

# UTILIZATION OF LONG ACTING AND PERMANENT FAMILY PLANNING METHODS AMONG WOMENS VISITING FAMILY PLANNING CLINIC IN ARBA MINCH HOSPITAL.

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## Abstract

**Background:** maternal health improvement is dependent on availability and utilizations of reproductive health services including family planning. Family planning is assumed to prevent 187 million unintended pregnancies and nearly 60 million unplanned births. This study aimed to assess the utilization of long acting family planning methods in Arba Minch Hospital.

**Methods:** Health facility based cross-sectional was conducted in Arba Minch Town. The study included women of reproductive age who were visiting Arba Minch General hospital. Data was collected by interviewer administered questionnaire and analyzed by SPSS software version 20.

**Results:** One hundred forty four (88.88%) of the respondents took FP methods during the study. From these women most 88(61.15%) of them took Depo-Provera. In this study utilization of long acting family planning methods was 22.9%. The commonly used long acting methods were IUCD 5.55% and Implanon 17.3%.

**Conclusion and Recommendations:** utilization of long acting family planning methods in the study area was low. Increasing the awareness and resolving the perception of clients on wrong assumption need to be corrected through health education.

**Key words:** long acting methods, utilizations, reproductive health, Arba Minch, Ethiopia

## 1 INTRODUCTION

Family planning is the way of controlling birth and allows people to attain their desired number of children and determine the spacing of pregnancies. Access to family planning through preferred and effective methods contributes to health of mothers supports the health and development of community (1, 2).

Currently, women in the developing countries are using some form of family planning. Despite this, there is reported lack of access to contraceptives. Providing these women with the services they need would prevent an additional 52 million unintended pregnancies and 23 million unplanned births each year and contributes to maternal health. (4)

In the past 40 years, family-planning programs have played a major part in raising the prevalence of contraceptive from less than 10% to 60% and reducing fertility in developing countries from six to about three births per woman. However, in half of the 75 larger low-income and lower-middle income countries, contraceptive practice remains low. Reaching Millennium Development Goals makes greater investment in family planning in these countries (5). Between 1990 and 2000, total fertility in Ethiopia declined from 6.4 to 5.9 births per woman. This is a significant achievement. In rural areas, women bear an average of 6.4 children – nearly double that of their urban counterparts (4). Population growth, meanwhile, remains around 2.7 percent annually, making Ethiopia Africa's second most populous country with an estimated population of 77.4 million in 2005(6).

As a way of tackling population growth problems, family planning programmers have been in place for more than thirty years in many regions of the world. It is agreed that increased family planning expenditures are an effective long-term investment in human capital development and family welfare. Family planning contributed to reproductive revolution in developing countries. Contraceptives prevent maternal deaths by reducing the number of times women go through pregnancy and childbirth. These in turn can threaten the life of the mother or lead to infertility and related social stigma. Contraceptives also allow women to delay motherhood, space birth and protect themselves from sexually transmitted diseases including HIV/AIDS. In Ethiopia the concept of family planning has been promoted since 1966, by the initiation of concerned volunteers who established FGAE (Family Guidance Association of Ethiopia). In 1980 'MCH' coordinating office was established as a department under MOH. After ten years of its establishment, it is recognized as FHD (Family Health Department). With four teams under it of which one is family planning team, which was running family planning programs nationally until federalism took place and similar departments in all regions handed over the program activities. The knowledge of Family planning is as high as 86% of currently married women. But use of contraceptives is very low, especially use of modern contraceptive methods, which is 6% of currently married women (25)

Accordingly the Ethiopian national reproductive health strategy set some crucial strategies for family planning. These are: create acceptance and the need of FP, with special emphasis on populations served vulnerable by geographic dispersion, gender, and wealth; increase access and utilization of quality FP services, particularly for married and unmarried young people and those who have reached desired family size; delegate to the lowest service delivery level, the provision of all FP methods, including long acting and permanent methods (7).

