ADDIS ABABA UNIVERSITY

FACULTY OF MEDICINE

SCHOOL OF PUBLIC HEALTH

Assessment of the prevalence and factors affecting use of long acting and permanent contraceptive in Jinka town, South Omo zone, SNNPR

BY

Getachew Mekonnen (BSc)

Thesis submitted to the School of Graduate Studies of Addis Ababa University, Faculty of Medicine, School of Public Health, as a partial fulfillment of the requirements for the degree of Master of Public Health

June, 2008

Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY
FACULTY OF MEDICINE
SCHOOL OF PUBLIC HEALTH

Assessment of the prevalence and factors affecting use of long acting and permanent contraceptive in Jinka town, South Omo zone, SNNPR

BY
Getachew Mekonnen (BSc)
Advisor: Dr Fikre Enquselassie

Thesis submitted to the School of Graduate Studies of Addis Ababa University, Faculty of Medicine, School of Public Health, as a partial fulfillment of the requirements for the degree of Master of Public Health

June 2008
Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATES STUDIES

Assessment of the prevalence and factors affecting use of long acting and permanent contraceptive in Jinka town, South Omo zone, SNNPR

BY

Getachew Mekonnen

School of Public Health

Faculty of Medicine, Addis Ababa University

Approved by the Examining Board

_____

_____

Chairman, Department Graduate Committee

Signature

Dr. Fikre Enquselassie

_____

Advisor

Signature

_____

_____

Examiner

Signature

Acknowledgment

Initially, my genuine gratitude goes to my advisor Dr. Fikre Enquselassie who has assisted me meticulously and tolerantly in a range of aspects of this thesis work starting from proposal development to the write up of this outcome. Moreover, I would like to express my deep appreciation to CORHA and its staff for sponsoring this study and timely and fruitful advice on proposal development and analysis. I would also like to broaden my thanks to the School of Public Health, Faculty of Medicine, AAU for giving me the chance to conduct this thesis. Besides, I expand my gratitude to all data collectors, supervisors and participants of survey and FGDs for their voluntary participation on the study. Finally, my appreciation goes to all my instructors, friends and families for there advice, moral support through the whole process of this study.

Table of contents

List of Tables

List of Figures

Acronyms

AA Addis Ababa
AAU Addis Ababa University
AIDS Acquired Immune Deficiency Syndrome
AOR Adjested Odds Ratio
AU African Union
Bsc Bachelor of Science
CBRH Community Based Reproductive health
CI Confidence Interval
CORHA Consortium of Reproductive Health Association
CPR Contraceptive Prevalence Rate
CSA Central Statistic Agency
DHS Demographic and Health Survey
EDHS Ethiopian Demographic and Health Survey
Edu. Education
Et. Ethiopia
F Female
FDRE Federal Democratic Republic of Ethiopia
FGAE Family Guidance Association of Ethiopia
FP Family Planning
FGD Focused Group Discussion
GDP Gross Domestic Product
HSDP Health Sector Development Program
ICPD International Conference on Population and Development
IEC Information, Education and Communication
IUCD Intra Uterine Contraceptive Device

IUD	Intra Uterine Device
Kms	Kilo meters
LAPMs	Long Acting and Permanent contraceptive Methods
M	Male
MCH	Maternal and Child Health
MOH	Ministry Of Health
MOI	Ministry Of Information
OR	Odds Ratio
Q no	Question number
RH	Reproductive Health
RR	Relative Risk
SNNPR	Southern Nations and Nationalities People Region
S.No	Serial Number
SOZHD	South Omo Zone Health Department
SPH	School of Public Health
SPSS	Statistical Processing for Social Science
STIs	Sexually Transmitted Infections
UN	United Nations
US	United States
USAID	United States Agency for International Development
VSC	Voluntary Surgical Contraception
WHO	World Health Organization

1 Abstract

Introduction: In Ethiopia, knowledge of contraceptive methods is high though there is low CPR in the two EDHS surveys. However, there is very low knowledge and use of LAPMs of contraceptive compared to shorter acting contraceptive methods.

Objective: The objective of this study was to assess the prevalence and factors affecting the use of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive among women of reproductive age group in Jinka town, South Omo Zone, SNNPR, Ethiopia.

Methodology: A cross sectional community based survey was conducted on the prevalence and factors affecting LAPMs use from March to April 2008 on 763 women of reproductive age groups and 33 FGD discussants in Jinka town, South Omo zone.

Results: The prevalence of contraceptive among participants was about 301 (39.5%) among this LAPMs contributes for 56 (7.3%). Implant is the most widely used method from LAPMs contributing to almost half, 28 (50%) of the LAPMs users. There was very low 137 (18%) knowledge of LAPMs in Jinka town. Among LAPMs, Implant is known by most 104 (76.1%), and the least known is male sterilization 24 (17.4%). A considerable amount, 449 (63.5%) of participants have intentions to use LAPMs one time in the future.

Conclusion and Recommendation: The study had demonstrated that there was low knowledge and relatively fair level use of LAPMs in the town. Furthermore, intention to use LAPMs in the future is promising. The Zonal

health department should have routine monitoring and evaluation of family planning programs; maintain continuous health education programs on LAPMs contraceptive methods using leaders at different settings.

1 Introduction

1.1Background information

The current world population projection of just over 9 billion humans at final population stabilization is a highly optimistic estimate. Because of poor family planning services and laissez-faire attitudes in many parts of the world, the planet may be forced to accommodate many more than this number. An estimated 550,000 women die every year through unsafe induced abortion, pregnancy and childbirth. At least 35% of these died due to pregnancies that would have been avoided if contraceptives were available (1).

Contraceptive use and fertility rates vary substantially among developing countries. In a few countries of Asia and Latin America, at least three-fourths of married women use a contraceptive method. In contrast, in some Sub-Saharan African countries fewer than 10% of married women use contraception. Fertility rates range from just 2.3 children per woman in Vietnam to 7.2 in Niger in developing countries (2). Four modern contraceptive methods like female sterilization, oral contraceptives, injectables, and intrauterine (contraceptive) devices (IUDs/IUCD) are the most widely used methods among married women in developing countries. Together they account for almost three-fourths of all contraceptive use (2).

According to Federal Democratic Republic of Ethiopia Central Statistics Authority's (CSA) report, Ethiopia has a population of more than 77 million. Of these, 12,689,000 (16.5%) live in urban areas and the rest live in rural area. The Southern Nations Nationalities and People Regional State (SNNPR) has

an estimated total population of 15,321,000, with 7,609,000 men and 7,702,000 women (3).

In Ethiopia, family-planning program was first started in the 1960s by a local non-governmental organization (NGO) namely the Family Guidance Association of Ethiopia (FGAE). Among the many sexual and reproductive health problems faced by women in Ethiopia, the main once are:- gender inequality, sexual coercion, early marriage, polygamy, female genital cutting, closely spaced pregnancies, abortion, sexually transmitted infections (STIs), and AIDS (4, 5).

In Ethiopia, 34% of currently married women have an unmet need for family planning, with 20% having an unmet need for spacing and 14% having an unmet need for limiting. According to EDHS 2005, the contraceptive prevalence rate for married Ethiopian women who are currently using a method of family planning is 15%. Almost all of these users are using modern methods. The most widely used methods are injectables (10%) followed by the pill (3%). According to the data, two thirds of births in the five years preceding the survey were planned, 19% were mistimed, and 16 % were unplanned. One in five births of order four or higher is unplanned, twice the level among births of order three or below (6).

1.2 Rationale of the Study

There were only few studies conducted on prevalence and factors affecting the use of long acting and permanent contraceptive (LAPMs) use in Ethiopia and almost there were no studies in SNNPR and specifically in South Omo zone. Moreover, almost all-contraceptive use in Ethiopia is dependent on shorter acting contraceptive methods in contrary to other many developing countries. Therefore, this study has tried to asses the prevalence and factors affecting use of long acting and permanent contraceptive (LAPMs) in women's of

reproductive age group of Jinka town. Moreover, it tried to assess the factors for the existing utilization of contraceptive in general and LAPMs in particular. Finally, this study may contribute much in improving the FP service i.e. the service quality, method mix (enough choice as per demand) and access to appropriate information in the area.

2 Literature Review

2.1 Use and Intention to use LAPMs

The earth faces a future of rising populations and growing strains on the planet. Whatever else the future holds, significant population increase is inevitable and the current UN forecast of 9.2 billion by 2050 (itself a 40 percent increase on the 6.7 billion in 2007) may turn out to be an underestimate. By 2050, humanity is likely to require the biological capacity of two earths. The environmental damage resulting from population increase is already widespread and serious, ranging from climate change to shortages of basic resources such as food and water (1).

According to population report of 2003 among surveyed developing regions, levels of contraceptive use vary widely, from an average of 15% in Sub-Saharan Africa to 68% in Latin America and the Caribbean. In 37 of 60 developing countries surveyed, at least 95% of married women know of at least one contraceptive method (modern or traditional). In 36 countries, at least 95% know of at least one modern method (2).

Sterilization is the world's most widely used contraceptive method accounting for nearly half of all contraceptive use. In a study conducted in Tanzania on factors affecting vasectomy acceptability, reasons for wanting to limit family size, having enough or too many children was a frequently mentioned motivation for undergoing vasectomy. The primary reasons provided for wanting to limit family size were economic hardship and concern for the health and well-being of spouses (7).

According to study conducted by USAID on the role of commercial sectors in providing LAPMs, in many parts of the world was reported that the use of modern methods is much lower than total method use in some Sub-Saharan African countries indicating that traditional method use is high. There are also variations in the use of LAPMs among regions; LAPMs use is lowest in the Sub-Saharan Africa region where the highest use in any country is 19.7% (South Africa), accounting for less than 40% of modern method use. In Zimbabwe, LAPMs account for only 8% of modern method use. Conversely, in some Latin American countries, where modern method use is high, such as the Dominican Republic (66%), LAPMs account for almost three-quarters of the contraceptives used in this category. Indonesia has the highest use of Implants (4%), while male sterilization use is highest in Nepal (6.1%) and use around 2% in Brazil, India, and South Africa (8).

In Sub-Saharan countries, level of intention to use contraception is 44% in average, ranging from 14% in Chad to 74% in Malawi. Among countries of Eastern Europe and Central Asia, the lowest percentage of women who intend to use contraception is 36% in Armenia, and about 46% in the region overall. About half of married women in Asia intend to use family planning in the future, from 15% in Pakistan to 73% in Nepal (2). In 2003 IUD use in Sub-Saharan African ranges from 0.2 in Middle Africa to 1.8% in western Africa, while it is 2.2% in Japan, 1.6% in India and 0.7% USA (9).

As in many other countries, in Ghana vasectomy has been a relatively "invisible" contraceptive method, with prevalence of less than 0.1%. A review of research on vasectomy services and perceptions of the method by both providers and potential vasectomy users in Ghana identified four main barriers to vasectomy utilization. These are:-inadequate access to and quality of services, bias against the method on the part of providers and clinic staff, low knowledge of the method among the general public and the prevalence of

myths and misinformation about the method, among both men and women (10).

According to a study conducted on the role of family planning as a possible intervention in maternal mortality reduction amongst women in an urban setting, South-West Nigeria about 150 (50%) of the participants have used one family planning method or another and these included; oral contraceptives (30%), intrauterine devices –IUDs (25%) and the withdrawal method (5%). Knowledge of use of family planning amongst participants included: prevention of unwanted pregnancies (70%), possible maternal death (60%), reduction in family size (60%) and child spacing (45%). About 5% (15) of the participants became pregnant while using the withdrawal method. There were many positive opinions amongst the participants about the use of family planning and these were: public health education and knowledge involving both rural and urban women (25%), family planning should be encouraged (30%), child spacing (25%), avoiding unwanted pregnancies and unsafe abortion (15%) and prevention of maternal death (65%)(11).

According to study conducted to know method mix of contraceptive, changes in method mix were seen in developing countries. The overall proportion of users relying on female sterilization ranged from 29% to 39%, reaching 42–43% in Asia and in Latin America and the Caribbean in 2000–2005; on average, the share of all method use accounted for by male sterilization remained below 3% for all periods. Contraceptive prevalence among married women has increased gradually in all regions of the developing world since 1980, rising to 60% for the period 2000–2005. Prevalence is currently highest in Latin America and the Caribbean (73%) and Asia (66%); these rates are followed distantly by that of Sub-Saharan Africa (22%). However, this pattern masks dramatic variations by country with in regions (12).

2.2 Factors affecting use and intention to use LAPMs contraceptive

A study done on the effect of socio economic and cultural determinants on acceptance of permanent contraceptive in India showed that acceptance of permanent methods declined with increasing age ,as 50% of women in the 35-39 year age group had opted for a permanent method which was significantly higher than that of the 40-44 years age group. The rate in the later age was also higher than that of the 45-49 years age group though this difference is not statistically significant. In the same study religion did seem to have an influence on the acceptance of permanent methods as Hindus showed an acceptance rate of 37.8% where as Muslims showed 22.7% the difference was found to be statistically significant. Moreover, acceptance was higher among women having 3-5 children. The acceptance was seen to be directly proportional to the per capita income (13).

In a study conducted on understanding contraception use among Muslims of India, Pakistan and Bangladesh , what is interesting to note in this regard is that, contraceptive prevalence is pretty high (37%) among non-literate couples in Bangladesh compared to those in Pakistan (6%) and India (22%). This may point towards the successful implementation of the family planning programs in Bangladesh where the acceptability of the program has trickled down to the socially deprived section of the community (14).

In a study conducted in Nepal in 2001, on the relationship between mass education and childbearing revealed that couples in which the husband attended school reported 41% higher rates of permanent contraceptive use. Couples that live near a school after the birth of their first child have about 20% higher rates of contraceptive use than couples that do not. Couples that have sent a child to school have approximately 40% higher rates of contraceptive use than couples that have not (15).

Several factors affect acceptance and use of LAPMs. In a study conducted in Tanzania it was found that vasectomy acceptance is limited by the scarcity of skilled vasectomy providers and by the fact that men and women hold many of the same misunderstandings about vasectomy, including a fear of decreased sexual performance because of the procedure (16).

In a study conducted in Islamic countries of Asia and Africa voluntary female sterilization is a major family planning method in Bangladesh, Jordan, and Tunisia. Tunisia in 1988 had the highest reported prevalence of voluntary female sterilization among Islamic countries, at 12% of married women of reproductive age, or about one-sixth of all family planning users (17)

2.3 Ethiopian situation of Use and Intention to use LAPMs

There are marked differences in the contraceptive prevalence rate among currently married women by background characteristics. Contraceptive use is associated with the number of living children a woman has; it is highest among currently married women with one or two children (17%) and lowest among women with no children (12%). As expected, contraceptive prevalence is more than four times higher in urban than in rural areas (47% versus 11%). Furthermore, contraceptive use differs significantly across educational categories and current use increases five-fold from 10% among women with no education to 53% among those with secondary and higher levels of education. Wealth has a positive effect on women's contraceptive use, with use increasing markedly as wealth increases, from 4% among married women in the lowest wealth quintile to 37% among those in the highest wealth quintile. In general, in Ethiopia, knowledge of contraceptive methods is high though there is low CPR according to DHS surveys, the EDHS 2005 finding being 88% knowledge for currently married women and 93% for currently married men knowing at least one method of contraception (6, 18).

In a study conducted on improving the range of contraceptive choices in rural Ethiopia, Tehuleder woreda the majority of the clients (89.4%) were predominantly Muslim, 26.1% of the participants had no education, 54.1% had some informal education, and 19.7% had some formal education. A majority (58.3%) of the clients reported that they were farmers. The majority (73.9%) of the participants got their information on family planning from the CBRH program and knowledge for modern contraceptive is over 90% (19).

Ethiopia is an ancient country with a rich diversity of people and cultures and a unique alphabet that has existed for more than 3,000 years. Palaeontological studies identify Ethiopia as one of the cradles of humankind. "Dinknesh. It is the second most populous country in Sub-Saharan Africa. A very large proportion of the population (85%) lives in the rural areas (18).

The use of contraceptive in general and the use of long acting and permanent contraception are very low. According to EDHS 2005, IUCD use was 0.2% in married women. Modern methods are more widely known than traditional methods and among modern methods; the pill is the most widely known method (84%), followed closely by injectables (83%). Nevertheless, knowledge for long acting and permanent contraceptive is very low, example male sterilization knowledge by females is 5.5%, IUCD knowledge by males is 12% (6).

More than half, (52%) of currently married women who were not using any contraception at the time of the EDHS survey say that they intend to use a family planning method some time in the future. Forty-four percent do not intend to use any method, while 4% are unsure of their intention (6).

In a study conducted on improving the range of contraceptive choices in rural Ethiopia, Tehuleder woreda (South Wollo zone of Amhara Regional State)

among the total of 218 family planning clients interviewed, 11 (5%) were males who had undergone vasectomy. Moreover, almost 81% of the clients who used long term and permanent methods were in the age group of 25-44 years. A majority, (58.3%) of the clients reported that they were farmers (19).

In a study conducted in Gonder the overall modern contraceptive prevalence rate was 28.6% (35.5% urban and 11% rural). Contraceptive prevalence among married women was 32.1%. Injectable contraceptives were used by 39.7% of the female users, followed by oral contraceptive pills (35.3%). Moreover, among non-users, 72% of the females and 69.6% of the males had positive attitude towards future use of contraceptives (20).

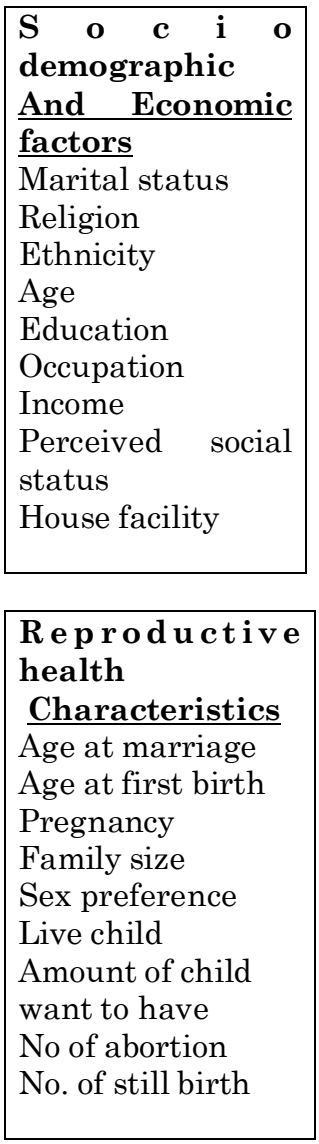
In a study conducted in the big regions of Ethiopia, knowledge on IUCD was 16.7% of 992 participants and for Implant and IUCD was 15.1%. Clients reported over 30 different rumors about IUCD and major reason for low use of IUCD (40.8%) is lack of adequate information on it. Other reasons are abdominal pain during picking up heavy load, weight gain, back pain and difficulty on walking long distance. However, knowledge for short term methods was high (pills-82.2%,injectables-42.8%) and participants support having 4 children on average (21).

