

**ADDIS ABABA UNIVERSITY**

**COLLEGE OF HEALTH SCIENCE**

**DEPARTMENT OF NURSING AND MIDWIFERY**

**ASSESSMENT ON UTILIZATION OF LONG ACTING REVERSIBLE  
CONTRACEPTIVE METHODS AND ITS ASSOCIATED FACTORS AMONG  
REPRODUCTIVE AGED WOMEN IN SELECTED HEALTH CENTERS IN ADDIS  
ABABA, ETHIOPIA.**

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## LIST OF ACRONYM

<b>FP</b>	Family Planning
<b>IUCD</b>	Intra Uterine Contraceptive Devices
<b>LAPCM</b>	Long Acting and Permanent Contraceptive Methods
<b>LARCM</b>	Long Acting Reversible Contraceptive Method
<b>OCP</b>	Oral Contraceptive Pills

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## ABSTRACT

**Background:** Globally, female sterilization is the single-most used method and alone accounts for one-third of all contraceptive use worldwide. The IUCD is used by (22%) of all contraceptive users and the oral pill by (14%). The use of modern contraceptive method differs significantly between the developing and developed areas. In Ethiopia the most popular modern contraceptive method for all women's are Injectables (21%).

**Objective:** The study was used to assess the utilization of long acting reversible contraceptive method and its associated factors among women in reproductive age.

**Study Method:** Cross-sectional Facility based study was conducted from January to June /2015 among reproductive aged women. The Study was conducted in selected health centers in Addis Ababa, Ethiopia. Multi stage cluster sampling technique was used to determine the Sample size to be 342. A pre-test and structured questionnaire was used to collect the data and entered using Epi data Version 3.1 and Bivariate and multivariable data analysis was performed using Statistical Package for Social Sciences (SPSS) version 20 software to assess statistical association.

**Result:** Multivariate analysis showed that study participants who had a supportive attitude regarding LARC were 3 times more likely to use LARCM as compared with those had non-supportive attitude (AOR=2.7, 95% CI (1.5, 4.8) and study participants who had shifted/switch contraceptives were 12 times more likely to use LARCM as compared with their counter parts (AOR=12.4, 95% CI (6.6,23.6).

**Conclusion:** LARCMs use among modern family planning users in health centers is higher than the LARCM use rate reported in other studies in Ethiopia still dominated by short acting method that were Injectables. Among several factors that would affect use of long acting reversible contraceptive methods, study participants who had supportive attitude towards LARCM and contraceptive shifting/switching were found to be determinants of LARCMs use.

**Keywords:** Utilization and associated factors.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

Family planning is defined as the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. [1]

There are traditional methods of family planning, which is divided into withdrawal and rhythm, and there are modern family planning methods, which is divided into three: - Long acting reversible contraceptive methods (Intra Uterine Contraceptive Device& Implants); permanent contraceptive methods (tubal ligation for female& vasectomy for male) and short term contraceptives methods (Oral pill, inject-able, male& female condoms, foam tablet & cervical cap. [2]

Intra Uterine Contraceptive Devices (IUCDs) and implants are long-acting reversible contraceptive methods (LARCM); when removed, return to fertility is prompt. [3] Modern family planning methods account for the majority of current global contraceptive practices; almost nine out of every ten contraceptive users rely on a modern method. Female sterilization, intrauterine device and oral pills account for more than two-third of all contraceptive practice worldwide. [4]

Globally, female sterilization is the single-most used method and alone accounts for one-third of all contraceptive use worldwide. The IUCD is used by (22%) of all contraceptive users and the oral pill by (14%).The use of modern contraceptive method differs significantly between the developing and developed areas. In the developing areas, modern methods account for much larger share of total contraceptive use (90%) than in the developed areas (70%) [4].

In Ethiopia the progress of contraceptive prevalence rate (CPR) is increased to 42 Percent and total fertility rate of four. [5] Understanding the magnitude of need for modern family planning services, the Federal Ministry of Health (FMOH) has considered the important role of long-acting contraceptive methods and aim to provide all family planning clients with the long-acting and permanent methods. [6]

## 1.2 Statement of the problem

Different report indicates that the utilization of Long Acting Reversible Contraceptive method is low. The prevalence of Long Acting Reversible Contraceptive use is 13% in the world and Long Acting Reversible Contraceptive use coverage is 2%, for sub-Saharan Africa. [7] For Ethiopia, Long Acting Reversible Contraceptive use coverage is 3.7%.[8] The prevalence of implant in Addis Ababa was lower than the rate in different parts of Ethiopia.[9] A study conducted in Kirkos sub city in Addis Ababa indicates 9.1% of married women used Long Acting Reversible Contraceptive.[10]

Among family planning users only 16% were using Long Acting Reversible Contraceptive among family planning users found in Addis Ababa. [5] Studies done in Ethiopia indicate awareness of LARCM is low. A community based studies from Jinka and Butajira indicates that 18% and 25% participants were aware of LARC and permanent methods. [11, 12] Ministry Of Health(MOH) made effort to expand method mix special attention given to expansion of services for LAPCM aim provide of 20% of family planning with LAPCM.[13]

Studies conducted in Ethiopia documented that factors associated with LARCM use were age, knowledge, number of pregnancy, desire for more children, education, number of children, duration of family planning, discussion with husband, ever use of LARCM, side effect and source of contraception. [11, 12] So, this study was intended to assess utilization of long acting reversible contraceptive methods and its associated factors.

### 1.3 Significance of the study

From the perspectives of unmet need for family planning; long acting contraceptives are more use full for spacing and limiting than short acting. However, currently Utilization of LARCMS 16% in Addis Ababa which is low. [5] The findings of this study will provide input to policy makers to design appropriate policy, programmes and strategies to address factors leading to low utilization of long acting reversible contraceptive.

It also helps health managers at a higher level and in particular those looking after the health institutions in the region to understand the extent of the problem and to use it for evidence based practice. The study will enhance recognition of health professionals about socio demographic, reproductive, source of information/awareness, knowledge, attitude and practice variables that influence utilization of long acting reversible contraceptive.

The study findings also help in developing new approaches for increasing utilization of LARCM among women in reproductive age. The research helped to generate ideas for reducing women's negative perceptions and attitudes towards use of contraceptives. The recommendations made by this study may play a role towards improving effective use of contraceptives and family planning services.

Addressing this gap in turn helps in the improvement of awareness on the family planning clients. In addition, the paper may be useful to other researchers as reference material while conducting further studies on similar problems. This study was conducted because there is knowledge gap in terms of what factors are affecting utilization of LARCM among women in reproductive age family planning users.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Utilization of modern contraceptive and long acting reversible contraceptive Methods (LARCM)

Intrauterine contraceptive device (IUCD) is one of the most widely used long acting reversible contraceptive method which accounts for (26%) of all contraceptive method.[14] More than half of the 150 million women in the world using an Intrauterine Contraceptive Device (IUCD) are in China. A more accurate picture emerges when focusing on regional data: the percentage of women using IUCD who are married or in union is (7%) in Latin America, (6%) in Asia (excluding China) and just (1%) in Africa. [15]

A study conducted in Karachi, Pakistan, on factors affecting hormonal and non hormonal contraceptive method use in women presenting to Reproductive Health Services revealed that most commonly used contraceptive method was long acting reversible contraceptive and it accounts 41% were Norplant and followed by 35% were IUCD users.[16]

The cohort study undertaken on knowledge and use of family planning methods and services in Kenya revealed that the most popular methods among the informants were Pills and injection, mentioned by (66.2 %) and (64.4%) respectively. It also showed that (69%) of women used of modern contraception while the use IUCD and implant were 14.4% and 17.9% respectively. [17]

Southern Ethiopia, In Jinka town, a cross sectional study done on prevalence and factors affecting use of long acting and permanent contraceptive showed that (31.6%) of the women preferred to user modern contraceptive other than long acting and permanent contraceptive methods. In married women used long acting methods such as implant (50%) and intra uterine contraceptive device (12.5%). [11]

A community based cross sectional study complemented by qualitative method was conducted in Adigrat town, Tigray Region, revealed that the most preferred method was Depo Provera (68.3%) followed by pills (11.6%). The prevalence of long acting contraceptive methods (LACMs) use among the women taking modern contraceptives was 19.5%, which Implants constituted for the highest (10.2%). [18]

A study conducted in East Gojjam zone, Ethiopia showed that about (78.2%) of rural adolescents were familiar with Oral contraceptive pills(OCP); however, long-acting contraceptive methods were less likely used by the adolescents.[19]

Study conducted on Acceptance of long acting contraceptive methods and associated factors among women in Mekelle city shows that (21.4%) want to delay their next baby prefer to use long acting contraceptive methods(LACMs) and (35.6%) want to use to limit number of children and the only reported determinant were mothers who had a supportive attitude regarding LARC were 2 times more likely to accept LARC as compared with those had non-supportive attitude(AOR=2.094, 95% CI (1.109, 3.954)).[20]

A study done in Bahirdar indicated that 0.9% family planning clients were received LARCM during their visit.[21] In Northwest Ethiopia facility based study indicated that 1.5% family planning clients were use LARCM.[22] A study conducted in Batu facility based study documented that 3% family planning clients were received implant during the clinic visit.[23] Performance ,monitoring and accountability (PMA 1020) indicated that 17.8% family planning user married women were use LARCMs.[24] A study conducted in Eastern Hararge among married family planning user documented that 24.3% were use LARCMs.[25]

## 2.2 Factors associated with utilization of long acting reversible contraceptive method

Qualitative research involving Latino and non-Hispanic black teenagers aged 14-19 noted “an enormous amount of erroneous information circulating among these participants, their peers, and others in their environment” regarding contraception. Misperceptions regarding hormonal contraceptives included an elevated risk of cancer and permanent sterility, among more minor side effects such as irregular bleeding, weight gain, nausea, low libido and hair loss. [26]

A study conducted in Latin America revealed that (51%) and (47%) of women reported that they had heard of the Intra Uterine Contraceptive (IUCD) and implant, respectively. More women stated they would use the copper IUCD (24%) than implant (9%).[27] A study conducted in Pakistan on factors affecting hormonal and non hormonal contraceptive method use in women presenting to reproductive health services showed that uneducated women in centre region have the highest prevalence of unmet need (55.5%) and educated has the least (31.4%).[15]

In Malawi, a study conducted on women empowerment and the current use of long acting and permanent contraceptive revealed that there is a higher proportion of LACM use among women who had heard about family planning program, which is (21.1%) than those who did not 17.9%. [28]

A health facility based, cross sectional study on knowledge and attitude of LARC among women in reproductive age conducted in Uganda showed that Mean age (Standard deviation) and current use of LARC was 26.34 (5.35) and 31.7% respectively and participants awareness of effective duration of effectiveness of IUCD, implant and injectable contraceptives was (68.5%), (69.9%) and (87.4%) respectively. Knowledge of prevention of IUCD and implant was (75.9%) and

(80.2%) respectively. Despite of this, their myth on LARCM as it can cause permanent infertility is(32.9%).[29] A Study conducted on family planning service quality as determinant of use of IUCD in Egypt showed that nearly 40% of married women do not believe in practicing contraception and more than half believe that family size should be left up to God.[30]

In Burkina Faso, a study showed that the percentage women in reproductive age who use modern contraceptive was significantly higher among women in reproductive age who have discussed family planning with health professionals (27.4%) than those who have not (9.1%). The proportion of married women who are currently using long acting contraception was more for those whose have supportive attitude on the use of family planning (21.8%) as compared to (4.2%) of married women whose have non supportive attitude.[31]

Different factors affect choice of LARCM by family planning clients. Marie Stops International Ethiopia has conducted assessment of Knowledge, Attitude, Practice (KAP) in five regions of Ethiopia among women of reproductive age show that 52% of were aware at least one type of long term method. The study documented that age of women, ethnicity, education, number of live birth, ever given birth, spousal/partner support, and spousal/partner communication were found predictors factors of modern FP use. [32]

Community based Studies conducted in Hexosa, Arsi zone and Debremarkose town in Ethiopia among women of reproductive age reported that Knowledge and age of women were found to be important predictors of LARCMs use. [33, 34]

A study conducted on Long Acting Contraceptive Method Utilization and Associated Factors among Reproductive Age Women in Arba Minch Town, Ethiopia revealed that Long acting contraceptive method utilization was 13.1% and Mothers who had supportive attitudes towards

long acting contraception were 3 times (AOR=3, 95%: [1.43-3.57]) more likely to utilize than those who had non supportive attitudes. Similarly, the likelihood of utilizing long acting contraceptive methods increased for mothers whose knowledge score about contraception was higher(AOR=2.3,95%CI:[1.27-2.67]).[35]

