including IUCD) as compared with those who had low knowledge (19). It could be true that our study participants are dwellers of the Addis Ababa city and could have multiple access and sources of information to hear about IUCD. However, these participants could also have prior information from colleagues and might have developed a negative attitude towards IUCD. Although this could be potential barriers to use IUCD, this warrants further investigation. A qualitative study conducted in two urban localities of Nigeria in 2012 showed that even though many participants were familiar with the method they believe that it is prone to infection causing stomach ache and waist pain. Other participants also believed that the method caused cervical infection, weight gain and high blood pressure and consequently they are not using it (15).

Regarding source information majority of the clients heard about IUCD from health professionals (46.91%) or friends (31.9%) (Figure 3). The role of friends as information source could be more importantly affecting the use of IUCD. This has been seen in the focus group discussions that, most married women were afraid of using IUCD because of the possible side effects of the method (such as bleeding, infection, etc) and that it could cause infertility.

Moreover, out of 307 respondents 121(39.4%) and 123 (40.1%) respondents agreed that IUCD cause irregular menstrual bleeding and infection, respectively. This is significant result to affect the use of IUCD negatively. When FGD participants were asked what information their providers give on IUCD, most of them indicated that they were not given much information about IUCD since they visited the clinic. A research thesis conducted in Kenya Nairobi in 2015 shows that fear about the method („fear of side effects, fear of what people say about it" and „fear of the procedure") was the most frequently mentioned reason for not using IUD (63.2%) (16).

A study conducted in Ambo town of Oromiya region of Ethiopia in 2014 revealed that large number of the women had misconception about IUCD and its side effects such as interference with sexual intercourse, cancer, delays pregnancy, restriction from working normal activity and invasion of privacy during its insertion and removal. It also reported that the main limiting

factors to use IUCD were fear of side effect, infertility after LAPMs use (31). Majority of respondents in this were belong to the age group 25-34 [297(48.2 %)] with slightly lower in a study conducted in Adama town in 2014 (23). In a study conducted in Kenya Age of women was found to be a significant driver of IUD utilization in Kenya and IUCD use was highest among women in the age group of 25 to 35 years of age (48.2%). And IUCD utilization was increasing as the age of respondents increased in Kenya (16).

In the present study, although, statistically non-significant relationship was noted in this study between age and IUD use, on absolute figures, clients with age of 35 and above were using IUCD at a higher rate than other age group. In line with our result, the Demographic and Health Survey has also identified that women aged 35-39 were five times more likely to use IUCD than women aged 20-24 and women aged 40-44 and 45-49 were three times more likely to use IUCD than women aged 20-24 (8). This may be explained that increased use of IUCD with increase in age may be due to the fact that women in younger age group may not have yet given birth thus have desire to give birth soon. On the other hand older age group women may have given births and don‟t like giving birth soon such that they want to use long acting method of contraception.
In the present study, significant amount of difference in IUCD utilization was observed between married (88.6%) women and single women (2.9%). The majority of IUCD users 90 (33.1%, n 307) were married women. This finding is similar with other studies (6). This could be explained by the fact that married women could be motivated to use the method to control the number of children or to space the number of years between children. It was observed in our study that 109 (35.5%) of the study participants had 3 or more children that may require controlling their family size.

The study also reveals that 23% of respondents perceive that IUCD migrate to other body part after insertion in the uterus. A relatively similar profile (26%) was reported in a study conducted in Kenya (16). A cross sectional community based survey conducted in Mekele town of Tigray regional state, Ethiopia, shows that large number of the women had misconception about IUCD and its side effects such as interference with sexual intercourse, causing cancer, delays pregnancy, restriction from working normal activity and invasion of privacy during its insertion and removal (6).

8. Strength of the study

Both qualitative and quantitative methods were used to substantiate the study. These methods improve the research outcomes as qualitative study complement and strengthen the quantitative study**.**

9. Limitations of the study.

The study is a cross sectional which can be considered as an inherent design limitation where causal relationship between the independent and dependent variables cannot be established. And also client service and program related barriers were not assessed in detail in this study.

