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COLLEGE OF HEALTH SCIENCES
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

MATERNAL AND REPRODUCTIVE HEALTH NURSING POST GRADUATE

ASSESSMENT OF FACTORS INFLUENCING UTILIZATION OF LONG ACTING AND PERMANENT CONTRACEPTIVE METHODS AMONG MARRIED WOMEN (18-49 YEARS) OF REPRODUCTIVE AGE IN AMBO TOWN, OROMIA REGION, ETHIOPIA

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List of abbreviations

AOR-Adjusted Odd Ratio

FP-Family planning

UN-United Nations

CSA-Central statistical Agency

IUD-Intra uterine contraceptive device

LAPMs-Long acting and permanent contraceptives Methods

CPR-Contraceptive prevalence Rate

EDHS-Ethiopian Demographic Health Survey

WHO-World Health Organization

UNICEF-United Nations Children Fund

BC-Before Christ Birth

CDC-Center of Communicable Disease Control

FGAE-Family Guidance Association of Ethiopia

RH-Reproductive Health

MOH-Ministry of Health

UNFPA-United Nation Population Fund

TFR-Total Fertility Rate

LARC-Long acting Reversible Contraceptives

CBRH - Community Based Reproductive Health

SNNPR-Southern Nation and Nations people Republic
RRR-Relative Risk Ratio

P-prevalence

FGD- Focused Group Discussion

SPPS-Statistical package for social science

Epi Info-Epidemiological information

NGO-Non-Governmental Organization

TVT-Technical and vocational Training
Abstract

**Background:** Ethiopia is the second most populous country in Sub-Saharan Africa. Total Fertility Rate of Ethiopia is 4.8 children per women, population growth rate is estimated to be 2.7% per year and contraceptive prevalence rate is only 29% while the unmet need for family planning is 34%. Overall awareness of Family Planning methods is high, at 87%. The prevalence of long acting and permanent contraceptive methods (LAPMs) in Oromia region is low (26.2% for any method) which accounts for 24.9% for modern method and 0.3% users for intra-uterine contraceptive device (IUCD) and 0.2% for female sterilization.

**Objective:** To assess factors influencing utilization of long acting and permanent contraceptive methods and associated factors among women of age group 18-49 years in Ambo town, west shoa Zone, Ethiopia.

**Methods:** A descriptive cross-sectional community-based study was conducted between April 20- May /2014 in Ambo town of West Shoa Zone, Oromia National Regional State, and West Ethiopia. A total of 384 of married women were selected for the study with a multistage cluster sampling.

**Results:** The study consisted of quantitative and qualitative data. From the quantitative part of the study the response rate of the study was 100%. Majority of the married women at Ambo town used implants from LAMPS (57%) and few of them practiced the female sterilization and vasectomy. About one third of the married women (34%) had never practiced LAMPS and had negative attitude towards practicing of LAPMs. The overall prevalence of LAPMs use was 65.6% however; there were few users for female sterilization (6.2%) or male sterilization (.3%).
Mothers who had high income were 4 times more likely to use LAPMs as compared with those who had low income (AOR = 3.6, 95% CI of (1.494, 8.741). Mothers who were orthodox and were 5 times more likely to use LAPM as compared with those who had other religion (AOR = 4.715, 95% CI of (1.026, 21.67) and protestant were 8 times to others in practicing the LAMPs (AOR = 8.492, 95% CI of (1.710-42.173).

**Conclusion:** Educational level, Religion, payment for service and media, Number of pregnancy has statistical significance with utilization of long acting and permanent contraceptives methods. The prevalence of utilization of LAMPs for married women of Ambo town was 65.3%. More than half of the married women used implants which control Pregnancy for three years. A significant amount of the participants had low knowledge on permanent contraceptive particularly vasectomy. Few of married women use female sterilization and vasectomy.

**Recommendations**

The Health Berau of Ambo town should encourage public and private institutions to give Continuous health education on LAPMs, increase availability of LAPMs services and information education communication should focus on addressing the needs of long acting and permanent contraceptive methods of married women.
Introduction

Family planning (FP) could prevent as many as one in every three maternal deaths by allowing women to delay motherhood, space birth, avoid unintended pregnancies and abortion and stop childbearing when they reached their desired family size (1). As of July 2008, the world's population is estimated to be just over 6.684 billion. In line with population projections, this figure continues to grow at rates that were unprecedented before the 20th century, although the rate of increase has almost halved since its peak of 2.2 percent per year, which was reached in 1963(1,2).

Currently, 500 million women in the developing world are using some form of family planning, thereby preventing 187 million unintended pregnancies, 60 million unplanned births, 105 million induced abortions, 2.7 million infant deaths, 215,000 maternal deaths and 685,000 children from losing their mothers due to pregnancy related deaths each year. However, another 200 million women throughout the developing world who would like to delay or limit their births lack 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. Evidence suggests that more than half of all couples in the developing world are using family planning to delay, space or limit future pregnancies, yet the need for FP keeps increasing as the number of women of reproductive age continues to grow. An estimated 137 million women worldwide have unmet need for FP, that is, they are not using any method and report that they want to avoid pregnancy (2).

In the past 40 years, family-planning programmes have played a major part in raising the prevalence of contraceptive practice 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 (mainly in Africa), contraceptive practice remains low and fertility, population growth, and unmet need for family planning are high. The crosscutting contribution to the achievement of the Millennium Development Goals makes greater investment in family planning in these countries compelling (3).

Ethiopia is one of the developing countries where population issue has become a major area of concern during the last few decades. The country began family planning services through Family Guidance Association of Ethiopia, established in 1966. However, the fertility regulation efforts made so far in Ethiopia through Family Guidance Association and other organizations are minimal (4). Ethiopian Demographic and Health Survey of 2005 revealed that knowledge of contraception has remained consistently high in Ethiopia over the past five years with 88% of currently married women having heard of at least one method of contraception. However, actual contraceptive practice among women of reproductive age group remained very low (4, 5).

During the last few years, studies have documented that FP service is influenced by various factors which includes demographic characteristics, psychological, knowledge and attitudinal factors and the like (4). Others are social factors such as the organization of contraceptive health care, the quality of the information given by professionals and the influence of the mass media, which all play significant role in contraceptive (4,6,7).

The contraceptive prevalence rate for married Ethiopian women is 29 %. Almost all of these users are using modern methods. The most widely used method is injectables (21%). 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 (5).
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. They are also cost effective for programs over time, can result in substantial cost savings for governments, and contribute directly to reaching national and international health goals. Despite these advantages, LAPMs remain a relatively small, and sometimes missing, component of many national reproductive health and family planning programs. and the fact that FP services are made accessible nearly at all major urban areas in Ethiopia (including the study area, Ambo town) and in most instances at lower or no cost, the decision that lead women to use the services seems to occur within the context of their marriage, household and family setting. It is thus important to examine the extent to which women are making use of the services and answer why large majority of women do not use the services especially the LAMPs. The present study therefore aims at examining both the level and factors affecting the utilization of LAPMs contraceptive methods in one of the fast growing town of Ethiopia, Ambo.

**Statement of the problem**

Population growth is a major concern in developing countries in view of its impact on broader socio-economic development. In Sub-Saharan Africa, including Ethiopia continued high fertility levels, along with declining mortality rates, have resulted in a wide gap between birth and death rates, and subsequently in high annual population growth rate. Factors contributing to high fertility include low socio-economic development, deeply ingrained cultural values for large family size, and low levels of contraception.
An estimated 358,000 maternal deaths occurred worldwide in 2008, a 34% decline from the levels of 1990. Despite this decline, developing countries continued to account for 99% (355,000) of the deaths. Sub-Saharan Africa and South Asia accounted for 87% (313,000) of global maternal deaths (8). 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 (6).

Women and couples who want safe and effective protection against pregnancy would benefit from access to more contraceptive choices, including long acting and permanent contraceptive methods (LAPMs). Despite of these advantages, LAPMs are given in few areas and sometimes are missing component of many national reproductive health and family planning programs.

More than 350 million couples worldwide have limited or no access to effective and affordable FP, especially to LAPMs (4). Thirteen percent of the world’s married women use the Intrauterine Contraceptive Device (IUCD) as their method of contraception (9, 10).

In developing countries, 20 to 30% of women who use oral contraceptives or injectables stop within two years of starting because of side effects or other health concerns. Many of these women could benefit from switching to LAPMs (11). In Sub-Saharan Africa a quarter of women and couples have unmet needs for contraception (6, 8). 14% used modern contraceptives and most births in the region are still spaced closer than two years (9).

Ethiopia is the second most populous nation in Africa. Its population has increased nearly seven times from 11.8 million at the beginning of the 20th century to about 80 million today (4). The total fertility rate of Ethiopia is 4.8 children per women, population growth rate is estimated at 2.7% per year, contraceptive prevalence rate (CPR) is only 15% and an unmet need for family
planning is 34 percent. Implants and female sterilization are the least used methods of modern contraceptive each accounting only for 0.2 %.(9). The prevalence of LAPMs use in Oromia region is rather very as low as IUCD 0.3% and female sterilization 0.2 %( 10). The overall the percentage of women who are currently using any method of contraceptive for Oromia region is 26.2 % (9).

A number of factors could contribute to the lack of availability and access to LAPMs. Evidences in other countries and within Ethiopia showed that many factors including fertility related reason, opposition to use, lack of knowledge, method related reason could act as barriers to LAPMs use (10). Health personnel may not provide LAPMs to clients because of unnecessary or outdated restrictions, such as age or the number of children a woman has (3). Myths and misconceptions are also widespread for these methods (9).

There is no study that documented factors associated with very low use of LAPMs in oromia region, ambo town. This study assessed factors associated with utilization of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive methods among married women of reproductive age (18-49 years) in Ambo town, Oromia Region, West Ethiopia.
Rationale and Significance of the Study

Contraceptive use has increased worldwide over the last decade. Yet, Africa—like many other regions of the developing world—continues to have a high unmet need for family planning. Approximately 25 percent of women and couples in sub-Saharan Africa who want to space or limit their births are not using any form of contraception. More than half of the people in Africa are younger than 25 years old, so unmet need is only expected to increase as these individuals enter their reproductive years. Over time, the use of LAPMs has not kept pace with that of short-acting methods, such as oral contraceptives and injectables (11, 12). Data from demographic and health surveys from four sub-Saharan countries show that the proportion of women currently using LAPMs is significantly lower than the proportion using short-acting methods (2). In many countries in the region, including Ethiopia, fewer than 5 percent of women who are using contraception are using LAPMs (5). Thus there is a need to assess factors influencing for LAPMs and associated factors in diverse developing country setting including Ethiopia, in which Ambo town is currently found.