Demographic growth in the developing world will continue to exert upward pressure on the population base of women of reproductive age. In many countries, where contraceptive utilization is low and 40% to 50% of the population is under age 15 years, this may result in higher probability of having unintended pregnancies (10). The Guttmacher Institute estimates a pregnancy rate of 137 per 1,000 women aged 15–44 years in the developing world and an unintended pregnancy rate of 57 per 1,000 which is either mistimed or unwanted pregnancies. There is decline in unintended rate has declined since the mid-1990s, due to utilization of FP (11).

An estimated 358 000 maternal deaths occurred worldwide in 2008, a 34% decline from the magnitudes of 1990. Despite this decrement, developing countries still contribute for 99% of the deaths each year [12]. Fortunately, the vast majority of maternal and newborn deaths can be prevented with proven interventions to ensure that every pregnancy is wanted using modern contraceptive and every birth is safe(13).

Urban fertility is 26% lower than rural fertility for all the four regions combined. Most women give birth while they are in their teens, as a consequence of the early age of marriage. Among women currently pregnant, a significant proportion (about 40% in Tigray, a little over 40% in Amhara, 31% in Oromiya and 37% in SNNPR) reported that the pregnancy was unwanted or mistimed suggesting that these pregnancies could have been prevented if women had had access to family planning services(14). In 2005, about 49% of Ethiopian women reported that they wanted no more children or they want to wait for at least two years to have their next child. , Yet, only about 15 % were using contraception, which reflects an unmet need for contraceptives of about 34%. In 2000, demand for contraception was 40%, and it increased sharply, by about 25% between 2000-2005. Because demand grew faster than use, unmet need for contraception continues to be high. Although the TFR was 5.4 in 2005, total wanted fertility rate (TWFR) was only 4 children per woman meaning that there is about 1.5 unwanted births per woman (15) .Knowledge of contraception has remained high in Ethiopia over the past five years. For example, knowledge of any modern method among currently married women was 85 percent in 2000 and 87 percent in 2005. But selectively knowledge on long term and permanent contraceptive methods is very much lower and female sterilization 18.4%, male sterilization 6.6%, IUD 14.85, and implants 22.4% among all women. (16)Although short-acting methods provide contraceptive coverage for many women who do not want more children, these women are still entitled to a choice of contraceptive methods. LAPM may be a good option for some of them, given their reproductive intentions, but they may not be using one because of lack of information. Clients unsatisfied with short-acting methods but still wish to avoid pregnancy need alternative family planning choices. In low income countries, nearly 30% of women who use oral contraceptives or injectable stop within two years of starting because of side effects.

One reason these methods are so popular is that they are highly effective; another is that they do not require daily use or repeated visits to obtain resupply [21]. Almost all women are eligible for IUDs, implants, and/or

sterilization and all men who do not want more children are eligible for vasectomy. Of course, permanent methods are only appropriate for couples who have achieved their desired family size [22].

These methods are the most effective (99 percent or greater) methods of contraception available and are very safe and convenient with some side effects. They are all clinical methods and thus must be provided by trained doctors, nurses, and/or midwives in health facilities. Only one action by client and provider results in years of protection against unintended pregnancy. The desirability of these methods is due to their long life span, which requires fewer visits to health providers, thus saving clients time, effort, and money while at the same time easing the patient load at health facilities. When available, LAPMs of contraception are chosen by hundreds of thousands of Africans, especially when cost and other access barriers are removed [20].

LAPMs are cost-effective for programs over time. When compared with the use of other methods, use of LAPMs results in fewer unintended pregnancies and fewer clinic visits. This eases the burden on already overextended health systems and providers. If used for at least three years, the IUD, vasectomy, and implants are considered the three most cost-effective methods when all direct medical costs associated with the methods, side effects, and unintended pregnancies are taken into account, but most clients consider the first time cost of methods which is technically greater than any other methods. In this regard client may not tend to realize the overall cost, so that they will not use those methods (23). A study done on prevalence and factors affecting use of LAPMs in 2008, in Jinka, SNNPR, Ethiopia showed the prevalence of contraceptive among participants was about 39.5%. Of these LAMP contributes for 7.3%. Implant is the most widely used method from LAPMs contributing to almost half (50%) of the LAPMs users. There was very low (18%) knowledge of LAPMs in Jinka town. Among LAPMs, Implant is known by most (76.1%), and the least known is male sterilization (17.4%). A considerable proportion, (63.5%) of participants had intentions to use LAMP in the future (22).