10 Conclusions

In conclusion the present study has revealed that the rate of IUCD use among the FGAs clients were 32.5%. Being told about IUCD duration of contraception for 12 years and knowledge score were factors for utilization of IUCD. The perception of the women regarding IUCD to possibly cause side effects (including bleeding, infection) and to cause infertility were potential barriers to utilization of IUCD in the setup.

11 Recommendations

Provision of focused FP education should be extended to the clients addressing associated misconceptions through effective communication strategies and involving spouses in family planning programs is essential. The clients need to get educated to properly make them understand the clear benefits and side effects of the method or to properly remove the misconceptions about IUCD so that the utilization of IUCD may be improved. Clinical administrators and Health professionals working in the FGAs and other health institutions should strengthen general and method specific counseling on IUCD for clients visiting the health institutions as well as using mass media and other communication strategies.

Further study needs to be undertaken to determine why Family planning clients not choosing this method and how to increase its utilization. Program planners and implementers need to scale-up awareness creation programs to change the attitude, myths and misconceptions of clients on intra uterine contraceptive device. Based on these findings, further large scale study specially a qualitative study should be conducted on IUCD utilization and attitudes of the clients regarding IUCD utilization in order to formulate precise strategies to reduce misconception to improve IUCD utilization.

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Annex I

A Information Sheet

IDENTIFICATION

Name of the Institute_____

Address of the Institute _____

Greeting:

Hello, how are you?

My name is…… I am data collector on behalf of a Masters Student in AAU, college of health sciences, school of public health, who want to conduct this study. The objective of the study- to assess intrauterine contraceptive device (IUCD) method utilization and factors associated with it among women of reproductive age in AA FGAE clinics.Your cooperation and willingness for the interview is very helpful in identifying the problems related to the issue. Your name will not be written in the form and I assure you that all information that you give will be kept strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answerIf you are not still comfortable with interview, please be free to stop me any time you like there is no harm if you not answer the questions and no special benefit you get if you answer the question the interview will take 20- 25 minutes We would be thankful if you spend some time with us answering questions related to the issues described above.

1. . If yes, Name of interviewer_____ Signature_____
2. If not, skip to the other participant

For more information and question if there is here is the contact address of investigator.

Mohammed Ali

Tele 0911 892172

e-mailmohaali_100@yahoo.com

Annex II

Consent Form

I_____ am informed on study to be conducted by Masters Student in AAU, college of health sciences school of public health on assessment of intrauterine contraceptive device (IUCD) method utilization and factors associated with it among women of reproductive age in AA FGAE clinics. The objective of the study and participation to this study is voluntary no obligation to answer any questioner. There is no harm by not answering the questions and no special benefit by answering the question and also the interview will take 20- 25 minutes .I heard all the information mentioned above and willing to participate in the interview.

Name of interviewers ---------- Signature----------

(Signature of interviewer certifying that respondent has given informed consent verbally)