The findings or results obtained from this research can be useful in many ways. Governmental and non-governmental organizations will take intervention measures and set appropriate plans to reduce and improve the existing level of awareness and practice of long acting and permanent contraceptives by identifying and taking measurement on factors which influences the utilization of LAPMs.

And it helps individuals (women and men) to have enough knowledge about the practice of family planning. It is hoped that this study will contribute to the improvement of family planning services in the town through assessing and identifying factors influencing the utilization of long acting and permanent contraceptives.
4. Literature Review

4.1 Overview of Family Planning

According WHO, Family planning is defined as birth spacing, preventing unwanted pregnancies or secure wanted pregnancy (6). Family planning is adopted voluntarily through the practice of contraception or other methods of birth control on the basis of knowledge, attitude and responsible decision by individuals and couples, in order to promote the health welfare of the family and contribute to the social and economic development of the country (6, 10).

Family planning has been identified by the World Health Organization (WHO) as one of the six essential health interventions needed to achieve safe motherhood and by United Nations Children Fund (UNICEF) as one of seven strategies for child survival. Both women and men’s use of contraception have been going on for centuries. Traditional methods such as coitus interrupts is described in Bible, periodic abstinence was used in ancient India and the precursor to the condom was used by the Egyptians back in 1350 BC (6).

The practices of modern contraceptive methods offer many advantages in health and economy of the couple and the country. The primary aim of family planning enables women and men to plan their families and space their children through the use of modern contraceptives (1,2,9).

Raising a child requires significant amounts of resources: time, social, financial, and environmental. "Family planning benefits the health and well-being of women and families throughout the world. Most of the countries with lowest rates of contraceptive use, highest maternal, infant, and child mortality rates, and highest fertility rates are in Africa. Only about 30% of all women use birth control, although over half of all African women would like to use birth control if it was available. China's one-child policy forces couples to have no more than
one child. Beginning in 1979, the policy was instated to control the rapid population growth that was occurring in the nation at that time. (9)

4.2 Situation of family planning in the world

The era of modern contraception began in 1960s, when both the birth control pill and intrauterine contraceptive device (IUCD) became available. These effective and convenient contraceptive methods resulted in widespread changes in birth, fertility and demography in the United States. Between 1800 and 1900, the family size in the United States declined from 7.0 to 3.5 children, and by 1933, the average family size had declined to 2.3 children. Since 1972, the average family size had leveled off at approximately two children, with increasing safety, efficacy, diversity, accessibility and use of contraceptive methods.

Between 1990 and 1994, the global average contraceptive use by married women of reproductive age rose from 57% to 60% (13).

Even in developed countries, the situation is far from ideal and policies and provision of services vary considerably within each country. Unwanted side effects, inconvenience of the chosen method, and media scares about safety of modern contraceptives are some of the issues that limit their acceptability. Poor contraceptive use is further compounded by ignorance among users and providers of wide range of methods available now and likely to be so in the future. Giving women reproductive autonomy through comprehensive and up-to date information about all methods is vital for successful and long-term use of contraception (empowering the women and availing information and services where they can get easily help women’s to use LAMPs). (14, 15).
4.3 Family planning in the Ethiopia

Modern FP services in Ethiopia were pioneered by the Family Guidance Association of Ethiopia (FGAE), which was established in 1966. FGAE’s first FP services were provided from a single-room clinic run by one nurse. FGAE’s programmatic activities and services gradually spread all over the country, with a network of eight branches, 18 clinics, 26 youth centers, 740 community-based reproductive health (RH) service outlets, 242 outreach sites, six marketplace sites, and eight workplace sites. The ministry of health (MOH) also began to enhance the effort through provision of maternal and child health (MCH) and FP services in health facilities. Since 1980, the MOH further expanded its FP services through cyclic country support programs by the United Nations Population Fund (UNFPA) and other stakeholders (16).

Knowledge of FP has increased to 87% among currently married women. However, FP use is still lagging, at 13.9% in 2005—though a recent survey with representative samples from Ethiopia’s four most populous regions demonstrated the CPR to have reached 32% there (17).

Knowledge about FP and about HIV is higher among men than among women. Knowledge among all women about any method of contraception is 86.1%, compared with 91% among all men. The average number of contraceptive methods known is 2.7 among women, compared with 3.6 among men. Yet women bear most of the burden of using FP methods: Male-dependent or male-dominated contraceptive methods account only for 1.1% among the 13.9% CPR. This is despite better knowledge about male-dependent methods than about female-dependent methods (7).

Early marriage is common in Ethiopia. Women aged 15–49 years constitute 23.4% of the total population. Among women aged 25–29 at the time of the 2005 survey, 61.7% had been married
by 18 years of age. In addition, 12.7% of 15–19-year-olds were already married by age 15. (This is despite the fact that the legal age at marriage in Ethiopia is 18 years.) Among adolescents aged 15–19, 20.4% had had a live birth by age 18. Nearly half (46.1%) of women aged 20–24 in 2005 had given birth before they were 20 years old (7).

The total fertility rate (TFR) in Ethiopia is 4.8 lifetime births per woman (EDHS 2011). The contraceptive acceptance rate is 56.2%. The contraceptive prevalence rate (CPR) among married women is 13.9% in 2005 and 32% in 2008 (Central Statistical Agency [Ethiopia] and ORC Macro, 2006; Health and Health related indicators 2008/2009, FMOH, L10K study). Maternal deaths accounted for 21% of all deaths among women aged 15–49 in 2005 (9).

4.4 Trends in TFR and CPR in Ethiopia

Ethiopia has set its own goals for population, which is articulated in the population policy and HSDPIV as a TFR of 4.0 and a CPR of 65% by 2015. The population size has increased by five and one-half times in a little over a century, from 11.5 million in 1900 to 74 million in 2007. The demographic transitions in Ethiopia are characterized by an initial slow growth at a rate of less than 1.5% per annum until the 1940s, followed by acceleration between 1955 and 1995 up to 3%, after which the annual growth rate declined slowly to the current level of 2.6%. The population doubling time currently is estimated to be 23 years (9).

The increase in population size is mainly the result of two very important demographic events: the gradual decline in the crude death rate over the last four decades, from around 30 per 1,000 to about 15 per 1,000; and the maintenance of the crude birth rate at between 40 and 50 births per 1,000 from 1960 to 2000. The country’s TFR increased over three decades, from about six lifetime births per woman to 7.7 in the 1990s, after which it gradually declined to 4.8 by 2011.
(Central Statistical Agency [Ethiopia] and ORC Macro, 2006). Although the urban TFR started declining as early as 1984 and was half of the rural TFR by 2000, the decline in rural TFR has not only lagged behind but has also been small, having dropped by only one birth in a decade. Another problem is that couples in Ethiopia rely more on short-term methods of contraception than on long-acting and permanent methods (12,15).

4.5 Use of LAPMs

Long-acting reversible contraceptives (LARCs) are novel medical devices that are highly effective at preventing unintended pregnancy over long periods of time, but are easily reversible, allowing for pregnancy later in life. These methods function to eliminate the effect of user error on contraceptive failure rates – they can claim virtually no distinction between perfect and typical use failure rates. In a 2012 study, Winner and colleagues (2012) enrolled a prospective cohort of 7,486 women in a 3 year study where participants were provider their choice of hormonal contraception at no cost. Contraceptive failure rates were found to be much higher among those using the patch, pill, and ring compared with LARC methods even after adjusting, for age, education, and pregnancy history (13).

The 2002 Maternal and Child Health Survey in Guatemala showed that 43% of married women in fertile age use a contraceptive method, 34% of which use a modern method. Among these users, the most popular methods are female sterilization (17.8%), injectables (9.0%), oral contraceptives (3.4%), and condoms (2.3%). Only 1.9% of women living in union use IUDs, a smaller figure than that recorded in 1999 (2.2%) and in 1995 (2.8%). More women in urban areas (3.4%) use IUDs compared to women in rural areas (0.9%); more non-indigenous use IUDs (2.4%) than indigenous women (0.4%). Therefore, a population group that has greater access to services and a comparatively higher socioeconomic level uses the IUD (12).
In Ethiopia in areas where strong donor supported family planning programs were carried out through CBRH programs, use of LAPMs is much higher than the national one (8).

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 LAPMs 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 LAPMs in the future (13).

4.5.1. Factors associated with demand for LAPMs

4.5.1.1. Service quality

One of the major factors associated with demand for LAPMs is quality of family planning service. Improved quality of care is an increasingly important goal of international family planning programs, for a variety of compelling reasons. From a human welfare perspective, all clients, no matter how poor, deserve courteous treatment, correct information, safe medical conditions and reliable products. It also has been argued that providing such quality services will lead to increased service utilization by more committed users, eventually resulting in higher contraceptive prevalence and lower fertility. (14) A study done on family planning services quality as a determinant of use of IUD in Egypt showed that the unadjusted relative risk ratios the quality of family planning services had a significant positive effect on the use of IUDs from public sources (RRR = 1.23; p < 0.05). (18)
4.5.1.2. Perceived Cost

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 (15).

4.5.1.3. Educational status

Women with secondary or higher education and urban women show higher demand for and use of contraception than their less educated or rural counterparts, and they are nearing the replacement-level of fertility (TFR of 2.2-2.4). Women in Addis Ababa have a TFR of 1.4, markedly below replacement-level fertility and more in common with Italy or Singapore. Only 10 percent of women with no education use contraception, though it is used by 53 percent of women with secondary education (7).

Unmet contraceptive need is 35 percent for women without education, while only 17 percent of women with secondary or higher education have unmet need. (11) In addition, the study done in Guatemala showed that more women with high school or higher education (5.2%) use IUDs than women with elementary education (1.4%) or without formal schooling (0.4%) (12).
4.5.1.4. Myths and misconceptions

A study done on LAPMs in Uganda showed that poor knowledge about the effect of the use of long-term methods on fertility as well as poor understanding of the procedures, particularly for vasectomy, have led to the fuelling of myths and beliefs that hinder the successful promotion and adoption of the services. Myths and beliefs like: - Vasectomy involves removal of the testicles and that it thus renders a man unable to achieve an erection, man who has undergone vasectomy would also be unable to ejaculate and so would suffer weight gain, possibly shrinking of the penis and loss of interest in sex. Norplant and tubal legation causes weakness, weight gain, possibly loss of menstrual cycle, vaginal dryness (loss of sexual fluids) and loss of interest in sex (16).