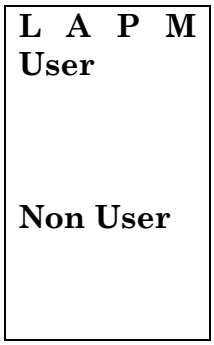
According to a study conducted selected regions of Ethiopia on the effects of contraceptive shortages and coping mechanisms, there is a remarkably growing trend in contraceptive demand in all the regions, which is primarily because of the expansion of the community-based reproductive health (CBRH) services in addition to the increasing health service coverage (22).

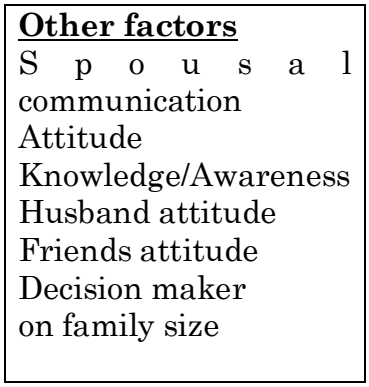
In a study conducted in Bure woreda,West Gojjam zone on family planning method mix and effects of lack of preferred contraceptive methods, use of IUD and Norplant were found to be -0.2% and 0.2% respectively. Moreover, among

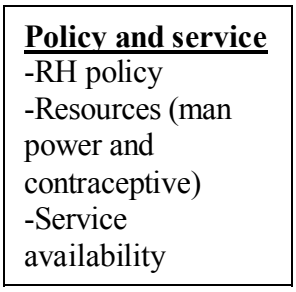
users of a method due to unavailability of their method of choice; 60 (52.6%) had preferred Norplant, 1.8% for IUD and 3.5% had preferred male sterilization. In the same study it was found that among those who have unintended pregnancy due to lack of there preferred method, 32.4% had preference for Norplant, 5.1% for IUCD, 3.5% for female sterilization and 2.1% had preference for male sterilization. Furthermore, from participants who have had intention to wait for the next pregnancy, most, 367 (59.2%) want to use injectables, 219 (35.3%) want Norplant, 3.5% want female sterilization and 1.1% want male sterilization (23).

Figure 1-Conceptual framework developed for analyzing the data by considering different literature









Key

* Factors which are not assessed in this study

- Factors whose effects on LAPMs use and non use was addressed

Description of Conceptual framework

Several factors affect the use and intention to use of LAPMs of contraceptive in an area. Some of the factors are socio demographic, economic, reproductive health characteristics of individuals, availability services and other resources, policy knowledge and attitudes towards LAPMs of contraceptive. In this study only socio demographic, reproductive health, knowledge and attitude related factors were considered and studied to know there effect on LAPMs of contraceptive use.

3 Objective

3.1 General Objective

To assess the prevalence and factors affecting use of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive among women of reproductive age group (15-49 years) in Jinka town, South Omo Zone, SNNPR, Ethiopia.

3.2 Specific Objectives

- To asses the prevalence of long acting and permanent contraceptive
- To assess the knowledge concerning long acting and permanent contraceptive
- To assess attitude towards long acting and permanent contraceptive
- To assess predictor factors on the use of long acting and permanent contraceptive

4. Methods and Materials

4.1 Study design and area

The study was conducted in Jinka town, South Omo zone, in Southern Nations and Nationalities and People Regional State (SNNPR), Ethiopia. The study area was selected purposively. South Omo is bordered on the south by Kenya, on the southwest by the Ilemi Triangle, on the west by Bench Maji, on the northwest by Keficho Shekicho, on the north by Semien Omo (Gamo Gofa), on the northeast by the Dirashe and Konso Special Woredas, and on the east by the Oromia Region. The zone is known for its being among the best tourist attraction sites of the region and the home for many ethnic groups (about 17 natives). Jinka, the study area, is the zonal town that is located 525 kms from the capital city of the region i.e Hawassa and 755 kms from Addis Ababa. This town has a latitude and longitude of 5°39′N, 36°39′E and an elevation of 1490 meters above sea level. There were 25804 (male-13160, female-12644) people at the time of the survey (24, 25, 26). Moreover, there are one hospital, one health center, five private clinics, two private colleges, one technical school, one high school and six elementary schools. The town is subdivided in to six kebeles and had access for 18 hours electricity service and pipe water. The study has used both qualitative (FGD) and cross sectional quantitative designs. Data was collected from fifth of March to seventh of April 2008.

4.2 Study population

4.2.1 Source of Population

The source population was all women of reproductive age group in Jinka town for the quantitative study and females of reproductive age group and males of age 18 and above were included for the qualitative study (FGD). For the FGDs participants who live in Jinka town at time of survey from both sexes were selected.

The inclusive and exclusive criteria for the quantitative study were-

Inclusion Criteria- Women's of reproductive age group (15-49)

-Who live in Jinka town at the time of survey

-Who live in the study area for at least six months

Exclusive Criteria-Women who don't live in Jinka town at the time of survey.

4.2.2 Sample size

For the quantitative survey sample, final sample size (n) was 800 and calculated manually using single population proportion formula for finite population with 95% confidence interval, prevalence of modern contraceptive (p) use in SNNPR 11.4% and marginal error (d) of 2%.

$$n=n_o/(1+n_o/N), \text{ where } n_o=Z^2\alpha/_2P(1-P)/d^2$$

n= sample size from finite population

$\mathbf{n_o}$= sample size from infinite population

N= size of house holds = 5160

Z= the standard score (critical value) corresponding to 95% confidence level = 1.96

d= the proportion of sampling error between the sample and the population = 2% (0.02)

P= the prevalence of modern contraceptive in SNNPR, 2005= 11.4% (0.114).

$\mathbf{n_o}$= $(1.96)^2$ 0.114 (0.886)/$(0.02)^2$=960

n =960/(1+960/5160) = 800

4.2.3 Sampling procedure

For the quantitative part of the survey, first census was done to have unique identification number for each households in the town (since there was no house number for almost all houses in the town). This was done by recruiting and assigning individuals to different sub kebeles so that each individual had given numbers starting with different English letters to avoid overlaps. Then sampling frame was developed based on the temporarily given house numbers. After that, study units, households, were obtained by systematic random sampling first by calculating K, which is 5160/800 that is approximately six (6.45). The first household was selected randomly from the list of 1st to the sixth household and taking it (let it be Y) as starting point ,others were selected as follows:-Y+K,Y+2K,Y+3K…. . Finally, study subjects were identified by lottery method from each household from women who are in the age group of 15-49 and who were found at the time of survey days.

The participants for FGDs were selected by snowball sampling technique taking in to consideration different socio demographic factor like religion, age and occupation.

4.3 Data collection

4.3.1 Data collection tools

For collecting data interviewer administered questionnaires and FGD guides were developed. The questionnaires had socio demographic questions, questions concerning reproductive health characteristics of participants, economic conditions, knowledge, attitude and practice of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive methods. The questioners were developed by reviewing several literatures and considering the local and international situation of the study subject (see appendix 1). Moreover, before conducting FGDs about twelve FGD guides were developed to ensure subject areas are covered

systematically and for uniformity of FGDs. Besides, the FGDs' note takers were informed on the procedures and appropriate ways of not taking of the FGD participants' expressions.

- **Operational Definitions**

LAPMs- long acting and permanent contraceptives are those contraceptives that are useful as a family planning method from years until permanently if used once and it includes methods like Implant, IUCD, female voluntary sterilization and Vasectomy.

Natural contraceptive methods-Methods that are used for contraceptive purpose without using external substances to be swallowed, taken as injection, put in or on different body parts, but methods like coitus interrupts, periodic abstinence, lactational amenorrhea.

Other Modern method-contraceptives other than LAPMs and natural methods

LAPM user-A person who uses/her partner uses one of the four LAPMs

Awareness/Knowledge–have information/knowledge on different aspects of LAPMs

Previous LAPMs user-person who has been using either Implant or IUCD but now stopped using it.

Perceived social status-the level of social status the participants thinks to be included among the choices given

Modern education-education level from grade one up to grade twelve

Very good-knowledge-those who know four and more distinct features (from knowledge questions) of a LAPMs contraceptive.

Good knowledge-those who know one to three distinct features (from knowledge questions) of a LAPMs contraceptive

Poor knowledge-those who only name a method of the LAPMs

Good attitude-those who score equal to or above average, (10.5 points), in a composite measure for attitude on LAPMs from 13 points, maximum possible score.

Poor attitude - those who score below average, (10.5 points), in a composite measure for attitude on LAPMs from 13 points, maximum possible score

- **Variables**

Dependent variables: - LAPMs use

Independent variables:- age, sex, level of education, occupation, religion, ethnicity, monthly income, perceived social status, family size, age at marriage, total children available, total children wanted to have, sex preference, decision maker on family size, knowledge on LAPMs, communication on LAPMs with husband/friends, husband attitude on LAPMs, participant attitude on giant family effect on MCH and family economy.

4.3.2 Data collection procedure

The principal investigator trained the data collectors and supervisors. The two days training session has consisted of instruction in qualitative methods, a revision of all of the study guides, role-plays, and a review of informed consent, respectful approach of participants, ethical procedures and general information on contraceptive and the objective of the study in general. Data collectors and the three supervisors were assigned to different site of the town after zoning it. The data collectors visit sampled households carrying there questionnaire and when they got in to the houses they give information for their visit. Then data collectors took a participant randomly by lottery method (when there are more than one female of reproductive age group in a house) for the questionnaire survey and had informed consent before collecting data. There were up to two additional visits for each household if not available at first visit. Those who are not found in two revisits, give incomplete response (>10% questions not answered) and who are unwilling to participate are

considered as non-response. In the case of FGDs after identifying discussants appropriate time and usual and comfortable place of meeting was selected and organized. While conducting FGDs, explanation and elaboration of the need to do the FGDs was done and participants were participated voluntarily. Note taker and recorder assigned while the principal investigator facilitate the discussion. The FGDs were conducted separately for males and females.

4.3.3 Data quality control

To maintain the quality of data in the quantitative survey the questionnaires were pre-tested in the near by town, Keyafer and adjustments like age estimation/tracing system, asking additional opinion of participants was made. Moreover, there was training for 10 data collectors and 2 supervisors' and regular and surprise follow up was made by the supervisors and the principal investigator to monitor quality of the data collection process. Moreover, regular checkup for completeness and consistency of the collected quantitative data was done. In addition, questionnaires were edited and coded for computerization by the investigator. In the case of FGDs, all were tape recorded in addition to taking notes. The data collected from FGDs were transcribed to Amharic on daily basis and translated to English for further processing.

4.4 Data processing and analysis

Quantitative data was entered using Epi Info version 3.3, exported and cleaned using SPSS version 13 and analyzed by SPSS. Socio demographic data, reproductive health, knowledge, attitude data were summarized and presented by frequency tables and summary statistics and the contraceptive use data were summarized and presented by graphs, tables and other summery measures. For all statistical significance tests, the cut- off value set was $p<0.05$ as this was considered statistically reliable for analysis of this study. In the bivariate analyses, crude odds ratios of use of LAPMs were

estimated for all independent variables. All the covariates were categorical. Since crude OR does not take in to account the effect of the confounding variable(s), a multivariate analysis was used to estimate the adjusted odds ratios of use of LAPMs to control for confounding factors.

The transcripts and English translated FGD data were first thoroughly read to be familiar with it to help easy identification and categorization of data when themes emerge. Then it was reviewed, examined meticulously, categorized in to primary themes and then data reviewed and pooled in to broader concepts. Moreover, quotes of participants that illustrate key concepts were used directly during analysis. Finally, the concepts were developed in to major themes under each discussion guides. The result of both the qualitative and quantitative study components were presented using quotes, explanations, different graphs, tables, charts and other summery measures.

4.5 Ethical consideration

Data collection was carried out after approval of the project proposal by the ethical clearance committee of AAU, South Omo Zone health department, Jinka town health office and lastly verbal consent was obtained from individual participants. All the participants in the questionnaire survey and FGD were told that participation is on voluntary basis and confidentiality of information they give is kept. Moreover, the purpose, procedures of the study, advantages and disadvantages (missing some minutes to hour) were told to participants.

4.6 Dissemination

The findings of the research will be submitted to the School of Public health, CORHA, South Omo zone health department, Jinka town health office and

other responsible bodies. The result will be presented to the School of Public Health and in different seminars, meetings and workshops. Finally; the findings will be published and disseminated through different journals, scientific publications.

5. Result

5.1 Quantitative Result

5.1.1 Socio demographic and economic characteristics of the study subjects

Seven hundred sixty three women of reproductive age group participated in the quantitative survey making a response rate of 94.4%. The majority, 554 (89.4%) of participants were in the age group of 15-39 with mean age of-28.3years (Rangs from 15-49, SD-8.16 years, median age-28). Nearly half, 368 (48.2%) of participants were Amharas by ethnicity, followed by Ari-122 (16%) and Gofa-51 (6.7%). Orthodox is the major religion contributing for 469 (61.5%) of all followed by Protestant, 189 (24.8%) and Muslim 82 (10.7%). Significant number, 535 (70.1%) of participants were married, followed by singles, 148 (19.4%) and widowed, 42 (5.5%). Furthermore, more than half of participants, 449 (58.8%) were housewives followed by students, 146 (19.1%) and Gov/NGO employees, 119 (15.6%). Moreover, about 505 (66.2%) of them have modern education and above, and out of which 98 (12.8%) have college/university education (See table 1).

Table 1.Sociodemographic characteristics of study subjects, Jinka town, 2008

Socio demographic Characteristics of participants		Frequency	Percentage (%)
Age group of participants(763)			
	15-19	130	17.0
	20-24	117	15.3
	25-29	207	27.1
	30-34	100	13.1
	35-39	119	15.6
	40-44	42	5.5
	45-49	38	5.0
	***Non response	10	1.4
Marital Status(763)			
	Married	535	70.1
	Single	148	19.4
	Divorced/ Separated	38	5.0
	Widowed	42	5.5
Educational Status(763)			
	Illiterate	171	22.4
	Read and write	81	10.6
	Modern edu.(1-12)	407	53.3
	College/Univ.	98	12.8
	No response	6	0.9
Occupation(763)			
	Student	146	19.1
	Gov/NGO	119	15.6
	House wife	449	58.8
	Others	35	4.6
	No response	14	1.9
Religion(763)			
	Orthodox	469	61.5
	Muslim	82	10.7
	Protestant	189	24.8
	Catholic	15	2.0
	No response	8	1.0
Ethnic Composition(763)			
	Amhara	368	48.2
	Ari	122	16.0
.	Gofa	51	6.7
	Wolayta	36	4.7
	Besketo	32	4.2
	Malie	16	2.1
	Oromo	14	1.8
	Gamo	14	1.8

Non Response	59	7.7
Others	51	6.8

***Age not exactly known, but still having regular menses, in school life…

When we see the house facilities and economic condition of participants, about two third, 516 (67.6%) of them perceived their social status to be medium, followed by poor, 200 (26.2%) and rich, 19 (2.5%). Moreover, the average monthly income of participants was found to be 697.2 Et.Birr (SD-641.1 Et.Birr, Range: 30-4500 birr). Significant number of participants, 342 (44.8%) earn <500 birr per month and 584 (76.5%), 489 (64 %) and 406(53.2%) of houses of participants have electricity, radios, and televisions respectively. In addition, 325 (49.4%) of participants have at least one cattle in their home. (See Table 2)

Table 2 Economic indicators of study subjects, Jinka town, 2008

Economic Indicators	Frequency	%
House Facility(763)		
Radio	489	64.0
Television	406	53.2
Electricity	584	76.5
None	65	8.5
No response	15	2.0
Monthly Income (763)		
<500 birr	342	44.8
500-1000 birr	220	28.8
. >1000	92	12.1
No response	109	14.3
Perceived social status(763)		
Very poor	12	1.6
Poor	200	26.2
Medium	516	67.6
Rich	19	2.5
Very rich	1	0.1
No response	15	2.0
No. of cattle in the family		
One	90	11.8
Two	94	12.3
Four and above	141	18.5
None	374	49.0
No response	64	8.4

5.1.2. Reproductive Health Characteristics of the Study Population

Of the total participants, majority, 576 (75.5%) were ever pregnant, 567 (74.3%) were married and have been pregnant. About 343 (45%) participants have more than four family size and the average family size of participants was 4.95 (SD-2.2, Ranges from 1-15). Moreover, nearly two third, 485 (63.5%) of participants want to have three or more children and married participants have 3.3 children on average. Three hundred twelve, (40.9%) participants have their first marriage before 18 years and 372 (48.8%) have their first birth at or after age of 18. Moreover, 336 (44%) of the participants want to have 3-4 children and 565 (74%) give birth after marriage. Of those married participants, 99 (12.6%), and 68 (8.9%) have abortion and still birth respectively.

Those single participants want to have their first pregnancy on average at the age of 25.14 years (SD-3.1, min-18, max-36 years). Furthermore, when we see the sex preference of participants more than half, 335 (43.9%) prefer to have both sexes and 170 (22.3%) prefer males than females. (See table 3)

Table 3 Reproductive health characters of participants, Jinka town, 2008

Reproductive Health Characteristics	Frequency	%
Family size(763)		
<4 in number	320	41.9
>=4 in number	338	44.3
No response	105	13.8
Age at marriage(615)		
age<18	312	50.7
age>=18	301	48.9
No response	2	0.4
Ever pregnant(763)		
Yes	576	75.5
No	183	24.0
No response	4	0.5
Age at 1st birth(580)		
<18 years	183	31.6
>=18 years	372	64.1
No response	25	4.3
Total children (580)		
1-2 children	229	39.5

3-4 children	207	35.7
>4 children	132	22.8
No response	12	2
Total children wanted (763)		
1-2 child	214	28.1
3-4 children	336	44.0
5 and above	149	19.5
No child(0)	23	3.0
No response	41	5.4
Planed age for 1st pregnancy for never pregnant (183)		
15-19	1	0.5
20-24	34	18.6
25-29	62	34.0
30-34	7	3.8
35-39	1	0.5
Don't have planed time	71	38.8
No response	7	3.8
Sex preference of participants(763)		
. Male	170	22.3
Female	49	6.4
No choice	76	10.0
Both	335	43.9
God knows	104	13.6
No response	29	3.8
Decision maker on No of children(763)		
Husband	38	5.0
Wife	40	5.2
Both	525	68.8
No response	155	20.3
Others	5	0.7
No. of still birth(763)		
One	55	7.2
Two	12	1.6
Three	1	0.1
None	510	66.8
Not applicable	183	24.0
No response	2	0.2
No. of abortion(763)		
One	66	8.7
Two	24	3.1
Three	6	0.8
None	483	63.3
Not applicable	183	24.0
No response	1	0.1
Pregnancy(763)		
After Marriage	565	74.6
Before Marriage	13	1.7
Not applicable	183	24.0

No response	2	0.2

5.1.3 General Awareness on LAPMs

Of the total participants of the questionnaire survey only 138 (18%) participants have knowledge about LAPMs (95% CI: 15.4-20.9). Majority, 110 (80%) of those with knowledge (14.4% of total participants) concerning LAPMs are married women, followed by singles, 14 (10.1%). In addition, 94 (68%) of those with knowledge have modern education (from grade one to twelve) and above, but very great proportion, 153 (89.4%) of illiterates have no knowledge on LAPMs.