A Study conducted on family planning service utilization in Mojo town reveal that religious prohibition, fear of side effects, number of children are pointed out as factors for nonuser of Family Planning(FP).[36]Another case control study conducted in Hossana town among married women indicated that level of knowledge, discussion between partner about modern method, source of contraceptive, number of children alive and plan to give birth in future were found to be determinants of LARCMs use.[37]

In Indonesia, women aged, 30-39, having 3-4 children, with educated women were more likely to use long-term contraceptive. [38] Similar to this, In Eastern Nigeria revealed that, high use of Norplant was seen among high parity women, age 30-34 years but when compared to IUCD users .Norplant users were significantly less educated in which less than one percent of Norplant users had tertiary education compared to 25% of IUCD users. [39]

A study conducted in Jinka and Butajira town of Ethiopia documented that husband disapproval, considering children as assets, fear of sterility, lack of knowledge, and religion disapproval and fear of several side effects such as heavy period, slipping out during heavy work in the case of intra uterine contraceptive device were some of factors associated with long acting contraceptive use. [11, 12]

A study conducted in Goba, South East Ethiopia on demand for long acting and permanent methods of contraceptives and factors for non-use among married women stated that most ever

heard long acting contraceptive methods (LACMs) of contraceptive was Norplant (87.3%). (60.8%) of the respondents have discussed with health professional about long acting contraceptive methods (LACMs). The major source of information was media (87.3%) and their main reason for not using were side effect (34.3%). [40]

In Adama town, Oromia region study conducted on utilization of long acting and permanent contraceptive methods and its associated factors among married women revealed that eighty seven percent of the respondents knew long acting and permanent contraceptive and 55% had positive attitude about it .Magnitude of long acting and permanent method was 20.9% and the main reason for not using was fear of side effect (63.5%).Current use of long acting and permanent method was higher among women who have high knowledge (AOR=5.26,95% CI=1.90-14.69) and positive attitude about the method (AOR=3.25,95%CI=1.60-6.58).[41]

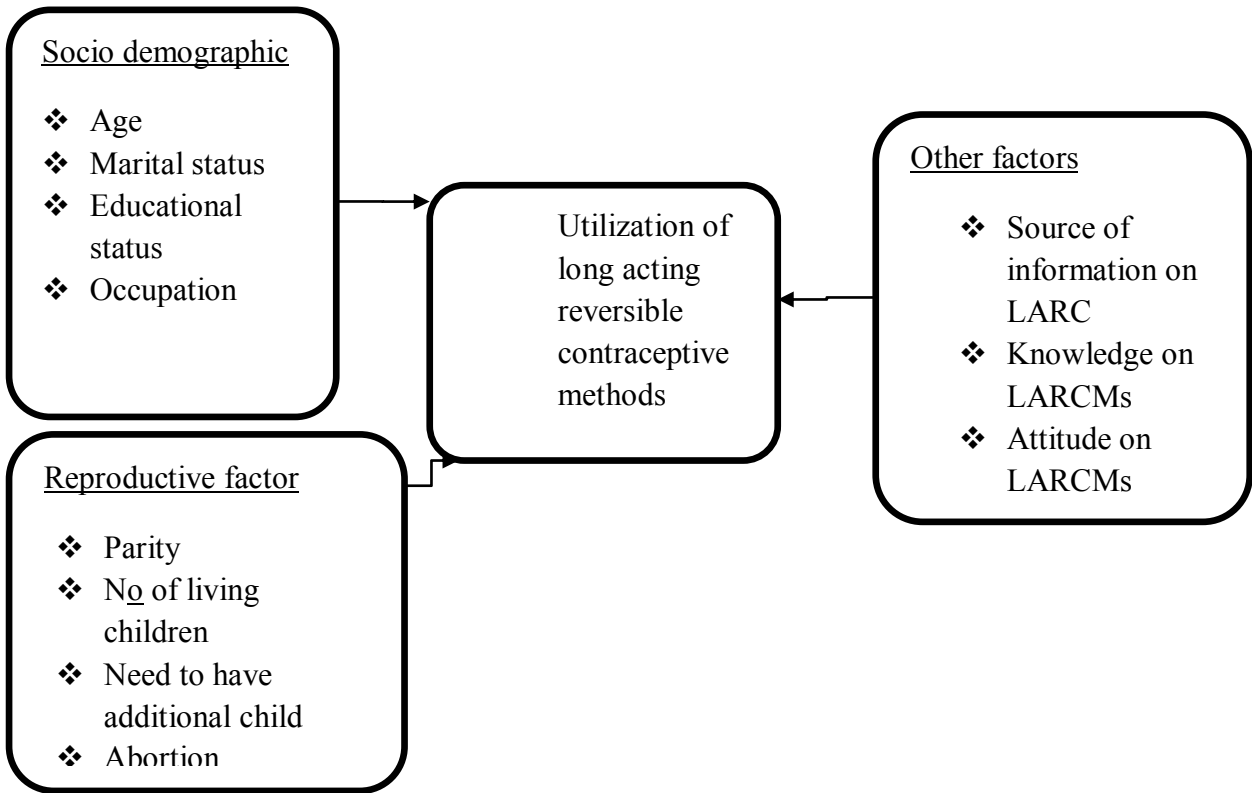


Figure1: Conceptual framework

Source: Conceptual frame work adopted from Shimels Wudie, 2013

## **CHAPTER THREE: OBJECTIVE OF THE STUDY**

### **3.1. General objective**

To assess the utilization of long acting reversible contraceptive methods and its associated factors among women in reproductive age in selected health centers, Addis Ababa, Ethiopia.

### **3.2. Specific objectives**

- ✓ To assess utilization of long acting reversible contraceptive methods.
- ✓ To identify factors associated with use of long acting reversible contraceptive methods.

## CHAPTER FOUR: METHOD AND MATERIALS

### 4.1 Study area and Study period

The study was conducted in Addis Ababa City administration government health centers from April to May 2015. Addis Ababa (AA) is the capital city of Ethiopia. The area covered about 526.99km<sup>2</sup>. According to the 2007 census, it has a population of 2,687,593 and among these 34.8% women in reproductive age living in Addis and 28.4% of them are contraceptive accepters. The city has 10 sub cities and 99 wards. Among these highly populated sub-cities is Kolfe Keranio, Yeka and Nifas Silk-Lafto respectively. [43]

Majority of Ethiopian ethnic groups are represented in Addis Ababa due to its position as capital of the country, the largest groups include the Amhara (47.04%), Oromo (19.51%), Gurage (16.34%), Tigray (6.18%), Silt'e (2.94%), and Gamo (1.68%). Languages spoken include Amharic (71.0%), Oromiffa (10.7%), Gurage (8.37%), Tigrinya (3.60%), Silt'e (1.82%) and Gamo (1.03%). The religion with the most believers in Addis Ababa is Ethiopian Orthodox with 74.7% of the population, while 16.2% are Muslim, 7.77% Protestant, and 0.48% Catholic.[44]

According to the Ministry of health 2012 report, Addis Ababa has 6 hospitals, 52 health centers and 650 clinic under the federal administration and 30 hospitals from others. (Excluding police and Armed forces).The hospitals and health centers give reproductive health services with different type's Family planning, Antenatal care, Delivery and reproductive health services. [44]

### 4.2 Study Design

Facility based cross-sectional study was conducted in selected health centers in Addis Ababa, Ethiopia.

## **4.3 Population**

### **4.3.1 Source population**

All reproductive age women in Addis Ababa city.

### **4.3.2 Study population**

All women who use modern family planning methods in Addis Ababa.

### **4.4.3 Sample Population**

Women who use family planning methods for spacing and limiting births in selected health centers in Addis Ababa.

## **4.4 Inclusion and Exclusion criteria**

### **4.4.1. Inclusion criteria**

- ❖ Women who reside in Addis Ababa for more than 6 months period.
- ❖ Women who have used modern contraceptive methods 1 month and greater

### **4.4.2 Exclusion criteria**

- Clients who are critically ill or having mental illness was excluded.

## **4.5 Sample size and procedure**

### **4.5.1 Sample size determination**

The sample size for this particular study was calculated using formula for a single population proportion considering the following assumptions.

95% confidence level with margin of error (0.05).

Proportion (P): proportion of long acting reversible contraceptive Method (LARCM) use was 16% among family planning users in Addis Ababa. [5]

Substituting in Kish Leslie (1996) single population proportion formula, gives:-

$$n = \frac{(Z\alpha/2)^2 p (1-p)}{d^2}$$
$$= \frac{(1.96)^2 (0.16) (0.84)}{(0.05)^2} = \frac{(3.8416)(0.1314)}{0.0025} = 207$$

Where

n= required sample size

Z= critical value for normal distribution at 95% confidence level which equals to 1.96 (z value at  $\alpha = 0.05$ , two tailed)

Expected proportion (P) = proportion of long acting contraceptive user

Desired precision (d) = 0.05 (5% margin of error)

Design effect 1.5=311

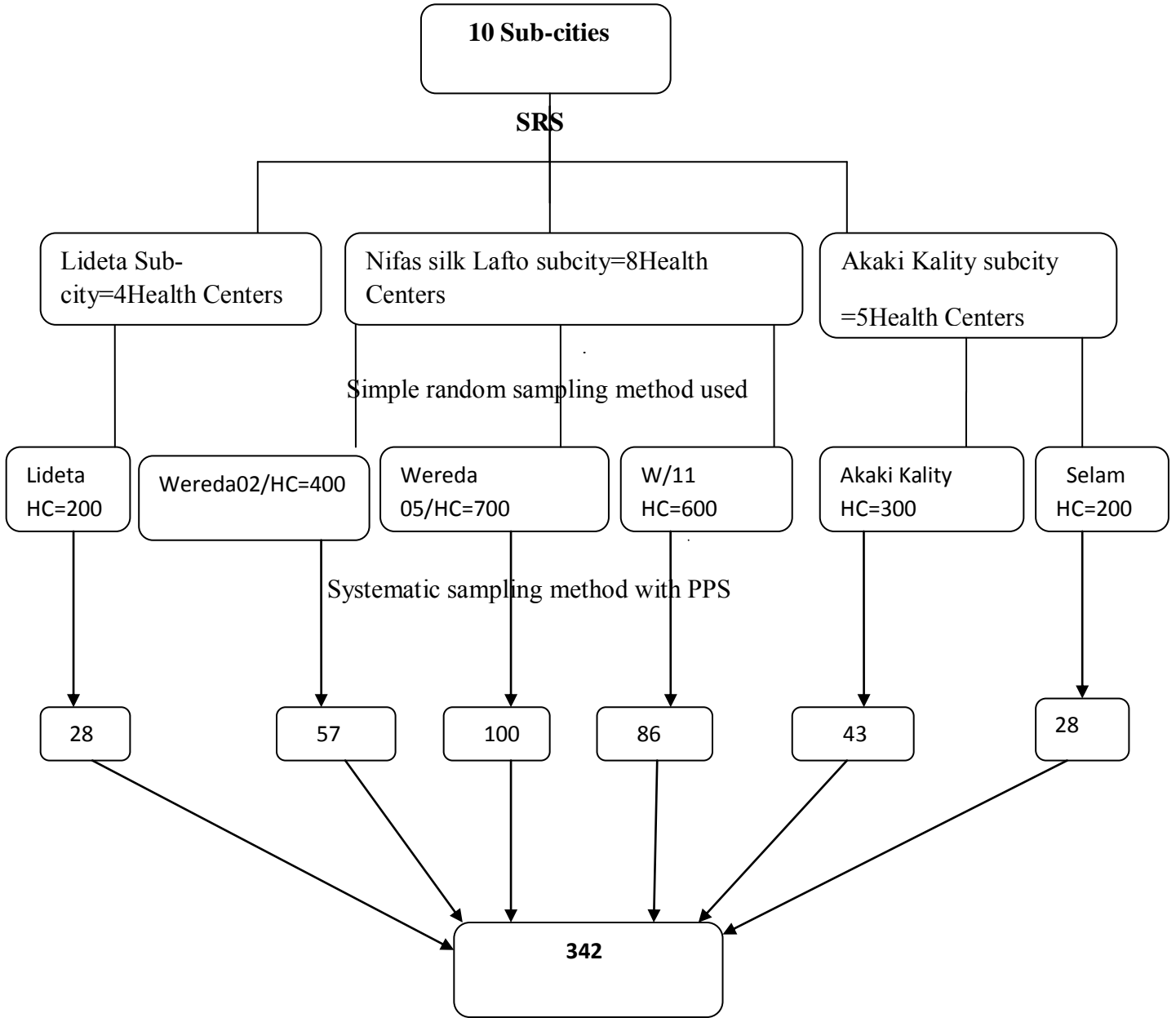
Contingency (for non-response & incompletes=10%) =31. The total sample size was **342**.