4.5.1.5. Partner influence and Age

Perceived spousal support for contraception and support through discussion about family planning have been found to be factors affecting the use of family planning services. The retrospective study on vasectomy users in Uganda found that in only about one half of the cases (44.4%) the decision to opt for vasectomy had been shared by both partners (17).

Studies on family planning in developing countries have long focused on women as the subject of interest. Very little work in this area has focused on men. It is now increasingly recognized that the actions required achieving improvements in reproductive health outcomes in general and maternal health in particular should also encourage men’s active participation (11). The biological and social interdependence between husbands and wives in their plan for the family and practice of contraception makes the importance of including men in this area of research (11, 19, and 20)
4.6 Factors associated with use of contraception

The contraceptive prevalence in most developing countries remains very low. Many developing countries have substantial geographic variations in contraceptive use, although the factors shaping these variations are little understood. Previous studies suggested that variations in contraceptive use typically remain after accounting for individual and household factors. Contextual factors such as community-level cultural beliefs, the presence and quality of reproductive health services, the physical characteristics of the area, macroeconomic factors, and the presence of transport routes have been suggested as causes of geographic variations in contraceptive use (21, 22, 23).

According to Ethiopian Demographic and Health Survey 2011, Women of educated and higher family monthly incomes have a much higher increased chance of contraceptive use compared to women with less educated and low monthly incomes. Current contraceptive use increases with women’s education. Twenty-two percent of women with no education report current use of any method, compared with 68 percent of women with more than secondary education. Similarly, current use of any contraceptive method increases with wealth, from 13 percent of women in the lowest quintile to 52 percent of women in the highest quintile (24, 25).
5. Objective of the study

5.1. General objectives
To assess factors influencing utilization of long acting and permanent contraceptive methods and associated factors among women of age group 18-49 years in Ambo town, west shoa Zone, Ethiopia.

5.2. Specific objectives

- To assess socio-cultural, economic, demographic factors influencing Long acting and permanent contraceptives utilization among married women.
- To determine Predictor of long acting and permanent contraceptives among married women.
- To Examine Prevalence of long acting and permanent contraceptives among married women.
- To assess potential barriers to LAPMs acceptance.
- To assess the knowledge, practice and attitude toward LAPMs.
6. Method and Materials

6.1. Study Area and Period
Ambo is one of the 180 Woredas in the Oromia Region of Ethiopia. Part of the West Shewa Zone, Ambo is located 112 Kms West of the capital Addis Ababa, on the road to Nekemt. The town has an estimated total population of 260,193 of whom 131,922 are men and 128,271 are women. The Health system is represented by one regional hospital, two health centers and four governmental health posts. In addition, there are higher and lower clinics owned by private sectors. The town also has one established university, one technical & vocational school, one preparatory and two high schools, and there are other private owned colleges.

The data was collected from March 10-April 10, 2014.

6.2. Study design
A descriptive cross-sectional community-based study was conducted in Ambo town of West Shoa Zone, Oromia National Regional State, and West Ethiopia. The study also used qualitative study design to supplement quantitative data. Thus, both quantitative and qualitative methods of data collection were employed on married women of 18-49 years.

6.3. Source and study population

6.3.1 Source population

For quantitative study: - The source population were all married women in the age group of 18-49 years, who resides in Ambo town at the time of study.

For qualitative study:- All married women and men in age group 18-49 years who stayed overnight at the house hold at the time of study until data was saturated.
6.3.2 Study population

*For quantitative study:* - All sampled married women in the age group 18-49 years, were selected for the study in the study area.

*Inclusion criteria:* - All married women aged 18-49 years old who reside in Ambo town at least for two months.

*Exclusion criteria:* - All married women of aged below 18 or above 49 years women

- When two or more married women were encountered in one household,

Only one woman was considered in the study on random to avoid intra-class correlation.

*For qualitative study:* - married women in age group 18-49 years who participated actively in family planning activities were purposively selected.

6.4. Sample size and Sampling procedure:

6.4.1 Sample size

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

Assumptions: 95% confidence level, margin of error (0.05), \( p = 0.5 \) was substituted in the following single population proportion formula.

\[
n = \left( \frac{Z_{\alpha/2}}{d} \right)^2 p (1-p)
\]
Where: \( n \) = required sample sizes

\[
Z_{\alpha/2} = \text{critical value for normal distribution at 95% confidence}
\]

Level which equals to 1.96 (\( z \) value at alpha = 0.05)

\( P \) = Prevalence of married women of reproductive age 18-49 using LPM

\( d \) = an absolute precision (margin of error 5%).

The formula yields \( n = 384 \).

6.4.2. Sampling procedure

The required sample size of 384 was selected from the list of 13,421 households (Get the number by the formula, House hold=Total population/3.8% for Oromia region) by simple random sampling technique.

A multistage cluster sampling technique was used first to obtain the required sample size. A total of 2 kebeles was randomly selected by lottery method. From each kebele 192 households were required as the study subject. Assuming that the kebeles have uniform number of households, and each Kebele was organized into 4 equal sub-units called Gots or Ketenas. And from each Gots or ketena 48 households would be selected until the total required sample size obtained by using systematic random sampling. After the first household was selected, we would proceed in every \( k=N/n \) households (random walk method). All 18-45 years old, married women in the selected households were studied.
Fig: 1 Schematic representation of the sampling procedure for the selection of married women of reproductive age in Ambo Town, West Shoa, Ethiopia, 2014

Total sample size = 384
6.5. Data collection

For quantitative study

A semi-structured, pre-tested, and standardized questionnaire used for data collection. The instrument first prepared in English, translated to Afan Oromo and back to English again to check validity. Four (4) data collectors and two supervisors were assigned. One day intensive training was given to the data collectors and supervisors before the pre-test undertaken. The interviewers would be the same gender of the respondents in order to decrease embarrassment. During the data collection respondents were arranged in a manner that can ensure their privacy during the FGDs.

Qualitative Part

For the FGD study: - A total of 16 focus group participants were purposely selected from 2 Kebeles. Each FGD consisted of 8 participants composed of married women of reproductive age group and married men. Selection was performed by purposive sampling technique taking into consideration sex and educational status for convenient individuals during FGD. FGD consist of similar ideas with questionnaire but also the guide-line help more to probe ideas which was difficult to collect using only quantitative methods i.e beliefs and attitude questions.

The discussion was moderated by the principal investigator and one other experienced professional in FGD as assistance. The purpose, aim and rules of the discussion was explained to the participants and verbal consent obtained. Special attention was paid to maintaining privacy and confidentiality during the discussions. Tape recorded as well as hand in hand notes were taken both by the principal investigator and assistant during focus group discussion.
6.6. Data management and quality control measures

The instrument was derived from standard data collection tools prepared by EDHS & WHO. Before the actual data collection, the questionnaire was pre-tested on 5% (33 Married women) in Gedo town which is 70 km far from study area and found on west from Ambo town. Based on the pre-test, the time needed to complete interview and the number of data collectors in need was estimated. The principal investigator trained 4 clinical nurse students as data collectors and 2 urban health extension workers as supervisors for two consecutive days on objective, data collection tools and interview techniques.

The interview was conducted in a place where the Woman feels free to express her feelings and ideas.

After analyzing the pre-test result, necessary modifications was made accordingly before using it in the actual survey. Principal investigator closely followed the day-to-day data collection process and ensured completeness and consistency of the collected questionnaire daily.

6.7 Study variables

6.7.1 Dependant variables

Utilization of long acting and permanent contraceptives

6.7.2. Independent variables

➢ Age
➢ Religion
➢ Education
➢ Ethnicity
➢ Marital status
➢ Incomes
➢ Family size
➢ Knowledge about LAPMs
➢ Attitudes about LAPMs
➢ Parity
➢ Side effects of LAPMS

6.8. Operational Definitions

Contraceptive utilization: - The utilization of family plans method to regulate the number and spacing of children in a family through the practice of contraceptive or other method of birth control.

Knowledge of contraception methods: a woman aware of at least one method of

Contraceptives

Residents of kebele: Those who lived in the selected kebeles for more than six month

6.9. Data Entry and Analysis

For quantitative data

Data was cleaned, coded and entered, and analyzed using SPSS for Windows versions 16.0. Both descriptive and analytical statistical procedures were utilized. Appropriate statistical tests were done by software package and interpretations were done accordingly. Moreover, logistic regression was employed to assessment factors influencing the utilization of LAPMs use. Statistical significance was declared for variables outcomes of the P-value less than 0.05.
For qualitative data

Data was transcribed into an English text by the principal investigator by replaying the tape recorder. The different ideas in the text were clearly coded by thematic areas and thematic framework analyses employed to extract meanings out of the texts manually. The results presented in narratives in Triangulation with quantitative data.

6.10. Ethical clearance

It was obtained from the Ethical committee of the Department of Nursing and Midwifery, College of Health Sciences, School of Allied Health Sciences of Addis Ababa University. Officials at different levels including Ambo town municipality and administrative office and selected Kebeles were communicated through formal letters by the School of allied health science Department of Nursing and Midwifery, AAU. Participants were informed about the purpose and objective of the study. They were also told that they had every right to discontinue or refuse to participate in the study and verbal consent was obtained from each study participant. Confidentiality of the information was assured and privacy was maintained.

6.11. Dissemination of results

The final report will be presented as partial fulfillment of degree of Master of Maternity and Reproductive Health Nursing to the Department of Nursing and Midwifery, AAU and the results of this study will be communicated to the community of West Shoa, Ambo town administration, and to relevant NGOs working on family planning. It will also be accessed to interested researchers and academicians through the department of Nursing and Midwifery, College of Health Sciences, School of Health School of Allied Health Sciences of Addis Ababa.
6.12. Measurement

Married women’s knowledge was measured by the total number of correct answers to 10 items on knowledge with a minimum score of 0 and maximum of 10. To measure the knowledge it was categorized based on the percent of knowledge of the distinct characteristics of LAMPs as: “high” - those who knew 80% and above, “moderate” those who know 60 - 79% and “low” those who knew less than 60%.