Regarding the general uses of LAPMs as any contraceptive methods, about three quarter, 103 (74.6%) of those with knowledge know that LAPMs are useful to prevent unwanted pregnancy and 107 (77.5%) know that LAPMs are useful for child spacing. Furthermore, 87 (63%) participants know that LAPMs are useful for deciding on family size and 67 (48.6%) are aware of its contribution in preventing maternal mortality and morbidity. The greatest part, 128 (92.8%) of those with knowledge about LAPMs got the information from health institution and 96 (69.6%) participants know at most two methods. From the LAPMs (Implant, IUCD, Male sterilization (Vasectomy) and Female sterilization), Implant is known by most, 105 (76.1%) participants followed by female sterilization, 55 (39.9%), and IUCD, 53 (38.4%). (See table 4)

Table 4 General Awareness on LAPMs, Jinka town, 2008

General Knowledge Questions on LAPMs	Frequency	Percentage
Knowledge of any LAPMs (763)		
No	625	81.9
Yes	138	18.1
Prevent unwanted pregnancy(138)		
No	35	25.4
Yes	103	74.6
Use for child spacing(138)		
No	31	22.6
Yes	107	77.4
To decide on the family size		
No	51	37.0
Yes	87	63.0
Prevent maternal and child mortality and morbidity(138)		
No	71	9.3
Yes	67	8.8
Know >=3 general uses(138)		
No	71	51.4
Yes	67	48.6
Methods of LAPMs known(138)		
IUCD	53	38.4
Implant	105	76.0
Tubal ligation	55	39.8
Vasectomy	24	17.4
Know <=2 methods	96	69.6
Know >= three of the methods	28	20.3
Source of information (138)		
Health facility	128	92.8
Others sources	10	7.2

5.1.4 Knowledge on IUCD, Implant, Vasectomy and Female sterilization

Of the total participants who have knowledge about LAPMs, 33 (23.9%) do not know anything about IUCD. When we see those who know about IUCD 15

(10.9%) and 84 (60.9%) participants have very good and good knowledge on IUCD respectively. Moreover, 72 (52.2%) know that it is very effective, 45 (32.6%) know that it is long term (used usually for more than ten years). Besides, 37 (26.8%) participants know that it is long acting and very effective, 131 (94.9%) don't know that it not good for female at high risk of getting STIs. Only 9 (6.5%) and 3 (2.2%) participants know that it had minimal side effect and has no interaction with medicine respectively. However, none of the participants knows that IUCD has no effect on breast-feeding; no interference with sexual intercourse and that it is immediately reversible (becoming pregnant quickly when removed). (See table 5)

Table 5 Knowledge on IUCD, Jinka town, 2008, (N=138)

Knowledge Questions on IUCD	Know/Yes #(%)	Don't Know /No #(%)
It is very effective	72(52.2)	66(47.8)
It is long acting	45(32.6)	93(67.4)
No effect on breast feeding	0(0.0)	138(100.0)
Not good for female at high risk of getting STIs	7(5.1)	131(94.9)
No effect on sexual performance and sensation	0(0.-)	138(100.0)
No interaction with medicine	3(2.2)	135(97.8)
Immediately reversible	0(0.0)	138(100.0)
Had minimal side effect	9(6.5)	129(93.5)
Very good knowledge	15 (10.9)	123(89.1)
Good knowledge	84 (60.9)	54(39.1)
Poor knowledge	6(4.3)	132(95.7)
Now nothing about IUCD	33 (23.9)	105(76.1)

Of the total participants who have knowledge about LAPMs 21 (15.2%), don't know anything about Implant. When we see those who knows about Implant, 10 (7.3%) and 103 (74.6%) have very good and good knowledge respectively. Moreover, less than half, 61 (44.2%) of the participants know that it is very effective, 76 (55.1%) know that it has long-term use (used for up to five years) and 33 (24%) know that it is long acting and very effective. Besides, no more

than 9 (6.5%) participant know that it had minimal side effect and only 5 (3.6%) know that it has no interaction with medicine. To the contrary, most of the participants, 116 (84.1%), don't know that it is immediately reversible, 130 (94.2%) don't know that it has no effect on breast feeding, and only few 9 (6.5%) participants know that it has minimal side effect. (See table 6)

Table 6-Knowledge on Implant, Jinka town, 2008,(N=138)

Knowledge Questions	Know/Yes #(%)	Don't Know /No #(%)
It is very effective	**61(44.2)**	**77(55.8)**
It is long acting method	**76(55.1)**	**62(44.9)**
Has no effect on breast feeding	**8(5.8)**	**130(94.2)**
Requires minor surgery	**27(19.6)**	**111(80.4)**
No effect on sexual performance and sensation	**24(17.4)**	**114(82.6)**
No interaction with medicine	**5(3.6)**	**133(96.4)**
Immediately reversible	**22(15.9)**	**116(84.1)**
Had minimal side effect	**9(6.5)**	**129(93.5)**
Very good knowledge	**10 (7.3)**	**127(92.7)**
Good knowledge	**103 (74.6)**	**35(25.4)**
Poor knowledge	**4(2.9)**	**134(97.1)**
Know nothing about Implant	**21(15.2)**	**117(84.8)**

Of all participants of the questionnaire survey who have knowledge on LAPMs, 66 (47.8%) have good knowledge on vasectomy but half, 69 (50%) of them do not know about vasectomy. Moreover, about three quarter, 103 (74.6%) do not know that vasectomy is very effective but only 27 (19.6%) know that vasectomy is very effective and permanent method. In addition, greater number of participants, 127 (92%) don't know that it needs simple and safe surgery, 136 (98.6%) don't know about its effectiveness after 20 ejaculation or after months of surgery and 134 (97.1%) don't know that it have no known major long term side effect. However, about 45 (32.6%) participants know that vasectomy is permanent method, 10 (7.2%) know that there is no need for

supplies to get/no repeated clinic visit and 26 (18.8%) know that it has no effect on sexual performance and sensation. (See table 7)

Table 7 – Knowledge on Vasectomy, Jinka town, 2008, (N=138)

Knowledge Questions on Vasectomy	Know/Yes #(%)	Don't know /No #(%)
It is very effective	35(25.4)	103(75.6)
It is permanent(Irreversible)	45(32.6)	93(67.4)
Need safe and simple surgical procedure	11(8.0)	127(92.0)
No supplies to get/no repeated clinic visit	10(7.2)	128(92.8)
No problem on sexual performance and sensation	26(18.8)	112(81.2)
Fully effective after 3 months	2(1.4)	136(98.6)
No known long term side effect	4(2.9)	134(97.1)
Needs counseling and informed consent	8(5.8)	130(94.2)
Very good knowledge	1(0.7)	137(99.3)
Good knowledge	66(47.8)	72(52.2)
Poor knowledge	2(0.2)	136(99.8)
Know nothing about Vasectomy	69(50.0)	69(50.0)

When we look at the knowledge of participants on female sterilization, about a quarter, 37 (26.8%)) of participants with knowledge on LAPMs don't know anything about female sterilization, while 6 (4.4%) and 90 (65.2%) participants have very good and good knowledge on female sterilization respectively. However, 75 (54.3%) know that it is permanent method and 18 (13%) know that female sterilization is very effective and is permanent method too. Only 5 (3.6%) participants know that female sterilization helps to protect from ovarian cancer and 11 (8%) know that it has no known long term side effect. However, majority, (82.6%) don't know that it is very effective, 114 (89.1%)

don't know that it need simple and safe surgery, 104 (75.4%) don't know that it have no effect on sexual performance and sensation and 126 (91.3%) don't know that it requires counseling and informed consent. (See table8)

Table 8 Knowledge on Female Sterilization, Jinka town, 2008,(N=138)

Knowledge Questions on Female Sterilization	Know/Yes #(%)	Don't know /No,#(%)
It is very effective	24(17.4)	114(82.6)
It is permanent(Irreversible)	75(54.3)	63(45.7)
Need safe and simple surgical procedure	15(10.9)	123(89.1)
No supplies to get/no repeated clinic visit	9(6.5)	129(93.5)
No problem on sexual performance and sensation	34(24.6)	104(75.4)
Helps to protect from ovarian cancer	5(3.6)	133(96.4)
No known long term side effect	11(8.0)	127(92.0)
Needs counseling and informed consent	12(8.7)	126(91.3)
Very good knowledge	6(4.4)	132(95.6)
Good knowledge	90(65.2)	48(34.8)
Poor knowledge	5(3.6)	133(96.4)
Know nothing about female sterilization	37 (26.8)	101(73.2)

5.1.4 Attitudes and Intention to use LAPMs

Nearly half, 379 (50.3%) of participants used to communicate on LAPMs and 374 (98.7%) of those who communicate with their partner /friends support use of LAPMs. In addition, majority, 689 (90.3%) of participants support use of LAPMs and 468 (68%) participants who support use of LAPMs have also intention /plan to use LAPMs. Concerning their friends/husbands attitude, greater part, 471 (61.7%) of participants explained that their friend/husband support use of LAPMs and 76 (10%) said that their partners/friends are against use of LAPMs (Implant, IUCD, Vasectomy and female sterilization). Furthermore, majority, 545 (71.4%) of participants need to know more on

LAPMs and of those who want to know more 290 (53.2%) have also tried to know more and the rest 195 (25.6%) participants don't want to now more on LAPMs. While participants answering to the responsibility of using LAPMs, majority, 605 (79.3%) answered that it is the couples responsibility, 61 (8%) said that it is wives' responsibility and 38 (5%) said it is husband's responsibility. Additionally, most of participants, 747 (97.9%) and 744 (97.5%) believe that having giant family size poses great problem on economy and maternal health respectively.

In general, about 332 (43.5%) participants have good attitude towards LAMPs and 239 (31.5%) participants have poor attitude. (See table 9)

Table 9- Attitudes on LAPMs, Jinka town, 2008

Characteristics(Attitude factors)	**Frequency**	**%**
Support use of LAPMs (763)		
Yes	689	90.3
No	41	5.4
No idea	16	2.1
Don't concern me	8	1.0
No response	9	1.2
Communication with friend/Husband on LAPMs (763)		100.0
Yes	379	49.7
No	375	49.1
No response	9	1.2
Friend/Husband attitude on LAPMs (763)		
Support	471	61.7
Against	76	10.0
Neutral	5	0.7
I don't know'	133	17.4
Don't concern me	71	9.3
No response	7	0.9
Need to know more on LAPMs (763)		
Yes	545	71.4
No	195	25.6
No idea	17	2.2
No response	6	0.8
Tried to know more on LAPMs (763)		
Yes	293	38.4

No	435	57.0
Don't concern	16	2.1
No response	19	2.5
Responsibility in using LAPMs(763)		
Wife	61	8.0
Husband	38	5.0
Both	605	79.3
Don't know	13	1.7
Don't concern	40	5.2
No response	6	0.8
Large family has problem on economy (763)		
Yes	747	97.9
No	8	1.0
Don't know	3	0.4
No response	5	0.7
Large family has problem on MCH (763)		
Yes	744	97.5
No	10	1.3
Don't know	4	0.5
No response	5	0.7
Intention/plan to use LAPMs (763)		
Yes	478	62.6
No	208	27.3
No idea	16	2.1
Don’t concern me	54	7.1
No response	7	0.9
Attitude on LAPMs composite measure(763)		
Good attitude	332	43.5
Poor attitude	239	31.3
Non response	192	25.2

When we see intention to use LAPMs of contraceptive with different factors, 90 (53%) of illiterate, 51 (64.6%) of those who read and write, 276 (68.3%) of those with modern education, 57 (58.2%) of those with college education have intention to use LAPMs. In addition, 119 (81.5%) singles, 340 (64%) married women, 13 (34%) divorced/separated women and 6 (14.3%) widowed women have intention to use LAPMs. Moreover, 7 (58.3%), 111 (55.8%), 334 (65.4%) and 13 (68.4%) participants who perceive their social status to be very poor, poor, medium and rich respectively have intention to use LAPMs of

contraceptives. Furthermore, 85 (62.5%) of those with awareness and 392 (63.3%) with out awareness and have intention to use LAPMs of contraceptives.

5.1.5 LAPMs use and Reasons for not use

The over all prevalence of contraceptive among participants was about 39.5% (301) clients or (278) 52% in married couples, of which majority, 242 (31.6%) were users of modern contraceptive (other than LAPMs) followed by LAPMs users, (56) making the prevalence of LAPMs use 7.3% (95% CI: 5.6%-9.5%)/10.5% in married women. The rest, 3 (0.4%) clients were users of natural method (Periodic abstinence) (See figure)

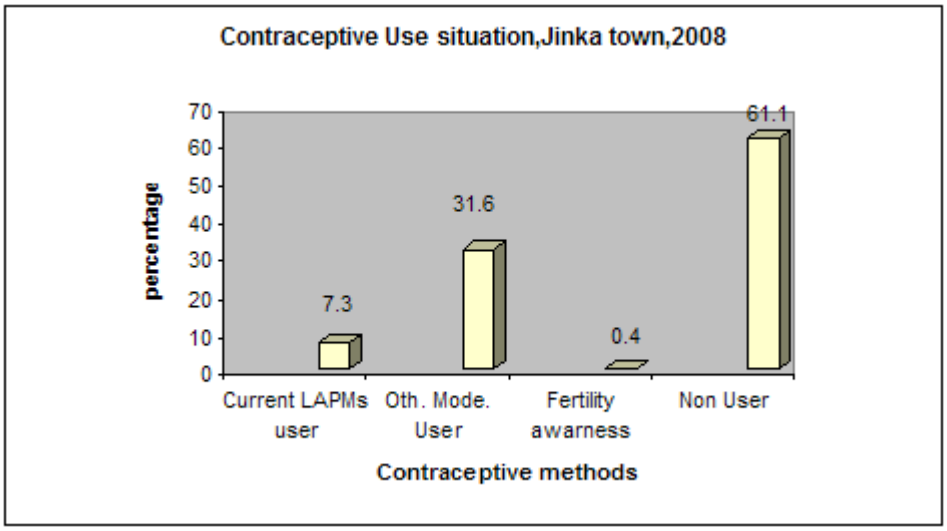


Figure 2-General Contraceptive use situation of women of age 15- 49, Jinka, 2008

Among current LAPMs users half, 28 (50%) were Implant users followed by female sterilization, 20 (35.7%) and IUCD, 7 (12.5%). The least used method from LAPMs was vasectomy (only one user). Further more, most, 46 (72%) LAPMs users started using it in the age group of 20-34 with mean starting age of 28.3 years (min.-18,max-39,SD-4.864) and all,(56) current users got LAPMs from government health facilities and the previous users (2) got it out of government institution.

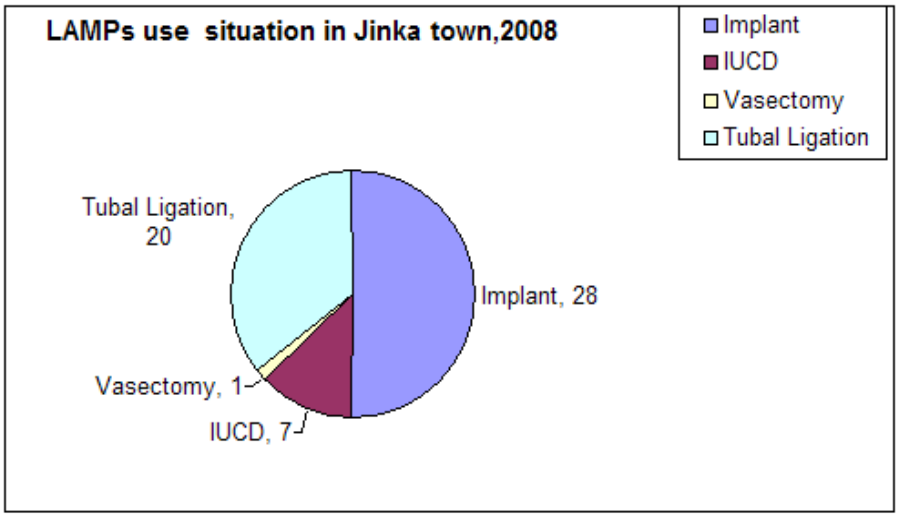


Figure 3 Types of LAPMs used in Jinka town,2008

There were several reasons for not using LAPMs among 598 participants who answered for this. Ninety-seven, (16.2%) participants said that they were not using it because they are single, equal amount of participants, 66 (11%), were not using because they want to be pregnant and they have health problems

and 65 (11%) are not using due to fear of health effect. Moreover, 57 (9.5%) participants do not use because they use other methods, 54 (9%) due to fear of sterility, 44 (7.4%) because they do not know LAPMs and many other were not using it for different reasons. (See table 10)

Table -10 Reasons for not using LAPMs, Jinka town.2008

Reasons for not using LAMPs	Frequency	Percent(%)
Fear of Side effect	65	11.0
Due to health problem	66	11.0
Fear sterility	54	9.0
Husband disapproval	33	5.5
Its sinful act	9	1.5
To get pregnant	66	11.0
Am divorced	9	1.5
Am widowed	19	3.2
Use other modern method	57	9.5
Am single	97	16.2
Don't know about LAPMs	44	7.4
Am infertile	6	1.0
Others	73	12.2
Total	598	100.0

In addition to the above-mentioned reasons, there were many other reasons and misconception towards not using LAPMs. Some of the reasons were:-unwillingness to use, cultural disapproval, age getting old, being sexually inactive, having satisfaction with the method they are using, on lactation by now, being pregnant by now, unavailability of LAPMs at the time she want to use, fear of sterility , having marriage quit recently, not having any/enough children and other reasons too. There were only two previous user and they discontinued due to end of Implant use (5 years) and divorce respectively.

5.1.6 Factors affecting LAPMs use

Several socio demographic, reproductive health and other factors like :-age, sex, education level, occupation, religion, ethnic composition, monthly income, perceived social status, family size, age at marriage, total children available,

total children wanted to have, sex preference, and many others were tested for the presence of association with LAPMs ever use by using binary logistic regression analysis. Variables like age of participants, education, monthly income, family size, total number of children participants want to have, knowledge on LAPMs and presence of communication with husband or friends were found to be significantly associated with LAPMs use on binary logistic regression analysis. These factors were further analyzed using multiple logistic regression using enter stepwise elimination method.