#### 4.5.2 Sampling procedure

Multi-stage cluster sampling was used to select the study subjects. From ten sub cities found in Addis Ababa, three sub cities were selected using simple random sampling method then six health centers was also selected from each selected sub cities using simple random sampling. The determined sample for each health center was achieved through pre service interview from systematically sampled and allocated to each health centers by probability proportional to size based on daily client flow.

The first respondent from each health centers was selected randomly then subsequent respondents was selected every  $K^{\text{th}}$  where  $N/n$  (N is the total population and n is sample size) of from the daily FP clients flow until the required respondents was selected depends on voluntarily

consenting reproductive ages women who visit health facilities for Family Planning methods within four weeks of working days.



Keys: - W-Wereda

HC-Health Center

SRS-Simple Random Sampling

PPS-Probability proportional to size

Figure2. Schematic presentation of sampling procedure and selection

## 4.6. Study variables

### 4.6.1 Dependent Variables

- Utilization of long acting reversible contraceptive.

### 4.6.2 Independent Variables

The independent variables included in this study were:-

- Age
- Marital status
- Educational status
- Occupation.
- History of births
- Number of living children
- High parity
- Desired number of children.
- Abortion
- Source of information
- Knowledge
- Attitude

## 4.7 Data Collection Procedure

The questionnaire was developed in English language originally and translated to Amharic. The study instrument was taken from studies done in Adama town on 360 sample size.[41] and a study done on Debremarkose town on 481 sample size.[42]The Amharic language questionnaire was used to collect data after being pre-tested in the health facilities out of the selected health centers in same study area. The pretest was carried out in 10% of sample size carried out one

week prior to the actual data collection time in Kolife health center and was excluded from the actual subjects. The questionnaire was checked for its clarity, understandability, uniformity and completeness of the questions and important amendments was done based on the pretest result. The logical flow of ideas was maintained.

The questionnaire has six parts and includes part I Socio demographic, Part II reproductive history, Part III Source of information/awareness on LARCMs and Part IV Knowledge, Part V Attitude and Part VI on Utilization of modern and LARCM among reproductive age women.

Data was collected by trained health professional data collectors who were not working in the study area. Four data collectors who have diploma in nursing and also one supervisor who has degree in nursing was participated in the data collection process after being given two days training on the data collection tools.

Then data was collected using interviewing technique by close and partially open ended questionnaire .After having personal introduction, the purpose and the benefits of the study was told to the study subjects and finally the consent and willingness of them was asked to give their responses for the prepared questionnaires. Next, the questionnaires were interviewed to those who were voluntary to participate.

#### **4.8 Operational definitions**

**Modern contraceptive method:** This is a birth control method that includes pills, Injectables, Condom, IUCDs, Implant and sterilization methods.

**Contraceptive users:** women in the reproductive age group who are currently using modern contraceptives for 1 month’s period and longer.

**Long-acting reversible contraceptives:** This is a contraceptive methods in which their lengths of action range from 3-12 years (intrauterine devices and implants) and return fertility soon after removal.

**Short-acting contraceptives:** are contraceptive methods in which their lengths of action, ranges from 1day to 3 months (condoms, Injectable and pills,).

**Reproductive age women:** All women who are illegible for conception and pregnancy with the age of 15-49 years.

**Family Planning:** is used to regulate the number and spacing of children in a family through the practice of contraception or other methods of birth control.

**Shifting/switching of contraceptive:** if the women need to change from one contraceptive to other contraceptive method if the women needs and with medical advice to change.

**Knowledge of Long acting reversible contraceptive:** A women in reproductive age who has understanding about LARCMs and measured by the total number of correct answers to 6 items on knowledge, with a minimum score of 0 and maximum of 6.

**High knowledge:** Those who knew 80% and above from six knowledge measuring questions.

**Moderate knowledge:** Those who knew 60-79% from six knowledge measuring questions.

**Low Knowledge:** Those who knew less than 60% from six knowledge measuring questions

**Supportive Attitude:** From six attitudes measuring questions those who score above mean to the correct answers from attitude measuring LARCMs.

**Non supportive Attitude:** From six attitude measuring questions those participants who scored mean and below to the correct answers. Finally, women's utilization of long acting contraceptive methods was set as binary outcome variable. For the purpose of analysis, the attitude of women was grouped into two: "agree" and "disagree".

#### **4.9 Data quality management**

The quality of data was assured by properly designing and pre-testing of the questionnaire, proper training of the data collectors and supervisors on the data collection procedures, proper categorization and coding of the questionnaire. Every day the questionnaires was reviewed and checked for completeness and relevance by the supervisors and every other day by the principal investigator and all the necessary feedback was offered to data collectors in the next morning before data collection.

#### **4.10 Data processing and analysis**

The quantitative data was collected, cleaned and entered using Epi data Version 3.5.4 and analyzed using Statistical Package for social science (SPSS) version 20. The study participant's attitude was measured as supportive and non supportive attitude. Three point attitude likert scales were used with six attitude questions considered and those that have scored above mean was grouped as supportive attitude and mean or below mean was grouped as non supportive attitude.

Women's knowledge was measured by the total number of correct answers to six item of knowledge with a minimum score of zero and maximum six .Measure of knowledge was categorized based on the percent of knowledge of the distinct characteristics of LARCMs as „high“ those who knew 80% and above, „moderate“ those who knew 60-79% and „low“ those who knew less 60%.

Descriptive statistics and logistic regression (binary and multiple) analysis was used to determine the effect of factor(s) on the outcome variables and to control possible confounder's P-value<0.05 was considered to show statistical significance. Factors found to have a P-value<0.05 in the binary logistic regression was entered into multivariate analysis to identify their

independent effects. Odds ratio from logistic regression was used to identify their association with utilization of long acting reversible contraceptive.

#### **4.11 Ethical clearance**

The proposal was reviewed by the Department of Nursing and midwifery ethical clearance Committee. After ethical clearance the letter was obtained from department of nursing and midwifery to Addis Ababa Health bureau and district council then letter obtained for selected sub cities from Addis Ababa Health bureau, finally sub cities permission got for the selected health centers to conduct the study. Informed verbal consent was secured for each study subjects. Each respondent was informed about the objective of the study and assurance of confidentiality.

#### **4.11 Dissemination of the result**

The final report will be presented to department of Nursing and midwifery, by hard and soft copy, to Addis Ababa health bureau, federal ministry of health, important stakeholders, Family Guidance association of Ethiopia and it will be disseminated through scientific publications. Depending on the opportunities, the finding will be presented in conferences or seminars.

## CHAPTER FIVE: RESULT

### 5.1 Socio demographic characteristics of study participants

A total of 342 clients were included in the pre service interview and they were at child bearing age women, making a response rate of 100%. Modern family planning users (n=342), 184(54.1%) were at the age range of 25-34 years; whereas, the smallest number 42(12.4%) were 15-24 years old. The mean age of participants was 27( $\pm 5.3$  SD). LARCM users (n=117), Mean age were 26.9( $\pm 5.4$  SD) and majority of them 57(49.6%) were age range 25-34 years.

With regard to Marital status of modern family planning users (n=342), Majority 213(62.3%) were Married while 7(2%) were widowed. LARCM users (n=117), 76(65.0%) were married. Modern family planning users (n=342), orthodox Christian followers were 199(58.2%) followed by 66(19.3%) were Muslim. Majority of women from modern family planning users (n=342), 113 (33.0%) were Amhara by ethnicity. (Table1)

**Table-1: Table1-Socio demographic characteristic of study participants, Addis Ababa, 2015**

<b>S. no</b>	<b>Socio demographic</b>	<b>Number (342)</b>	<b>Percent</b>
<b>1.</b>	<b>Age</b>		
	15-24	42	12.4
	25-34	184	54.1
	35-44	114	32.9
	Don't remember	2	0.6
<b>2</b>	<b>Marital status</b>		
	single	72	21.1
	married	213	62.3
	widowed	7	2.0
	Divorced	10	2.9
	Separated	8	2.3
	Cohabiting	32	9.4
<b>3</b>	<b>Religion</b>		
	Orthodox	199	58.2
	Muslim	66	19.3
	Protestant	61	17.8
	Others	16	4.7
<b>4</b>	<b>Ethnicity</b>		
	Amhara	113	33.0
	oromo	72	21.1
	Gurage	65	19.0
	Tigre	45	13.2
	Silte	23	6.7
	Others	24	7.0

Concerning their educational status of modern family planning users (n=342), 131 (38.3%) were primary education while 10(2.9%) graduated from higher education (BSC and above).LARCM users (n=117), 37(31.6%) were primary education and 3(2.6%) were less used by Women with no formal education.

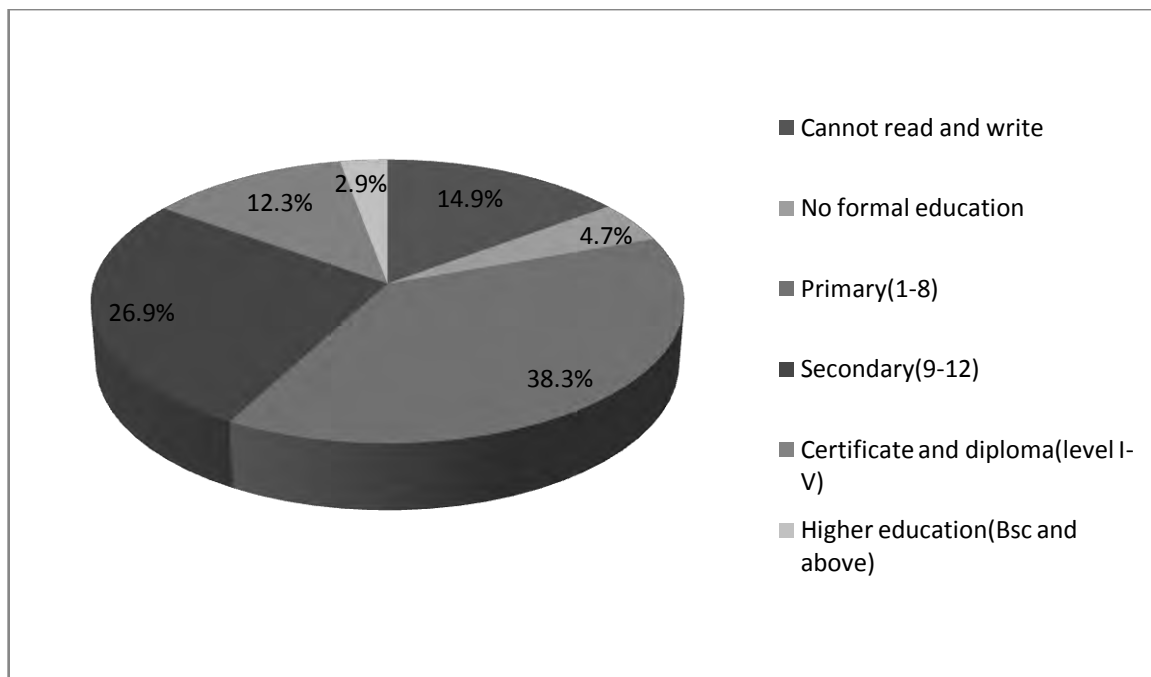


Figure 3: Educational status of study participants Addis Ababa, 2015

Occupationally, Modern family planning users (n=342), majority of the respondents 140(40.9%) were house wives and the least 20(5.8%) were Handcraft makers. Among LARC users (n=117), majority 38.55 were housewife followed by 23(19.7%) were merchants.