Items on attitude of married women about the use of LAPM were grouped in to three as follows: “strongly agrees/agree” were labeled as “agree” and “strongly disagree/disagree” as “disagree”, while “not sure” was categorized as it is. To measure the attitude of the married women two categories were assigned: Positive Attitude - those who scored above the mean on attitude items and “Negative Attitude” - those who scored the mean or below mean to attitude items.

For analyzing the attitude, married women to the use of LAPM were grouped into three “strongly agrees” and “agree” were grouped together as “agree”, “strongly dis-agree” and “disagree” were grouped together as “dis-agree” while not sure is categorized as it is. To measure the attitude of the married women, two categories were assigned: Positive Attitude - those who scores above mean to the correct answers from attitude measuring LAPMs questions. Negative Attitude - those who score mean and below mean to the correct answers from attitude measuring LAPMs questions. Finally, married women’s use or not use of long acting and permanent contraceptive methods among study units was set as binary outcome variable.
7. Results

7.1. Socio-demographic characteristics of Married Women

The total response rate of the survey was 100%, out of 384 married women. The majority of the respondents were oromo (60.4%) and Amhara (18.2%) in ethnicity. The mean age of the married women was 30.5260 (SD = 7.09167) years. The majorities were Orthodox Christians (48.4%), had attended formal education (75.5%) and most (25%) were housewives.

The majority monthly income of the family was greater five hundred Ethiopian Birr (33.1%). Out of the total married women 265 (69%) had Radio and Television but 119 (31%) had not owe radio and television respectively (Table1).

Table: 1 Socio-demographic characteristics of Married Women, Ambo town, 2014

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (Number)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of married women (n=384)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>97</td>
<td>25.3</td>
</tr>
<tr>
<td>25-34</td>
<td>159</td>
<td>41.4</td>
</tr>
<tr>
<td>35-44</td>
<td>124</td>
<td>32.3</td>
</tr>
<tr>
<td>&gt;=45</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Religion of the married women (n=384)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthodox</td>
<td>186</td>
<td>48.4</td>
</tr>
<tr>
<td>Catholic</td>
<td>25</td>
<td>6.5</td>
</tr>
<tr>
<td>Protestant</td>
<td>112</td>
<td>29.2</td>
</tr>
<tr>
<td>Muslim</td>
<td>44</td>
<td>11.5</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Ethnicity (n=384)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oromo</td>
<td>232</td>
<td>60.4</td>
</tr>
<tr>
<td>Tigré</td>
<td>37</td>
<td>9.6</td>
</tr>
<tr>
<td>Language</td>
<td>No.</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------</td>
<td>-----</td>
<td>------------</td>
</tr>
<tr>
<td>Amhara</td>
<td>70</td>
<td>18.2</td>
</tr>
<tr>
<td>Others</td>
<td>45</td>
<td>11.7</td>
</tr>
</tbody>
</table>

**Educational level (n=384)**

<table>
<thead>
<tr>
<th>Level</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>94</td>
<td>24.5</td>
</tr>
<tr>
<td>Read &amp; write</td>
<td>57</td>
<td>14.8</td>
</tr>
<tr>
<td>Grade 1-4</td>
<td>33</td>
<td>8.6</td>
</tr>
<tr>
<td>grade 5-8</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>grade 9-10</td>
<td>44</td>
<td>11.5</td>
</tr>
<tr>
<td>grade 11-12</td>
<td>56</td>
<td>14.6</td>
</tr>
<tr>
<td>TVT</td>
<td>48</td>
<td>12.5</td>
</tr>
<tr>
<td>College or university</td>
<td>46</td>
<td>12.0</td>
</tr>
</tbody>
</table>

**Occupation (n=384)**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>76</td>
<td>19.8</td>
</tr>
<tr>
<td>Merchant</td>
<td>96</td>
<td>25.0</td>
</tr>
<tr>
<td>Gov-employee</td>
<td>70</td>
<td>18.2</td>
</tr>
<tr>
<td>NGO</td>
<td>52</td>
<td>13.5</td>
</tr>
<tr>
<td>Daily labor</td>
<td>88</td>
<td>22.9</td>
</tr>
</tbody>
</table>

**Income**

<table>
<thead>
<tr>
<th>Income</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;150 birr</td>
<td>88</td>
<td>22.9</td>
</tr>
<tr>
<td>150-299 birr</td>
<td>79</td>
<td>20.6</td>
</tr>
<tr>
<td>300-499</td>
<td>90</td>
<td>23.4</td>
</tr>
<tr>
<td>&gt;= 500</td>
<td>127</td>
<td>33.1</td>
</tr>
</tbody>
</table>

**Media they use (n=384)**

<table>
<thead>
<tr>
<th>Media</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own TV or radio</td>
<td>265</td>
<td>69.0</td>
</tr>
<tr>
<td>Do not owe TV or radio</td>
<td>119</td>
<td>31.0</td>
</tr>
</tbody>
</table>

Regarding the level of education the respondents 24.5% were illiterate where as 14.6 % and 12% of them were grade 11-12 and College or university respectively. Majority of the married women were merchant (25%) and 22.5 of them were daily labor in occupation (Table -1).
7.2 Reproductive history of married women

Majority of the respondents had history of having had pregnancy more than two 354(92.2 %), and majority of them were married after age 18 years 218(56.8%) as well More than 83% of them got the delivery after age 18 years. Women who had experienced abortion two and above were about 35.4%.

Desire for additional children was asked and the majority respondents 230(59.9%) replied that they have few children and need more sons and responded as the decision were made by wife and husband agreement jointly (44.3%) but 29.9% responded as wife only decide to have children where as 25.3% by husband (Table -2).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at marriage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;18</td>
<td>166</td>
<td>43.2</td>
</tr>
<tr>
<td>&gt;=18</td>
<td>218</td>
<td>56.8</td>
</tr>
<tr>
<td><strong>Age at delivery(n=384)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;18</td>
<td>62</td>
<td>16.1</td>
</tr>
<tr>
<td>&gt;=18</td>
<td>322</td>
<td>83.9</td>
</tr>
<tr>
<td><strong>Number of pregnancy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td>Two and above</td>
<td>354</td>
<td>92.2</td>
</tr>
<tr>
<td><strong>Number of abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>119</td>
<td>31.0</td>
</tr>
<tr>
<td>Two and above</td>
<td>136</td>
<td>35.4</td>
</tr>
<tr>
<td><strong>Responsible for deciding to have children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wife</td>
<td>115</td>
<td>29.9</td>
</tr>
<tr>
<td>Husband</td>
<td>97</td>
<td>25.3</td>
</tr>
</tbody>
</table>
Jointly
Friends /Relatives
Desire to have children (n=384)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jointly</td>
<td>170</td>
<td>44.3</td>
</tr>
<tr>
<td>Friends /Relatives</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Desire to have children</td>
<td>230</td>
<td>59.9</td>
</tr>
<tr>
<td>don't want more children</td>
<td>154</td>
<td>40.1</td>
</tr>
</tbody>
</table>

7.3 Use of LAMPs by Married Women
The majority of women used implants (57%) followed by IUCD (6.2%). The results of FGD also support this. A focus group participant said “...I heard about male contraceptive method just now. Only females are using all methods like Implant, IUCD and female sterilization still now…” (35 years old, male, protestant). The prevalence of implants and IUCD users was 57 and 6.2 % respectively. The majority (65.1%) of the married women gets the service from public institution, NGO (14.3%) and private organization (20.3%). Eighty nine point three percent of the married women got the contraceptives for free, while 10.7 % paid to get it and all the married women told that the fee was affordable.

The main reason cited by the married women for not using LAMPS was the use of another method of contraceptive 119 (28.4%), developing side effect 7(1.8%) and not allowed by husband 14 (3.6%) and medical problem and the non availability of service) 4(1%). The age of women at first delivery greater than eighteen years and less than eighteen years was about 83.9 % and 16.1 % respectively. Sixty-six point four (66.4%) of the married women had abortion, of which 35.4%
experienced more than one induced abortion in their life time. The average number of children in the household was 3.5 (Table- 3).

Table-3 Use of LAMPs by married women, Ambo town, 2014

<table>
<thead>
<tr>
<th>Practice of LAPM (N=384)</th>
<th>Type of LAPM the married women practiced</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Implant</td>
<td>219</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>2. IUCD</td>
<td>24</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>3. Vasectomy</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td></td>
<td>4. Female sterilization</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>5. Others</td>
<td>133</td>
<td>34.6</td>
</tr>
</tbody>
</table>

What was the source of information for LAMP

|                          | Public institution                      | 278    | 72.4   |
|                          | Mass media                              | 64     | 16.7   |
|                          | Family                                  | 22     | 5.7    |
|                          | combination of this sources             | 20     | 5.2    |

Do you use LAMP?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>251</td>
<td>65</td>
</tr>
</tbody>
</table>

Why don’t you use LAPM?

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.Use other methods of contraceptives</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>2.Fear of developing side</td>
<td>7</td>
</tr>
</tbody>
</table>
Regarding to the use of LAMPS by married women, 65.3% had practiced LAPMs in general, out of this, majority of them knew and used, implants (57%) , but some of them used IUCD and female sterilization which was 6.2 and 1.8 % respectively.(Table-3). Only 0.3% of the married women used vasectomy and 81.2 % named more than two contraceptive.

Moreover, 312 (81.2%) had awareness about more than one types of LAPMs. Among the married women 57 % of them used implants and 6.2 % IUCD (LAPM) for prevention of unwanted pregnancy and helps to have planned family size. Two hundred fifty one (65.4 %) of married women got the service of LAMPS from public institution, NGO 55 (14.3%) and private organization 78(20.3%). About 89.3% of the married women did not pay for the service (get for free).

The source of information to use LAMPS for the married women were public institution (72%), mass media 16.7%, family 5.7% and combinations of the sources were 5.2%. the main reason
cited for married women not to use the LAMPs were use other methods of contraceptives 28.4%, Fear of developing side effect 1.8%, Not allowed by husband 3.6% and Have medical problem about 1% (Table -3)

7.4 Knowledge of Married Women about Long Acting and Permanent Contraceptive Methods

As depicted in the table above about 44.5% of the married women had knowledge as IUCD prevents pregnancy for more than 10 years but 40.1 % of the married women were not sure as it prevents for more than ten years. Among the married women 27.9 % responds as IUCD is not appropriate for female at high risk of getting STIs and 44.5% of the married women were not sure of it. 31.8 of the married women gave feed back as IUCD has no interference with sexual intercourse or desire. However, 26.3 % were responded as IUCD interfere with sexual intercourse or desire.