Annex III

Questionnaire

PART 1: SOCIO- DEMOGRAPHIC AND SOCIO- ECONOMIC CHARACTERSTICKS

Q. No	Questions	Choices	Remark
101	How old are you?(age in years)	) **Insert**…….(completed year)	
102	What is your ethnicity?	1Oromo 2 Amhara 3 Tigre 4 Guraghe 5 Other(specify)---------	
103	What is your religion?	1 Orthodox 2 Muslim 3 Protestant 4Other (specify	
104	What is the highest level of school you have Completed?	1 Illiterate 2 Read and write 3 Elementary [1-4] 4 Junior secondary [5-8] 5 Secondary[9-10] 6 Senior secondary[10-12] 7 Diploma and above	
105	What is your partners highest level of school you have Completed?	1 Illiterate 2 Read and write 3 Elementary [1-4] 4 Junior secondary [5-8] 5 Secondary[9-10] 6Senior secondary[10-12] 7 Diploma and above	
106	Family size of the respondent?	**Insert No** ……..(numbers	
107	What is your occupation?	1 House wife 2 Government employee 3 daily laborer 4 Merchant 5 Student 6 . Other (specify	
108	What is your monthly income?	Insert birr in cash----------	
	Part II Reproductive history of participants		
109	Have you ever given birth?	1 Yes2 No	
110	If your answer is yes, how many births you gave?	**Insert No […..]**	
111	How many of them are alive?	**Insert No […..]**	
112	How many more children do you want?	**Insert No […..]**	
113	Do you want to have a child within two years (soon)	1 Yes 2No	

114	Do you discuss with your partner on contraceptive methods?	1Yes 2No	

Part III. Knowledge of modern contraceptive method of the respondents				
Q.NO	**Questions**	choices		Remark
115	Have you ever heard about IUCD method	1Yes 2 No		
116	If yes, from where diduse_ you get information on IUCD?	1.Friends,2 neighbors/relatives 3.Husband4.Health professionals 5.Mass media 6 Other specify		
117	Have you ever had exposure to IUCD method message through mass media within the last 2 years?	1 Yes 2No		
118	If yes what was the type of media	1Television2.Radio3,print media		
119	What general uses of IUCD do you know?	1. Helps for prevention of un wanted pregnancy 2. Prevention of possible maternal and child death 3. Limiting family size 4. Child spacing 5 Others(specify) ---		
	What do to know about IUCD	1 True	2 False	3 I don‟t know
120	IUCD can prevent pregnancies for more than 12 yrs			
121	IUCD is not appropriate for female at high risk of getting STI			
122	IUCD has no interference with sexual intercourse or desire			
123	IUCD is immediately reversible			

124	Have you ever used IUCD contraceptive method?	yes	No	
125	If the answer is yes are you using the method now	Yes	No	
126	If the answer is yes for how long are you using the method	Insert No years---		

Part IV. Participants' beliefs and perceptions on IUCD method			
	Statements of perception on IUCDs	**Choices**	**Remark**
127	Using IUCD do not cause irregular bleeding	1Agree 2Not sure 3Disagree	
128	Insertion of IUCD do not lead to lose privacy	1 Agree 2 Not sure 3 Disagree	
129	For me IUD don‟t move through the body after insertion	1Agree 2Not sure 3Disagree	
130	For me there is no bleeding side effect from using IUD	1Agree 2Not sure 3Disagree	
131	IUCD causes infertility	1Agree 2Not sure 3Disagree	
132	Do you think that IUCD can cause infection?	1Agree 2Not sure 3Disagree	
133	Do you think that IUCD can cause cancer?	1Agree 2Not sure 3Disagree	
134	IUCD use affects sexual intercourse?	1Agree 2Not sure 3Disagree	
135	IUCD will expel out from the uterus automatically?	1Agree 2Not sure 3Disagree	
136	IUCD may migrate to other organs beyond the uterus?	1Agree 2Not sure 3Disagree	

Annex IV

Qualitative Data Collection Interview Guide

Part 1- Interview Guide for FGDs

General information about the participant

1. What do you understand by the term „Intrauterine contraceptive device (IUCD)?
2. In your opinion do you think that you get adequate information about this method?
3. What do you feel about the advantage & side effect of the IUCD?
4. What are the factors affecting the utilization of the method?
5. Are there misconceptions about this method?
6. What recommendation would you propose to access this method for more acceptors?
7. Do you have anything to add?

Part 2.Key informants Interview Guide

Questions

1What is your opinion on IUCD as a contraceptive method?