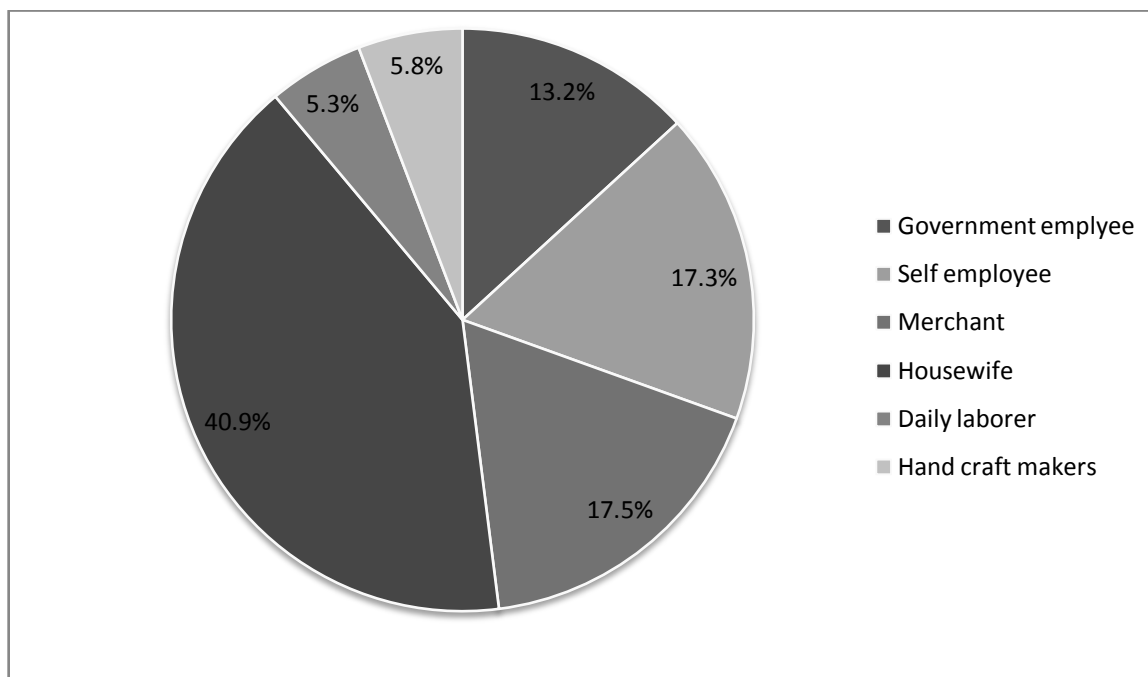


Figure 4. Occupational status of study participants in Addis Ababa, 2015

## 5.2 Reproductive history of study participants

From modern family planning users (n=342), the mean age of first marriage and first birth were 21.8 ( $\pm 3.6$  SD), and 23 ( $\pm 3.4$  SD) years, respectively. Ninety four (27.5%) of the study participants had never given birth. The median number of births was 2 with 1 and 6, minimum and maximum births, respectively. Among modern family planning users (n=342), 15(7%) were married at the age of less than 18 years and 22(8.9) % of the respondents were giving birth at the age of less than 20 years.

LARCM users (n=117), 78(96.3%) were married at the age 18 and above and 56(94.9%) were giving birth at the age 20 and above. Majority modern family planning users (n=342), 186 (75.3%) had 3-4 children while 63(75.9%) had 3-4 children from LARCM users (n=117). From LARCM users (n=117), 63(75.9%) had 3-4 children. Modern family planning users (n=342), Sixty four (18.7%) had abortion, among this twenty one (17.9%) of study participants had abortion that uses LARCM users (n=117) currently. (Table2).

**Table- 2: Reproductive history of study participants, Addis Ababa, 2015**

<b>S. No</b>	<b>Reproductive History</b>	<b>Frequency</b>	<b>Percent</b>
<b>1</b>	<b>Age at first marriage(213)</b>		
	<18 years	15	7
	>=18 years	196	92
	Don't remember	2	1
<b>2</b>	<b>Ever gave birth(342)</b>		
	Yes	248	72.5
	No	94	27.5
<b>3</b>	<b>Age at first birth(248)</b>		
	<20 Years	22	8.9
	>=20Years	208	83.9
	Don't remember	18	7.2
<b>4</b>	<b>Number of birth(248)</b>		
	1-4	240	96.8
	>4	8	3.2
<b>5</b>	<b>Number of alive children(247)</b>		
	1-2	6	2.4
	3-4	186	75.3
	>4	55	22.3
<b>6</b>	<b>Ever had abortion(342)</b>		
	Yes	64	18.7
	No	278	81.3

### **5.3 Source of information on modern and LARCMs among study participants**

Majority of modern family planning users (n=342), heard/aware about modern family planning were 339(99.4%). From LARCM users (n=117), One hundred sixteen (99.1) were heard/aware about modern contraceptive methods. Among modern family planning users (n=342), 252(73.7%) of study participants had information/awareness about Long acting reversible methods. During study period, Majority of study participants were 239(69.6) were heard message through mass media within 12 months on LARCMs. (Table 3)

**Table- 3: Source of information on modern and LARCM among study participant, Addis Ababa, 2015**

<b>S. No</b>	<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>1</b>	<b>Ever heard of modern contraceptive method(342)</b>		
	Yes	339	99.4
	No	3	0.6
<b>2</b>	<b>Information about LARCMs(342)</b>		
	yes	252	73.7
	No	90	26.3
<b>3</b>	<b>Message from mass media on LARCMs in 12 months(342)</b>		
	Yes	239	69.6
	No	103	30.4

From modern family planning users (n=342), their main source of information about modern contraceptive methods, 159 (46.4%) were from mass media followed by 137(40.1%) were from health professionals.

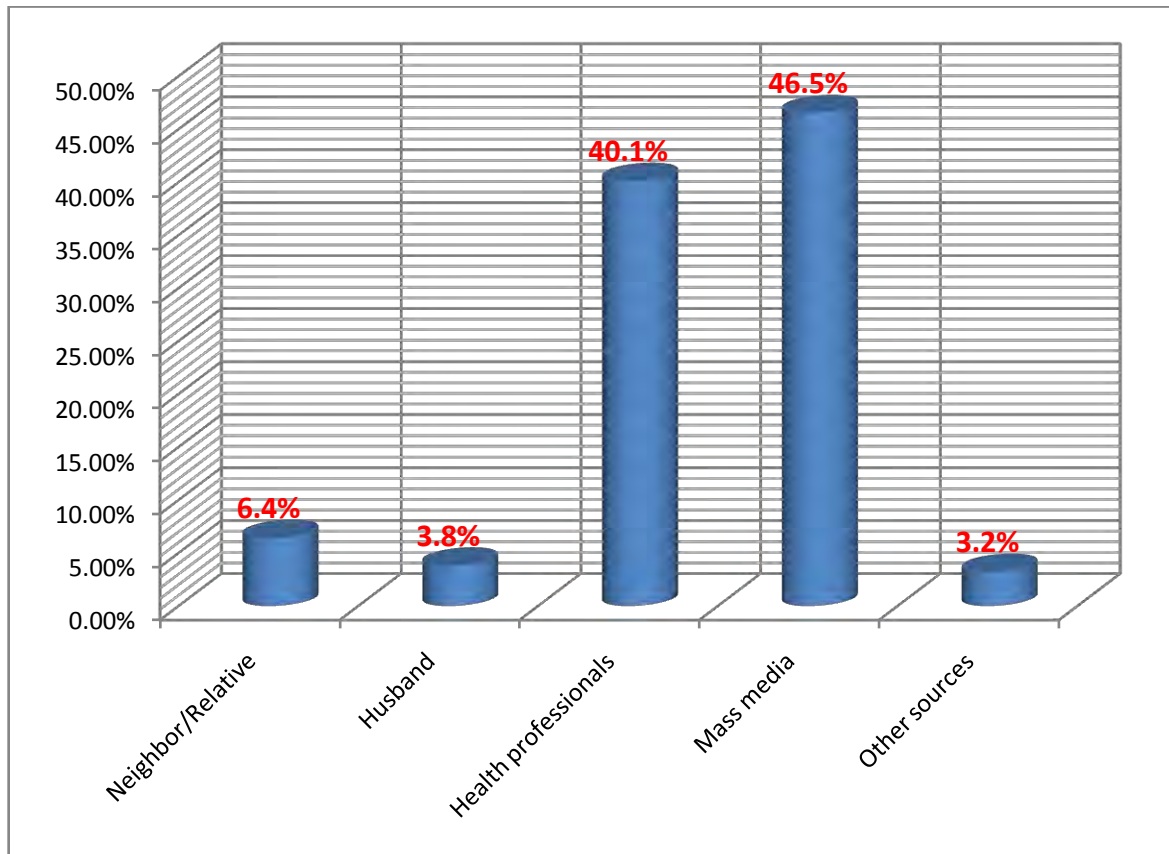


Figure 5 .Main source of Information on modern and LARCM among study participants, Addis Ababa, 2015

#### **5.4 Knowledge of women about long acting contraceptive methods**

In this study, modern family planning users (n=342), 203(59.4%) did not know that IUCD can prevent pregnancy for 12years. Out of the total study participants, 202(59.1%) did know that IUCD do not interferes with sexual intercourse. Two hundred and twenty (64.3%) of the study participants had knowledge about the notion that Implant prevents pregnancy for 3-5 years whereas 122(35.7%) did not know.

Among the study participants, 214(62.6%) had knowledge that after immediate removal of Implant, women become pregnant. Modern family planning users (n=342), 73(21.3%) had high knowledge and the least 65(19.1%) had moderate knowledge and from LARCM users (n=117), 33(46.5%) had high knowledge and the least 22(33.8%) had moderate knowledge. (Table 4)

**Table- 4: Knowledge of study participants about long acting Contraceptive Methods in Addis Ababa, Ethiopia, 2015**

Knowledge statements of women reproductive age on LARCMs	True		False	
	No	%	No	%
IUCD prevent pregnancy for 12 years.	139	40.6	203	59.4
IUCD appropriate for preventing STIs.	155	45.3	187	54.7
IUCD appropriate to interfere with sexual intercourse or desire.	140	40.9	202	59.1
Implant prevents pregnancy for 3-5 years.	220	64.3	122	35.7
Implant interferes with sexual intercourse or desire.	172	50.3	170	49.7
Implants reverse pregnancy quickly when removed if the women need to be pregnant.	214	62.6	128	37.4
Knowledge score of respondents				
	Number		Percent	
<b>High</b>	<b>73</b>		<b>21.3%</b>	
<b>Moderate</b>	<b>65</b>		<b>19.1%</b>	
<b>Low</b>	<b>204</b>		<b>59.6%</b>	

## **5.5 Attitude of study participants towards long active contraceptive methods**

Among Modern family planning users (n=342), 117(34.2%) thought that Implant does not causes irregular vaginal bleeding and 117(34.2%) reported that insertion and removal of Implant was not highly painful. One hundred and five (30.7%) agreed that insertion of IUCD does not lead to lose privacy and 99(29%) said that IUCD do not restrict from performing daily activities. Modern family planning users (n=342), 112 (32.7%) had supportive attitude and LARCM users (n=117), 66(59.5%) had supportive attitude. (Table5)

**Table- 5: Attitudes of study participants towards long acting contraceptive methods in Addis Ababa, Ethiopia, 2015**

Attitude questions	Agree		Not sure		Disagree	
	No	%	No	%	No	%
Using implant does not cause irregular vaginal bleeding.	117	34.2	55	16.1	170	49.7
Insertion of IUCD does not lead to lose privacy.	105	30.7	72	21.1	165	48.2
IUCD doesn't move through the body after insertion.	110	32.2	83	24.2	149	43.6
Using IUCD do not restrict from performing daily activities.	99	29	59	17.2	184	53.8
Insertion and removal of implant is not highly pain full	117	34.2	69	20.1	156	45.7
Implant doesn't move through the body after insertion.	111	32.5	66	19.3	165	48.2
Attitude score towards LARCM						
	Number		Percent			
<b>supportive attitude</b>	<b>112</b>		<b>32.7</b>			
<b>Supportive attitude</b>	<b>230</b>		<b>67.3</b>			

### 5.6 Utilization of modern and long acting reversible contraceptive among study participants

From the current modern family planning users (n=342), only 117(34.8 %) in 95% CI (29.5, 40.3) of the study participants utilized long acting reversible contraceptive methods. Majority of study participants 175(51.2%) were used injection and least 44(12.9%) were used IUCD.