Table: 4 Knowledge of Married Women about Long Acting and Permanent Contraceptive Methods of Ambo town, 2014(n=384)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Knowledge statements</th>
<th>Knowledge of married women on LAPM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>True%</td>
</tr>
</tbody>
</table>

Fig: 2 Distribution of utilization of long acting and permanent contraceptive methods of married mother’s age of 18-45 years, Ambo town, West Shoa, Ethiopia.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IUCD can prevent pregnancies for more than 10 years</td>
<td>44.5, 15.4, 40.1</td>
</tr>
<tr>
<td>2</td>
<td>IUCD is not appropriate for female at high risk of getting STIs</td>
<td>27.9, 27.6, 44.5</td>
</tr>
<tr>
<td>3</td>
<td>IUCD has no interference with sexual intercourse or desire</td>
<td>31.8, 26.3, 41.9</td>
</tr>
<tr>
<td>4</td>
<td>IUCD is immediately reversible (become pregnant quickly when removed)</td>
<td>24.5, 27.1, 48.4</td>
</tr>
<tr>
<td>5</td>
<td>IUCD cannot cause cancer</td>
<td>25.3, 18.2, 56.5</td>
</tr>
<tr>
<td>6</td>
<td>Implant can prevent pregnancies for 5 years</td>
<td>43.8, 15.9, 40.4</td>
</tr>
<tr>
<td>7</td>
<td>Implants require minor surgical procedure during insertion and removal</td>
<td>64.1, 12.8, 23.2</td>
</tr>
<tr>
<td>8</td>
<td>Implants is immediately reversible (becomes pregnant quickly when removed)</td>
<td>62.2, 15.4, 22.4</td>
</tr>
<tr>
<td>9</td>
<td>Vasectomy has no interference with sexual intercourse</td>
<td>59.1, 13, 27.9</td>
</tr>
<tr>
<td>10</td>
<td>After female sterilization pregnancy is not possible</td>
<td>56.8, 11.5, 31.8</td>
</tr>
</tbody>
</table>
One hundred seventy one (44.5%) of the women were aware of that IUCD can prevent pregnancies for 10 years and 40.1% were not sure of if IUCD is good for female at risk of acquiring sexual transmitted infection. In this study 31.8% and 24.5% of the women aware of that IUCD has no influence on sexual intercourse and it results in immediate pregnancies after removal, respectively. The majority (62.2%) of the married women aware of that implants result in immediate pregnancy after removal. Fifty nine percent of the married women knew that male sterilization has no influence on sexual intercourse, in addition (56.8%) of the married women were aware that pregnancy is not possible after tubal ligation done for female sterilization (Table 4).

7.5 Attitude about and their side effects of Long Acting and Permanent contraceptives

Methods

With regard to attitudes about LAMPs, 50.5% and 46.6% married women agreed that implant can result in irregular bleeding and cause severe pain during insertion and removal respectively. Above (40.6%) of the married women agreed that insertion of IUCD can result in shame while it inserted to cervix by health professional. Forty nine married women percent agreed that IUCD prevents from doing normal activities and 51.8% agreed that undergoing an operation for female sterilization was dangerous. Asked on their attitudes about the side effects of LAMPs, they agreed that irregular bleeding due to the use of implant is severe (47.1%), insertion and removal of implant is highly pain full (32%), losing privacy during IUCD insertion is shameful (33.1%) and undergoing operation for female sterilization is unacceptable (45.6%) (Table 4).

Table: 5 Attitude about and their side effects of Long Acting and Permanent contraceptives Methods, Ambo town, 2014(n=384)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Attitude about LAMPs</th>
<th>Agree</th>
<th>Disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
</tbody>
</table>

Version No 1, version Date 11/06/2014
<table>
<thead>
<tr>
<th></th>
<th>Using implant cause irregular bleeding.</th>
<th>194</th>
<th>50.5</th>
<th>56</th>
<th>14.6</th>
<th>134</th>
<th>34.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The insertion and removal implant is highly pain full.</td>
<td>179</td>
<td>46.6</td>
<td>98</td>
<td>25.5</td>
<td>107</td>
<td>27.9</td>
</tr>
<tr>
<td>3</td>
<td>Insertion of Intra uterine contraceptive device cause to lose privacy.</td>
<td>156</td>
<td>40.6</td>
<td>123</td>
<td>32.0</td>
<td>105</td>
<td>27.3</td>
</tr>
<tr>
<td>4</td>
<td>Using Intra uterine contraceptive device restrict normal activities.</td>
<td>188</td>
<td>49.0</td>
<td>114</td>
<td>29.7</td>
<td>82</td>
<td>21.4</td>
</tr>
<tr>
<td>5</td>
<td>Operation for female sterilization is dangerous.</td>
<td>199</td>
<td>51.8</td>
<td>46</td>
<td>12.0</td>
<td>139</td>
<td>36.2</td>
</tr>
</tbody>
</table>

**Attitude statements about side effects of LAMPS**

<table>
<thead>
<tr>
<th></th>
<th>For me irregular bleeding due to using implant is severe.</th>
<th>181</th>
<th>47.1</th>
<th>61</th>
<th>15.9</th>
<th>142</th>
<th>37.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>For me insertion and removal of implant is highly pain full.</td>
<td>123</td>
<td>32.0</td>
<td>126</td>
<td>32.8</td>
<td>135</td>
<td>35.2</td>
</tr>
<tr>
<td>3</td>
<td>For me loosing privacy during Intrauterine contraceptive device insertion is shame full</td>
<td>127</td>
<td>33.1</td>
<td>143</td>
<td>37.2</td>
<td>114</td>
<td>29.7</td>
</tr>
<tr>
<td>4</td>
<td>For me by using Intra uterine contraceptive device restricted from different work activity highly un acceptable</td>
<td>159</td>
<td>41.4</td>
<td>126</td>
<td>32.8</td>
<td>99</td>
<td>25.8</td>
</tr>
<tr>
<td>5</td>
<td>For me operation for female sterilization is unacceptable</td>
<td>175</td>
<td>45.6</td>
<td>104</td>
<td>27.1</td>
<td>105</td>
<td>27.3</td>
</tr>
</tbody>
</table>

Concerning the level of attitudes, more than half (53.6%) of the married women had negative attitude towards practicing of LAPM. This can be illustrated by what a focus group participant said as follows“...I think it is best to practice long acting contraceptive however I don’t encourage use of permanent contraceptive., If some-one has female sterilization, she cannot give birth and her husband may divorce her and she may encounter a problem to raise her child, so...
why do we encourage the utilization of it. In my opinion, nobody should use it...” [34 year’s old, male, Muslim]

Mothers who had greater income were 4 times more likely to use LAPMs as compared with those who had low income (AOR = 3.6, 95% CI of (1.494, 8.741). This might be due to those who were high income are most of the time those whose level of education are higher that help them to get information from different sources.

Mothers who were orthodox in religion were 5 times more likely to use LAPM as compared with those who had other religion (AOR = 4.715, 95% CI of (1.026, 21.67) and protestant were 8 times to others in practicing the LAMPs (AOR =8.492, 95% CI of (1.710-42.173).This might be due information exchange and acceptance of information is high at the worship or church if it is told to them by their priests.

Table: 6 Multivariate analyses of factors associated with long acting and permanent contraceptive methods utilization among married mothers in Ambo town, North West Ethiopia, may-2014

<table>
<thead>
<tr>
<th>Covariate</th>
<th>AOR(95%CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Religion Religion</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Orthodox</td>
<td>4.715(1.026, 21.674)</td>
<td>.046</td>
</tr>
<tr>
<td>Catholic</td>
<td>4.999(.696, 35.902)</td>
<td>.110</td>
</tr>
<tr>
<td>Protestant</td>
<td>8.492(1.710, 42.173)</td>
<td>.009</td>
</tr>
<tr>
<td>Muslim</td>
<td>2.259(.383, 13.312)</td>
<td>.368</td>
</tr>
<tr>
<td>2.Education</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>506(.150, 1.708)</td>
<td>.272</td>
</tr>
<tr>
<td>Read and write</td>
<td>.194(.055, .680)</td>
<td>.010</td>
</tr>
<tr>
<td>Grade 5-8</td>
<td>1.434(.405, 5.072)</td>
<td>.576</td>
</tr>
<tr>
<td>Grade 9-10</td>
<td>.103(.006 , 1.836)</td>
<td>.122</td>
</tr>
<tr>
<td>Grade 11-12</td>
<td>.939(.251 , 3.516)</td>
<td>.926</td>
</tr>
</tbody>
</table>
Multinomial Logistic regression analysis showed that women of age group 25-34 years were 64.6 times more likely to use implant than others (injectable contraceptives, pills…) compared to women of age group 45. And college or University married women used implants 1.19 times than TVT married women. And also those whose their income were 300-449 ETB used implant 1.992 times that of those having income less than or equal to one hundred fifty birr. And also on the regression those who have more than two pregnancies and have no desire to have children were also likely to use implant 10.093 and 1.09 times respectively.

Table: 7 Multinomial regression analysis of LAMP type use by married women of Ambo town, 2014
<table>
<thead>
<tr>
<th>Predictor</th>
<th>Response</th>
<th>X² value</th>
<th>Df</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational level</td>
<td>Demand for more child</td>
<td>18.717</td>
<td>7</td>
<td>0.009</td>
</tr>
<tr>
<td>Religion</td>
<td>Demand for more child</td>
<td>17.504</td>
<td>4</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Regarding the use of the IUCD on the multinomial regression those whose age were from 25-34 and 34-44 years old were 33.364 and 20.008 times to those whose age were equal or greater than forty five years old.