Women with secondary or higher education and urban women show higher demand for and use of contraception than their less educated or rural women. Women in Addis Ababa have a TFR of 1.4, markedly below replacement-level fertility. Less than 10 % of women with no education use FP, though it is used by 53 percent of women with secondary education. Unmet contraceptive need is 35 percent for women without education, while only 17 percent of women with secondary or higher education have unmet need. (19) The contraceptive prevalence rate for married Ethiopian women is 15%. Almost all of these users are using modern methods. The common method used is injectable (10%) followed by the pill (3%). But the prevalence of long acting and permanent method is very low and it accounts; female sterilization 0.2%, intrauterine devices IUD 0.4%, Implants 2.0% among all women (8). Women and couples who want safe and effective protection against pregnancy would benefit from access to more contraceptive choices, including long-acting and permanent methods (LAPMs) these are: IUDs, implants, female sterilization, and vasectomy. LAPMs are convenient for users and effectively prevent pregnancy. Despite many advantages, LAPMs remain a relatively small, and sometimes missing, component of many national reproductive health and family planning program (9). Therefore, this study was designed to assess factors affecting utilization of long acting and permanent family planning methods in Arbaminch general hospital among women visiting family planning clinic.

## 2. METHODS AND MATERIALS

### 2.1 study setting

Arba Minch town is the capital of Gamo Gofa zone which is found at 505 K.M from Addis, 275 from Hawassa. There are two health centres and one hospital in the town. Institution Based cross sectional survey was conducted among women visiting family planning clinic in Arba Minch hospital. The study population were women getting family planning service from the hospital. Women visiting FP clinic and provided with contraceptive method during time of data collection and health service providers in the unit were included. But, woman, who is not there during data collection disables and those who cannot respond the questions were excluded.

### Sampling

Probability (systemic random sampling) method was used to get the required sample size. The required sample size for clients exit interview was determined by using the following assumptions to estimate sample size of single population proportion.

Expected prevalence (p) for LAPM is estimated to be 54%(EDHS 2011).

Confidence level = 95%, which means  $\alpha$  set at 0.05 and  $Z_{\alpha/2} = 1.96$  (value of Z at  $\alpha$

0.05 or critical value for normal distribution at 95% C.I.). Desired precision (d) = 5 % (0.05) 382 women require to carry out the study. The total number of women using family planning methods during the data collection period is 350. Then by using reduction formula finally 203 require to carry out the study.

### 2.3. Study variables

#### Dependent variable

Utilization of LAPM

#### Independent variables

**Socio- demographic characteristic** such as: Age, occupation,

Marital status, educational level and religion; parity

**Client characteristics** ;knowledge about LAPMs, myths and misconceptions, partner influence, choice of method, desire for another child, spacing, satisfaction with information given, waiting time, clinical procedure, method accepted, cost of methods, reason for visit.

**Provider characteristics:** sex, qualification, training, and supervision, counseling.

### 2.4. DATA COLLECTION

**Data collection tools:** Data was collected by interviewing women using interviewer administered structured questionnaires.

**Pre-test:** was done 10 day before the actual data collection. It included 5% of sample size and these subjects are not included in the study.

**Data analysis:** each items or components of the questionnaires was tallied, tabulated, and proportion was determined to give statically figures of factors influencing utilization LAPM.

**Data presentation:** Data was presented by tables, graphs and charts with brief explanation.

**Data quality control:** Questionnaires' was checked by each members of the group, and it will be standardized. Pre-test will be done 1 week before the actual data collection begin to check the consistency. Questionnaires was translated to Amharic during face-to-face interview again back to English. The collected data was checked and commented about its correctness by the group members each other.