2. What factors facilitate IUCD utilization in your facility?

3. What are some of the barriers to IUCD uptake in this facility?

4. Do you obtain regular supplies of IUCD? If not why?

5. What is your opinion on availability of supplies necessary for IUCD provision?

6. Is the facility equipped with competent health provider who can provide IUD?

7 What do you think should be improved?

8 Suggest ways to scale up utilization of IUCD service?

9 Do you have anything to add?

ANNEX-V:

Amharic version questionnaire

አዲስአበባዩኒቨርሲቲጤናሳይንስኮሌጅፐብሊክሄልዝትምህርትቤትየሰርቬፕያቄስለአይዩሲዲ (

በመሃጸንውስጥየሚቀመጥየረጅምጊዜየወሊድመከላከያዘደአጠቃቀምናተያያዥምክንያቶች (አአቤተሰብመምሪያ)

የሰርቬኮድ ---------- ክሊኒክ ----------

የጠያቂውኢንፎርሜሽን

እኔመሀመድአሊእባላለሁእኔየምሰራው **በኢትዮጵያ ቤተሰብ መምሪያ ማህበር** አዲስአበባ **አከባቢጽ/ቤት ነው**።።የኔጥያቄየሚፈጀው**25**ደቂቃብቻስሆን፣በዚህምስለአይዩሲዲ(በመሃጸን ውስጥየሚቀመጥየረጅምጊዜየወሊድመከላከያዘደእውቀት፣አመለካከት፣አጠቃቀምእናከዚህ□ር ተያያዥስለሆኑምክንያቶችንያካተታል።።የርሶምላሽምለከተማውናለሀገሪቱየወሊድመከላከያዘዴእናአጠቃቀምደረጃንከፍለማድረ ግየጎላፉይዳአለው።።ለዚህመጠይቅየተመረጡትበእጣነውናለዚህመጠይቅፈቃደኛከሆኑበሚቀጥለውኮንሴንትመሰረትመሳተፍይ ችላሉ።።