Knowledge on LAPMs was found to be an important predictor of LAPMs use (OR:145.6 (29.03-730.2)). Those with knowledge on LAPMs are 145.6 times users of LAPMs than those with out knowledge on LAPMs. Moreover, people in the age group of 25-34 (OR= 6.51 (1.44-29.49)) and 35-49 (OR=6.22 (1.28-30.36)) were more than six times users of LAPMs compared to those in the age group of 15-24. (See table 11)

Table 11 Predictors of LAPMs everuse, Jinka town, 2008

Variables	LAPMs Ever use		Crude OR (95%CI)	AOR ** (95%CI)
	Yes	No		
Age				
15-24	4	241	1	
25-34	28	275	6.14(2.12-17.73)	**6.51(1.44-29.49)***
35-49	26	173	9.06(3.10-26.15)	**6.22(1.28-30.36)***
Education				
Illitrate	8	132	1	1
Read and write	8	72	2.25(0.81-6.23)	0.57(.09-3.61)
Modern edu(1-12).	24	379	1.28(0.56-2.92)	0.40(.09-1.79)
College/Univ.	17	81	4.25(1.76-10.26)	0.95(0.16-5.67)
Monthly income				
<500 birr	17	321	1	1
500-1000 birr	28	192	2.75(1.469-5.163)	2.05(0.65-6.42)
. >1000	9	83	2.05(0.88-4.76)	1.24(0.29-5.42)
Family size				
<4 in number	14	305	1	1

>=4 in number	35	300	2.54(1.34-4.82)	1.20(.44-3.31)
Total children wanted				
1-2 child	7	206	1	
3-4	28	305	2.70(1.158-6.301)	0.8(0.23-3.54)
5 and above	19	130	4.30(1.76-10.52)	2.294(0.43-12.31)
Communication with husband/friend				
No	3	370	1	
Yes	55	324	20.94(6.488-67.56)	1.99(0.45-8.80)
Knowledge on LAPMs				
No	5	614	1	1
Yes	53	84	77.48(30.12-199.32)	**145.6(29.03-730.2)***

p-value<0.05,Adjusted for socio demographic, reproductive, knowledge and attitude factors and * indicates those with significant association.

5.2 Qualitative Result

5.2.1 General description of the FGD conducted

A total of 33 discussants participated in four FGDs; each FGD containing 7-9 discussants. The participants have different socio economic, religious and cultural backgrounds and all are from Jinka town. The FGDs were conducted separately for males and females and before conducting FGDs, about twelve FGD guides were developed to ensure subject areas are covered systematically and for uniformity of FGDs. While conducting FGDs, explanation and elaboration of the need to do the FGDs was done and participants were participated voluntarily. The FGDs took from1-2 hours and all were tape recorded in addition to notes. The data collected from FGDs were transcribed to Amharic on daily basis and translated to English for further processing.

5.2.2 General Knowledge of Contraceptive

As an entry question, discussants' knowledge concerning contraceptives in general was raised. Majority of the participants expressed that most of them and community members have knowledge concerning family planning and many people are using family planning methods too. Moreover, most of participants believe that it is mandatory to use family planning methods especially due to the current difficult living condition. In addition, most discussants have also expressed that there are many activities concerning contraceptive in towns and most of the users are those living in towns. However, most discussants feel that there are limited activities concerning family planning in rural areas and that is why there is poor knowledge and use of contraceptive in the rural population. Furthermore, discussants recommend further provision and expansion of health education service to the community giving emphasis to the rural people by using health extension workers, CBRH agents and different health and non-health personnel.

Large amount discussants also expressed that people readily accept education on contraceptives in most of the time. One of the participant, (male, 30, Orthodox), while expressing his sister's experience said:

"…There was my sister's neighbor who is guard. On day, he asked my sister the reason why she had only two children with in eight years gap. She told him that she has education concerning family planning to limit her family size. After knowing the reason, the guard was regretted saying that it was unknowingly that he had many children. By now, his wife has prepared herself to use family planning service; hence, routine and continuous education is mandatory… "

Another discussant, (25, M, Orthodox), while expressing his view on the town people's knowledge on family planning methods said:

"..In previous days people in this town give birth to too many children thinking they will be helped when they are old, but now they have stopped it because they are educated and are getting health education on family planning methods…"

On the contrary, some discussants don't agree that there is better knowledge and use of contraceptive in general even in towns since most of the town and rural communities don't get appropriate, routine and programmed education. One discussant, (18, F) expressed her thought saying:

"…The community has no knowledge since it is new innovation. Hence, the community should get education & boast their knowledge. Secondly, there should be assigned persons in town & rural area to educate the community on LAPMs….".

5.2.3 Knowledge on LAPMs

Generally, most discussants expressed their view saying that there is very low knowledge and use of LAPMs in their community, even some participants said that they heard about it right after the start of FGD. One of the discussant, (30, F) expresses his view saying:

"….I know LAPMs since we occasionally got educations on it from health facilities, but the community mostly use depo provera than LAPMs. If there is use of LAPMs at all, sure, it is too minimal from the total and I think there is too little knowledge too. Those who live in towns may have the knowledge but they use depo despite their knowledge…"

From the LAPMs, which were raised for discussion, majority of those who know, are only familiar with Implant. Moreover, some discussants expressed that there is good knowledge and use of Implants. Furthermore, most discussants said that there is almost no knowledge and use of IUCD and vasectomy. In addition, many discussants explained that there are many misconceptions and complaints among users of Implant. A participant, (32, F) has said:

"…Mostly, the communities know about Implant. However, I don't think the communities have better knowledge about IUCD and male sterilization. There is thinking that IUCD and female sterilization can cause internal problem to the user. I heard that there is a method of family planning by sterilizing males but I don't heard about the use of male sterilization in my locality. If it is available, I think males can use. To the contrary, there are husbands who don't want their wife to use family planning because they can get bride price ("Koyta" "Tilosh") from their female children. By tackling these problems, improvements can be seen in the future… "

5.2.4 Attitudes on LAPMs

In general, most participants had positive attitude towards using contraceptives. Most participants agreed that the use of contraceptives in general and long acting methods in particular, especially Implant for birth spacing are good to the health of children, mothers and family. Moreover, limiting family size is important for a country and society. One discussant, (30, F) expressed her view saying:

"…It is good if every one uses family planning methods because of the current difficult living condition. Moreover, mothers suffer much due to birth, can die during birth and also children may die due to frequent birth hence, it is better

to use family planning methods .Therefore, limiting the number of children and using family planning is good in my opinion…"

Most participants seriously express that it is very essential to limit family size due to the current harsh living condition. In order to limit family size most participants thought that it is better to use shorter acting and long acting once rather than permanent methods. A femal participant, (46, F) from Jinka town said:-

"…Those who will be born in the future should be limited. Nevertheless, there shouldn't be sterilization for both male and female rather using injection contraceptive is good. Previously, people born 10-15 children and they were in good health than the present people…"

Another male participant, (31, M, protestant), from town put his view saying:
"…The permanent methods can cause regret if a LAPMs user, having one or more children, wants to have additional child when he/she improve economically. Hence, rather than using permanent methods it is better to use methods like depo and IUCD. In addition, providing education concerning permanent methods is mandatory…"

A female, (18, F), discussant while expressing community's perception said:

"…The communities don't want totally to stop giving birth, but want to limit the number of children to two or three by using contraceptive methods. If couples do not have birth at all the community attitude towards them may not be good…"

There was very poor attitude concerning vasectomy by most male participants. One male participant, (54, M, Orthodox), expressed his view saying:

"*…If I have vasectomy, I can't have birth. Why should I use this method?! Shouldn't I replace my self?! Nobody should use vasectomy, unless by legal punishment. In previous times, there was no issue about male sterilization. It is what the new generation brought to us. We should work together by all our occupation and develop our country rather than thinking about it…"*

Another young male (26 years, Orthodox) participant expressed his view saying:

"…I can decide the number of children that we want to have with my wife. So what is the need for male sterilization?! I am confused of it…"

One participant was so astonished even to discuss on the issue of vasectomy and he expressed his view as".. *Vasectomy is new for us and I think it is dangerous to use.."*

Nevertheless, some women discussants have emphasized that men should share females burden by starting use of vasectomy given that females are suffering at all times due to frequent childbirth.

Almost all participants want to know more on LAPMs and to disseminate health information concerning LAPMs. They emphasized that there is a need for extensive health education to improve knowledge and avoid misconceptions. Moreover, discussants said that if they got education on LAPMs, they can use it in the future, they could educate their families, neighbors and other people too.

A male participant, (20, M, Protestant), from town expresses his views: *"..I want to know more about LAPMs because, due to our mothers and fathers mistakes, now there is very great population, which has caused negative impact on our economy. However, after now onwards, using these methods as contraceptive is very essential. We can educate about LAPMs through "Edir", on funeral ceremonies and other social contacts. Generally, it is better to use all possible social networks to educate about LAPMs..."*

A female participant, (33, F), put her view saying: *"..I want to know more because, in the future when I reach to good position and had marriage, I may have child, so to keep up my child healthy and for his better growth, there is a need to know about and use contraceptives. Moreover, after we know more about LAPMs we can educate others…"*

5.2.5 Preference, Use and Factors affecting use of LAPMs

Majority of participants prefers long acting methods rather than permanent methods. For their preference, they site different reasons. Participants also suggest that permanent contraceptives should be used by those who want no more children, HIV/AIDS patients, street children and others with no income.

Almost all discussants certainly explained that there is low use of LAPMs, especially permanent contraceptives (Vasectomy) and IUCD. Participants witnessed that there are some Implant and female sterilization users. Moreover, participants raised many factors and misconceptions that hinder use of LAPMs like:-husband disapproval, considering children as assets, fear of sterility lack of knowledge, cultural and religion disapproval and fear of several side effects (heavy period, slipping out during heavy work (for IUCD), vertigo) they are hearing and encountering. One male discussant, (20, M, protestant) said-

"…I know about Implant and IUCD since I have learned about it in my high school life. One day, I was talking with my neighbor about long acting family planning methods and she says" I want to use Norplant for family planning purpose but, it has its own side affects like preventing work by the hand where it is inserted". In addition one of her friend told me she has used IUCD and it slips out during heavy work…"

Large numbers of participants believe that family planning methods are just the concerns of females and using or not using contraceptives is under great influence of males. One participant expressing his view said:

"…I heard about male contraceptive method right now. Only females are using all methods like Implant and female sterilization still now. Even, there are males who do not want their wife to use any type of contraceptive methods. They say you cannot give birth, you are mare or you want another husband that is why you do not want to be pregnant from me. One of my neighbors was using injection contraceptive secretly but her husband knows it lastly and had conflict with her, than she stopped and gave frequent births. Subsequently, at her last pregnancy, she was operated and had tubal ligation. Hence, it is better to give education to such type of males…"

On the discussions some of participants also raised that optimum family size should be to a maximum of six and minimum of four if couples have economic capacity to satisfy all the needs of their children and family size should be decided by the mutual agreement of couples.

5.2.6 Comparison of LAPMs with other FP methods

Discussants expressed that LAPMs are advantageous when compared to other contraceptive methods in the following aspects:-there won't be frequent visit,

help for long year spacing, decreases expense for contraception purpose and other many reasons. One male participant (20, protestant) put his view saying:

"….Using LAMPs method is very essential for it helps to space child birth by several years, prevents frequent health institution visit, economically feasible and have no worry of forgetting use as that of shorter acting methods. The disadvantage or side effect of using it by community is that one can't have birth if he/she lost child…"

Another female participant (30, F) expressed her views saying:

"*…When compared to other contraceptive methods, LAPMs help for having better education of children by spacing for long period. Their will be great problem if we don't space as well as, currently the living condition is very difficult…."*

5.2.7 Ways to improve knowledge, attitude and use of LAPMs

A number of solutions were raised for improving the knowledge, attitude and use of contraceptives in general and LAPMs in particular. All discussants express the need for continuous education concerning LAPMs both in towns and rural areas but giving due emphasis to the rural communities. Moreover, participants suggest training of health professionals and ensuring supply of LAPMs for service continuity.

Discussants also raise the use of all available institutions (like health, education etc), social contacts (like markets, Edirs, funeral ceremonies, coffee ceremonies) for imparting knowledge for the community. Additionally,

discussants suggest education and training on LAPMs not only by health professional but also by LAPMs client, kebele leaders, Edir leaders and other important opinion leaders of the community.

Furthermore, some discussants have suggested that health professionals working with family planning service should give due emphasis in counseling of LAPMs since most of clients, even those using other modern contraceptives, rarely heard about LAPMs in health facilities.

6 Discussions

The study has assessed the prevalence and the factors affecting use of LAPMs in Jinka town. Moreover, it has assessed the knowledge and attitudes on LAPMs in the study area. A total of 763 participants have filled the survey questionnaires and 33 discussants were involved in FGDs from both sexes.

Less than a quarter, (18%, 138) of participants have named one or more of LAPMs (i.e. at least one of the four LAPMs considered by this study). This is relatively lower than that of EDHS 2005 findings which were 22.4% for

Implant, 18.4% for female sterilization, 14.8% for IUCD and 6.6% for vasectomy and also lower than other study in Ethiopia (Amhara, Wollo, Tehuledre woreda) (6,19). This may be due to lack of describing and probing of methods not mentioned spontaneously by participants, unlike in EDHS 2005, (where the interviewer describes and probes for whether the respondent recognized it). Furthermore, the study in Tehuledre is among clients of long acting and permanent methods users and many other factors, which need further investigation. The result of this study is comparable with other studies in the big regions of Ethiopia (21). Furthermore, 10%, 9.8%, 9.4% and 6% of the participants have knowledge (besides naming the method) on implant, female sterilization, IUCD and vasectomy respectively.

Generally, knowledge concerning LAPMs was very low which is consistence with other similar studies. It was also raised by most focused group discussants that there is very low knowledge on LAPMs probably for there were no routine health education programs on LAPMs targeting the whole community rather than education that is given as campaign and to those who have health institution visit (6).
Moreover, those with knowledge on LAPMs were married and those with some education, which is consistent with many other studies and with the FGD result (6, 19).

Most participants of focused group discussants suggested that optimum family size should be to the maximum of four this is also comparable with other studies done in big regions of Ethiopia (21). Moreover, it is relatively inconsistent with EDHS 2005 finding where three out of five women preferred an ideal family size of four or more children (6).

There is good level of knowledge for the general contraceptive as mentioned by FGD discussants. This is consistent with EDHS finding (For example, knowledge for pills is 83%) and a study in Tehuledere among users of LAMPMs (>90%) (6,19).

Considerable amounts, 63.5% (95% CI: 59.9%-66.9%) of participants have intention to use LAPMs one time in the future after getting further information on it which is consistent with other studies in Ethiopia (19). Moreover, it is in line with EDHS 2005 finding where 42% women want no more children while they were asked about their fertility intention and among those with unmet need 14% having an unmet need for limiting (6). This result is also consistent with a study in Bure where among users of a method due to unavailability of their method of choice,57.9% had preference to LAPMs. Furthermore, in the same study it was found that among those who have unintended pregnancy due to lack of there preferred method about 43.1% had preference for LAPMs (23). There is also very high intention to use contraceptives in general as suggested by FGD participants. This is similarly seen in other studies like 15% in Pakistan to 73% in Nepal married women have intention to use contraceptives and about half, (52%) married women who were not using any contraception at the time of the survey intend to use a family planning method some time in the future (2).

In general, most participants have positive attitude towards using contraceptives in general as expressed by FGD discussants. This is similarly seen in other studies (Gonder) that 72% of the females and 69.6% of the males had positive attitude towards future use of contraceptives (20).

The over all prevalence of contraceptive use for women of reproductive age in the town was found to be 39.5% (301 clients or 52% for married couples) of which 56 were LAPMs users making the prevalence of LAPMs use 7.3% (95

CI:5.6%-9.5%)/ 10.5% in married women. Both the over all prevalence of contraceptive and prevalence of LAPMs are much higher than the EDHS 2000/2005 findings (CPR=15%, LAPMs CPR=0.6% in married women EDHS 2005), findings in Bure, West Gojjam (use of IUD and Norplant were found to be -0.2% and 0.2% respectively) and other studies in Ethiopia (20, 21, 23). These may be due to the recent provision of training and supplies of long acting methods by many NGOs working in the area, attitude change of people towards using long acting methods and different changes through time (it is three years from EDHS 2005). Furthermore, majority, (66.1%) of participants have modern (1-12 grades) or college education and provision of female sterilization methods to those visiting hospital for delivery. In addition, further investigation is mandatory for better explanation of the relatively high LAPMs use in the town. Furthermore, need for LAPMs was seen to exist in other studies too, though not very great as what was found in this study (17).

LAPMs prevalence, 7.3% or 10.5% in married women, found in this study is comparable with that of Zambia (8%) and lower than that of South Africa (19.7%). This finding is very low when compared to some Latin American countries like Dominican Republic where LAPMs contribute for three forth of the already high contraceptive use and India (Hooghy district) which is 34.5% (19,13).

Of the LAPMs users half, 28 (50%) or 3.7% of all participants use Implant which is higher than studies in our country these may be due to the recent introduction of two sticks Implant which is easy for insertion and accessed at health center level by trained nurses and other staffs. Moreover, females might have understand and shift towards using understanding Implant because there is no frequent visit, no frequent expenses, no fear of forgetting use as these factors were also raised by FGD discussants as advantageous aspects of LAPMs (6,20).

The second most used method among LAPMs was female sterilization contributing 2.6% of all contraceptive users (35.7% of all LAPMs) which is higher than some studies in Ethiopia (6). However, it is very low compared to that of the study in Tehuledere, Ethiopia (47% of all LAPMs), Tunisia (12% of all CPR in 1998) , Bangladesh (8% in 1985) and it was (5%,1985) in Jordan (19,22). Furthermore, it is very low when compared to Asia and Latin America, where the overall proportion of users relying on female sterilization ranged from 29% to 39%, reaching 42–43% in Asia and in Latin America and the Caribbean in 2000–2005. These different may be due to different socio demographic,cultural and service related factors in different areas (12).

The least used method of LAPMs is IUCD (7, 0.9%) and vasectomy (1, 0.1%) which are comparable with many other studies in Africa. The lowest IUCD use is also the common problem in many African countries (southern Africa-0.2%). The reasons for low use of IUCD may be several factors raised as side effect of it and also lack of knowledge (as also expressed in FGDs) (6,10,21).

As many other African country, Vasectomy is almost non existence in Jinka town, which is consistent with EDHS but very much lower than in a study conducted in Tehuledere, Ethiopia. This may be due to low knowledge of vasectomy, misconception about it, negative attitude of family planning clients and many other reasons as identified by most FGD discussants and many other studies else were in Africa(6,10,19).

Many factors were raised to be affecting the knowledge, attitudes and use of LAPMs in the town by FGD discussants and participants of questionnaire survey. Among these, the main once were lack of education which rendered

low knowledge, poor counseling by family planning providers, fear of side effects and existing health problems and several misconceptions as it is also reported in many other studies (6,21).

FGD discussants have also raised factors like religion, culture and other socio demographic factors have effect on the acceptance and use of LAPMs that is consistent with other study (13).