### 2.5. Ethical consideration

The data collection was begin after getting approval for the project proposal from ERB (Ethical Review Board), of midwifery department of AMU. Ethical clearance or formal letter was obtained from the department of midwifery and will be given to administration of the hospital to get permission and verbal consent. Actual data collection began after getting permission from the hospital. Each woman was consented about the study beginning from greeting and introducing one self.

## 3. Result

### 3.1. Socio demographic factors

The response rate for this study was 94.5. From the respondent most of 68% (41.9%) of them are in the age range of 20-24 years (Table 1).

TABEL 1; Socio demographic status of women visiting FP clinic in Arbaminch hospital, Arbaminch town, Gamo Goffa, Ethiopia 2005.

Socio demographic status		FREQUENCY	%
AGE	15-19	15	9.25
	20-24	68	41.975
	25-29	45	27.7
	30-34	23	14.2
	35-39	11	6.79
Marital status	Married	123	79.93
	Un married	25	15.43
	Divorced	12	7.41
	Widowed	2	1.23
Occupation status	House wife	65	40.12
	Gov't employee	11	6.79
	Daily labor	26	16.05
	Merchant	18	11.1
	Student	32	19.75
	Unemployed	10	6.17
Religion	Orthodox	76	46.91
	Protestant	66	40.74
	Muslim	30	18.51
Educational status	No formal education	50	30.86
	1-6	45	27.75
	7-12	43	26.54
	>12	25	15.43

### 3.2 Demand related problems.

From the 162 respondent 116 (71.6%) of them have visited the hospital for FP service before. Regarding to the reason for arrival to the clinic during our study (40.12) of women come to take FP method that they are using. See the following table

Table 2 Reason of visit for women visiting FP clinic in Arba minch general hospital, Arbaminch town , Ethiopia 2013.

Reason for visiting	Frequency	%
To take FP they were using	65	40.12
To begin new FP method	48	24.62
To change to other form of FP	15	9.25
To being FP that discounts	13	8
To get information	21	13

Out of these 162 respondent 113 (69.753%) of them used FP method reason before for visit. The following bar graph .

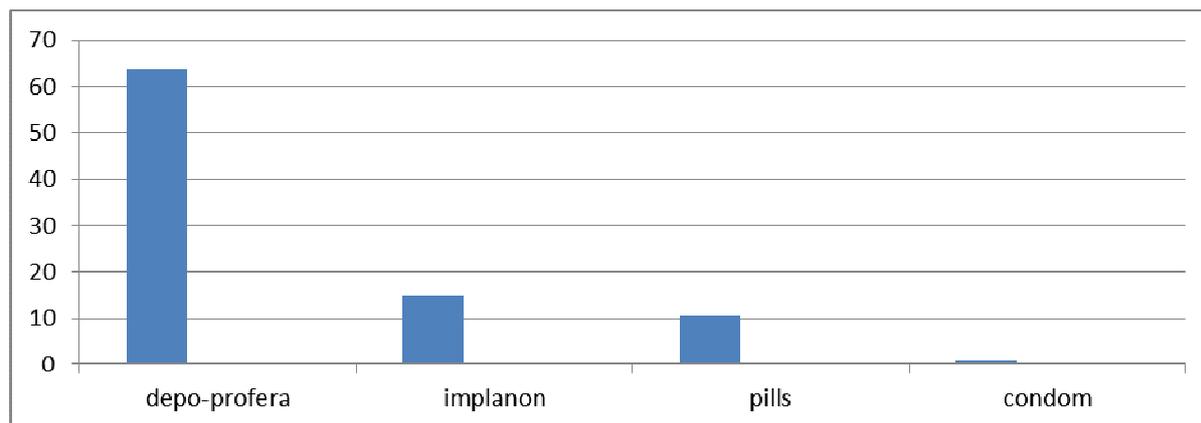


Fig 1 FP method that women use in Arbaminch hospital ,Arbaminch town ,Gamo Goffa, Ethiopia 2013

From these 113 users 84 (74.33) of them discussed about problems related with FP method, and 61(53.98%) of them experience problems with the method they used. Health providers tried to understand the problem for 42(68.85%) of the respondent. Out of women those experienced problem 25(59%) of them satisfied with the solution provided to them.