የጥናቱርዕስ፤ስለአዩሲዲ(በማህጸንውስጥስለሚቀመጥየወሊድመከላከያዘዴናየተያያዝምክንያቶች

ኢንፎርምድኮንሴንት:እኔከላይየጠቀስትንአምብቤያለሁ፣በሚገባኝቋንቋምተነቦልኛል።።

በዚህጥናትውስጥለማሳተፍፍቃደኛነዎት

1. አዎ ***2.*** አይደለም

የተመራማሪውስም፤***መሀመድ አሊ***

አድራሻስልክቁጥር ***0911892172***

የድርጅቱስም፤አዲስአበባዩኒቨርሲቲጤናሳይንስኮሌጅ

የጠያቂውስም…….. ፊርማ……

የኢንተርቪውውጤት

1. አልቋል/ተጠናቋል 2. ተጠያቂውአልተገኘም

2. ፍቃደኛአልነበረም 3. የተወሰነፓርትተጠናቋል።።

የሱፐርቫይዘርስም…….. ፊርማ……

ጥያቄ	ምርጫ	ምርመራ
101 እድሜዎስንት ‘ነው?	(በዓመት) በሙሉዓመትፃፉ--	
102 ብሔርዎምንድንነው?	1 ኦሮሞ 2 አማራ 3 ትግሬ 4ጉራጌ 5 ሌላ--	
103 የምንህይማኖትተከታይነዎት?	1ኦርቶዶክስ 2 ሙስሊም 3. ፕሮቴስታንት 4 ሌላ (ይጥቀሱ	
104 የደረሱትየትምህርትደረጃ ምንያህልነው?	1 ምንምያልተማሩ 2 ማንበብናመጻፍየሚችሉ 3 መለስተኛ (1-4) 4 ደረጃ (5-8) 5 ሁለተኛደረጃ (9-10) 6 ዲጵሎማናከዛበላይ	
105 ባለቤትዎየደረሱትየትምህርት ደረጃምንያህልነው?	1 ምንምያልተማሩ 2 ማንበብናመጻፍየሚችሉ 3 መለስተኛ (1-4) 4 ደረጃ (5-8) 5 ሁለተኛደረጃ (9-10) 6 ዲጵሎማና ከዛበላይ	
106 የ ቤተሰ ቦ ዎቁ ጥ ር ምን ያ ህ ል ነ ው?	በ ቁ ጥ ር ፃ ፉ(…….	
107 ስ ራዎ ምን ድ ነ ው?	1 የ ቤትእ መቤት 2 የ መን ግ ስ ት ተ ቀ ጣሪ 3 የ ቀ ን ሰ ራ ተ ኛ 4 ነ ጋ ዴ 5 ተ ማሪ 6 ሌላ (ይ ጥ ቀ ሱ)	
108 የ ወ ር ኀ ቢ ዎ ስ ን ት ነ ው?	ቁ ጥ ር ይ ጻ ፉ …….	
ክ ፍ ል ሁ ለ ት የ ተ ሳ ታ ፊ ወ የ ስ ነ ተ ዋ ል ዶ ታ ሪ ክ		
109 ል ጅ ወ ል ደ ው ያ ው ቃ ሉ?	1 አ ዎ 2 አ ይ ደ ለ ም	
110 መ ል ስ ዎ አ ዎ ከ ሆ ነ ስ ን ት ል ጅ ወ ለ ዱ?	ቁ ጥ ር ይ ጻ ፉ …[1]	
111 ስ ን ቶ ቹ ል ጆ ች በ ህ ይ ወ ት አ ሉ?	ቁ ጥ ር ይ ጻ ፉ …	
112 ስ ን ት ተ ጨ ማ ሪ ል ጆ ች እ ን ዲ ኖ ሩ ዎ ት ይ ፈ ል ጋ ሉ?	ቁ ጥ ር ይ ጻ ፉ …	
113 በ ሁ ለ ት ዓ መ ት ጊ ዜ ው ስ ጥ ል ጅ እ ን ዲ ኖ ሩ ዎ ት ይ ፈ ል ጋ ሉ?	1 አ ዎ 2 አ ይ ደ ለ ም	
114 ስ ለ ወ ሊ ድ መ ከ ላ ከ ያ ዘ ዴ ከ ባ ለ ቤ ት ዎ ጋ ር ተ ወ ያ ይ ተ ወ ው ቃ ሉ?	1 አ ዎ 2 አ ይ ደ ለ ም	
ክ ፍ ል ሶ ስ ት ስ ለ ዘ መ ና ዊ ወ ሊ ድ መ ቆ ጣ ጠ ሪ ያ የ ተ ሰ ታ ፊ ዉ እ ወ ቀ ት		
115 በ ማ ህ ጸ ን ወ ስ ጥ ስ ለ ሚ ቃ መ ጥ መ ከ ላ ከ ያ ዘ ዴ(አ ዩ ሲ ዲ)	1 አ ዎ 2 አ ይ ደ ለ ም	