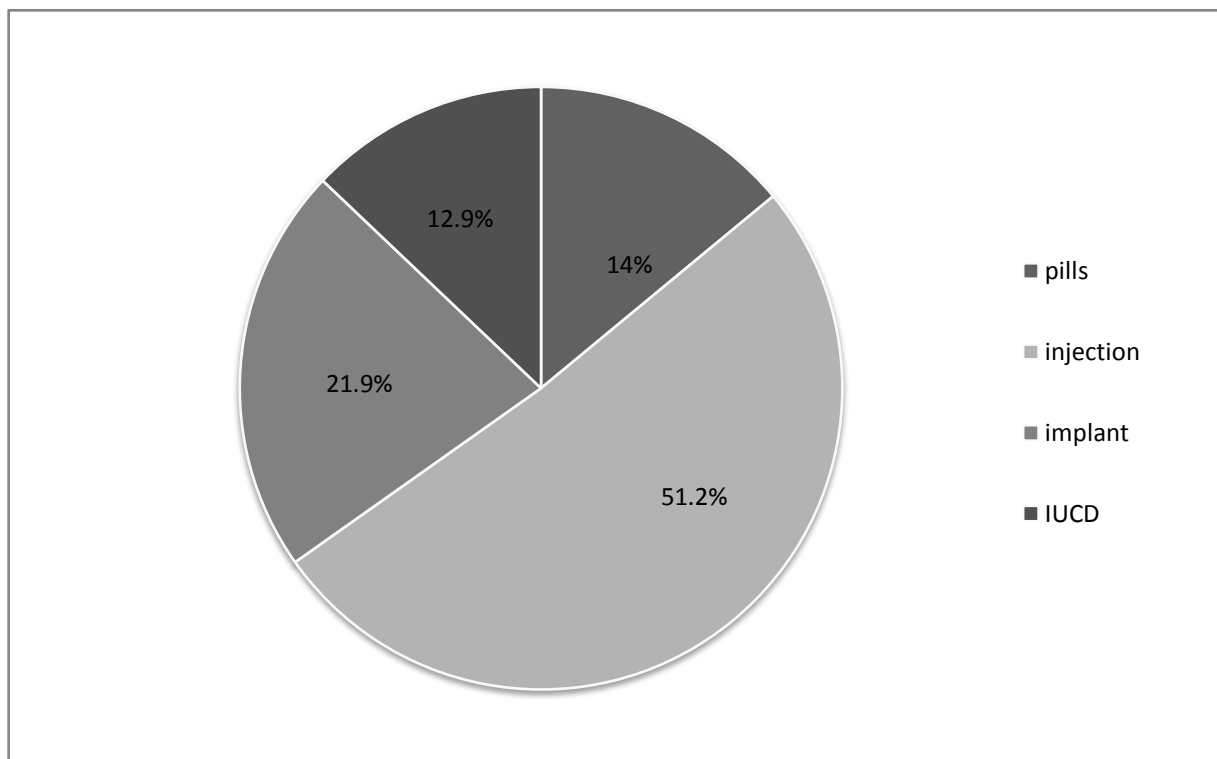


Figure 6: Modern and long acting Reversible contraceptive methods utilization among study participants, Addis Ababa, 2015

In this study, 342(100%) were used modern family planning method on the previous service and the most preferred method that study participants ever used 219(65.4%) were injectable and least used 20(6%) were IUCD. From modern family planning users (n=342) those who visited health facility, 171(50%) were shifted/switch from one contraceptive method to other contraceptive method.

Majority of modern family planning users (n=342), 103(60.2%) were shifted /switched from short to long acting contraceptive method. Out of the LARCMs users (n=117), 99(84.6%) of them were shifted from short to long acting reversible contraceptive. Modern family planning users (n=342), main reason to shift from one contraceptive method to another contraceptive method, 110(64.7) were provider advise followed by 98(57.6%) were need for long acting reversible contraceptive. (Table 6)

**Table- 6: Utilization of modern and LARCMs of study participant, Addis Ababa, 2015**

<b>S. No</b>	<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>1</b>	<b>Type of Modern contraceptive method ever used*</b>		
	Pills	168	50.1
	Injectable	219	65.4
	Condom	51	15.3
	Implant	75	22.4
	IUCD	20	6
<b>2</b>	<b>Shift from one contraceptive method to other( 342)</b>		
	Yes	171	50
	No	171	50
<b>3</b>	<b>From which contraceptive to which contraceptive method (171 )</b>		
	Long to long	1	0.6
	Long to short	5	2.9
	Short to long	103	60.2
	Short to short	62	36.3
<b>4</b>	<b>Reason to change from one contraceptive method to another*</b>		
	For inconveniency of previous method	61	35.9
	For convenience of new method	33	19.4
	Due to side effect	68	40.0
	Need for long acting contraceptive method	98	57.6
	Provider advise me	110	64.7
	Partner influenced me	4	2.4

\* indicate that it is not taken out of 100%.

From the current modern family planning users who are not using LARCM (n=225), their main reason 83(36.7%) were due to side effect and least 1(0.4%) were due to medical causes.

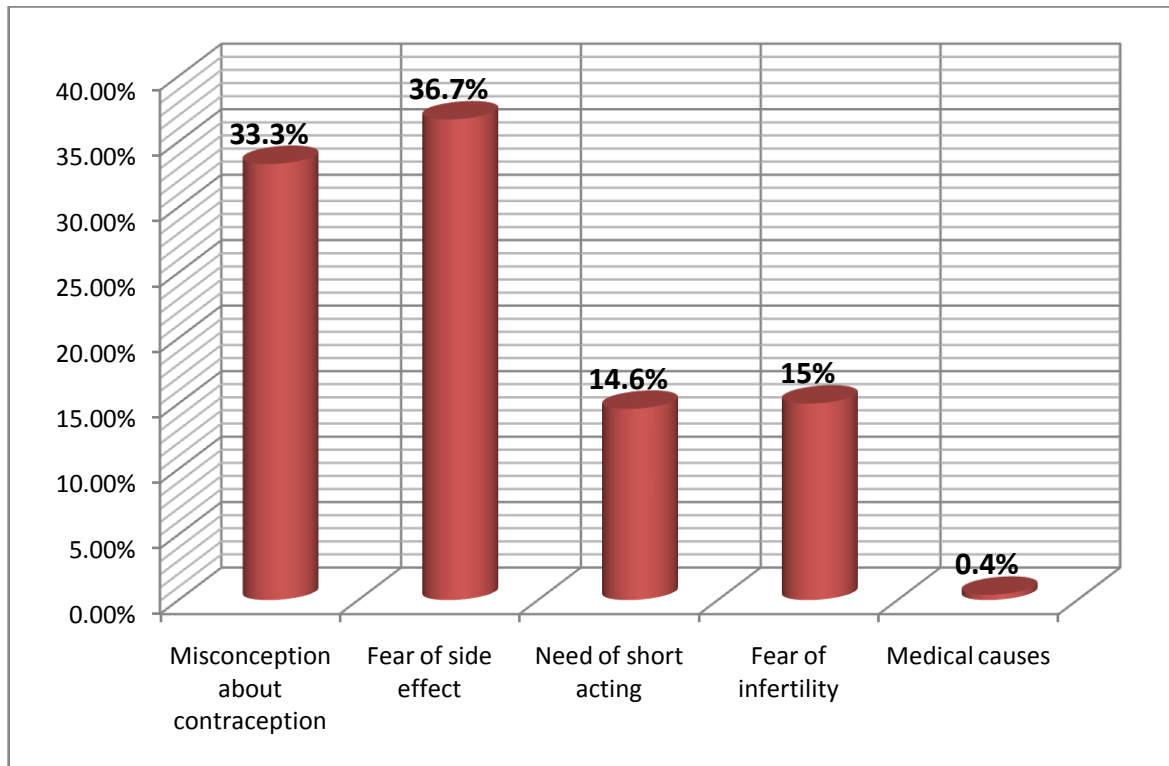


Figure 7: Reasons not to use long acting reversible contraceptive methods among study participants, Addis Ababa, 2015.

## 5.7 Factors associated with utilization of LARCMs

Bivariate and multivariate logistic regression analysis was used to calculate odds ratios and corresponding 95% confidence intervals for the predictors of LARCM use. Variables which were significant in the bivariate analysis at p-value <0.05 were Knowledge, attitude, heard/aware about LARCM and Shifting /switching from one contraceptive method to other contraceptive method.

The odds of high knowledge to use LARCM is 1.9 times that of low knowledge (COR=1.9 (1.1, 3.4),  $p<0.017$ ), the odds of moderate knowledge to use LARCM is 1.1 times that of low knowledge (COR=1.1 (0.6, 2.2),  $p<0.001$ ), the odds of supportive attitude to use LARCM is 5.1 times that of non supportive attitude (COR=5.1 (3.1, 8.3),  $p<0.001$ ), and the odds of contraceptive shifting/switching to use LARC 17 times that of their counterpart and the odds of hearing /awareness about LARCM is 2 times more likely to use LARCM as compared with their counterparts (COR=2 (1.2, 3.5),  $p<0.012$ ) were entered to the multivariate analysis.

As a result attitude and switching /Shifting from one contraceptive to other contraceptive were remained in the multivariate logistic regression due to its statistical significance. Hence, the result of multivariate analysis showed that study participants who had a supportive attitude regarding LARCM were 2.7 times more likely to use LARCM as compared with those had non supportive attitude (AOR=2.7, 95% CI (1.5, 4.8),  $p<0.001$ ) and study participants who had shifted/switched contraceptives were 12 times more likely to use LARCM as compared with their counterparts (AOR=12.4, 95% CI (6.6,23.6),  $p<0.000$ (Table 7)

**Table- 7: Unadjusted and Adjusted Odds ratio and (95% confidence intervals) of logistic regression showing effects of selected Characteristics (predictor variables) on the likely hood of LARCM use among study participants in Addis Ababa ,2015**

Predictor variable of Long Acting Contraceptive use		Using LARC		Crude OR (95%CI)	Adjusted OR (95.0% C.I)	Pvalue <0.05
		No	Yes			
Knowledge of respondent	High	38	33	1.9 (1.1,3.4)	1.6 (0.8,3.2)	0.181
	Moderate	43	22	1.1 (0.6,2.2)	0.9(0.4,1.9)	0.846
	Low	141	62	1	1	
Attitude of respondent	Supportive	45	66	5.1(3.1,8.3)	2.7(1.5,4.8)*	0.001
	Non Supportive	177	51	1	1	
Heard/Aware about LARC	Yes	154	96	2.0(1.2,3.5)	1.5(0.7,2.9)	0.252
	No	68	21	1	1	
Contraceptives Shifting	Yes	68	101	17.0(9.0,32.8)	12.4(6.6,23.6)*	0.001
	No	151	13	1	1	

**\*Significant after adjusting**

## CHAPTER SIX: DISCUSSION

This study revealed that more than one-third (34.8%) of the study participants were LARCM users, in which majority of study participants accepted 73(21.9%) were implant followed by the intrauterine contraceptive device 44 (12.9%). This result was higher compared to other studies conducted in Mekelle, Bahirdar, Northwest Ethiopia, Batu, Eastern Harerge, Uganda and Arbaminch [20-23,25,29,35] but lower than studies conducted in Jinka southern Ethiopia and Pakistan [11,16]

The discrepancy might be due to the fact that Addis Ababa has more access to such methods and the existence of better education, cultural and socioeconomic status of participants might be the core reason for the increased acceptance rate in this city. In addition study area, study design, sample size and study period might be another possible explanation for studies conducted particularly in Jinka and Pakistan might lead to the big discrepancy in the result. [11, 16].

Current use of IUCD in this study area was 12.9%, which was lower than in Pakistan(35%) and Kenya, (14.4%), Latin America(24%) and Eastern Nigeria(25%). [16,17,27,39]. This might be because of study participants in Addis Ababa perceived that IUCD restrict from performing daily activity(53.8%), move through the body after insertion(43.6%) and lead to lose privacy(48.2%). The current use of implant was 21.9% which was greater than in Adigrat town in Tigray region where the prevalence of implant was 10.2% .

This might be due to low awareness of LARCM (63.9%) in Adigrat [18] compared to this study area (73.7%). Acceptance in the current study might be due to its convenience and there is no cultural influences related to the procedure of implant that leads to have a positive effect on

the acceptance of LARCM. In the current study attitude and contraceptive shifting/switching were significantly associated with LARCM use.

Current use of modern family planning method was 65.2%.The most preferred method was injectable (51.2%).This finding was less than that of Kenya [17] (69%) and the most preferred method was injectable(64.4%). However, regarding to long acting reversible contraceptive in kenya only 32.3% were used that is lower than finding of the current study .This shows that participants in this study area were switching/shifting to long acting reversible contraceptive method than in Kenya. Alternatively, this might be due to awareness (73.7%) of participants towards LARCM in this study area. The greater number of LARCM users were those who had supportive attitude and had history of shifting/switching of one contraceptive to other contraceptive.

The current use of LARCM was different among respondent's socio demographic and other characteristics. for example, current use of LARCM was higher among study participants aged 25-34 and 35-44 years than study participants aged 15-24.Similarly, current use was higher among study participants gave birth to 3- 4 than those gave birth 1-2.This finding was in line with study done in Nigeria and Indonesia [38,39] where married women of high parity and aged 30-34 years use LARCM more likely compared to their counterpart .This might be due to women aged 15-24were at the beginning of childbearing age hence they had limited practice of LARCM due to fear of infertility.

In the current study, knowledge about LARCMs was not significant. This is in line with a study conducted in Mekelle [20] but the current study result was contradict with study done in Arsi zone, Debremarkose, Arba Minch, Hossana and Adama town. [33-35, 37, 41] The possible

explanation for the difference is that as socio demographic, cultural values, sample size and study design may have contribution.

In the current study attitude and contraceptive shifting/switching were significantly associated with LARCM use. In the current study, it is statistically significant that study participants with supportive attitude towards LARCMs had 2.7 times more likely to accept long acting reversible contraceptive as compared with those who had non supportive attitude(AOR=2.7, 95% CI (1.5, 4.8). This study is Consistent with a study done in Mekelle, Burkina Faso, Arba Minich and Adama town were likely [20, 31, 35, 41].This might be due to; having positive attitude was prerequisite for using contraceptive method.

As shown in the present study, the main reason mentioned by study participants for not use LARCMs was fear of side effect. This finding is similar to study conducted in Jinka, Butajira, Arba Minch, Mojo and Goba town [11, 12, 35,36, 40 ] this indicates that misperception about the LARCMs widespread to over all the country.