From the total of 113 respondent who have using FP method priviously 73(64.6%) of them come to take similar FP method. the following graph shows the types of FP method they want to take during the study.

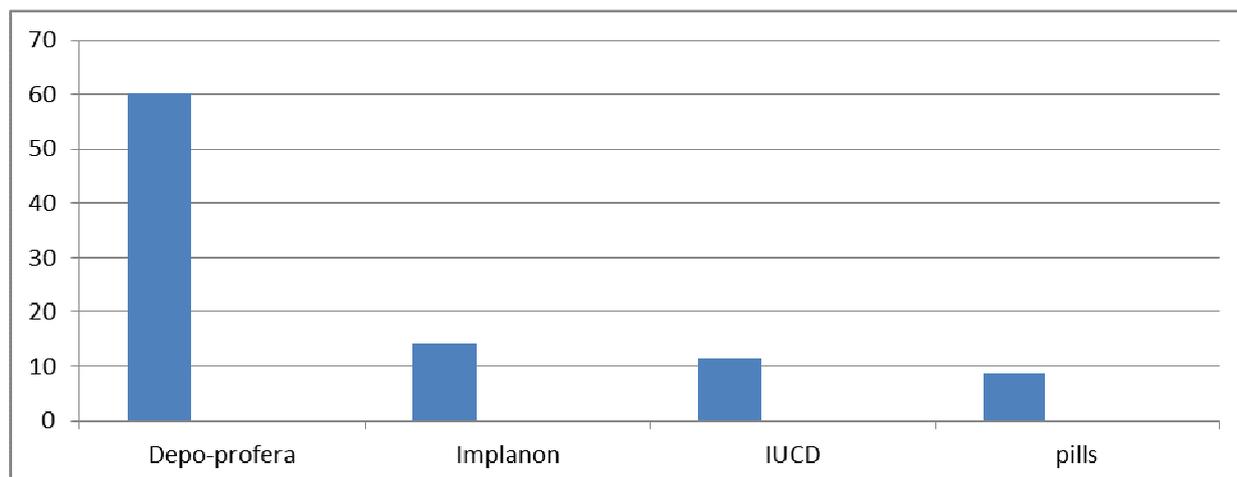


Fig 2 FP methods the women interested to take in Arbaminch hospital, Arbaminh town,Gamo Gofa,Ethiopia 2013.

Out of those 123 marred women 101 (82.2%) of them discuss with their husband. From these 66(65.5%) of them used their husband preference and the remaining 35 (34.5%) use their choice. among these who discussed with their partner 24 Of them use LAMPF, and only 9 from these who did not use LAPFM.

Table 3 methods of FP that health provider discus with women and the number of women participated in Arbaminch hospital,Arbaminch town,Gamo Goffa,Ethiopia 2013.

FP method	Frequency	%
Nor plans	116	71.6
Condom	121	74.5
IUCD	115	7.95
Depo-Provera	98	60.41
Tubal ligation	50	38.85

### 3.3. Awareness about LAPF

Out of 162 respondents 126(77.78%) of them have awareness about LAPF. From thus having awareness 108(85.71%),86(68.25%) and 50(39.68%) of them have awareness about norplants, IUCD and tubal ligation respectively. 85(67.5%) heard myths and misconception. Specific myths that were usually encountered were. Norplant and IUD cause infertility.

A high number of women among those who heard myths and misconceptions said that use of implants might lead to permanent sterility. Most women were concerned about the health effect of IUD, encountered IUD could cause bad smell of the vagina ('mehatsen yashetal'), the others said it could cause discomfort or pain during intercourse, headache and eat the uterus and make it thin. Also they heard that it could disappear in the uterus.