Table: 8 Chi-square test of association for different predictor and response variables, married women Ambo town, 2014
<table>
<thead>
<tr>
<th></th>
<th>more child</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Demand for more child</td>
<td>43.238</td>
<td>3</td>
</tr>
<tr>
<td>Payment for service of LAPM</td>
<td>LAPM use</td>
<td>30.278</td>
<td>4</td>
</tr>
<tr>
<td>Religion</td>
<td>LAPM use</td>
<td>49.183</td>
<td>16</td>
</tr>
<tr>
<td>Tv/Radio ownership</td>
<td>LAPM use</td>
<td>60.343</td>
<td>4</td>
</tr>
<tr>
<td>Age group</td>
<td>LAPM use</td>
<td>43.541</td>
<td>12</td>
</tr>
<tr>
<td>No of pregnancy</td>
<td>LAPM use</td>
<td>24.870</td>
<td>8</td>
</tr>
<tr>
<td>Educational level</td>
<td>Decision</td>
<td>78.852</td>
<td>21</td>
</tr>
<tr>
<td>Educational level</td>
<td>No of abortion</td>
<td>75.375</td>
<td>14</td>
</tr>
<tr>
<td>Income</td>
<td>No of abortion</td>
<td>18.790</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Age at marriage</td>
<td>17.108</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>No of pregnancy</td>
<td>26.526</td>
<td>6</td>
</tr>
</tbody>
</table>

As can be seen from table-5, Education and Desire for more children has statistical significant association ($X^2=18, \text{df}=7, p=0.009$) and Religion, TV/Television owning, payment for service, No of pregnancy and LAMP use has also statistical significance. Here above from the table media and Long acting and permanent contraceptive methods have strongly associated ($X^2=60.343, p<0.001$) in similar way Religion and LAMP use also have statistical significant ($X^2=49.183, \text{df}=12, p<0.001$) and also payment for service and LAMP use also have statistical significance ($X^2=49.183, \text{df}=12, p<0.001$).
Qualitative part

Findings from Focus Group Discussion

Based on the checklist that was developed to guide the discussion, relevant information was obtained. Four focus group discussions were held, each consisted of 8 members. The participants were group of married women and men.

Perception of married women about the utilization of long acting and permanent contraceptives in general

Most of the participants explained that they know family planning. They said that they have heard of family planning from different sources: friends, neighbors, relatives, health institutions, health professionals and Radio sets.

Many of them heard about the long acting contraceptive implant and IUCD but few of them heard about the female sterilization and vasectomy. A 32 years old mother said “we heard about the implants and IUCD, for example I am using it from the last two years and some of my neighbors’ are also on using it. A 29 years old women also added information on the use of implants she said I have heard about implant and IUCD But fear to use it because those who are using implants have severe bleeding and other are unable conceive after the use of the implant and IUCD will fly up in to the uterus.

Perception on tradition of having a large family size

A 34 Years old female orthodox said that “family size depends on the income of the couples and if they grow up they can have many children if not they must decrease, she took her as example as she has four children and started to use a 3year family planning contraceptive method. A 30
years old male protestant said determine the family size man is not good he said God will
determine for us and no want of determining family size. In addition one 36 years old Muslim
girl said “she highly argued that Every child comes to this world with his or her chance to
means of living and she also said that Allah feeds children and that one shouldn’t worry about
the problem of having too many children. But some of the discussants opposed the above ;they
said that there are many problems related with having many children. They mentioned that poor
maternal and child problems, poor child education, poor family economy, and family
disintegration are few of these problems. And One the Muslim married women argued that the
number of children is decided by Allah and not by them, it isn’t their concern

**Site where they get the service**

Most of the respondents said that they got the information about the LAMPs from HEW’s and
some of them said from media/Radio and Television. And Most of them said that we got the
service from Health center and Hospital. For using the injectable an pill one we get from
pharmacy or private clinic but get the implants and IUCD from governmental Health institution.
About four Married women said that we got the service of the implant from Mariastopes.

**Reason why women don’t use LAMPs**

**Some of the discussants said that it might be against the religion(Islam) and their culture.**

They also discussed why they are not using LAMPs, some of them majorly raised as the implants
have side effect of causing bleeding on some women and others fear by having this information.

A 32 years mother protestant using implant said that after I used the implant my behavior is
highly changed and it makes me to exhaust and causes a severe headache.
36 years old year’s female said that I didn’t hear about the female sterilization and vasectomy but I know implant and IUCD. So she said the HEW’S only taught us about the implants and IUCD.

24 years old mother orthodox said that I have the intension to use implants but I fear the pain and the side effect that it may have once removed it may cause unable conceive. And four females said we are using other method of contraceptives from which three of them used injectable contraceptive and one Oral contraceptive pills.

Men’s attitude towards the LAMPs

The discussants said that some of men in the area are against family planning except for male who are highly educated. One participant said I have the intention to use contraceptive but I afraid that if I don’t give birth when we want, he may leave me or divorce me.

Majority of the discussants said that when we want to decide the family size we discuss it and plan when to have children jointly.

A 27 years old female said that some men’s don’t understand the effect it pose on female they blindly want to have many children so she said we women’s are the one who have greater role to determine size of the family.

A 34 years old female said that Men’s always want us to bring up the child at home ,they don’t want us to work else area. So, male’s attitude toward using the family planning is poor.

37 years old mother who have six children appreciated her husband, she said that my husband heard the information of the loop from the Radio and asked the health professionals, then by identifying the information he encouraged me to use the loop and from the past one year I am on using the loop.
Suggested solutions on what should be done to improve contraceptive use in the community

The FGD discussants also gave idea how to increase the use of the contraceptive especially LAMPS as follows

- Religious fathers should be convinced and they said that it shall surely be simple to get the consent of the community members.
- Information, education and communication at family level is mandatory especially IUCD
- Giving Education about the LAMPS for the married women.
- Training the HEW, said that they only taught us but don’t give us and they don’t know the side effect they only say use it.
- Many communities should be trained to teach others.
- Intensive Health education at different places, For example, mosques, church and schools
8. Discussion

In this study the overall the current use of LAMP use at Ambo town was 65.3%. However, which is higher than the prevalence reported from Jinka (7%), Butajira (5%) and the report of EDHS 2005 (4, 7). This might be due to difference in the study areas, access to information and the services.

From this study about 57 % of married women uses implant, 6.2 % IUCD and few of them uses female sterilization which is 1.8% and or very few used vasectomy (their husband) 0.3 %.). which is greater than that of prevalence of LAPMs use in Oromia region is which is very as low as IUCD 0.3% and female sterilization 0.2 %( 10). The overall the percentage of women who are currently using any method of contraceptive for Oromia region is 26.2 % (9). This might be due to the difference in resident of the study participants, availability of urban health extension workers and continuous advertisement of these contraceptives’ through media (TV and radio) in the study area which is an urban setting and attention given from government and non government is too high during these time.

Only 6.2% of the married women used IUCD, which is lower as compared with a study done in Nigeria (7%) and Indonesia (52%) (17,18). Which might be due to the fact that large number of the women had misconception about IUCD and its side effects such as interference with sexual intercourse, cancer, delays pregnancy, restriction from working normal activity and invasion of privacy during its insertion and removal. The main reason perceived for not practicing IUCD was the use of other methods of contraceptives, fear of side effects, cause cancer and husband’s disapproval which is supported by reports from Elsalvadore and Turkey (15,19).
Similar to the findings of EDHS and a report from Arsi (11,20), there were few users of female sterilization in Ambo town. However, this finding is not consistent with other studies which showed higher rates of sterilization in Jinka (36%), Butajira (10%), Caribbean (4%) and Uzbekistan (5%) (7.9). A study done in England showed that women prefer female sterilization because it is irreversible, does not involve hormonal treatment and they do not wish to have child for the future (23). This might be due the knowledge difference between the developing and developed country and the difference in female empowerment in developing and developed countries.

The major source to obtain contraceptives for the married women was a public health facility (65.4%). This finding is inconsistent with findings of EDHS 2005(80%), Butajira(80.8%) and Jinka (> 80%) (7), this difference might be at this time the NGO and private clinic share the responsibility to deliver the service.

Most participants of the focused group discussions suggested that the optimum family size should be four which is parallel with other studies done in big regions of Ethiopia (24). However, it is relatively inconsistent with finding of EDHS 2005 in which three out of five women preferred an ideal family size of four or more children (11).

Results of regression analysis showed that Mothers who had income greater than five hundred birr per month were 4 times more likely to use LAPMs as compared with those who had low income (AOR = 3.6, 95% CI of (1.494, 8.741). This might be the mothers who have good income can get the access to learn and to get the information from media.

Mothers who were orthodox were 5 times more likely to use LAPM as compared with those who had other religion (AOR = 4.715, 95% CI of (1.026, 21.67) and protestant were 8 times to
that of others (Wakeffaata…) in practicing the LAMPs (AOR = 8.492, 95% CI of (1.710-
42.173)), which is consistent with a study done in Jinka and Butajira (7). This might be the church of protestant and orthodox gave the information to the community as well the frequency to get many people’s at once to deliver the information is high. This idea was also raised by the focus group participants that they recommend the fathers of the religion must be convinced to easily address the information about the contraceptive and help people to accept and use it. And also Multinomial Logistic regression analysis showed that women of age group 25-34 years were 64.6 times more likely to use implant than others (injectables, pills…) compared to women of age group 45 which may be at high extreme age the chance to have birth is low.

The focus Group discussants also gave the information as males are also mandatory to be included in the family planning methods. They said that to increase the chance for mothers to use LAMPs males must be included and attention should be given to males as women which is similar study done in Uganda on family planning in developing countries have long focused on women as the subject of interest. Very little work in this area has focused on men. It is now increasingly recognized that the actions required achieving improvements in reproductive health outcomes in general and maternal health in particular should also encourage men’s active participation (15). this might be the dominant part in the family is the Husband and most of the decision are given by them.

Respondents who are their age 25-34 years old used LAMPs more likely than women age above 35 years old. Which is similar with the Ethiopian DHS 2005 which reveal current use is lowest in extreme age. LAPMs among men and influence on their wives were not addressed through in this study
9. Conclusion

Educational level, Religion, payment for service and media, Number of pregnancy has statistical significance with utilization of long acting and permanent contraceptives methods. The prevalence of utilization of LAMPs for married women of Ambo town was 65.3%. More than half of the married women used implants which control Pregnancy for three years. A significant amount of the participants had low knowledge on permanent contraceptive particularly vasectomy. Few of married women use female sterilization and vasectomy. Positive knowledge of LAMPs, women who had two and above pregnancies and women who do not want to have additional child were significantly associated. The findings have implications for family planning programs to seriously examine ways to increase contraceptive use for those specifically on LAMPs. Furthermore further study should be conducted to produce better evidence focusing on the service providers, male partners, and to identify factors influencing the utilization of LAPMs.
10. Strength of the study and Limitation of the study

10.1 Strength of the study

In this study qualitative and quantitative methods were used. These methods improve the research outcomes as qualitative study complement and strengthen the quantitative study. Use of logistic regression helped to control possible confounding factors in order to assess the relative effect of independent variables and high response rate.