## **Strength of the study**

- Qualified data collectors (health professionals) were used for pre service interview data collection.
- Two days training were given for the data collectors.
- Pretest was performed that increases the study's validity and reliability.
- Different types of data collection instruments were used to collect data from different sources to increase validity of the study.

## **Limitation of the study**

- If this study were triangulated, more information's may be induced and strengthen those factors identified by quantitative data collection.
- The study used to assess based on only client perspective but other perspectives such as professional counseling, availability of adequate supply, trained professional and others might have significance.
- If it were done on community level, it was more significant.

## **CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION**

### **7.1 CONCLUSION**

In this study, LARCMs use among modern family planning users in health centers is 34.8% higher than the LARCM use rate reported in other studies in Ethiopia but still dominated by short acting method that were Injectables followed by implants. Among several factors that would affect use of long acting reversible contraceptive methods, study participants who have supportive attitude towards LARCM and Shifting/switch from one contraceptive to another contraceptive were found to be determinants of LARCMs use. Significant association between study participants on Supportive attitude and shifting from one contraceptive to other contraceptive on the use of long acting reversible contraception methods was observed.

### **7.2 RECOMMENDATION**

- ✓ Federal Ministry of health, regional health bureau and other stakeholders should continue the promotion of LARCMs.
- ✓ For Addis Ababa health bureau and other stakeholder work on family planning: strengthen continuous education on LARCM by model LARCM users and advocate for method uptake during clinic visit.
- ✓ For health centers: ensuring availability of printed materials like leaflets that help family planning users to understand the benefits of LARCM use.
- ✓ For Service providers: should provide counseling on LARCM during consultation, clients should be provided with complete information on the methods including their side effects.
- ✓ For researchers: To conduct further researches that look into manager and staff opinion towards LARCM With the emphasis of quantitative study.

## CHAPTER EIGHT: REFERENCES

1. Federal Democratic Republic of Ethiopia Ministry of Health (FMOH). National Guideline for Family Planning services in Ethiopia. February 2011. p 23
2. Deppe P. Family planning and the future; 2011
3. USAID, Long-Acting and Permanent Methods of Contraception: Meeting Clients' Needs [WWW.poptechproject.com/pathfinder] (Accessed on January 18/2015)
4. What makes a contraceptive acceptable? UNFPA, UNDP, WHO, World Bank; 1997.
5. Central Statistical Agency [Ethiopia]. Ethiopia Mini Demographic and Health Survey (EMDHS) 2014. Addis Ababa, Ethiopia
6. Federal Democratic Republic of Ethiopia, Ministry of Health. Health Sector Development Program IV, 2010-2014.
7. Population reference Bureau, Family planning world wide data sheet. 2013.
8. Central Statistical Agency [Ethiopia]; Ethiopia Demographic and Health Survey (EDHS 2011). Central Statistical Agency Addis Ababa, Ethiopia & ICF International Calverton, Maryland, USA March 2012
9. United nation Family planning agency, A decade of change in 2000-2011. Addis Ababa; December, 2012
10. Mulatu D. Assessment of factors associated with non-use of modern contraceptive methods among currently married women in reproductive age group in Kirkos subcity, Addis Ababa city administration: Addis Ababa University; 2010.
11. Mekonnen G, Enquesslassie F, Tesfaye G, Semahegn A. Prevalence and factors affecting use of long acting and permanent contraceptive methods in Jinka town, Southern

- Ethiopia: a cross sectional study. Pan African Medical Journal. 2014; 18:98  
doi:10.11604/pamj.2014.18.98.3421
12. Abdi T. Assessment of the prevalence and factors influence the utilization of long acting and permanent contraceptive methods in Butajira town, Gurage zone, SNNPR: Addis Ababa university;2009
  13. Federal ministry of health in Ethiopia,2015
  14. Jacobstein R, Stanley H. Contraceptive implants: Providing better choice to meet growing family planning demand. Global Health: Science and Practice; 1(1):11-7
  15. Clifton D, Kaneda T, Ashford L. Family planning worldwide 2008 data sheet. Washington, DC: Population Reference Bureau; 2008
  16. Baig DZ, Hatcher DJ, Saleem DS. Factors affecting hormonal and non hormonal contraceptive method use in women presenting to Reproductive Health Services-A Centers of Karachi Journal of Dental and Medical Sciences. 2012; 2(1):8-21
  17. Malalu PK, Alfred K, Too R, Chirchir A. Determinants of use of modern family planning methods: A case of Baringo North District, Kenya Science Journal of Public Health. 2014; 2(5):424-30.
  18. Gebremariam and Addissie: Intention to use long acting and permanent contraceptive methods and factors affecting it among married women in Adigrat town, Tigray, Northern Ethiopia. Reproductive Health 2014, 11:24
  19. Abajobir AA, Seme A. Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: a community-based cross-sectional study. BMC Health Services Research 2014, 14:138

20. Gebremichael H, Haile F, Dessie A, Birhane A, Alemayehu M, Yebyo H. Acceptance of long acting contraceptive methods and associated factors among women in Mekelle city, Northern Ethiopia Science Journal of Public Health. 2014; 2(4):349-55.
21. Tseganeh W. Assessment of quality of family planning service, Bahardar special zone, Amhara regional state: Addis Ababa university;2005
22. Fantahun M. Quality of family planning services in Northwest Ethiopia. Ethiopian journal of health development.2006;19(3):195-202
23. Haile A. Demand for long acting and permanent contraceptive methods and associated factors among family planning service users, east shoa zone, Batu town, Ethiopia; Addis Ababa university;2009
24. Johns Hopkins Bloomberg school of public health, Bill and Melinda Gates institute for population and reproductive health performance, monitoring and accountability 2020/PMA 2020.2014
25. Dubiwak R. Factors influencing contraceptive method mix among married women of reproductive age group in rural east Harerge zone: Addis Ababa university;2008
26. Aarons, Sigrid J.; Jenkins, Renee R. Sex, Pregnancy, and Contraception-Related Motivators and Barriers among Latino and African-American Youth in Washington, DC. Sex Education. 2002; 2:5–30
27. Kari W, Kristine H, E PJ, Daniel G. Knowledge and attitudes about long-acting reversible contraception among Latina women who desire sterilization. Women's Health Issues. 2013; 23(4): e257–e263. doi:10.1016/j.whi.2013.05.001
28. Palamuleni M, Adebawale A. Women empowerment and the current use of long acting and permanent contraceptive: Evidence from 2010 Malawi Demographic and Health Survey. Malawi Medical Journal. 2014; 26(3):63-70.

29. Anguzu R, Tweheyo R, Sekandi JN, Zalwango V, Muhumuza C, Tusiime S, et al. Knowledge and attitudes towards use of long acting reversible contraceptives among women of reproductive age in Lubaga division, Kampala district, Uganda. *BMC pregnancy and childbirth* 2014, 7:153
30. Ratharuth Holly LM, Vinod Mosse. Family planning service quality as determinant of use of IUD in Egypt. *BMC health service research*. 2006
31. Adebowale SA, Palamuleni ME. Determinants of Unmet Need for Modern Contraception and Reasons for Non-use among Married Women in Rural Areas of Burkina Faso African population study. 2014; 28 (1).
32. Espeut D, Renju J and Wubshet T. What derives family planning use in Ethiopia? London: Marie stopes international, 2010.
33. Lee H, Lee T, Shin H, Kim M, Lee M. Patterns and Predictors of non use of FP methods in Ethiopian women: A panel survey. *International nursing review*; 60(3):335
34. Bulto GA, Zewdie TA, Beyen TK. Demand for long and permanent contraceptive methods and its associated factors among married women of reproductive age group in Debre Markos, North west Ethiopia. *BMC womens health*. 2014; 14(1):46
35. Shegaw G, Mohamed A, Nadew K. Long Acting Contraceptive Method Utilization and Associated Factors among Reproductive Age Women in Arba Minch Town, Ethiopia: *Greener Journal of Epidemiology and Public Health*. 2014; 2(1):023-031
36. Gizaw A, Regassa N. Family planning service utilization in Mojo town, Ethiopia: A Population based study. *Journal of geography and regional planning*; 4(6):355-63
37. Earsido A. To assess determinants of long acting and permanent contraceptives methods utilization among married women in Hossana town, southern Ethiopia. Addis Ababa university; 2013

38. Rahayu R, Utomo I, MC Donald P, editors. Contraceptive use pattern among married women in Indonesia 2009.
39. Ozumba B, Chuhudebelu W, Snow R. Norplant as a contraceptive device in Enugu, Eastern Nigeria. *Advances in contraception* 1998; 14(2):109-19
40. Takele A, Degu G, Yitayal M. Demand for long acting and permanent methods of contraceptives and factors for non-use among married women of Goba Town, Bale Zone, South East Ethiopia. *Reproductive Health* 2012, 9:26.
41. Desalegn M. Utilization of long acting and permanent contraception methods and associated factors among married women in Adama town, Oromia region, central Ethiopia, July 2014
42. Wudie S. Assessment of factors affecting the use of long acting reversible contraceptive methods among married women of reproductive age group in Debre Markos district, North west, Ethiopia, Debre Markos university, August 2013
43. The 2007 population and housing census of Ethiopia results for Addis Ababa city administration statistical report August, 2010
44. Federal democratic republic of Ethiopia CSA, Ethiopia statistical abstract, March 2012/2013

## ANNEXES

### ANNEX I. INFORMATION AND INFORMED CONSENT, IN ENGLISH AND AMHARIC

#### Introduction

My name is \_\_\_\_\_. I am working with Tizita Dadi who is doing a research for the partial fulfillment of Masters Degree in maternity and reproductive health at Addis Ababa University. This questionnaire is intended to assess utilization of long-acting reversible contraceptives and its associated factors among women reproductive age group in Addis Ababa, capital city of Ethiopia. You are selected to be one of the Participants in the study.

**Study title:** Assessment on utilization of long-acting reversible contraceptives methods and its associated factors among women reproductive age group in Addis Ababa, capital city of Ethiopia.

**Purpose:** purpose of the project is to identify factors affecting use of long acting Family planning methods. The other purpose is for the fulfillment of my master degree in maternity and reproductive health. The information you provide here will be very helpful to the investigator of this study to write a research paper for the requirement in completion of master's program. The findings of this project could help in designing priority intervention strategies for better implementation of long-acting contraceptives that enables to meet much more planned fertility of couples.

**Duration of the Study:** From January- to June/2015 GC

**Procedures:** There are questions that assess factors influencing the use of long acting reversible contraceptives among women of reproductive age group .I would like to ask you to give your

genuine and honest answers on the questions forwarded. If you need clarification please ask me.  
It will take you about 15 minutes to finish this survey.

**Benefits and Risks:** By participating in this study and answering our questions, you will not receive any direct benefit. However, the information will help the researcher to understand factors influencing the use of long-acting reversible contraceptives among married women of reproductive age group in order to appropriately identify future interventions related to problem to be found. Your participation in this study will not involve any risks. If a question makes you feel uncomfortable, you may choose not to answer.

**Confidentiality:** you will not be asked your name on to be written the survey questions. All the information you give to us will be kept private. Whatever information you provide will be kept strictly confidential. The information you give will kept in a locked file cabinet. Only the researcher will have access to see the answers you give. No information identifying you will ever be released to anyone outside of this data collection activity.

**Participation:** Participation in the survey is completely voluntary. If you are not comfortable in answering any question(s), you can leave it blank. You can stop filling out the questionnaire at any time without giving a reason and your relationship with the community or any other body will not be affected in any way. If you would like to know more, please contact:

Address of the Principal Investigators Name Tizita Dadi Demie, 0911855134

IDR (Tel No AAU- 251-11-553873)

I thank you in advance for taking your time to answer questions.

Would you be willing to participate in the study?

If yes, I am in advance to ask you.

If no, please stop here

**Consent of the participant:** I the undersigned have been informed that the purpose of this research project. Based on the above information I agree to participate in the research voluntarily.