### 3.4. Service utilization

One hundred forty four (88.88%) of the respondents took FP methods during the study. From these women most 88(61.15%) of them took Depo-Provera. See the table below.

Table 3 Types of FP methods that the women provided during the study in Arba Minch general hospital, Arba Minch town, Gamo Goffa, Ethiopia 2005.

FP methods	Frequency	%
Depo-Provera	90	62.5
Imp anon	25	17.3
Pills	21	14.5
IUCD	8	5.55
Total	144	100

From 144 users 111(77.8%) of them took methods that they think from their home. The remaining 33(22.9%) of them change their idea because of counseling by health providers 26(78.78%) and health providers order them to take other method 7(21.2%).

Out these women provided with FP method 138(95.8%) of them get information about how to use the method with health providers. The following table shows topics of discussion and number of women participated.

Table 4 Topics of discussion and numbers of participants involved during study in Arba Minch general hospital, Arba Minch town, Gamo Gofa, Ethiopia 2005.

Topic	Frequency	%
How to use method	138	95.8
Side effects	130	90.27
Solution for problems	120	84.02
Prevention from Hiv/AIDS	144	100

All of the respondents got service with no pay. As they responded 115( 79.86%) of them get appropriate condition to ask question. 117(72.22%) of respondents get enough information and the remaining 26(16.05%) of them get little information.

Out of the total respondents 83(51%) of them got good approach from the health providers.

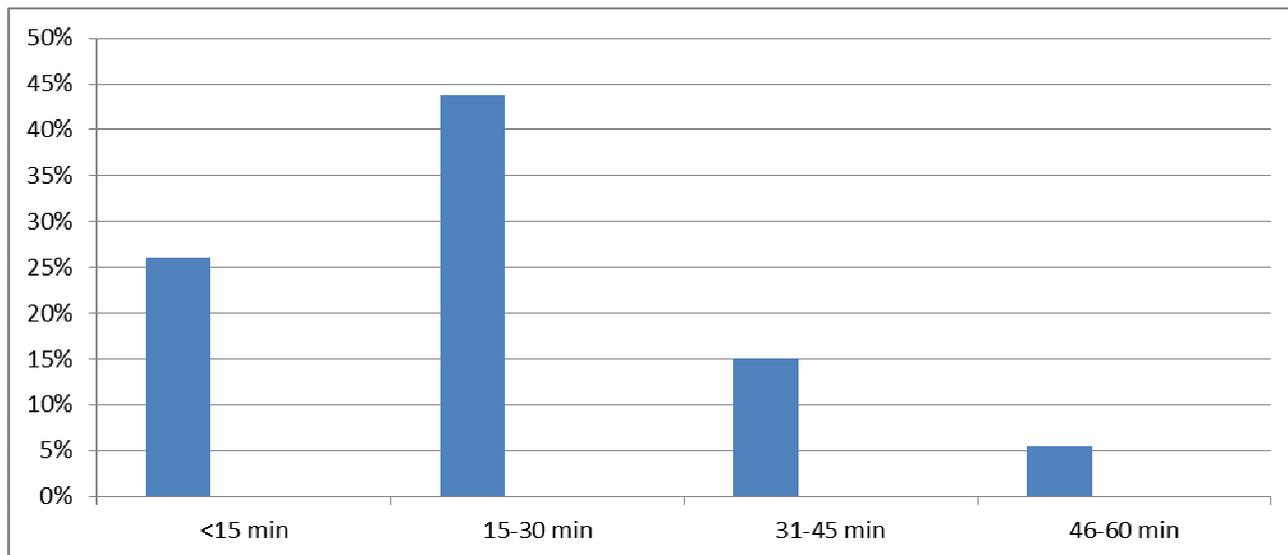


Fig 3 Length of time the client stayed to get service in Arba Minch general hospital, Arba Minch, town Gamo Goffa, Ethiopia 2005.