10.2 Limitation of the study

Cross- sectional study design was used in the present study. This type of study design shows the exposure and outcome at the same point in time, so that we cannot formulate a cause and effect relationship.
11. Recommendations

- The Health Berau of Ambo town should encourage public and private institutions to give Continuous health education on LAPMs, increase availability of LAPMs services and information education communication should focus on addressing the needs of long acting and permanent contraceptive methods.
- Working in collaboration up to family with integration of the HEWs, NGO, and private organization further increase the use of the LAPMs.
- Training health professionals and teaching the married women exhaustively about the LAMPs by the Ambo Health Berau in collaboration with Oromia Health Berau and Federal Ministry of Health, may increase the use of LAMPs by married women.
- Health officials at varies levels should do better to make the LAMPS service available at all health institution governmental and nongovernmental.
- Advocacy at level of religious leader which help decision making.
- Further study should be done to assess the quality of service given and factors affecting the utilization of the LAMPs making including the married males.
12. References


4) Federal Democratic Republic of Ethiopia Ministry of Health, National guideline for family planning services in Ethiopia. October, 2011


15) Aalap Bommaraju: Determinants of contraceptive use choice: Factors Affecting Contraceptive Non use contraceptive among urban Women Utilizing Title X Services, A.T.S University of Cincinnati, 2010


18) Ethiopia Demographic and Health Survey 2011.


Annexes

I: - Informed consent agreement

How are you, I am-----------------------------... I am working in the research team of Addis Ababa University School Allied health science; Department of maternal and reproductive Health. This survey is to know factors affecting the long acting and permanent contraceptive methods of married women 18-49 years. The research will be helpful to tackle the factors that affect the LAPMs and other problems of married women and also will help us to develop services and educational programs.

Thus, your ideas are very essential for us to better understand your problems in relation to long acting and permanent contraceptive problems. Your participation is voluntary, You don’t have to answer any questions that make you feel uncomfortable. Your name will not be on the survey so no one will know your answers. Everything you say will be kept private and confidential.

If you feel discomfort with the interview, please feel free to drop it any time you want. This interview will take about 30 minutes. Could I have your permission to continue?

1. If yes, signature__________________, Continue the interview.

2. If no, skip to the next participant by writing reasons for his/her refusal.

________________________________________________________________________________________

Interviewer who Collect the Consent

Name________________________

Signature ___________________
II: - Questionnaire

English Questionnaire
Addis Ababa University
College of Health Sciences
School of Allied health sciences
Department of Nursing and Midwifery

Questionnaire: - To Study the assessment of factors affecting the utilization of long acting and permanent contraceptive among married women, in Ambo town, West Shoa Ethiopia

INSTRUCTION TO THE RESPONDENT:

The questions in this survey represent a wide range of experiences and concerns faced by married women mainly in relation to family planning especially the long acting and permanent contraceptives. Please read instructions and each question carefully. Some of the questions may not be applicable to participants. Try to ask only those questions which are applicable to participants as indicated by accompanying instructions i.e. you may need to skip some questions. If you have any questions, please don’t ever hesitate to ask the supervisors.

It is very important to explain that participants should answer every question truthfully.

Thank You again for Your Help!
## Part-I: Socio-Demographic Assessment

<table>
<thead>
<tr>
<th>S.n</th>
<th>Questions</th>
<th>Alternatives</th>
<th>Remark</th>
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</thead>
<tbody>
<tr>
<td>102</td>
<td>Respondent age</td>
<td>Age: ________ years</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Age of married women</td>
<td>1. 18-24</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. 25-34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. 35-44</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. &gt; = 45</td>
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<td>104</td>
<td>Current religion</td>
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<td>2. Catholic</td>
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<td></td>
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<td>3. Protestant</td>
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<td></td>
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</tr>
<tr>
<td></td>
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<td>5. Other (specify) ___________</td>
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<td>Ethnicity</td>
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<td>3. Amhara</td>
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<td></td>
<td></td>
<td>4. Others, specify _______</td>
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<td>106</td>
<td>Level of Education</td>
<td>1. Illiterate</td>
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<td></td>
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<td>2. Read and write</td>
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<td>3. Elementary 1st cycle 1-4</td>
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<td>4. Elementary 2nd cycle 4-8</td>
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<td>5. High school 9-10</td>
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<td>6. Preparatory 11-12</td>
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<td>7. TVT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. College or university</td>
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<td>107</td>
<td>Occupation</td>
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<td>2. Merchant</td>
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<td></td>
<td></td>
<td>5. Daily labor</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>Monthly income in Birr.</td>
<td>1. &lt;150</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. 150-299</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. 300-499</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. 500&amp;above</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. No response</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>Do you Have radio &amp; or TV?</td>
<td>1. Have radio/TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Have NOT Radio/TV</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>What is your family size?</td>
<td>1. Male</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Total</td>
<td></td>
</tr>
</tbody>
</table>
**Part II. Reproductive History of Married Women, Ambo Town, 2014**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 111 | Age at marriage | 1. < 18  
2. ≥18 |
| 112 | Age at first delivery | 1. < 18  
2. ≥18 |
| 113 | Number of pregnancy | 1. One  
2. Two and above |
| 114 | Number of abortion | 1. One  
2. Two and above |
| 115 | Who is responsible for deciding to have children? | 1. Wife  
2. Husband  
3. Jointly  
4. Friends/Relatives |
| 116 | Desire for more children | 1. Want  
2. Don’t want |

**Par:III Practice of LAMPS methods of married women of Ambo town, 2014**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 117 | Do you know LAMPS methods | 1. Yes  
2. No |
| 118 | How many types of LAMPS methods you know? | 1. one  
2. two and more |
| 119 | Which types of LAMPS you use? | 1. Implant  
2. IUCD  
3. Vasectomy  
4. Female sterilization  
5. Others |
| 120 | If you don’t use why it seem to you? | 1. I prefer to use other contraceptive methods than LAMPS  
2. Fear of developing side effects  
3. Not Allowed by husband  
4. Non availability of the service |
| 121 | From you get the services of LAMPS? | 1. Public institutions  
2. NGO  
3. Private organizations |
| 124 | Where is the source of information for LAMPS? | 1. Public institutions  
2. Mass media  
3. Family  
4. Combinations of these sources |
| 125 | Do you pay for the services | 1. Yes  
2. No |
Part-IV. Knowledge of Married Women about Long Acting and Permanent Contraceptive Methods, Ambo Town.

<table>
<thead>
<tr>
<th>Knowledge statements</th>
<th>Knowledge of married women on LAPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IUCD can prevent pregnancies for more than 10 years</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
<tr>
<td>2. IUCD is not appropriate for female at high risk of getting STIs</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
<tr>
<td>3. IUCD has no interference with sexual intercourse or desire</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
<tr>
<td>4. IUCD is immediately reversible (become pregnant quickly when removed)</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
<tr>
<td>8. Implants is immediately reversible (becomes pregnant quickly removed)</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
<tr>
<td>10. After female sterilization pregnancy is not possible</td>
<td>1. True 2.False 3. Not sure</td>
</tr>
</tbody>
</table>

Part- V. Attitude about and Their Side Effects of Long Acting and Permanent Contraceptive Methods Ambo Town.

<table>
<thead>
<tr>
<th>What do think you about LAPMs?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
</tbody>
</table>
| 1. Using implant cause irregular bleeding. | 1. Agree  
2. Disagree  
3. Not sure |
| 2. The insertion and removal implant is highly pain full. | 1. Agree  
2. Disagree  
3. Not sure |
| 3. Insertion of Intra uterine contraceptive device cause to lose privacy. | 1. Agree  
2. Disagree  
3. Not sure |
| 4. Using Intra uterine contraceptive device restrict normal activities. | 1. Agree  
2. Disagree  
3. Not sure |
| 5. Operation for female sterilization is dangerous. | 6. Agree  
7. Disagree  
8. Not sure |

Attitudes statements about side effects of LAPMs

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 128 | 1. For me irregular bleeding due to using implant is severe. | 1. Agree  
2. Disagree  
3. Not sure |
| 2. For me insertion and removal of implant is highly pain full. | 1. Agree  
2. Disagree  
3. Not sure |
| 3. For me loosing privacy during Intrauterine contraceptive device insertion is shame full | 1. Agree  
2. Disagree  
3. Not sure |
| 4. For me by using Intra uterine contraceptive device restricted from different work activity highly unacceptable | 1. Agree  
2. Disagree  
3. Not sure |
| 5. For me operation for female sterilization is unacceptable | 1. Agree  
2. Disagree  
3. Not sure |
III: FGD-Guide

My name is ________________. My colleague near to me is called Mr/Miss_____________. We came from Addis Ababa University

Read the following as it is:

After a brief introduction we will be talking about Long acting and permanent contraceptives contraceptive methods. The research will be helpful to tackle the married women affecting on utilization of LAPMs and also will help us to develop services and educational programs. We will eventually conclude the session by asking for your recommendations on ways to bring about changes in the married women attitude and practice towards the long acting and permanent contraceptive methods utilization up on your comments and suggestions.

QUESTIONS

1. How do you understand about utilization of long acting and permanent contraceptives in general?

   Probe: would you explain further

   -would you give me an example

   -Is there anything else?

2. What do you suggest about the tradition of having large family size?

   Probe: would you explain further

   -would you give me an example
-Is there anything else?

3. Do you know about modern contraceptive methods and what kinds of modern contraceptive do you know?

Probe - would you explain further

-would you give me an example

-Is there anything else?

4. Why do people in your community not using modern contraceptives?

Probe - would you explain further

-would you give me an example

-Is there anything else?

5. How far are you aware of the family planning service in your area?

Probe - would you explain further

-would you give me an example

-Is there anything else?

6. Where do you get the information which related to long acting and permanent contraceptives methods?

7. What is the attitude of the community regarding long acting and permanent contraceptives methods?

Probe - would you explain further

-would you give me an example

-Is there anything else
8. How do you think, who should decide about family size and who should take responsibility practicing modern contraceptive methods?