Signature of Participant -----

Date-----

አዲስ አበባ ዩኒቨርሲቲ የነርሲንግ ሚድዌይፍ ት/ቤት

የእናቶችና የስነ ተዋልዶ ጤና ትምህርት ክፍል

አማርኛ መጠየቅ

የመጀመሪያ የስምምነት ውል ቅፅ

**ሀ. መግቢያ**

ጤና ይስጥልኝ!.....እባላለሁ::የምሰራው በአዲስ አበባ ዩኒቨርሲቲ የእናቶችና የስነተዋልዶ ጤና ሳይንስ ትምህርት ክፍል የሁለተኛ ዲግሪ ማማያ ጥናታዊ ፅሁፍ/ምርምር/ በማድረግ ላይ ከሚገኙት ስር ትዝታ ዳዲ ከተባሉ ጥናት አድራጊ ጋር ስሆን፤ በአዲስ አበባ ከተማ ውስጥ ያሉ ሴቶች በቤተሰብ እቅድ ላይ ያላቸውን ሁኔታ በተመለከተ ለማወቅ ቃለ መጠይቅ እያደረግሁኝ እገኛለሁ::እርስዎም የጥናቱ ተሳታፊ ይሆኑ ዘንድ ተመርጠዋል::

የምርምሩ/ጥናቱ ርዕስ:- በአዲስ አበባ ከተማ በመውለድ እድማ ውስጥ ያሉ ሴቶች የእረጅም ጊዜ ወሊድ መከላከያ እንዳይጠቀሙ የሚያደርጉ ምክንያቶችን ለማወቅ የሚካሄድ ጥናት ነው::

**ለ. የጥናቱ ዓላማ:-**

በመውለድ እድማ ውስጥ ያሉ ሴቶች በእረጅም ጊዜ አገልግሎት የሚሰጡ የወሊድ መከላከያዎች ላይ ያላቸውን ሁኔታ በተመለከተ ማወቅ ከዚህ ጋር ተያያዥነት ያላቸውን ዋና ዋና ጉዳዮችን በመሰብሰብ የቤተሰብ እቅድ አገልግሎቱንና ፕሮግራሙን ይበልጥ ለማሻሻል ነው::ሌላው በህብረተሰቡ ጤና ሳይንስ የሁለተኛ ዲግሪ ማማያ ፅሁፍ ለማቅረብ ነው:: ከዚህ በላይ የጥናቱ ውጤት በቤተሰብ እቅድ ዙሪያ ለሚሰሩ አባላት/ሀላፊዎች/ ዕቅድ፤ ዝግጅትና ትግበራ ላይ ማሻሻያ ለማድረግ አስፈላጊነቱ የላቀ ይሆናል::

አተገባበር:- ከላይ የተመለከተውን ጥናት ለማካሄድ የተለያዩ ጥያቄዎች ይኖሩናል:: ጥናቱ ውጤታማ ሊሆን የሚችለው እርሶ በሚሰጡት ትክክለኛ መልስ ላይ በመሆኑ ጥያቄዎቹን በጥንቃቄ እንዲመልሱልን ፍቃደኝነትዎን በትህትና እንጠይቃለን:: ግልፅ ያልሆነልዎን/እንዲብራራልዎት/ የሚፈልጉትን ጉዳይ ካለ መጠየቅ ይችላሉ:: መጠይቁ 15 ደቂቃ አካባቢ የሚጨርስ መሆኑን ለመግለፅ እንወዳለን::

የጥናቱ ጥቅምና ጉዳት :- እርሶ በዚህ ጥናት ተሳታፊ በመሆንዎ በቀጥታ ሊያገኙ የሚችሉት ነገር ላይኖር ይችላል፤ ነገር ግን የእርሶ ተሳትፎ በጥናቱ አላማ ለእረጅም ጊዜ ወሊድን በመከላከል ዙሪያ ያለውን ክፍተት ለማሳየት እና ትክክለኛ የመፍትሔ

አቅጣጫ ለመጠቀም እጅግ በጣም አስፈላጊ ነው። በዚህ ጥናት በመሳተፍ ምንም ዓይነት ጉዳት አይደርስበትም። በመጠይቁ ውስጥ ለመመለስ የመይፈልጉት ጉዳይ ካለም ምላሽ እንዲሰጡ አይገደዱም።

**ምስጢራዊነት:-** ለዚህ ጥናት /ፕሮጀክት/ የሚሰበሰብ ማንኛውንም ዓይነት መረጃ ምስጢራዊነቱ የተጠበቀ ሲሆን የርስዎም ስም ሳይገፍበት ሰው ሚስጥራዊ ቁጥር ብቻ ተሰጥቶት በፋይል ውስጥ የሚቀመጥ ይሆናል እንዲሁም መረጃው ጥናቱን ከሚያካሂደው ሰው በስተቀር ለማንም ዓይነት ሰው ግልፅ አይሆንም ።

**ተሳትፎ :-** በዚህ ጥናት ላይ መሳተፍ/አለመሳተፍ/ ሙሉ በሙሉ በርስዎ ፈቃደኝነት ላይ የተመሰረተ ነው። ለጥያቄዎቹ በሙሉም ሆነ በከፊል መልስ ያለመስጠት መብት አለዎት። ይህ ደግሞ ማንኛውንም ዓይነት ግልጋሎት ከማግኘት አያግድዎትም። እንዲሁም በፈለጉት ሰዓት ማንኛውንም መብትሆን ሳያጡ የማገረጥ ሙሉ መብት አለዎት።

የበለጠ መረጃ ካስፈለገት የሚከተሉት አድራሻ መጠቀም ይችላሉ

ጥናቱን የሚያካሂደው ሰው አድራሻ: ትዝታ ዳዲ ስ.ቁ 0911855134

በአዲስ አበባ ዩኒቨርሲቲ የነርሲንግ ሚድዌይፍ ት/ቤት የእናቶችና ስነተዋልዶ ጤና ትምህርት ክፍል የስነምግባር ኮሚቴ ስልክ:

ለቃለ ምልልሱ ተስማምተዋል አዎ ከሆነ ጥያቄውን ይቀጥሉ፡--

አልተስማማሁም ከሆነ በዚህ እናቆማለን

የተሳታፊዎ የስምምነት ውል:- እኔ ከዚህ በታች ፊርማዬን ያስቀመጥኩት ግለሰብ የዚህ ጥናት ዓላማ ተገልጦት ያለው። ከላይ በተገለፀልኝ መረጃ መሰረትም በጥናቱ ለመሳተፍ ተስማምቻለው።

የተሳታፊ ፊርማ----- ቀን-----

ለትብብርዎት እናመሰግናለን።

ቃለ ምልልሱን ያካሂደው ሰው ስም-----ፊርማ-----ቀን-----

ቃለ ምልልሱ የተጀመረበት ጊዜ ----- ቃለምልልሱ የተጠናቀቀበት ጊዜ-----

ያረጋገጠው ሱፐርቫይዘር ስም -----ፊርማ -----ቀን-----

## ANNEX II: ENGLISH AND AMHARIC QUESTIONNAIRE

English questionnaire on long acting reversible contraceptive method and its associated factors among reproductive aged women.

Kebele ----- Interviewer No. ----- Interviewee No. -----  
 Woreda/Town----- Date of interview-----

<b>PART I. SOCIODEMOGRAPHIC CHARACTERISTICS AMONG STUDY PARTICIPANTS</b>			
<b>Code</b>	<b>Questions</b>	<b>Possible responses</b>	<b>Skip</b>
<b>101</b>	How old are you? Age at interview in completed year	1. 15-24 2. 25-34 3. 35-44 4. I don't remember	
<b>102</b>	What is your marital status?	1. Single 2. Married 3. Widowed 4. Divorced 5. Separated 6. Cohabiting 99. Others _____	
<b>103</b>	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 99. Others _____	
<b>104</b>	What is your ethnicity?	1. Amhara 2. Oromo 3. Gurage 4. Tigire 5. Silte 99. Others _____	

<b>105</b>	What is the level of school you have completed?	<ol style="list-style-type: none"> <li>1. No education</li> <li>2. Elementary(1-8)</li> <li>3. Secondary(9-12)</li> <li>4. Diploma (level I-V)</li> <li>5. Higher education (BSC and above)</li> </ol>	
<b>106</b>	What is your occupation?	<ol style="list-style-type: none"> <li>1. Government employee</li> <li>2. Self employee</li> <li>3. Merchant</li> <li>4. Handcraft makers</li> <li>5. Housewife</li> <li>6. Daily laborer</li> </ol>	

**PART II: REPRODUCTIVE HISTORY OF STUDY PARTICIPANTS**

<b>Code</b>	<b>Questions</b>	<b>Possible Answers</b>	<b>Skip</b>
<b>201</b>	What was your age at first marriage?	<ol style="list-style-type: none"> <li>1. &lt;18 years</li> <li>2. &gt;=18 years</li> <li>88. I don't remember</li> </ol>	
<b>202</b>	Have you ever given birth?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	If your answer is NO skip to question number 306.
<b>203</b>	If your answer is yes for, what was your Age at 1 <sup>st</sup> birth?	<ol style="list-style-type: none"> <li>1. &lt;20 years</li> <li>2. &gt;=20 years</li> <li>88. I don't remember</li> </ol>	
<b>204</b>	How many births have you given?	<ol style="list-style-type: none"> <li>1. Zero</li> <li>2. 1-4</li> <li>3. &gt;4</li> </ol>	
<b>205</b>	How many of them are alive?	<ol style="list-style-type: none"> <li>1. 1-2    3. &gt;4</li> <li>2. 3-4</li> </ol>	
<b>206</b>	Have you ever had abortion?	<ol style="list-style-type: none"> <li>1. Yes    2.No</li> </ol>	

**PARTIII: SOURCE OF INFORMATION ON MODERN AND LONG ACTING REVERSIBLE CONTRACEPTIVE METHODS OF STUDY PARTICIPANTS.**

<b>Code</b>	<b>Questions</b>	<b>Possible Answers</b>	<b>Skip</b>
<b>301.</b>	Have you ever heard about Modern contraceptive method?	1. Yes 2. No	if NO skip to 304
<b>302.</b>	What type of modern contraceptive do you heard? More than one answer is possible	1. Pills 2. Injectable 3. Implant 4. IUCD 5. Condom 6. I don't know	
<b>303</b>	What is your main source of information on modern contraceptive?	1. Neighbors /relatives 2. Husband 3. Health professional 4. Mass media 99. Other specify	
<b>304</b>	Do you have information about long acting reversible contraceptive Methods?	1. Yes 2. No	If NO skip to question number 306
<b>305</b>	If Yes, please mention LARC that you heard.	1. Implant 2. IUCD 99.Others	
<b>306</b>	Have you ever had exposure to long Acting reversible contraceptive message through mass media within the last 12 months?	1. Yes 2. No	

<b>307</b>	If yes, please mention LARCMs You heard?	1.Implant 2.IUCD 99.Other_____	
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**PART IV:KNOWLEDGE ON LONG ACTING REVERSIBLE CONTRACEPTIVE AMONG STUDY PARTICIPANTS**

<b>Code</b>	<b>Questions</b>	<b>Possible Answers</b>	<b>Skip</b>
<b>401</b>	IUCD can prevent pregnancies for 12 years.	1. True 2. False	
<b>402.</b>	IUCD can prevent Sexually transmitted Infections (STIs).	1. True 2. False	
<b>403.</b>	IUCD interfere with sexual intercourse or desire.	1. True 2. False	
<b>404.</b>	Implant can prevent pregnancies for 3-5 years.	1. True 2. False	
<b>405</b>	Implant can interfere with sexual intercourse or desire.	1. True 2. False	
<b>406</b>	Implants reverse pregnancy quickly when removed if the women need to be pregnant.	1. True 2. False	

**PART V: ATTITUDE ON LONG ACTING REVERSIBLE CONTRACEPTIVE METHODS OF STUDY PARTICIPANTS**

<b>Code</b>	<b>Questions</b>	<b>Possible Answers</b>	<b>Skip</b>
<b>501</b>	Using implant does not cause irregular bleeding.	1. Agree 2. Not sure 3. Disagree	
<b>502</b>	Insertion of intrauterine Contraceptive devices does not Lead to lose privacy.	1. Agree 2. Not sure 3. Disagree	
<b>503</b>	IUCD doesn't move through the body after insertion.	1. Agree 2. Not sure 3. Disagree	
<b>504</b>	Using intra uterine contraceptive devices do not restrict normal activities.	1. Agree 2. Not sure 3. Disagree	
<b>505</b>	Insertion and removal of implant is not highly pain full.	1. Agree 2. Not sure 3. Disagree	
<b>506</b>	Implant doesn't move through the body after insertion.	1. Agree 2. Not sure 3. Disagree	

<b>PART VI. UTILIZATION OF MODERN AND LONG ACTING CONTRACEPTIVE METHODS OF STUDY PARTICIPANTS</b>			
<b>Code</b>	<b>Questions</b>	<b>Possible Answers</b>	<b>Skip</b>
<b>601</b>	Which type of modern contraceptive method have you ever used? More than one answer is possible.	1. Pills 2. Injectable 3. Implant 4. IUCD 5. Condom 99. Others-----	
<b>602</b>	Have you ever shifted/switched one contraceptive method to other?	1. Yes 2. No	If No skip to 605
<b>603</b>	If yes, from which contraceptive method to which contraceptive method (recent one)?	1. Long to long contraceptive method 2. Long to short contraceptive method 3. Short to long contraceptive method 4. Short to short contraceptive method	
<b>604</b>	Why did you shift/switch from one method to another? More than one answer is possible	1. For inconveniency of previous method 2. For convenience of new method 3. Due to lack of access to the previous method 4. Do to side effect 5. Need for long acting contraceptive method 6. Provider advise me 7. Partner influenced me 99. Others	
<b>605</b>	Which method are you using now?	1. Pills 2. Injectables 3. Implants	