To the contrary, religion and income were not found to be associated with LAPMs use in the quantitative survey, which is inconsistent with other study and FGD discussion result of this study (13). This may need further investigation in large-scale study.

7. Strengths and Limitation of the Study

Strengths of the Study

-The study uses both qualitative and quantitative methods. Moreover, males were involved in the FGDs to have better picture of the situation of LAPMs use and related factors.
-Study subjects were selected randomly and pre-tested questionnaires were used.

Limitations of the study

-The study is conducted only in the town that doesn't represent the great majority of the rural community.
-The view of service providers, NGOs working with LAPMs in the locality and those working at the health offices were not included.
-Resource constraint in terms of finance and transport
-Lack of adequate literatures in Ethiopian situation, which prevents further elaborating the discussion
-As any cross sectional study cause and effect relationship was not possible to establish for the factors dealt in the study for it is impossible which factor occur first.

8. Conclusion

The study had demonstrated that there was low knowledge and relatively fair level use of LAPMs in the context of Ethiopia. The over all prevalence of contraceptive use in Jinka town in women of reproductive age is somewhat high (39.5%). Moreover, LAPMs prevalence of 7.3% in Jinka town is relatively high.

Ethiopia being the poorest country in the world has very scarce resources including resources for health service for family planning service with no

exception; hence, the observed relatively increased users of LAPMs will help for the best use of the scarce resource.

Generally, there was lower knowledge on LAPMs in the town (18%) and several factors:-socio demographic, reproductive health and other factors were identified to be affecting LAPMs knowledge and prevalence.

Most of the participants have intention to use LAPMs in the future after getting appropriate information, education and counseling together with their partner.

There are relatively better progress in family planning service availability and use in the town area as identified by FGD discussants. Moreover, there is continuous training and employment of health extension workers, short training and assignment of CBRH agents that has helped to raise the use of contraceptives in the town. Hence, this should continued and strengthened in the future.

9. Recommendation

Based on the findings of this study, the following recommendations were given to the relevant government bodies, NGOs and other responsible bodies.

1. South Omo Zone health department should have routine monitoring and evaluation of family planning programs quality, continuity and logistic management of both private and government facilities since different problems on family planning service provision were raised by FGD participants.

2. The zonal health department should maintain continuous health education programs on contraceptives in general and LAPMs in particular by collaborating with Edirs, female and youth associations and other relevant organizations.

3. Special campaign should be organized to educate the community on Vasectomy. Since there is very low knowledge and poor attitude towards it the campaign will help to change the existing situation if it is also accompanied by routine health education sessions.

4. To ensure continuity of service, training should be given to staffs on LAPMs including supply of long acting contraceptives.

5. Boosting source of LAPMs service by using private clinics and NGOs is mandatory. These may help those who can afford for service and those who want to get service quickly since most of government institutions have great client load with few and continuously changing health workers. Hence, the zonal health department, regional health bureau NGOs working with LAPMs and private health institution of the locality should deal on the issue.

6. NGOs working on contraceptive service, supply and training provision should work with integration for reducing wasting of resources.

7. IEC activities, which are planned and implemented by NGOs and other concerned bodies concerning LAPMs, should focus on tackling the main misconceptions on LAPMs and also advantageous parts of LAPMs as compared with other methods.

8. Local opinion leaders, religious leaders and other influential persons should get appropriate information on LAPMs to elicit discussion on different occasions.

9. Federal MOH and regional health bureau should motivate and attract NGOs working with LAPMs since there is a need to use LAPMs by most people.

10**.** Further training and assignment of CBPH agent and health extension workers should be continued.

11. Conducting further research:- detailed and large study which considers NGOs perspective , service providers and health service managers views on similar issues should be conducted for identifying factors for the existing relatively high LAPMs use and weather there is changing trend on contraceptive use.

10. References

1. Optimum Population Thrust, Youth Quick, Population, Fertility and Environment in the 21st century, UK, 2007

2. Population Report, The Reproductive Revolution Continues, Johns Hopkins Bloomberg School of Public Health, Volume XXXI, Number 2 Spring 2003

3. CSA, Statistical Abstract 2006, A.A, FDR Ethiopia, June 2007

4. Ahmed Jelaludin and Genet Mengistu ORC Macro Calverton, Maryland USA, Evaluation of program options to meet unmet need for family planning in Ethiopia, November 2002

5. Assessment of Youth Reproductive Health Programs in Ethiopia, Youth Net Assessment Team, April 2004

6. Central Statistical Agency, ORC.MACRO. Ethiopia Demographic and Health Survey 2005, Addiss Ab aba, Calverton, Maryland, USA, 2006

7. ACQUIRE evaluation and research studies, Factors Affecting Vasectomy Acceptability in the Kigoma Region of Tanzania, E and R studyNo.5, June 2006 8. Barbara Janowitz, Commercial sector's role in providing long acting and permanent methods, USAID,USA, August 2006

9. Roy Jacobstein, Erin McGinn, Beyond the Barriers: Strategies for "Jumpstarting" the IUD in Africa, 2000

10. ACQUIRE Project, Get a Permanent Smile'—Increasing Knowledge of, Access to, and Utilization of Vasectomy Services in Ghana, USAID, Ghana, No.3, 2006.

11. Family Planning: A Possible intervention in maternal mortality, Ifeyinwa Flossy Obuekwe and Chinwe Lucy Marchie, Faculty of Pharmacy, University of Benin, Benin City. Nigeria

12. Eric E. Seiber, Jane T. Bertrand and Tara M.Sullivan, Changes in contraceptive method mix in developing countries, Volume 33, Number 3, September 2000

13. Bratati Banerjee, Socioeconomic and cultural determinants on acceptance of permanent methods of contraception, Hooghy district, West Bengal, India, 2000

14. L.K. Dwivedi, Usha Ram, Baishali Goswami, Understanding Contraception Use among Muslims of India, Pakistan and Bangladesh, Mumbai, India.

15. Mass education and child bearing, research brief, Nepal, December 2001

16. Arwen Bunce, Greg Guest, Hannah Searing, Veronica Frajzyngier, Peter Riwa, Joseph Kanama and Isaac Achwal, Factors Affecting Vasectomy Acceptability in Tanzania, International Family Planning Perspectives Volume 33, Number 1, March 2007

17. Population Reports, Approval of voluntary sterilization growing in Islamic countries, Nov. 1900
18. Central Statistical Agency, ORC.MACRO. Ethiopia Demographic and Health Survey 2000, Addiss Ababa, Calverton, Maryland, USA, 2006)
19. Mengistu Asnake, Lakachew Walie, Yilma Melkamu, Improving the range of contraceptive choices in rural Ethiopia, Tehuledere woreda, in South Wollo zone, Amhara Regional State, Ethiopia, September 2000
20. Yigzaw Kebede, Contraceptive prevalence and factors associated with usage of contraceptives around Gondar Town, Ethiop. J. Health Dev. 2000; 14(3):327-334
21. Amare Dejene, Dehab Belay, Reasons for the low use of IUCD, Dec. 2003
22. Yilma Melkamu, Mulgeta Betre, Effects of Contraceptive Shortages and Coping Mechanisms in Selected Regions of Ethiopia, CORHA, 2005.
23. Lamesgin Alamineh, Assessment of family planning method mix and effects of lack of preferred contraceptive methods in Bure woreda, West Gojjam zone, Amhara Regional State, Ethiopia, March 2007

24. South Omo zone health department annual work plan, 2007(unpublished document)
25. http://en.wikipedia.org/wiki/Debub_Omo_Zone, accessed Dec. 2007
26. http://en.wikipedia.org/wiki/Jinka, accessed Dec. 2007

11. Appendixes

Annex 1 Structured questionnaire for quantitative research part

Greeting

Hello! There is a research to be conducted here in Jinka and if you are willing, you may participate. You will not have any risk in participating except losing part of your time. Moreover, you can get the chance to now more on contraception and contribute your part in future improvement of the service in your area. I would like to ask you some questions about modern contraception, specifically we will discuss more on long acting and permanent contraception like IUCD, Implant, Voluntary sterilization (Female Sterilization and Vasectomy). The main aim of this study is to asses the knowledge, willingness and use of the above-mentioned methods in Jinka

town women's of reproductive age group wishing it would help in improving family planning service in the future. All the information you will be giving of your own accord will be kept confidential and we won't use your names. Moreover, you are not forced to answer to all questions and you can have some break time during the interview.

Can we proceed to the questioner? On the other hand, there is some thing vague that I should clarify.

Yes No

If you have some thing to ask concerning the study, any time you can contact the principal investigator by Phone No. 0911071149, P.O.Box 8069, Getachew Mekonen.

Thank You!

Time of visit

	First visit	Second visit	Third visit and above
Date			
Result			

Result code given
1. Complete response
2. Incomplete response
3. No response
4.Respondent an available
5.Other, specify

N.B For choice questions circle the possible answer(s)

A. 1.Identification

No	Questions	Response	Skip to
001	Questionnaire no.	□□□	
002	Name of data collector	_____	

003	House hold No.	Woreda….. Kebele…… No…….	
004	Visiting time a. first visit b .second visit c. third visit and above	Result code 1. Complete response 2. Incomplete response 3. No response 4.Respondent an available 5.Other, specify	
005	Could you tell me about your long acting and permanent (methods used for many years or permanently just after having it once) use situation?	1.current user 2.Non user 3.Previously user 4.user of other method 5.Others,specify	
006	Date of interview(in Ethiopian calendar)	[____/____/____] Date, month, year	
007	Supervisor Name	_____	

B. Socio-demographic and economic characteristics

No	Questions	Response	Skip to
101	What is your age (in completed years)?	_____-	
102	Marital status of participant?	1.Single 4.Widowed 2.Married 5.Separeted 3.Divorced	
103	Family size of respondent?	Enter the No…….	
104	What is your religion?	1.Orthodox 2.Muslim 3.Protestant 4.Catholic 5Others,specify	
105	What is your ethnicity?	_____	
106	Educational status?	1.Illitrate(can't read or write) 2.Read and write 3.Formaleducation(1-12) (enter grade) 4.College/University level	

107	Occupation of respondent?	1.Student 2.Private Business 3.Government or NGO employ 4.Hose wife 5.Daily laborer 6.Merchant 7.other,specify	
108	Perceived social status?	1.Very poor 2.Poor 3.Medium 4.Rich 5.Very rich	
109	Total monthly income of Family or household?	Enter the no. in birr_____	
110	How many oxen and\or cows do you have	1. One 2. Two 3.three 4.4 and above	
111	Which is available in your house? Radio Television Electricity	 1.Yes 2.No 1.Yes 2.No 1.Yes 2.No	

**If participant can't guess age by her self, better ask different questions to help her guess.(weather she is still having menses, age at marriage, age at first school, birthday and any other means to guess her age.)

C. Reproductive Health History

No	Questions	Response	Skip to
201	What was your age at time of marriage?	_____-	
202	Have you ever been pregnant?	1.Yes 2.No(if no go to Q no209)	209
203	If your answer is yes to Q no. 202 when was it?	1.Before marriage 2.After marriage	
204	If your answer is yes to Q no.202 was it wanted?	1.Yes 2.No	

205	If your answer is yes to Q no.202.what was your age at time of first birth?	Enter age in completed year ……..	
206	How many live children do you have?	Total….M…,F….	
207	How many abortions do you have?	1.1 4.None 2.2 3.3and above	
208	How many still births do you have?	1.1 4.None 2.2 3.3and above	
209	How many children you want to have?	Enter no_____(If answer is 0 skip to 301)	301
210	What is the sex of child you want more?	1.Male 3.No preference 2.Femal 4.Both	
211	Who decide on the no of children you want to have?	1.Husband 4.Others,specify------- 2.Wife 3.Both	
212	If your answer is No to Q no.302. at what age do you want to have your first birth?	Enter in number……	

B. Knowledge of Modern contraceptive (LAPMs)

No	Questions	Response	Remark
301	Do you know about LAPMs contraceptive methods (methods used for many years or permanently just after having it once)	1.Yes 2.No (if answer is no go to Q no. 401) _____-	
302	If yes to Q 301 what general uses of LAPMs as any contraceptive method do you know? (Tick all mentioned)	1. Helps for prevention of unwanted pregnancies 2. Prevention of possible maternal and child death and ill health. 3. Reduction in family size 4. Child spacing	
303	If yes to Q 301which method of LAPMs do you know?(circle all mentioned by the respondent)	1.IUCD 2.Implant 3.Vasectomy	

		4.Tubal Legation	
304	What is your source of information?(circle all mentioned by the respondent)	1.Health sector 2.Family 3.Fraind 4.Mass media 5.NGO 6.others	
305	What do you know about IUCD? (circle all mentioned by the respondent)	1.It is very effective 2.It is long term(used usually for more than ten years) 3.No effect on breast feeding 4.Not good for female at high risk of getting STIs 5.No interference with sexual intercourse 6.No interaction with medicine 7.Immediatly reversible(becoming pregnant quickly when removed) 8.Had minimal side effect 9.Others,specify	
306	What do you know about Implant? (circle all mentioned by the respondent)	1.It is very effective 2.It is long term(used for up to five years) 3.No effect on breast feeding 4.Insertion and removal require minor surgical procedure 5.No interference with sex 6.Can be used by females of any reproductive age 7.Immediatly reversible(becoming pregnant quickly when removed) 8.Had minimal side effect 9.Help to prevent some diseases like anemia 10.Others,specify	
307	What do you know about Vasectomy? (circle all mentioned by the respondent)	1.It is very effective 2.It is permanent(Irreversible) 3.Safe and simple procedure 4.no supplies to get/no repeated clinic visit 5 .No effect on sexual performance and sensation 6. fully effective after 3monthes (20 ejaculations)	

		7.No known long term side effect) 8.Requiers counseling and informed consent 9.others,specify	
308	What do you know about female sterilization? (circle all mentioned by the respondent)	1.It is very effective 2.It is permanent(Irreversible) 3.Safe and simple procedure 4.no supplies to get/no repeated clinic visit 5 .No effect on sexual performance and sensation 6.Helps to protect from ovarian cancer 7.No known long term side effect) 8.Requiers counseling and informed consent 9.Others,specify	

C. Attitude towards Modern contraceptive (LAPMs)

No	Questions	Response	Skip to
401	Do you discus about LAPMs contraceptive methods with your partner or friends?	1. Yes 3. Don't concern me 2. No - 4. Any other idea, explain _____	
402	Do You approve using LAPMs contraceptive?	1. Yes 2. No 3. No idea 4. not applicable	
403	Is it good to use LAPMs for contraception?	1. Yes 2. No 3. No idea 4. Not applicable	
404	What is your partner's attitude towards using LAPMs?	1. Supporting 4. Don't know 2. Against 5.Not applicable 3. Neutral 6. Any other idea, explain_____	
405	Do you want to know more about LAPMs?	1.Yes 2. No 3. Neutral 4. Not applicable	

406	Do you try to know more about LAPMs?	1. Yes 2. No 3. Neutral 4. Not applicable	
407	Do you have plan/intention to use LAPMs in the future?	1. Yes 2. No 3. Not applicable	
408	Whose responsibility is practicing contraception, including LAPMs?	1. Wife 6.Others,explain 2. Husband 3. Both 4. I don't know 5. Not applicable	
409	Does large family size affect economic condition?	1. Yes 2. NO 3. No response 4. I don't know	
410	Does large family size affect the health condition mothers and children?	1. Yes 2. No 3. No response 4. I don't know	

F. Practice and Perception towards Modern contraceptive LAPMs

No	Questions	Response	Skip to
501	Have you ever use LAPMs contraceptive methods?	1. Yes 2. No (If No go to Q No. 508) 3. Am using it now	508
502	If yes to Q No. 501 when do You start?	Enter the starting age……. Enter how long client use……	
503	If yes to Q No. 501 what is/was source of service?	1. Government Health sector 2. NGO 3. Private 4. Others,specify	
504	If yes to Q No. 501 which method have you used or still using?	1. Implant 2. IUCD 3. Vasectomy 4. Femal sterilization	
505	If yes to Q No. 501 are you still using it?	1. Yes (if yes end the questionnaire) 2. No	
506	If No to Q No 505 what happened to it? (for only IUCD and Implant users)	1. Change method 2. Stope using contraceptive method	

507	If you stop/change the method what is\could be the reason?(only for long acting contraceptive users) (circle possible answers)	1. Fear of side effect 2. Medical problem 3. Fear of infertility 4. Partner disapprove 5. To get pregnant 6. It is sinful 7. Cultural taboo 8. Others	
508	Do you use other modern contraceptive method?	1.Yes 2.No	
509	If you don't practice any of LAPMs why is the reason?	1. Fear of side effect 10. Am single 2. Medical problem 3. Fear of infertility 4. Partner disapprove 5. To get pregnant 6. It is sinful 7. Cultural taboo 8. Lack of knowledge 9. Service unavailable 11. Others, specify	

Any additional idea, opinion and/or further elaboration on issue/issues in our survey that you want to add? Finally I would like to express my heartfelt thank for your voluntary participation in this study. You have contributed your best**.**

Annex 2 FGD discussion guide

Greeting!

Hello,participants. Wishing it would help in improving family planning service in the future in your locality we would have this FGD. We hoped that the discussion we would be having with you is very much useful to strength quality, availability and access to contraceptive in general and to long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception in particular. In doing this discussion I will raise some questions concerning long

acting (IUCD, Implant) and permanent (voluntary sterilization) contraception knowledge, attitude, use and determinant factors. Before entering to the FGD I wish to forward my bottomless appreciation for all the voluntary participants.

Discussion topics

1. How does the community understand about contraception? How about your understanding concerning contraceptives?
2. What do you / the community knows about long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception?
3. Why do you/ the community /why don't you/ the community use long acting (IUCD,Implant) and permanent (voluntary sterilization) contraception?
4. What are the advantages/disadvantages of long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception over others?
5. Do you want to know more about long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception? What could be the reason?
6. What is the knowledge and attitude of the community regarding long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception?
7. When should people start to use long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception?
8. What is the optimum family size you think?
9. Is having large family size useful or harmful? What is the reason you think?
10. Who should decide about family size? What is the reason you think?
11. Who should use long acting and permanent contraception?
12. Which method (from IUCD, Implant, and Voluntary sterilization) do you prefer to use?
13. What is your attitude and communities perception concerning the use of vasectomy in this community?

Is there any additional idea that you want to add on our discussion on LAPMs and related issues?

Finally I would like to express my heartfelt thank for your voluntary participation in this focused group discussion study. You have contributed your best.