### 3.5. Child bearing Intention of women

The shows that most 65(40%) of women have 3-5 children. The following graph shows the number of children that the respondents have.

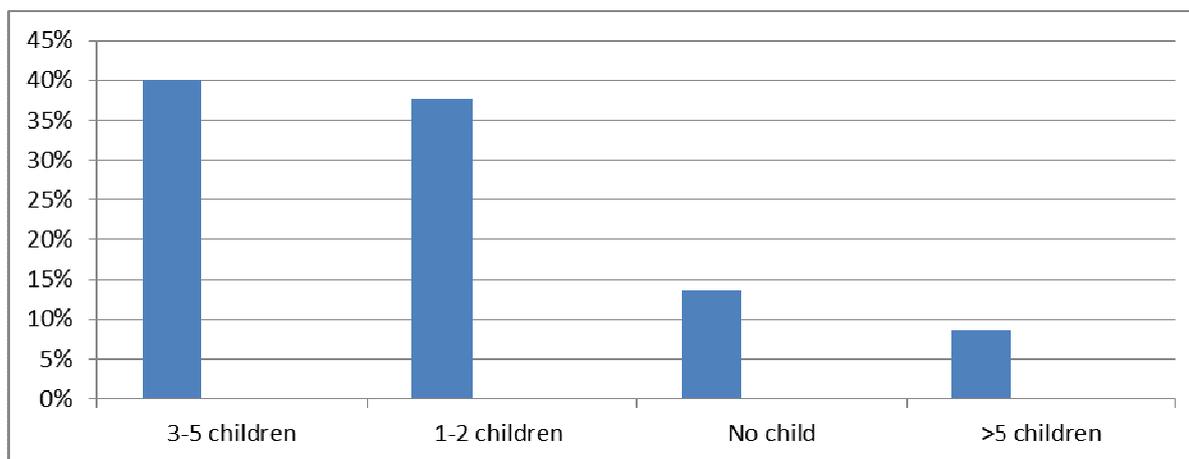


Fig 4 Number of children that the woman have using family planning service in Arbaminch general hospital, Arba Minch town, Gamo Goffa, Ethiopia 2005.

Among 144 respondents provided with different forms of family panning 71(53.4%) of them have intention to have children, the remaining 48(29%),14(12.5%) and 11(11.8%) of them responded as have no intention, wish of GOD and decision of their husband respectively.

## 4. Discussion

In this study utilization of long acting family planning methods was 22.9%. The commonly used long acting methods were IUCD 5.55% and Implanon 17.3%. This number is quite higher than study in Goba Oromia region (31). This figure has slightly higher than study done in Mekele (28). The acceptability of long acting reversible contraceptive was 16.4%. The main reasons mentioned for not accepting long acting reversible contraceptive was developing side effects, and fear of infertility after use. More than half of the women had a non-supportive

attitude towards long acting contraceptives. Mothers who had a supportive attitude towards long acting reversible contraceptive was the only independent predictors of acceptability of long acting contraceptive (28, 30) and our finding was quite lower than the finding from Adgirat, Tigray (29)

77.8% had awareness about LAFPM the education done may be contributed to this issue. The awareness or knowledge of the participants was high. Majority accessed the information from health providers.

More than half, 61.2% used short term FP method Depo provera. In most development countries the most common methods were short acting family planning methods. In nearly all of the studies conducted the utilization was high (28, 29, 30, 31).

On average more than half, 59% were satisfied with solutions given during their problems. But there is assumptions that were not based on scientific beliefs. Majority had misconception that permanent methods leads to infertility. This was in agreement with other studies conducted in the country. This may be the exact knowledge needed to be transferred well to the customers. This may also be an indication for the pre-service training capacity of the providers because there is a similar finding in all different cultures across the country.

## 5. Conclusion

In general, the most commonly used methods were short acting family planning methods. Less than one fourth clients use long acting methods.

## 6. Recommendations:

Based on the results there is a need to intervene the low utilizations of long acting family planning methods to increase the coverage.

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