		4. IUCD 99. Others _____	
<b>606</b>	If NO for question 605(3, 4), Why? Main reason	1. Misconception 2. Need for short acting contraceptive 3. Fear of Side effect 4. Medical cases 5. Fear of infertility 6. Other specify _____	

**Thank you for your participation!**

**የአማርኛ መጠይቅ**

ቀበሌ----- የጠያቂው የኮድ ቁ.----- የተጠያቂው የኮድ ቁ.-----  
 ወረዳ ክ/ከተማ ----- የመጠይቅ ቀን-----

<b>ክፍል አንድ:- ማህበራዊና ኢኮኖሚያዊ ሁኔታ መጠይቅ</b>			
<b>ኮድ</b>	<b>ጥያቄዎች</b>	<b>ለጥያቄው መልስ ሊሆን የሚችለው</b>	<b>ወደ ቀጣይ እለፈ</b>
101	እድሜዎ ስንት ነው? የመጠይቁ በተደረገበት ጊዜ	1. 15 - 24 2. 25- 34 3. 35- 44 88. አላስታውሰውም	
102	የጋብቻ ሁኔታዎ ምንድን ነው?	1. ያላገባች 2. ያገባች 3. የሞተባት 4. የተፋታች 5. የተለያየች 6. አብሮ መኖር 99. ሌሎች_____	
103	የምን አይማኖት ተከታይ ኖት?	1. አርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 99. ሌሎች_____	
104	ብሔርዎ ምንድነው?	1. አማራ 2. አሮሞ 3. ጉራጌ 4. ትግሬ 5. ስልጤ 99. ሌሎች_____	
105	የትምህርት ደረጃዎ ስንት ነው?	1. ማንበብና መጻፍ የማትችል 2. ያልተማረች 3. አንደኛ ደረጃ ያጠናቀቀች (1-8) 4. ሁለተኛ ደረጃ ያጠናቀቀች (8-12) 5. ሰርተፍኬት እና ዲፕሎማ	

		(ደረጃ 1-5) 6. ዲግሪና ከዚያ በላይ	
106	ስራዎ ምንድነው?	1. የመንግስት 2. የግል ድርጅት 3. ነጋዴ 4. እደጥበብ ሰራተኛ 5. የቤት እመቤት 6. የቀን ሰራተኛ	
<b>ክፍል ሁለት :- የስነተዋልዶ ታሪክ በተመለከተ</b>			
<b>ኮድ</b>	<b>ጥያቄዎች</b>	<b>ለጥያቄው መልስ ሊሆን የሚችለው</b>	<b>ወደ ቀጣይ እለፈ</b>
201	መጀመሪያ ባል ስታገቢ ዕድሜሽ ስንት ነበር?	88.አላስታውሰውም	
202	ልጅ ወልደሽ ታውቂያለሽ?	1. አዎ ወልጄ አውቃለው 2. አይ ወልጄ አላውቅም	አይ ከሆነ ወደ ጥያቄ ቁጥር 202 እለፈ
203	መልስሽ አዎ ከሆነ ፤ የመጀመሪያ ልጅሽን ስትወልጁ እድሜሽ ስንት ነበር ?	1. <20 2. >=20 88. አላስታውሰውም	
204	ስንት ልጅ ወልደዋል?	1. 1-2 2. 3-4 3. >4	
205	በህይወት ያሉ ስንት ልጆች ናቸው?	1. 1-2 2. 2-3 3. >4	
206	አስወርደሽ ታውቂያለሽ?	1. አዎ 2. አይ	

**ክፍል ሦስት፡-ስለ ዘመናዊ ወሊድ መቆጣጠሪያ እና ረጅም ጊዜ የሚያገለግሉ ወሊድ መከላከያ ዘዴዎች የተሳተፈው የመረጃ ምንጭ**

ኮድ	ጥያቄዎች	ለጥያቄው መልስ ሊሆን የሚችለው	ወደ ቀጣይ እለፈ
301	ስለ ዘመናዊ ወሊድ መቆጣጠሪያ ሰምተው ያውቃሉ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. አላውቅም</li> </ol>	<p>አላውቅም</p> <p>ከሆነ ወደ ጥያቄ ቁጥር 304እለፈ</p>
302	መልስዎ አዎ ከሆነ የትኛውን የወሊድ መቆጣጠሪያ ያውቃሉ የተጠቀሱት ወይም ያስታወሱትን ያክብቡ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	<ol style="list-style-type: none"> <li>1. ፒልስ(የሚዋጥ እንክብል)</li> <li>2. መርፌ</li> <li>3. ክንድ ላይ የሚቀበር</li> <li>4. (ለፕ)በማዕጸን የሚቀመጥ</li> <li>5. ኮንዶም</li> <li>6. አላውቅም</li> </ol>	
303	ስለዘመናዊ የወሊድ መቆጣጠሪያ መረጃ ከየት አገኙ?	<ol style="list-style-type: none"> <li>1. ጎረቤት/ዘመድ</li> <li>2. ከባለቤትዎ</li> <li>3. ከጤና ባለሙያ</li> <li>4. ከብዙአን መገናኛ</li> </ol> <p>99.ሌሎች_____</p>	
304	ስለረጅም ጊዜ የሚያገለግሉ ወሊድ መከላከያ ዘዴዎች ሰምተው ያውቃሉ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. አላውቅም</li> </ol>	<p>አላውቅም</p> <p>ከሆነ ወደ ጥያቄ ቁጥር 306እለፈ</p>
305	መልስዎ አዎ ከሆነ የሰሙትን የረጅም ጊዜ ወሊድ መከላከያ ይጥቀሱ_____	<ol style="list-style-type: none"> <li>1.ክንድቆዳ ውስጥ የሚቀበር</li> <li>2. ለፕ(በማዕጸንየሚቀመጥ)</li> <li>3.አላውቅም</li> </ol>	

		99.ሌሎች_____	
306	ባለፈው 12 ወራት ውስጥ ስለ ረጅም ጊዜ የወሊድ መከላከያ ዘዴዎች መልዕክት ደርሶዎታል?	1. አዎ 2. አይደለም	
307	መልሶት አዎ ከሆነ የትኞቹን (የተጠቀሱትን ያክብቡ)?	1.ክንድቆዳ ውስጥ የሚቀበር 2.በማዕፀን የሚቀመጥ 99.ሌሎች_____	

**ክፍል አራት :- ስለ ረጅም ጊዜ የሚያገለግሉ ወሊድ መከላከያ ዘዴዎች የተሳተፈዎ ግንዛቤ**

ኮድ	ጥያቄዎች	ለጥያቄው መልስ ሊሆን የሚችለው	ወደ ቀጣይ እለፈ
401	ሉፕ (በማዕፀን የሚቀመጥ የወሊድ መከላከያ) ለ12 ዓመት እርግዝናን ይከላከላል።	1. እውነት 2. አሰት	
402	ሉፕ(በማህጸን የሚቀመጥ የወሊድ መከላከያ) የአባላዘር በሽታ ይከላከላል።	1. እውነት 2. አሰት	
403	ለፕ(በማህጸን የሚቀመጥ የወሊድ መከላከያ) የግብረ ስጋ ግንኙነት ወይም ፍላጎት ላይ ተጽዕኖ ይኖረዎል።	1. እውነት 2. አሰት	
404	በክንድ ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ ከ 3-5 አመት እርግዝናን ይከላከላል።	1. እውነት 2. አሰት	
405	ቆዳ ውስጥ የሚቀበር የወሊድ መቆጣጠሪያ የግብረ ስጋ ግንኙነት ላይ ተጽዕኖ አለው።	1. እውነት 2. አሰት	
406	ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ ከወጣ በኋላ ወዲያውኑ ማርገዝ ይቻላል።	1. እውነት 2. አሰት	

**ክፍል አምስት :-ሰለ ረጅም ጊዜ የሚያገለግሉ ወሊድ መከላከያ ዘዴዎች የተሳተፈዋ አመለካከት**

ኮድ	ጥያቄዎች	ለጥያቄው መልስ ሊሆን የሚችለው	ወደ ቀጣይ እለፈ
501	በክንድ ቆዳ ስር የሚቀበረውን መጠቀም የተዛባ የደም መፍሰስ አያስከትልም።	1. እስማማለሁ 2. እርግጠኛ አይደለሁም 3. አልስማማም	
502	ሉፕ በሚገባበት ወቅት የግል ሁኔታና ሚስጢርን አያጋልጥም።	1. እስማማለሁ 2. እርግጠኛ አይደለሁም 3. አልስማማም	
503	ሉፕ በማእፀን ከተቀመጠ በኋላ ወደ ሌላ የሠውነት አካል ውስጥ አይዛመትም (አይዘዋወርም)።	1. እስማማለሁ 2. እርግጠኛ አይደለሁም 3. አልስማማም	
504	ሉፕ መጠቀም የተለመዱ እንቅስቃሴዎችን ማድረግ አይገድብም።	1. እስማማለሁ 2. እርግጠኛ አይደለሁም 3. አልስማማም	
505	በክንድ ቆዳ ስር የሚቀበረው ሲገባና ሲወጣ የተጋነነ ህመም አይኖርም።	1. እስማማለሁ 2. እርግጠኛ አይደለሁም 3. አልስማማም	
506	እንደ እኔ በክንድ ቆዳ ስር የሚቀበረው ከገባ በኋላ በሌላ የሰውነት አካል ውስጥ አይዛመትም (አይዘዋወርም)።	1.እስማማለሁ 2.እርግጠኛ አይደለሁም 3.አልስማማም	

**ክፍል ስድስት :- የዘመናዊ የወሊድ መከላከያ ዘዴ እና ስለ ረጅም ጊዜ የሚያገለግሉ ወሊድ መከላከያ ዘዴዎች የተሳተፈዋ አጠቃቀም**

ኮድ	ጥያቄዎች	ለጥያቄው መልስ ሊሆን የሚችለው	ወደ ቀጣይ እለፈ
601	የትኛውን የወሊድ መከላከያ ዘዴ ተጠቅመው ያውቃሉ?(ከአንድ በላይ መልስ መስጠት ይቻላል)	1. ፒልስ 2. መርፌ 3. በክንድ ቆዳ ስር የሚቀበር 4. ሉፕ 99.ሌሎች_____	
602	ከአንድ ወሊድ መከላከያ ወደ ሌላ ቀይረው ያውቃሉ ?	1. አዎ 2. አላውቅም	አላውቅም ከሆነ ወደ ጥያቄ ቁጥር 605 እለፈ.
603	መልስዎ አዎ ከሆነ ወሊድ መከላከያ ከምን ወሊድ መከላከያ ወደ ምን ቀየሩ?	1.ከረዥም ጊዜ ወደ ረዥም ጊዜ የወሊድ መከላከያ 2.ከረዥም ጊዜ ወደ አጭር ጊዜ የወሊድ መከላከያ 3. አጭር ጊዜ ወደ ረዥም ጊዜ የወሊድ መከላከያ 4.ከአጭር ጊዜ ወደ አጭር ጊዜ የወሊድ መከላከያ	
604	መልስዎ አዎ ከሆነ የወሊድ መከላከያ ለምን ቀየሩ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	1.የመጀመሪያው ስላልተመቸኝ 2.ስለፈለኩኝ 3.የበሬቱ ስለሌለ 4.የጎንዮሽ ጉዳት ስላስከተለብኝ	

		የረጅም ጊዜ መከላከያ ለመቀየር 6.የባለሙያ ምክር ስላስቀየረኝ 7.የጓደኛ ተጽእኖ 99.ሌሎች_____	
605	አሁን የትኛውን የወሊድ መከላከያ ዘዴ እየተጠቀሙ ነው?	1.ፒልስ(የሚዋጥ እንክብል) 2.መርፌ 3.በክንድ ቆዳ ስር የሚቀበር 4.ሉፕ(በማህጸን የሚቀመጥ) 99.ሌሎች_____	
606	መልስዎ 605(3, 4) አይደለም ከሆነ ለምን?	1. የተሳሳተ አመለካከት 2. የአጭር ጊዜ በመፈለግ 3.የተጓዳኝ ጉዳትን በመፍራት 4. በህክምና ሁኔታ የተከለከለ 5. መሆንነትን በመፍራት 99. ሌሎች_____	

ስለተሳትፎዎ አመሰግናለሁ!!

## DECLARATION OF THE PRINCIPAL INVESTIGATOR

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

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

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