ሰ ምተ ውያ ውቃሉ?		
116 መልሰ ዎአ ዎከ ሆነ ከ የ ትትሰ ሙ	1 ከ ጋ ደ ኛ 2 ከ ነ ረ ቤት 3 ከ ት ዳ ር ገ ደ ኛ 4ከ ጤና ባ ለ መያ 5ከ መ ገ ና ኛ ብ ዙ ሃ ን ከ ሌ ላ ግ ለ ጹ-	
117 በ ማህ ጸ ን ወሰ ጥ ስ ለ ሚቀ መጥ መከ ላ ከ ያ ዘ ዴ(አ ዩ ሲ ዲ) በ መ ገ ና ኛ በ ዙ ሃ ን በ ሁ ለ ት ዓ መት ጊ ዜ ወሰ ጥ ሰ ምተ ውያ ውቃሉ?	1 አ ዎ 2 አ ይ ደ ለ ም	
118 መልሰ ዎአ ዎከ ሆነ ከ የ ት ሰ መ?	1 ቲ ቪ 2 ሬ ዲ ዮ 3 በ ራ ሪ ጽ ሁ ፍ	
119በ ማህ ጸ ን ወሰ ጥ ስ ለ ሚቀ መጥ መከ ላ ከ ያ ዘ ዴ(አ ዩ ሲ ዲ) ጥ ቅ ም ምን ውቃሉ?	1 ያ ል ተ ፈ ለ ገ እ ር ግ ዝ ና ን ለ መከ ላ ከ ል 2የ እ ና ት ና የ ህ ጻ ና ት ን ሞ ት ለ ማ ስ ቀ ረ ት 3 ል ጅ ን ለ መ ወ ሰ ን 4 ል ጅ ን ለ ማ ራ ራ ቅ 5 ሌ ላ ግ ለ ጹ-	
በ ማህ ጸ ን ወሰ ጥ ስ ለ ሚቀ መጥ መከ ላ ከ ያ ዘ ዴ(አ ዩ ሲ ዲ) ጥ ቅ ም ምን ያ ውቃሉ?		
120 እ ር ግ ዝ ና ን ለ 12 ኣ መት ይ ከ ላ ከ ላ ል	1 እ ወ ሃ ት 2 ሀ ሰ ት 3 አ ላ ውቅ ም	
121 ለ አ ባ ለ ዘ ር በ ሽ ታ ተ ጋ ላ ጮ ች ገ ለ ግ ላ ል	1 እ ወ ሃ ት 2 ሀ ሰ ት 3 አ ላ ውቅ ም	
122 የ ግ ብ ረ ስ ጋ ግ ን ነ ነ ት ን አ ያ ስ ተ ጓ ጉ ል ም	1 እ ወ ሃ ት 2 ሀ ሰ ት 3 አ ላ ውቅ ም	
123 ከ ወ ጣ ወ ዲ ያ ውኑ ይ ረ ገ ዛ ል	1 እ ወ ሃ ት 2 ሀ ሰ ት 3 አ ላ ውቅ ም	
124 በ ማህ ጸ ን ወሰ ጥ ስ ለ ሚቀ መጥ መከ ላ ከ ያ ዘ ዴ(አ ዩ ሲ ዲ) በ ህ ይ ወ ት ዎ ዘ መን ተ ጠቅ መው ያ ውቃሉ?	1 አ ዎ 2 አ ይ ደ ለ ም	
125 መልሰ ዎ አ ዎ ከ ሆነ አ ሁን እ የ ተ ጠቀ ሙ ነ ው?	1 አ ዎ 2 አ ይ ደ ለ ም	
126 መልሰ ዎ አ ዎ ከ ሆነ ለ ሰ ን ት ጊ ዜ ተ ጠቀ መ?	ጊ ዜ ውን ይ ግ ለ ጹ----	
ክ ፍ ል 4የ ተ ሳ ታ ፊ ዎች እ ምነ ት ና አ መለ ካ ከ ት		
ስ ለ አ ዩ ሲ ዲ ያ ለ ዎ ት አ መለ ካ ከ ት		
127 አ ዩ ሲ ዲ መ ጠቀ ም የ ተ ዛ ባ የ ወ ር አ በ ባ አ ያ ስ ከ ት ል ም	1እ ስ ማ ማ ለ ሁ 2እ ር ግ ጠ ኛ አ ይ ደ ለ ሁ ም 3 አ ል ስ ማ ማ ም	
128 አ ዩ ሲ ዲ መ ጠቀ ም ሰ ወ ነ ት ን አ ያ ጋ ል ጥ ም	1 እ ስ ማ ማ ለ ሁ 2 እ ር ግ ጠ ኛ አ ይ ደ ለ ሁ ም 3	