9. Discuss about men’s opinion towards family planning

Probe—would you explain further

-would you give me an example

-Is there anything else

10. Is there any cultural and religious practices in the area that could promote or hinder family planning service?

Probing question related to acceptability, culture, religion, belief etc.

11. Does religion or belief in your community something to do with the use of modern contraceptive?

Probe—would you explain further

-would you give me an example

-Is there anything else?

12. Does your belief or religion influence the number your children?

Tip1. Our God needs many children

2. Our Ancestor happy with children

3. Childlessness is accurse

16. What do think should be done to improve contraceptive use in your community

17. What do you know about implant contraceptives, IUCD, female sterilization and vasectomy?

Probe: what attitude do you have about the implant and IUCD?
KEBELE:_________________, Lakk. Manaa__________________

Gaaffii Afaan Hiika Afaan Oromoon

Universiitii Addis Ababaa, Kolleejjii Fayyaa,Muummee Nursii fi kunuunsa Qaama Hormaata Haadholii iraa

Mata duree:qorannoo waa’ee wantoota akka qusannoo maatii dheraa hin fayyadamni godhan irratti kan maashaa keessa taa’u, gadameessa keessa ta’u, fi baqaqsaal fi suphaatti haadholiin magaala Amboo akka fayyadamne Lixa Showaa, Ethiopia.

**Ajaja deebii laattotaaf**

Gaaffin arman gadiitti qabanne haadholii irratti kan xiyyaffatee fi waa’ee qusannoo maatii kan dheeraa irratti yaada bal’aa ta’e ni kaasa. Kanaafis gaaffin tokko tokko faana deemu dhiisu ni danda’a, kanaafis gaaffii si hin ilaallanne bira darbuu ni danda’ama.gaaffii yoo qabatte yoomiyyuu gaafachuu ni dandeessa,

Garuu gaaffiiif deebii laatamuu hundinuu dhugaa ta’uu qaba.

Gargaarsa fi deebii nuuf laatte nu gargaarteef baay’ee galatoomi!.

**Kutaa-I: waa’ee maatii ilaalchisee**

<table>
<thead>
<tr>
<th>Lakk.</th>
<th>Gaaffii</th>
<th>Filanno</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Umurii gaafatamaa</td>
<td>Umurii:_______waggaan</td>
</tr>
</tbody>
</table>
| 103   | Umurii yeroo gaa’ela dhaabde   | 1. Waaggaa 18 gadi  
                                              2. Waggaa 18-24  
                                              3. Waggaa 25-34  
                                              4. waggaa 35-44  
                                              5. Waggaa 45 ol |
| 104   | Amantaan kee maal?             | 1. Ortoodoksi  
                                              2. kaatolikii  
                                              3. pirotestaantii  
                                              4. .islaama  
                                              5. kan biraa |
<table>
<thead>
<tr>
<th>Page</th>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 105  | Sanyiin kee maali? | 1. Oromoo  
2. Tigiree  
3. Amaara  
4. Kan biraa, ibsi.____ |
| 106  | Sadarkaa barumsaa kee maal? | 1.hin baranee  
2.barreessuufidubisuu beeka  
3.Kutaa 1_4tti  
4.Kutaa 4-8tti  
5.Kutaa 9-10tti  
6.Kutaa 11-12tti  
7.TVT  
8.Kollejjii ykn Universiitii |
| 107  | Hojii maal hojjettaa? | 1. Barataa  
2. Daldalaa  
3. Hojjetaa mootummaayknkan dhunfaa  
4. Hojjetaa guyyaa |
| 108  | Galiin ji,aa kee meeqa? | 1.Qar.50 gadi  
2.Qar.150-299  
3.Qar.300-499  
4.500 ol  
5.hin beeku. |
| 109  | Radiyooynk tv.qabda? | 1.Radiyoo qofaa  
2. TV.qofaa  
3. Lamaansaa qaba.  
4. Lamaansaayyuu hinqabu. |
| 110 | Gosa dawwaa ulfa ittisu kam fayyadamta? | 1.implantii  
2.IUCD  
3.Qaama dhiira maseensuun  
4. Qaama hormaata dubartiin maseensuun  
5. kan biraa yoo jiraate ibsi |
|-----|-------------------------------------|------------------------------------------|
| 111 | Baay`inni maatii kee meeqa? | 1.Male----  
2.Female------------  
3.Ida`ama ---------|
2.Waggaa 18 fi isaa ol. |
2.Waggaa 18 fi isaa ol. |
| 114 | Si`a meeqa ulfooftee? | 1.Al tokko  
2.Lamaafi isaa ol. |
| 115 | Daa,ima argachuuf itti gaafatamummaa eenyutu fudhate? | 1.Haadha manaa  
2.Abbaa manaa  
3.Waliigalte lamaanii |
| 116 | yeroo meeqaaf sirraa bahee? | 1. Al tokko  
2. Al-lama fi isaa ol |
### Kuttaa-III. Beekumsi Haadholiin Heerumanii Waa’ee Fayyadama Qusannaa Maatii Yeroo dheeraa Qabanii Kann Magaala Ambo

<table>
<thead>
<tr>
<th>118</th>
<th>Luuppiin ulfa waggaa kudhanii ol ittisuun ni danda’a</th>
<th>1. Dhugaa 2. Soba 3. Hin beeku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Luuppiin haadholii dhukkuba saala daddarbaaf haala salphaa saaxilamaniif hin kennamu.</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
<tr>
<td></td>
<td>Luuppiin qunnamtiisaalaa irratti dhiibbaa hin qabu</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
<tr>
<td></td>
<td>Luuppiin baafannaan dafanii ulfaa’u</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
<tr>
<td></td>
<td>Luuppiin kaansarii hin fidu</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
<tr>
<td></td>
<td>Maseensuun dhiiraa(vasectomy) qunnamtiisaalaa irratti dhiibbaa hin qabu.</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
<tr>
<td></td>
<td>Dubartiin operatiniin akka hin ulfoofne taate irra deebitee hin ulfooftu.</td>
<td>1. Dhugaa 2. Soba 3. Hin beeku</td>
</tr>
</tbody>
</table>
Kutaa -V. Ilaalcha fayyadamtooni qusannoo maatii waa’ee dhibee qorichi qusannoo maatii dheera fiduufi  da’umsa karaa baqaqsanii hodhuun fidu.

| 120 | Waa’ee LAPMs maal yaaddaa? | 1. Kan maashaa qaama keessa taa’u dhiiguu fida.  
2. Kan gadameessa keessa taa’u qaaniif nama saaxila.  
3. Kan gadameessa keessa taa’u sochii nama dhorka  
4. Baqaqsaa fi suphuun kan dubartoota dhala dhorkuun balaa guddaa fida. |
|---------------------------------|-------------------------------------------------------------|
| Ilaalcha dhibee qusannoo maatii kan yeroo dheeraa fidu irratti qaban | 1. Anaaf maashaa keessa kan taa’u dhiiga yeroo yerootti cimaa kan ta’e natty kaasa.  
1. Anaaf galfachuufi baasun qoricha qusannoo maatii baay’ee na dhukkuba.  
2. Anaaf yeroon isa gadameessa keessa kaa’udhu baay’ee na qaanessa  
3. Anaaf inni gadameessa keessa taa’u hojii na dhorka jechuun dhara dha.  
4. Anaaf baqaaqsanii hodhuun dhala dhorkuun fudhatamaa miti. |

III-WALIIN MAREE

Maqaan koo__________________maqaan nama nafaana hojjetuu____________________
Nuti Addis Ababa Universiiti iraa dhufne.

Kanneen arman gadiitti caqafaman akka jiraniin dubbisiif:

Ergaa baninsa gababa taa’ee booda, waa’ee qosannoo maatii kan yeroo dheeraa fi kan dhala dhorku irratti taphanna.

Faayidaan marii keenyaas haadholiin maalif akka fayyadamtoota qosannoo maatii dheera akka hin taane kan godhu maal akka ta’e adda baasuu fi gufuu kan ta’an irratti barsiidufi hubachiisuu fidha.dhumarrattis yaada keessan akkaataa itti ilaalcha haadholii qosannoo maatii yeroo dheeraa fayyadamuu qabanii fi fayyadamaa ta’an yaada nuuf laattu.

1. Waa’ee qusannoo maatii maal beektu? Kan yeroo gabaaba fi dheeraa maal hubattanii jirtu?
2. Waa’ee ijoolee baay’ee horuu yaada maal qabdu?
   Yaada ibsaa: dabaltaan ibsuu ni dandessuu? Fakkeenya naaf laachuu ni dandessuu?
3. Maaliif uummatni qusannoo maatii dheeraa hin fayyadamaniin?
   Yaada ibsaaaf: ibsuu ni dandessaa?fakkeenya laachuu hoo?
4. Waa’ee qusannoo maatii fayyadamuuf erga dhageesee hammam turte?
   Yaada ibsaa: dabaltaan ibsuu ni dandessuu? Fakkeenya naaf laachuu ni dandessuu?
5. oduu waa’ee qusannoo maatii kan yeroo dheeraa eessaa dhageesee?
   Yaada ibsaa: dabaltaan ibsuu ni dandessuu? Fakkeenya naaf laachuu ni dandessuu?
6. Illaalchi uummatni qusannoo maatii isa dheeraa irratti qabu maal fakkaataa?
   Yaada ibsaa: dabaltaan ibsuu ni dandessuu? Fakkeenya naaf laachuu ni dandessuu?
8. Yaadni dhiiraa qusannoo maatii irraatti qabu maal fakkaataa?
9. Aadaa fi amantaan akka naannoo keessanitti akka qusannoo maatii hin fayyadamne godhu ni jiraa?
10. Amantaan kee baay’ina daa’imman kee ni murteessaa?
    1. Zariin keenya ijoolee baay’ee godhachuutti ni gammada
2. Ijoolleen abaarsa
3. Waaqqyyo ijoollee baay’ee barbaada

11. Waa’ee qusannoo maatii kan maashaa keessa taa’u, gamedaessa keessa taa’u, fi baqaqsaa fi suphaan fayyadamuu maal yaada maali qabdaa?

Uummatni akka qusannoo maatii kan yeroo dheeraa akka fayyadamuu akkamitti fooyya’uu qaba jettee yaaddaa?