Annex 3 Amharic Translated Questionnaires

ማህበረሰብ አቀፍ መጠናዊ የረጅም ጊዜና ዘለቂታዊ የቤተሰብ እቅድ አገልግሎት ግንዛቢ፣ ስመጠቀም ፈቃደኝነትና ተጠቃሚነት ጥናት የተዘጋጀ መጠይቅ

ሰላምታ

እንደምን ነሽ/ነዎት። በዚህ በጅንካ ከተማ የረጅም ጊዜና ዘላለማዊ የወሲድ መቆጣጠሪያ ዘዴዎችን በተመለከተ የእውቀት፣ ስመጠቀም ያለ ፍቃደኝነትና ተጠቃነሚትን ለማወቅ አንድ ጥናት ይካሄዳል እናም አንቺ/ እርስዎ ፈቃደኛ ከሆንሽ/ኑ በጥናቱ ይሳተፉ። በዚህ ጥናት በመሳተፍ ከጥቂት ጊዜ በቀር የሚያጡት ነገር የለም፣ ነገር ግን ስለከተማዋ የቤተሰብ ምጣኔ አገልግሎት በተመለከተ ለሚደረገው ጥናት ብሎም ከጥናቱ ለሚገኘው ውጤትየራስን አስተዋጽኦ እንዳበረከቱ ያስቡት። በተጨማሪም ማንኛውም እርስዎ የሚሰጡት መረጃ ስሌላ አካል ተላልፎ አይሰጥም የእርስም ስም በመጠይቁ ላይ አልሞላም።በመጠይቁ ላይ ሁሉንም ነገር እንዲሞሉ አይገደዱም ደግማም በመጠይቁ መሀል በፈለጉ ጊዜ ረፍት ሊወስዱ ይችላሉ።

መቀጠል እንችላለን ወይስ ግልጽ እንዲሆንልሽ/ዎ የምትፈልጊዉ/የሚፈልጉት ነገር አለ?

እንችላለን አንችልም

በተጨማሪም አንቺ/አርስዎ ጥናቱን በተመለከተ ማወቅ የምትፈልጊው/የሚፈልጉት ካለፏ አስተያየት ካለ ስበስጠ መረጃ የዚህ ጥናት ዋና አጥኚውን በዚህ አድራሻ ማግኘት ትችያለሽ፡- ስ.ቁ. 0911071149 ፖ.ሳ.ቁ 8059 አ.አ ጌታቸው መኮንን

አመሰግናለሁ::

የጉብኝት ጊዜ

	የመጀመሪያ ጊዜ	ሁለተኛ ጊዜ	ሶስተኛ ጊዜ
የጉብኝት ጊዜ			
ውጤት			

ለውጤቱ የተሰጠ ኮድ

1. ሙሉ ምላሽ የሰጡ
2. ሙሉ ምላሽ ያልሰጡ
3. ምላሽ ያልሰጡ /ፈቃደኛ ያልሆነ/
4. በመጠይቁ ጊዜ ያልተገኙ
5. ሌላ ካለ ይጠቀሱ

ለምርጫ ጥያቄዎች ምላሹን በማክበብ ይምሉ

ሀ. መሰያ

ተ.ቁ	ጥያቄ	የተሰጠ መልስ	ወደ ተ.ቁ ይዝለሉ
001	የመጠይቁ ቁጥር	----------	
002	የመጠይቁ አቅራቢ	----------	
003	የተጠየቀ ቤት	ወረዳ------- ቀበሌ-------- የቤት ቁጥር /ኮድ-----	
004	የመጠይቁ ዕለት በኢትዮጵያ የቀን አቆጣጠር	---------/---------/-------- ሳን ፤ ወር፤ አ.ም	
005	የተቆጣጣሪው ስም	----------	
006	የተገበኘበት ቀን	ውጤት	

	ሀ. የመጀመሪያ ጉብኝት ለ. የሁለተኛ ጉብኝት ሐ. የሶስተኛ ጉብኝት	1.ሙሉ ምላሽ የተ ሰጠበት 2.ያልተማላ ምላሽ የተሰጠበት 3.ፈቃደኛ ያልሆኑ /ምላሽ ያልሰጡ 4.በመጠይቅ ጊዜ ያልተገኙ 5.ሌላ ምክንያት ካስ----------	
007	ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት /አንድ ጊዚየ በመጠቀም ስለመታት ወይም ስዘለአም የሚያገለግል ዘዴ / ተጠቃሚ ነትሽ ልትነግሪኝ ትችያለሽ	1. በአሁኑ ጊዜ ተጠቃሚ ነኝ 2.ተጠቃሚ አይደለሁም 3.ተጠቅሜ አውቃለሁ 4.ሌላ ዘመናዊ ዘዴ እጠቀማለሁ 5.ሌላ ካስ ይግለጹ	
ሐ. ሥነ ተዋልዶ ጤና መጠይቅ			
201	በስንት አመትሽ ትዳር ያዝሽ?	----------	
202	ነፍሰጡር ሆነሽ ታውቂያለሽ?	1.አዎ 2.አላውቅም (መልሱ አላውቅም ከሆነ....)	ወደ 209
203	ነፍሰጡር ሆነሽ ካወቅሽ መቼ ነበር?	1.ከትዳር በፊት 2.ከትዳር በኋላ	
204	ነፍሰጡር ሆነሽ ካወቅሽ እርግዝናው የተፈለገ ነበር?	1.አዎ 2.አይደለም	
205	በስንት አመትሽ ነበር የመጀመሪያ ወሲድሽ?	----------	
206	በህይወት ያሉ ስንት ልጆች አሉሽ?	አጠቃላይ----- ወ-- ሴ---	
207	ውርጃ አጋጥሞሽ ያውቃል? ምን ያህል ጊዜ?	1. 1 2.2 3.3ና ከዚያ በላይ 4. አላጋጠመኝም	
208	ሞቶ የተወለደ አጋጥሞሽ ያውቃል?	1. 1 2.2 3.3ና ከዚያ በላይ 4. አላጋጠመኝም	
209	ምን ያህል ልጆች እንዲኖሩሽ ትፈልጊያለሽ?	አጠቃላይ----- ወ-- ሴ--- /መልሱ 0 ከሆነ ወደ ቁጥር 301 ይለፉ/	302
209	በጣም የምትፈልጊው የልጅ ጾታ ምንድነው?	1.ወንድ 2.ሴት 3.ማንኛውንም 4.ሁለቱንም	
210	ሲኖርሽ በምትፈልጊው የልጆች መጠን ላይ ወሳኙ ማነው?	1. ባል 2. ሚስት 3. ሁለታችንም 4. ሌላ ካስ ይግለጹ	

211	ነፍሰጡር ሆነሽ ካላወቅሽ መውለድ የምትፈልጊው በስንት አመትሽ ነው?	----------	
መ. ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ግንዛቤ መጠይቅ			
301	ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴወች ግንዛቤ አለሽ?(አንድ ጊዚየ በመጠቀም ስአመታት ወይም ስዘለአም የሚያገለግል ዘዴ)	1.አዎ 2.የለኝም /የለኝም ከሆነ ወደ 401 ይለፉ/	401
302	ግንዛቤ ካለሽ /ካለዎት የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴወች አጠቃላይ ጥቅሞች ምን ምን ናቸው? /የተጠቀሰው በሙሉ ያክብቡ/	1.ያልተፈለገ እግግዘና መከላከል 2.የእናቶች ሞትንና እመምን መከላከል 3.የቤተሰብ መጠን ለመወሰን 4.አራርቆ ለመውለድ	
303	ከረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴወች ውስጥ የምታውቂት ዘዴወች /የተጠቀሰው በሙሉ ያክብቡ/	1.ሉፕ/በማህጸን የሚቀመጥ የወሲድ መ መቆጣጠሪያ/ 2.በክንድ ላይ የሚቀበር የወሲድ መቆጣጠሪያ 3.የወንድ ዘር መተላለፊያ ቧንቧን ማስቆረጥ 4.የሴት ዘር መተላለፊያ ቧንቧን ማስቆረጥ/ ማስቋጠር	
304	መረጃ ከየት አገኘሽ/ኙ /የተጠቀሰው በሙሉ ያክብቡ/	1.ከጤና ተቋም 2.ከቤተሰብ 3.ከጓደኛ 4.ከመገናኛ ብዙሀን 5.ከመያድ(ከመንግስታዊ ያልሆነ ድርጅት) 6.ሌላ ካለ ይጥቀሰ	
305	ስለ ሉፕ/በማህጸን የሚቀመጥ የወሲድ መቆጣጠሪያ የረጅም ጊዜ የቤተሰብ እቅድ አገልግሎት ዘዴ ምን ያህል ያውቃሉ? (የተጠቀሰ መልስ ያክብቡ)	1.በጣም ውጤታማ መሆኑን 2.ለረጅም ጊዜ ማገልገል መቻሉን 3.በጡት ማጥባት ላይ ችግር አለማስከተሉ 4.በአባለዘር በሽታ የመጠቃት አድላቸው ከፍ ላለ ሴቶች ተመራጭ አለመሆኑ 5.በወሲብ ግንኙነት ላይ ምንም ተጽእ 6.ከሌሎች መድሀኒቶች ጋር ተቃርኖ አለመኖሩ 7.ወዲያውኑ ከመህጸን በማውጣት ማርገዝ መቻሉ 8.ጥቂት የጎንዮሽ ጉዳት መሆኑ 9.ሌላ ካለ ይጥቀሉ	
306	በክንድ ስለሚቀበረው የረጅም ጊዜ የቤተሰብ እቅድ አገልግሎት ዘዴ ምን ያህል ያውቃሉ?	1.በጣም ውጤታማ መሆኑን	

	(የተጠቀሰ መልስ ያክብቡ)	2.ስረጅም ጊዜ መገልገል መቻሉን 3.በጡት ማጥባት ላይ ችግር አለማስከተሉ 4.ክንድላይ ስመቅበርና ስማስወጣት አነስተኛ ቀዶ ጥገና ማስፈለጉ 5.በ5.በወሲብ ግንኙነት ላይ ምንም ተጽእኖ አስ ማስከተሉ 6.ከሴሎች መድሀኒቶች ጋር ተቃርኖ አለመኖሩ 7.ወዲያውኑ ከክንድ ላይ በማውጣት ማርገዝ መቻሉ 8. ጥቂት የጎንዮሽ ጉዳት መሆኑ 9.ሴላ ካለ ይጥቀሱ	
307	ስለ የወንድ የዘር ማስተላለፊያ ቱቦ ማስቆረጥ ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴ ምን ምን ያውቃሉ?(የተጠቀሰ መልስ ያክብቡ)	1.በ1. በጣም ውጤታማ መሆኑን 2.ዘላለማዊ/ዘለቄታዊ ዘዴ መሆኑ 3.ቀላልና አስተማማኝ የቆዶ ጥገና እንዳለው 4.ተደጋጋሚ የጤና ድርጅት ክትትል አለማስፈለጉና/አቅርቦት አለማስፈለጉ 5.በወሲብ ግንኙነት ላይ ምንም ተጽእኖ አለማስከተሉ 6.ሙሉ በሙሉ ከቀዶ ጥገና ከ3 ወር በኋላ ውጤታማ መሆኑ 7.የረጅም ጊዜ የጎንዮሽ ጉዳት አለመኖሩ 8.ተጠቃሚ ስመሆን ጥልቅ የምክር አገልግሎት ማስፈለጉ 9. 9. .ሴላ ካለ ይጥቀሱ	
308	ስለ ሴት የዘር ማስተላለፊያ ቱቦ ማስቆረጥ ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ምን ምን ያውቃሉ?(የተጠቀሰ መልስ ያክብቡ)	1.በጣም ውጤታማ መሆኑን 2.ዘላለማዊ/ዘለቄታዊ ዘዴ መሆኑ 3.ቀላልና አስተማማኝ የቆዶ ጥገና እንዳለው 4.ተደጋጋሚ የጤና ድርጅት ክትትል አለማስፈለጉና /አቅርቦት አለማስፈለጉ 5.በወሲብ ግንኙነት ላይ ምንም ተጽእኖ አለማስከተሉ 6.የሴት የዘር መምረቻ አካል ካንሰር ይከላከላል 7.የረጅም ጊዜ የጎንዮሽ ጉዳት አለመኖሩ 8.ተጠቃሚ ስመሆን ጥልቅ የምክር አገልግሎት ማስፈለጉ 9.ሴላ ካለ ይጥቀሱ	
ሠ. ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴዎች ጥያቄ			
401	ከባለቤትሽ /ጓደኛህ ጋር ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴዎች	1.አዎ 2. አይደለም 3. አይመለከተኝም 4.ሴላ ሀሳብ ከለ ይገለጽ	

	ትነጋግሪችሁ?		
402	የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ አገልግሎት ዘዴዎችን መጠቀምን ትደግፈያለሽ/ ይደግፋሉ?	1.አዎ 2.አልደግፍም 3.አስተያየት የለኝም 4. አይመለከተኝም	
403	የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎችን መጠቀም ጥሩ ነው?	1.አዎ 2. አይደለም 3. አስተያየት የለኝም 4. አይመለከተኝም	
404	የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎችን በተመለከተ የባለቤትሽ/ጓደኛሽ አመለካከት እንዴት ነው?	1.ይደግፋሉ 6. ሌላ ሀሳብ ከለ ይገለጽ 2.ይቃወማል ---------- 3.ገለልተኛ 4.አላውቅም 5.አይመለከተኝም	
405	ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎች ተጨማሪ ማወቅ ትፈልጊያለሽ?	1.አዎ 2.አልፈልግም 3.አስተያየት የለኝም	
406	ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎች ተጨማሪ ለማወቅ ጥረሻል?	1.አዎ 2.አልጣርኩም 3.አይመለከተኝም	
407	ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎች የመጠቀም አላማ አለሽ?	1. 1.አዎ 2. የለኝም 3. አስተያየት የለኝም 4.አይመለከተኝም	
408	የቤተሰብ እቅድ አገልግሎት(የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎችን ጥምር) መጠቀም የማን ኃላፊነት ነው?	1. የሚስት 2. የባል 3. የሁለቱም 5. አይመለከተኝም 4. አላውቅም 6. ሌላ ሀሳብ ከለ ይገለጽ	
409	ትልቅ ቤተሰብ መኖር በኢኮኖሚ ላይ ተጽእኖ ያሳርፋል?	1. ያሳርፋል 2. አያሳርፍም 3. አላውቅም 5.አስተያየት የለኝም	
410	ትልቅ ቤተሰብ መኖር በእናቶችና ህጻናት ጤና ላይ ተጽእኖ ያስከትላል?	1.ያስከትላል 2.አያስከትልም 3.አላውቅም 4.አስተያየት የለኝም	
ረ. ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎች ያለ ተጠቃሚነት			
501	የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴ ተጠቅመሽ ታውቂያለሽ?	1. አዎ 2. አላወልቅም (አላወልቅም ከሆነ ወደ.. 3. አይመለከተኝም 4. እየተጠላምኩ ነው	508
502	ተጠቅመሽ ካወቅሽ	የጀመርሽበት እድሜ---------- ለምን ያህል ጊዜ ተጠቀምሽ---------	
503	አገልግሎቱን ከየት አገኘሽ ?	1.ከመንግስት ጤና ድርጅት 2.ከመደድ	

		3.ከግል ጤና ተቋም 4.ሌላ ካስ ይግለጹ	
504	ተጠቅመሽ የነበረው ወይም እየተጠቀምሽ ያለሽው የረጅም ጊዜና ዘለቄታዊ ዘዴ የቱ ነው?	1.በክንድ ላይ የሚቀበር 2.ሉፕ /በማህጸን የሚቀመጥ የወሊድ መቆጣጠሪያ ዘዴ/ 3.የወንድ ዘር ማስተላለፊያ ቱቦ ማስቆረጥ 4.የ 4.የሴት ዘር ማሰስተላለፊያ ቱቦ ማስቆረጥ	
505	አሁን የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴ ተጠቃሚ ነህ?	1.አዎ(አዎ ከሆነ መጠይቁን ይጨርሱ) 2.አይደለሁም	
506	የረጅም ጊዜ የቤተሰብ አገልግሎት ተጠቃሚነትሽን ያቋረጥሽበት ምክንያት?	1.ሌላ ስውጠሽ 2.የቤተሰብ እቅድ አገልግሎት መጠቀም አቆምኩ	
507	የረጅም ጊዜ የቤተሰብ እቅድ አገልግሎት ተጠቃሚነትሽን ያቋረጥሽበት/ የለወጥሽበት ምክንያት ምንድን ነው?	1.የጎንዮሽ ጉዳት በመፍራት 2.በጤና ችግር 3.መካን እንዳልሆን በመፍራት 4.ባለቤቴ ስላልተቀበለው 5.ስመጸነስ ፈልጌ 6.ሀጢያት ስለሆነ 7.ባህሌ ስማይፈቅድ 8.ሌላ ምክንያት ካለ ይጥቀሱ	
508	ሌላ ዘመናዊ የቤተሰብ እቅድ አገልግሎት ዘዴ ትጠቀሚያለሽ?	1.አዎ 2.አልጠቀምም	
509	ማንኛውንም አይነት የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴ የማትጠቀሚ ከሆነ ምክንያቱ ምንድነው?	1.የጎንዮሽ ጉዳት በመፍራት 2.በጤና ችግር 3.መካን እንዳልሆን በመፍራት 4.ባለቤቴ ስላልተቀበለው 5.ስመጸነስ ፈልጌ 6.ሀጢያት ስለሆነ 7.ባህሌ ስማይፈቅድ 8.እውቀቱ ስለሌለኝ 9.አገልግሎቱ ስለለ 10.ስላላገባሁ 11 11. ሌላ ምክንያት ካለ ይጥቀሰ	

ሌላ ሃሳብ ፤ ተጨማሪ ስለያየት ወይም ማብራሪያ ካለ?