	አልስማማም	
129 አዩሲዲከገባበሁዋላወደሌላየሰውነትከፍልአይሄድም	1 እስማማለሁ 2 እርግጠኛአይደለሁም 3 አልስማማም	
130 እኔስጠቀምምን ምዓይነትየወርአበባመዛባትአላስከተለብኝም	1 እስማማለሁ 2 እርግጠኛአይደለሁም 3 አልስማማም	
131 አዩሲዲመሃንነትያስከትላል	1አዎ 2አይደለም	
132አዩሲዲኢንፌክሽንያስከትላል	1አዎ 2አይደለም	
133 አዩሲዲካንሰርያስከትላል?	1አዎ 2አይደለም	
134 አዩሲዲየግብረስጋግንኙነትያሰተዋጉላል?	1አዎ 2አይደለም	
135 አዩሲዲበማህጸንከተቀመጠበሁዋላወደሌላየሰውነትከፍልይሰራጫል ብለውያስባሉ?	1አዎ 2አይደለም	
136 አዩሲዲበማህጸንከተቀመጠበሁዋላከማህጸንበራሱሊወጣይችላልብለ ውያስባሉ?	1አዎ 2አይደለም	
137 በሀይማኖት አባቶች ይህንን ዘዴ መጠቀም የተከለከለ መሆኑ ተነግሮት ያውቃል	1አዎ 2አይደለም	
138 ይህንን ዘዴ ሲመጠቀሙ በተንዳኝም ተከልክለው ያውቃሉ?	1አዎ 2አይደለም	
139 ይህንን □□ እእአየተ□ቀሙአርግዝና ሊከሰትይችላል ብለ□ው□ስባሉ?	1አዎ 2አይደለም	
ክፍልአምስትከክሊኒክአጠቃቀምጋርየተያያዙጉዳዮች		
140 በዚህክሊኒክአዩሲዲጥሩአማራጭዛ ውተብሎተነ ግሮዎታል?	1 አዎ 2 አይደለም	
141በዚህክሊኒክአዩሲዲየለምተብለ ውያውቃሉ?	1 አዎ 2 አይደለም	
142 በዚህክሊኒክ □ስ□ □ሚሰሩ □ና **ባለሙያዎች** □አዩሲዲንአገልግሎትለመስጠትፍላጎትአላቸው	1 አዎ 2 አይደለም	
143 በዚህክሊኒክአዩሲዲለ 12	1 አዎ 2	

ዓመታትእርግዝናንእንደሚከላከልተነ ግረውያ ውቃሉ?	አይደለም	
144 አዩሲዲከገባልዎትበሁዋላብዙክትትልእንደማያስፈልገውተነ ግረውያ ውቃሉ?	1 አዎ 2 አይደለም	

አመሰግናለሁ

መጠይቁን ጨርሻለሁ

ማንኛውምጥያቄካሎትይጠይቁ.

የ ውይይትጥያቄ/ፎከስ ግሩፕዲስ ከሰሽን /

የ ውይይትቀን _____

የ ውውይቱቦታ _____

የ ጸሀፊ ወሰ ም _____

የ ጠያቂ ወሰ ም _____

የ ቀጅ ወሰ ም _____

የ ተሳታፊ ውመረጃ

1. የ መግብያ ጥያቄ

1. ስለአዩሲዲየ እርግዝና መከላከያ ዘዴምን ታቃለህ /mÁKሽ

2. ስለአዩሲዲበቂግን ዛቤአግግቻለሁብለሽ /ህ ታስቢያለሽ /ለህ

3. ስለጠቀሜታውናስለጎንዮሽጉዳቱ **ምን □ህል ተረትተሸል/ተህል?**

4. ዘዴውን ለን ምን ድነ ወኖ ማይጠቀሙት?

5. ስለአዩሲዲመከላከያ ዘዴምን ዓይነ ትየ ተሳሳቱአመለካከቶችአሉ?

6 በርካታየ አዩሲዲተጠቃሚዎችእንዲኖሩምን መደረግአለበትይላሉ?

7. ከ ውይይታችን ሌላ **ማ**ጨምሩትአለህ /ሽ?

እናመሰግናለን

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