ምስጋና - በጥናቱ ላይ በፈቃደኝነት ስለተሳተፍሽ/ፉ ምስጋናዬ ታላቅ ነው

Annex 4 Amharic Translated FGD guide

ስለአይነታዊ ጥናት ስህብረተሰብ ተወካዮች የተዘጋጀ መጠይቅ

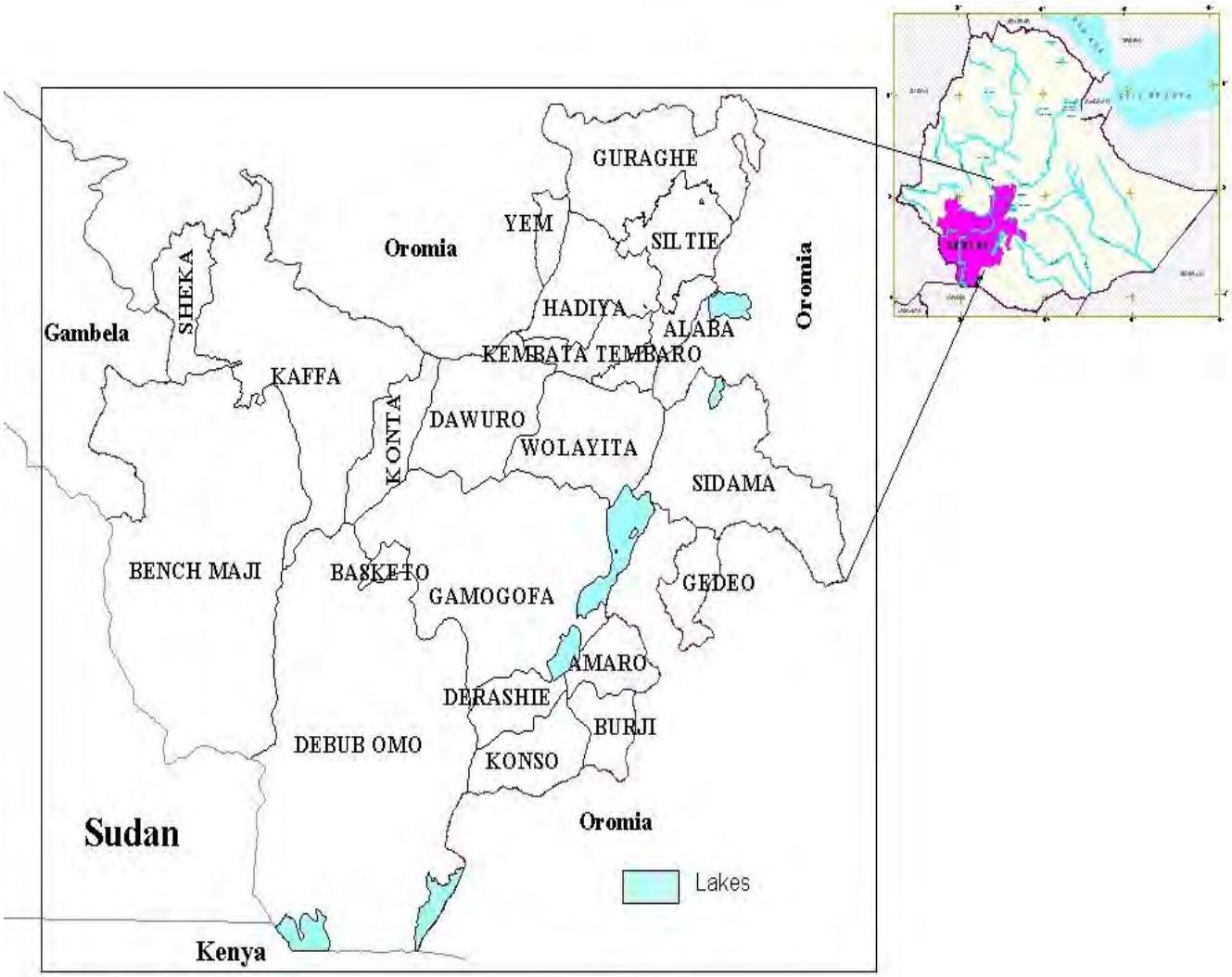
ሰላምታ፡- ክቡራን ተሳታፊዎች በቅድሚያ ጥሪያችንን አክብራችሁ ፈቃደኛ በመሆን በመገኘታችሁ ከፍ ያለ ምስጋናችንን እናቀርባለን፡፡ ዛሬ የተለያዩ የህብረተሰባችንን ክፍል ወክላችሁ የተገኛችሁ በጅንካ ከተማ ስሚደረገው ጥናት አጋዥ ይሆን ዘንድ በተመረጡ የውይይት ነጥቦች ላይ ስመነጋገር ነው፡፡ በሚኖረን ቆይታ በጣም ጠቃሚ በሆኑ ነገሮች ላይ ውይይት እናደርጋለን፡፡ የእናንተ ተሳትፎ ስወደፊቱ የቢተሰብ እቅድ አገልግሎትን በከተማችን ብሎም በዞኑ የተሻለ ስማድረግ ትልቅ አስተዋጽኦ አለው፡፡

<u>የመወያያ ነጥቦች</u>

1 .ስለ ወሲድ መቆጣጠሪያ ዘዴች ያላችሁ ግንዛቤ ምንድን ነው? የህብረተሰቡስ ግንዛቢ ምንያህል ነው?

2. ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴች ማስትም ሉፕ በክንድ የሚቀበር የወንድ ወይም የሴት የዘር መተላለፊያ ቱቦ መቁጠር /መቁረጥ ምን ታውቃላችሁ?
3. ስምንድን ነው የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴዎች ብዙውን ጊዚ ጥቅም ላይ የማይውለት? የምትጠቀሙ ከሆነ ለምንድን ነው?
4. የረጅምና ዘለቄታዊ የቤተሰብ እቅድ ዘዴች ጥቅሞቹ ምን ምን ናቸው? ጉዳቱስ? ከሌሎች የቤተሰብ እቅድአገልግሎት ዘዴዎች ጋር ሲነጻጸር?
5. ስለ የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴ በጥልቀት ማወቅ ትፈልጋላች? ለምን?
6. በየረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴችን ላይ የህብረተሰብ እውቀት /ግንዛቤ/ አመለካከት እንዴት ነው?
7. የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴችን ሰች መጠቀም መጀመር ያላባቸው መቼ ነው? /የእድሜ ክልል/
8. በቂ የቤተሰብ መጠን ብላችሁ የምታስቡት ምንድን ነው?
9. ስለ የቤተሰብ ቁጥር መጠን መወሰን ያለበት ማን ነው?
10. የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴች ውስጥ የትኛውን ዘዴ ይመርጣሉ? /ሉፕ በክንድ ላይ የሚቀበር
የወንድ/ሴት የዘር ማስተላፊያ ቱቦ ማስቁጠር/ማስቆረጥ/?ችን
11. የረጅም ጊዜና ዘለቄታዊ የቤተሰብ እቅድ ዘዴች ማን መጠቀም አለበት?
12. ትልቅ ቤተሰብ መኖሩ ጠቃሚ ነው ወይስ ጎጂ ነው? ዕንዴት?
13. ስለ የወንድ ወይም የዘር መተላለፊያ ቱቦ መቁጠር /መቁረጥ ዘለቄታዊ የቤተሰብ እቅድ ዘዴ መጠቀም ያላችሁ አመለከከት ምንድን ነው? የህብረተሰቡስ ዕይታ ምን ይመስላል?

Annex 5 Map of SNNPR and South Omo Zone (source SOZHD)


GURAGHE
YEM
Oromia
SIL TIE
Oromia
SHEKA
HADIYA
ALABA
Gambela
KEMBATA TEMBARO
KAFFA
KONTA
DAWURO
WOLAYITA
SIDAMA
BENCH MAJI
BASKETO
GAMOGOFA
GEDEO
AMARO
DERASHIE
BURJI
DEBUB OMO
KONSO
Sudan
Oromia
Lakes
Kenya

Annex 6 Knowledge scoring system

Variables	Score
Very effective	1
Perm./long act	1
Immediately reversible	1
Had minimal side effect	1
No interaction with medicine	1
No effect on breast feeding	1
No supply/frequent clinic visit	1
No effect on sex perf. & sens.	1
Fully Effective after 3 month	1
Protect from Ovarian Cancer	1
Not good for STI pron women	1
Need safe & simple surgery	1

Annex 7 Attitude scoring system

Characteristics(Attitude factors)	Scores given
Do you communicate with Husband/fraind	
Yes	1
No	0
Support use of LAPMs	
Yes	2
No	0
No idea	1
Don't concern me	1
Friend/Husband attitude on LAPMs	
Support	2
Against	0
Neutral	1
Don't concern me	0.5
I don’t know'	0.5
Is it good to use LAPMs	
Yes	1
No	0
No idea	0.5
Don't concern me	0.5
Need to know more on LAPMs	
Yes	1
No	0
No idea	0.5
Tried to know more on LAPMs	
Yes	1
No	0
Don't concern	0.5
Responsibility in using LAPMs	
Wife	0.5
Husband	0.5

Both	1
Don't know	0
Don't concern	0
Large family has problem on economy	
Yes	1
No	0
Don't know	0.5
Large family has problem on MCH	
Yes	1
No	0
Don't know	0.5
Intention/plan to use LAPMs	

Yes	1
No	0
No idea	0.5
Don’t concern me	0.5
Who make decision on number of children	
Husband	0.5
Wife	0.5
Both	1
Others	0.5

Annex 8 Non-response recording form

Age	Occupation	Social status(Vp, P, M, R, VR)	House Owner(P, R, G)	Income	Others

N.B: VP-very poor, P-poor, M-medium, R-rich, VR-very rich (social status)
P-Privately owned, R-rental from people, G-Rented from government

Declaration

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

Name: Getachew Mekonnen (BSc, Public Health)

Signature _____

Place: Addis Ababa University, School of Public Health, Faculty of Medicine

Date of submission:

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

Name: Dr. Fikre Enquselassie

Signature _____

Date: 29 July, 2007

Acknowledgment

Initially, my genuine gratitude goes to my advisor Dr. Fikre Enquselassie who has assisted me meticulously and tolerantly in a range of aspects of this thesis work starting from proposal development to the write up of this outcome. Moreover, I would like to express my deep appreciation to CORHA and its staff for sponsoring this study and timely and fruitful advice on proposal development and analysis. I would also like to broaden my thanks to the School of Public Health, Faculty of Medicine, Addis Ababa University for giving me the chance to conduct this thesis. Besides, I expand my gratitude to all data collectors, supervisors and participants of survey and FGDs for their voluntary participation on the study. Finally, my appreciation goes to all my instructors, friends and families for there advice, moral support through the whole process of this study.

Table of contents

List of Tables

List of Figures

Acronyms

AA	Addis Ababa
AAU	Addis Ababa University
AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted Odds Ratio
AU	African Union
Bsc	Bachelor of Science
CBRH	Community Based Reproductive health
CI	Confidence Interval
CORHA	Consortium of Reproductive Health Association
CPR	Contraceptive Prevalence Rate
CSA	Central Statistic Agency
DHS	Demographic and Health Survey
EDHS	Ethiopian Demographic and Health Survey
Edu.	Education
Et.	Ethiopia
F	Female
FDRE	Federal Democratic Republic of Ethiopia
FGAE	Family Guidance Association of Ethiopia
FP	Family Planning
FGD	Focused Group Discussion
GDP	Gross Domestic Product
HSDP	Health Sector Development Program
ICPD	International Conference on Population and Development
IEC	Information, Education and Communication
IUCD	Intra Uterine Contraceptive Device
IUD	Intra Uterine Device
Kms	Kilo meters
LAPMs	Long Acting and Permanent contraceptive Methods
M	Male

MCH	Maternal and Child Health
MOH	Ministry Of Health
MOI	Ministry Of Information
OR	Odds Ratio
Q no	Question number
RH	Reproductive Health
RR	Relative Risk
SNNPR	Southern Nations and Nationalities People Region
S.No	Serial Number
SOZHD	South Omo Zone Health Department
SPH	School of Public Health
SPSS	Statistical Processing for Social Science
STIs	Sexually Transmitted Infections
UN	United Nations
US	United States
USAID	United States Agency for International Development
VSC	Voluntary Surgical Contraception
WHO	World Health Organization

1 Abstract

Introduction: In Ethiopia, knowledge of contraceptive methods is high though there is low CPR in the two EDHS surveys. However, there is very low knowledge and use of LAPMs of contraceptive compared to shorter acting contraceptive methods.

Objective: The objective of this study was to assess the prevalence and factors affecting the use of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive among women of reproductive age group in Jinka town, South Omo Zone, SNNPR, Ethiopia.

Methodology: A cross sectional community based survey was conducted on the prevalence and factors affecting LAPMs use from March to April 2008 on 763 women of reproductive age groups and 33 FGD discussants in Jinka town, South Omo zone.

Results: The prevalence of contraceptive among participants was about 301 (39.5%) among this LAPMs contributes for 56 (7.3%). Implant is the most widely used method from LAPMs contributing to almost half, 28 (50%) of the LAPMs users. There was very low 137 (18%) knowledge of LAPMs in Jinka town. Among LAPMs, Implant is known by most 104 (76.1%), and the least known is male sterilization 24 (17.4%). A considerable amount, 449 (63.5%) of participants have intentions to use LAPMs one time in the future.

Conclusion and Recommendation: The study had demonstrated that there was low knowledge and relatively fair level use of LAPMs in the town. Furthermore, intention to use LAPMs in the future is promising. The Zonal health department should have routine monitoring and

evaluation of family planning programs; maintain continuous health education programs on LAPMs contraceptive methods using leaders at different settings.

1 Introduction

1.1Background information

The current world population projection of just over 9 billion humans at final population stabilization is a highly optimistic estimate. Because of poor family planning services and laissez-faire attitudes in many parts of the world, the planet may be forced to accommodate many more than this number. An estimated 550,000 women die every year through unsafe induced abortion, pregnancy and childbirth. At least 35% of these died due to pregnancies that would have been avoided if contraceptives were available (1).

Contraceptive use and fertility rates vary substantially among developing countries. In a few countries of Asia and Latin America, at least three-fourths of married women use a contraceptive method. In contrast, in some Sub-Saharan African countries fewer than 10% of married women use contraception. Fertility rates range from just 2.3 children per woman in Vietnam to 7.2 in Niger in developing countries (2). Four modern contraceptive methods like female sterilization, oral contraceptives, injectables, and intrauterine (contraceptive) devices (IUDs/IUCD) are the most widely used methods among married women in developing countries. Together they account for almost three-fourths of all contraceptive use (2).

According to Federal Democratic Republic of Ethiopia Central Statistics Authority's (CSA) report, Ethiopia has a population of more than 77 million. Of these, 12,689,000 (16.5%) live in urban areas and the rest live

in rural area. The Southern Nations Nationalities and People Regional State (SNNPR) has an estimated total population of 15,321,000, with 7,609,000 men and 7,702,000 women (3).

In Ethiopia, family-planning program was first started in the 1960s by a local non-governmental organization (NGO) namely the Family Guidance Association of Ethiopia (FGAE). Among the many sexual and reproductive health problems faced by women in Ethiopia, the main once are:- gender inequality, sexual coercion, early marriage, polygamy, female genital cutting, closely spaced pregnancies, abortion, sexually transmitted infections (STIs), and AIDS (4, 5).

In Ethiopia, 34% of currently married women have an unmet need for family planning, with 20% having an unmet need for spacing and 14% having an unmet need for limiting. According to EDHS 2005, the contraceptive prevalence rate for married Ethiopian women who are currently using a method of family planning is 15%. Almost all of these users are using modern methods. The most widely used methods are injectables (10%) followed by the pill (3%). According to the data, two thirds of births in the five years preceding the survey were planned, 19% were mistimed, and 16 % were unplanned. One in five births of order four or higher is unplanned, twice the level among births of order three or below (6).

1.2 Rationale of the Study

There were only few studies conducted on prevalence and factors affecting the use of long acting and permanent contraceptive (LAPMs) use in Ethiopia and almost there were no studies in SNNPR and specifically in South Omo zone. Moreover, almost all-contraceptive use in Ethiopia is dependent on shorter acting contraceptive methods in contrary to other many developing countries. Therefore, this study has tried to asses the

prevalence and factors affecting use of long acting and permanent contraceptive (LAPMs) in women's of reproductive age group of Jinka town. Moreover, it tried to assess the factors for the existing utilization of contraceptive in general and LAPMs in particular. Finally, this study may contribute much in improving the FP service i.e. the service quality, method mix (enough choice as per demand) and access to appropriate information in the area.

2 Literature Review

2.1 Use and Intention to use LAPMs

The earth faces a future of rising populations and growing strains on the planet. Whatever else the future holds, significant population increase is inevitable and the current UN forecast of 9.2 billion by 2050 (itself a 40 percent increase on the 6.7 billion in 2007) may turn out to be an underestimate. By 2050, humanity is likely to require the biological capacity of two earths. The environmental damage resulting from population increase is already widespread and serious, ranging from climate change to shortages of basic resources such as food and water (1).

According to population report of 2003 among surveyed developing regions, levels of contraceptive use vary widely, from an average of 15% in Sub-Saharan Africa to 68% in Latin America and the Caribbean. In 37 of 60 developing countries surveyed, at least 95% of married women know of at least one contraceptive method (modern or traditional). In 36 countries, at least 95% know of at least one modern method (2).

Sterilization is the world's most widely used contraceptive method accounting for nearly half of all contraceptive use. In a study conducted in Tanzania on factors affecting vasectomy acceptability, reasons for wanting to limit family size, having enough or too many children was a frequently mentioned motivation for undergoing vasectomy. The primary reasons provided for wanting to limit family size were economic hardship and concern for the health and well-being of spouses (7).

According to study conducted by USAID on the role of commercial sectors in providing LAPMs, in many parts of the world was reported that the use of modern methods is much lower than total method use in some Sub-Saharan African countries indicating that traditional method use is high. There are also variations in the use of LAPMs among regions; LAPMs use is lowest in the Sub-Saharan Africa region where the highest use in any country is 19.7% (South Africa), accounting for less than 40% of modern method use. In Zimbabwe, LAPMs account for only 8% of modern method use. Conversely, in some Latin American countries, where modern method use is high, such as the Dominican Republic (66%), LAPMs account for almost three-quarters of the contraceptives used in this category. Indonesia has the highest use of Implants (4%), while male sterilization use is highest in Nepal (6.1%) and use around 2% in Brazil, India, and South Africa (8).

In Sub-Saharan countries, level of intention to use contraception is 44% in average, ranging from 14% in Chad to 74% in Malawi. Among countries of Eastern Europe and Central Asia, the lowest percentage of women who intend to use contraception is 36% in Armenia, and about 46% in the region overall. About half of married women in Asia intend to use family planning in the future, from 15% in Pakistan to 73% in Nepal (2). In 2003 IUD use in Sub-Saharan African ranges from 0.2 in Middle Africa to 1.8% in western Africa, while it is 2.2% in Japan, 1.6% in India and 0.7% USA (9).

As in many other countries, in Ghana vasectomy has been a relatively “invisible” contraceptive method, with prevalence of less than 0.1%. A review of research on vasectomy services and perceptions of the method by both providers and potential vasectomy users in Ghana identified four main barriers to vasectomy utilization. These are:-inadequate access to and quality of services, bias against the method on the part of providers

and clinic staff, low knowledge of the method among the general public and the prevalence of myths and misinformation about the method, among both men and women (10).

According to a study conducted on the role of family planning as a possible intervention in maternal mortality reduction amongst women in an urban setting, South-West Nigeria about 150 (50%) of the participants have used one family planning method or another and these included; oral contraceptives (30%), intrauterine devices –IUDs (25%) and the withdrawal method (5%). Knowledge of use of family planning amongst participants included: prevention of unwanted pregnancies (70%), possible maternal death (60%), reduction in family size (60%) and child spacing (45%). About 5% (15) of the participants became pregnant while using the withdrawal method. There were many positive opinions amongst the participants about the use of family planning and these were: public health education and knowledge involving both rural and urban women (25%), family planning should be encouraged (30%), child spacing (25%), avoiding unwanted pregnancies and unsafe abortion (15%) and prevention of maternal death (65%) (11).

According to study conducted to know method mix of contraceptive, changes in method mix were seen in developing countries. The overall proportion of users relying on female sterilization ranged from 29% to 39%, reaching 42–43% in Asia and in Latin America and the Caribbean in 2000–2005; on average, the share of all method use accounted for by male sterilization remained below 3% for all periods. Contraceptive prevalence among married women has increased gradually in all regions of the developing world since
1980, rising to 60% for the period 2000–2005. Prevalence is currently highest in Latin America and the Caribbean (73%) and Asia (66%); these rates are followed distantly by that of Sub-Saharan Africa (22%).

However, this pattern masks dramatic variations by country with in regions (12).

2.2 Factors affecting use and intention to use LAPMs contraceptive

A study done on the effect of socio economic and cultural determinants on acceptance of permanent contraceptive in India showed that acceptance of permanent methods declined with increasing age ,as 50% of women in the 35-39 year age group had opted for a permanent method which was significantly higher than that of the 40-44 years age group. The rate in the later age was also higher than that of the 45-49 years age group though this difference is not statistically significant. In the same study religion did seem to have an influence on the acceptance of permanent methods as Hindus showed an acceptance rate of 37.8% where as Muslims showed 22.7% the difference was found to be statistically significant. Moreover, acceptance was higher among women having 3-5 children. The acceptance was seen to be directly proportional to the per capita income (13).

In a study conducted on understanding contraception use among Muslims of India, Pakistan and Bangladesh , what is interesting to note in this regard is that, contraceptive prevalence is pretty high (37%) among non-literate couples in Bangladesh compared to those in Pakistan (6%) and India (22%). This may point towards the successful implementation of the family planning programs in Bangladesh where the acceptability of the program has trickled down to the socially deprived section of the community (14).

In a study conducted in Nepal in 2001, on the relationship between mass education and childbearing revealed that couples in which the husband attended school reported 41% higher rates of permanent contraceptive use. Couples that live near a school after the birth of their first child have about 20% higher rates of contraceptive use than couples that do not. Couples that have sent a child to school have approximately 40% higher rates of contraceptive use than couples that have not (15).

Several factors affect acceptance and use of LAPMs. In a study conducted in Tanzania it was found that vasectomy acceptance is limited by the scarcity of skilled vasectomy providers and by the fact that men and women hold many of the same misunderstandings about vasectomy, including a fear of decreased sexual performance because of the procedure (16).

In a study conducted in Islamic countries of Asia and Africa voluntary female sterilization is a major family planning method in Bangladesh, Jordan, and Tunisia. Tunisia in 1988 had the highest reported prevalence of voluntary female sterilization among Islamic countries, at 12% of married women of reproductive age, or about one-sixth of all family planning users (17)

2.3 Ethiopian situation of Use and Intention to use LAPMs

There are marked differences in the contraceptive prevalence rate among currently married women by background characteristics. Contraceptive use is associated with the number of living children a woman has; it is highest among currently married women with one or two children (17%) and lowest among women with no children (12%). As expected, contraceptive prevalence is more than four times higher in urban than in rural areas (47% versus 11%). Furthermore, contraceptive use differs significantly across educational categories and current use increases five-fold from 10% among women with no education to 53% among those

with secondary and higher levels of education. Wealth has a positive effect on women's contraceptive use, with use increasing markedly as wealth increases, from 4% among married women in the lowest wealth quintile to 37% among those in the highest wealth quintile. In general, in Ethiopia, knowledge of contraceptive methods is high though there is low CPR according to DHS surveys, the EDHS 2005 finding being 88% knowledge for currently married women and 93% for currently married men knowing at least one method of contraception (6, 18).

In a study conducted on improving the range of contraceptive choices in rural Ethiopia, Tehuleder woreda the majority of the clients (89.4%) were predominantly Muslim, 26.1% of the participants had no education, 54.1% had some informal education, and 19.7% had some formal education. A majority (58.3%) of the clients reported that they were farmers. The majority (73.9%) of the participants got their information on family planning from the CBRH program and knowledge for modern contraceptive is over 90% (19).

Ethiopia is an ancient country with a rich diversity of people and cultures and a unique alphabet that has existed for more than 3,000 years. Palaeontological studies identify Ethiopia as one of the cradles of humankind. "Dinknesh. It is the second most populous country in Sub-Saharan Africa. A very large proportion of the population (85%) lives in the rural areas (18).

The use of contraceptive in general and the use of long acting and permanent contraception are very low. According to EDHS 2005, IUCD use was 0.2% in married women. Modern methods are more widely known than traditional methods and among modern methods; the pill is the most widely known method (84%), followed closely by injectables (83%). Nevertheless, knowledge for long acting and permanent

contraceptive is very low, example male sterilization knowledge by females is 5.5%, IUCD knowledge by males is 12% (6).

More than half, (52%) of currently married women who were not using any contraception at the time of the EDHS survey say that they intend to use a family planning method some time in the future. Forty-four percent do not intend to use any method, while 4% are unsure of their intention (6).

In a study conducted on improving the range of contraceptive choices in rural Ethiopia, Tehuleder woreda (South Wollo zone of Amhara Regional State) among the total of 218 family planning clients interviewed, 11 (5%) were males who had undergone vasectomy. Moreover, almost 81% of the clients who used long term and permanent methods were in the age group of 25-44 years. A majority, (58.3%) of the clients reported that they were farmers (19).

In a study conducted in Gonder the overall modern contraceptive prevalence rate was 28.6% (35.5% urban and 11% rural). Contraceptive prevalence among married women was 32.1%. Injectable contraceptives were used by 39.7% of the female users, followed by oral contraceptive pills (35.3%). Moreover, among non-users, 72% of the females and 69.6% of the males had positive attitude towards future use of contraceptives (20).

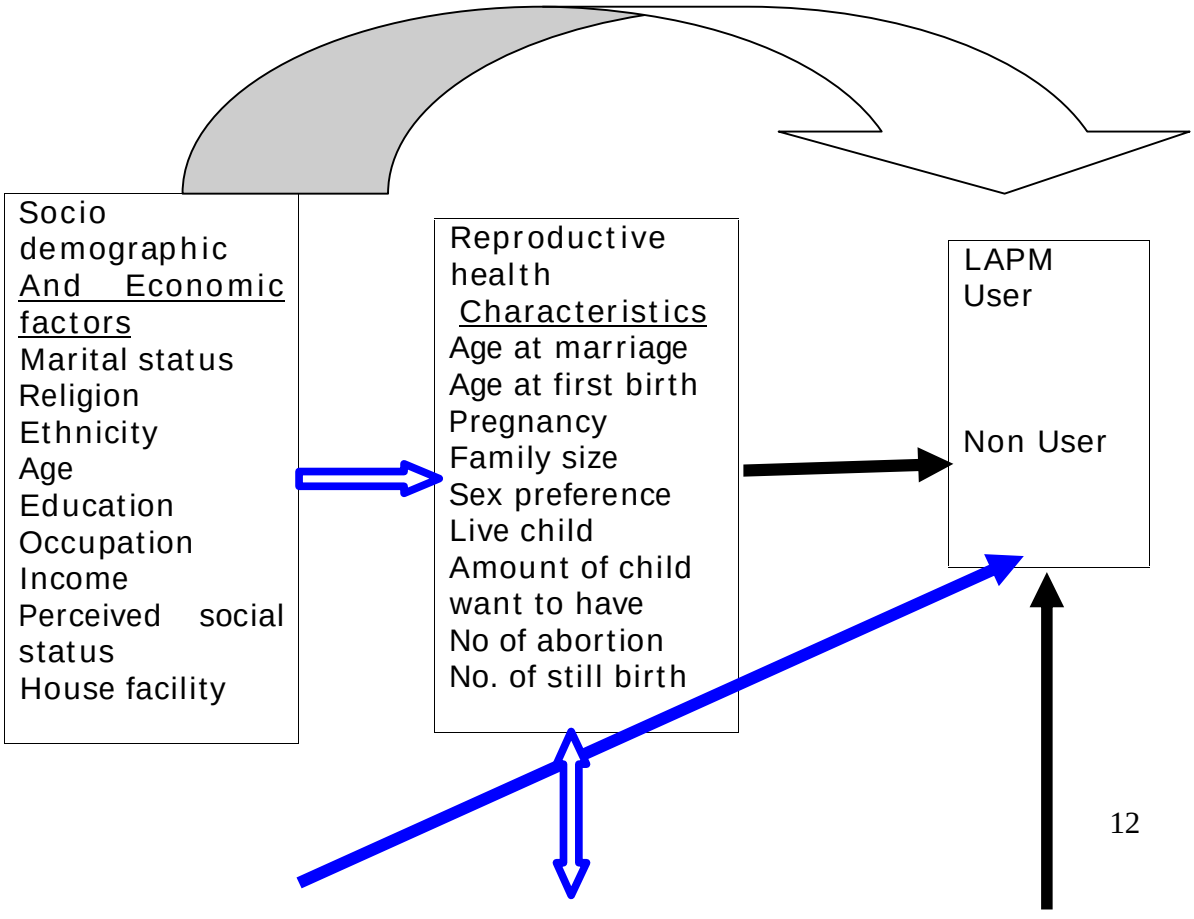
In a study conducted in the big regions of Ethiopia, knowledge on IUCD was 16.7% of 992 participants and for Implant and IUCD was 15.1%. Clients reported over 30 different rumors about IUCD and major reason for low use of IUCD (40.8%) is lack of adequate information on it. Other reasons are abdominal pain during picking up heavy load, weight gain, back pain and difficulty on walking long distance. However, knowledge

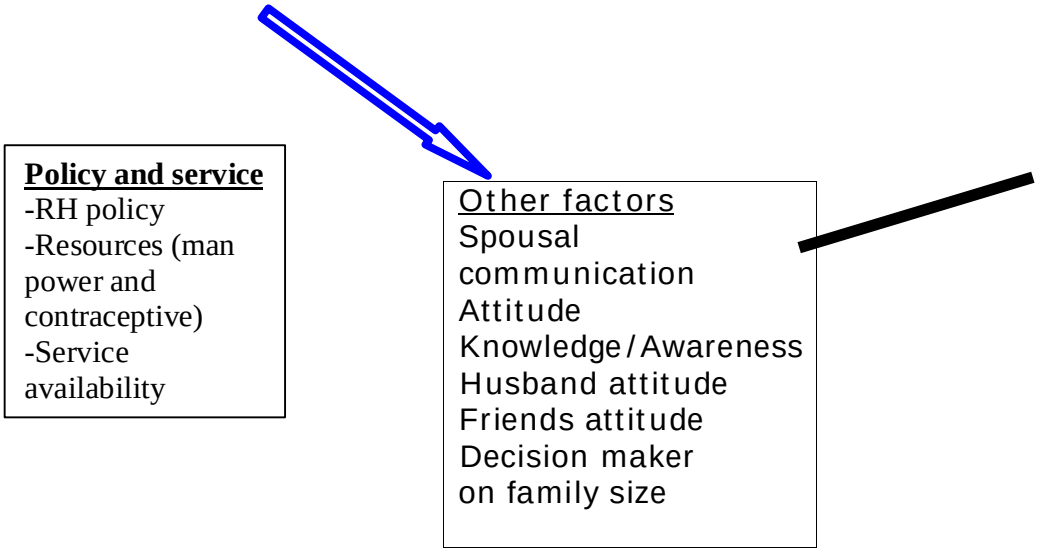
for short-term methods was high (pills-82.2%, injectables-42.8%) and participants support having 4 children on average (21).

According to a study conducted selected regions of Ethiopia on the effects of contraceptive shortages and coping mechanisms, there is a remarkably growing trend in contraceptive demand in all the regions, which is primarily because of the expansion of the community-based reproductive health (CBRH) services in addition to the increasing health service coverage (22).

In a study conducted in Bure woreda,West Gojjam zone on family planning method mix and effects of lack of preferred contraceptive methods, use of IUD and Norplant were found to be -0.2% and 0.2% respectively. Moreover, among users of a method due to unavailability of their method of choice; 60 (52.6%) had preferred Norplant, 1.8% for IUD and 3.5% had preferred male sterilization. In the same study it was found that among those who have unintended pregnancy due to lack of there preferred method, 32.4% had preference for Norplant, 5.1% for IUCD, 3.5% for female sterilization and 2.1% had preference for male sterilization. Furthermore, from participants who have had intention to wait for the next pregnancy, most, 367 (59.2%) want to use injectables, 219 (35.3%) want Norplant, 3.5% want female sterilization and 1.1% want male sterilization (23).

Figure 1-Conceptual framework developed for analyzing the data by considering different literature





Key

Factors which are not assessed in this study

- Factors whose effects on LAPMs use and non use was addressed

Description of Conceptual framework

Several factors affect the use and intention to use of LAPMs of contraceptive in an area. Some of the factors are socio demographic, economic, reproductive health characteristics of individuals, availability services and other resources, policy knowledge and attitudes towards LAPMs of contraceptive. In this study only socio demographic, reproductive health, knowledge and attitude related factors were considered and studied to know there effect on LAPMs of contraceptive use.

3 Objective

3.1 General Objective

To assess the prevalence and factors affecting use of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive among women of reproductive age group (15-49 years) in Jinka town, South Omo Zone, SNNPR, Ethiopia.

3.2 Specific Objectives

- To asses the prevalence of long acting and permanent contraceptive
- To assess the knowledge concerning long acting and permanent contraceptive
- To assess attitude towards long acting and permanent contraceptive
- To assess predictor factors on the use of long acting and permanent contraceptive

4. Methods and Materials

4.1 Study design and area

The study was conducted in Jinka town, South Omo zone, in Southern Nations and Nationalities and People Regional State (SNNPR), Ethiopia. The study area was selected purposively. South Omo is bordered on the south by Kenya, on the southwest by the Ilemi Triangle, on the west by Bench Maji, on the northwest by Keficho Shekicho, on the north by Semien Omo (Gamo Gofa), on the northeast by the Dirashe and_Konso Special Woredas, and on the east by the Oromia Region. The zone is known for its being among the best tourist attraction sites of the region and the home for many ethnic groups (about 17 natives). Jinka, the study area, is the zonal town that is located 525 kms from the capital city of the region i.e Hawassa and 755 kms from Addis Ababa. This town has a latitude and longitude of 5°39 N, 36°39 E and an elevation of 1490 meters above sea level. There were 25804 (male-13160, female-12644) people at the time of the survey (24, 25, 26). Moreover, there are one

hospital, one health center, five private clinics, two private colleges, one technical school, one high school and six elementary schools. The town is subdivided in to six kebeles and had access for 18 hours electricity service and pipe water. The study has used both qualitative (FGD) and cross sectional quantitative designs. Data was collected from fifth of March to seventh of April 2008.

4.2 Study population

4.2.1 Source of Population

The source population was all women of reproductive age group in Jinka town for the quantitative study and females of reproductive age group and males of age 18 and above were included for the qualitative study (FGD). For the FGDs participants who live in Jinka town at time of survey from both sexes were selected.

The inclusive and exclusive criteria for the quantitative study were-

Inclusion Criteria- Women's of reproductive age group (15-49)
-Who live in Jinka town at the time of survey
-Who live in the study area for at least six months

Exclusive Criteria-Women who don't live in Jinka town at the time of survey.

4.2.2 Sample size

For the quantitative survey sample, final sample size (n) was 800 and calculated manually using single population proportion formula for finite population with 95% confidence interval, prevalence of modern contraceptive (p) use in SNNPR 11.4% and marginal error (d) of 2%.

$$n=n_o/(1+n_o/N), \text{ where } n_o=Z^2\alpha/2P(1-P)/d^2$$

n= sample size from finite population

n_o= sample size from infinite population

N= size of house holds = 5160

Z= the standard score (critical value) corresponding to 95% confidence level = 1.96

d= the proportion of sampling error between the sample and the population = 2% (0.02)

P= the prevalence of modern contraceptive in SNNPR, 2005= 11.4% (0.114).

$n_o = (1.96)^2\ 0.114\ (0.886)/(0.02)^2 = 960$

$n = 960/(1+960/5160) = 800$

4.2.3 Sampling procedure

For the quantitative part of the survey, first census was done to have unique identification number for each households in the town (since there was no house number for almost all houses in the town). This was done by recruiting and assigning individuals to different sub kebeles so that each individual had given numbers starting with different English letters to avoid overlaps. Then sampling frame was developed based on the temporarily given house numbers. After that, study units, households, were obtained by systematic random sampling first by calculating K, which is 5160/800 that is approximately six (6.45). The first household was selected randomly from the list of 1st to the sixth household and taking it (let it be Y) as starting point ,others were selected as follows:-Y+K,Y+2K,Y+3K.... . Finally, study subjects were identified by lottery method from each household from women who are in the age group of 15-49 and who were found at the time of survey days.

The participants for FGDs were selected by snowball sampling technique taking in to consideration different socio demographic factor like religion, age and occupation.

4.3 Data collection

4.3.1 Data collection tools

For collecting data interviewer administered questionnaires and FGD guides were developed. The questionnaires had socio demographic questions, questions concerning reproductive health characteristics of participants, economic conditions, knowledge, attitude and practice of long acting (Implant and IUCD) and permanent (Vasectomy and Female sterilization) contraceptive methods. The questioners were developed by reviewing several literatures and considering the local and international situation of the study subject (see appendix 1). Moreover, before conducting FGDs about twelve FGD guides were developed to ensure subject areas are covered systematically and for uniformity of FGDs. Besides, the FGDs' note takers were informed on the procedures and appropriate ways of not taking of the FGD participants' expressions.

v Operational Definitions

LAPMs- long acting and permanent contraceptives are those contraceptives that are useful as a family planning method from years until permanently if used once and it includes methods like Implant, IUCD, female voluntary sterilization and Vasectomy.

Natural contraceptive methods-Methods that are used for contraceptive purpose without using external substances to be swallowed, taken as injection, put in or on different body parts, but methods like coitus interrupts, periodic abstinence, lactational amenorrhea.

Other Modern method-contraceptives other than LAPMs and natural methods

LAPM user-A person who uses/her partner uses one of the four LAPMs

Awareness/Knowledge–have information/knowledge on different aspects of LAPMs

Previous LAPMs user-person who has been using either Implant or IUCD but now stopped using it.

Perceived social status-the level of social status the participants thinks to be included among the choices given

Modern education-education level from grade one up to grade twelve

Very good-knowledge-those who know four and more distinct features (from knowledge questions) of a LAPMs contraceptive.

Good knowledge-those who know one to three distinct features (from knowledge questions) of a LAPMs contraceptive

Poor knowledge-those who only name a method of the LAPMs

Good attitude-those who score equal to or above average, (10.5 points), in a composite measure for attitude on LAPMs from 13 points, maximum possible score.

Poor attitude - those who score below average, (10.5 points), in a composite measure for attitude on LAPMs from 13 points, maximum possible score

v Variables

Dependent variables: - LAPMs use

Independent variables:- age, sex, level of education, occupation, religion, ethnicity, monthly income, perceived social status, family size, age at marriage, total children available, total children wanted to have, sex preference, decision maker on family size, knowledge on LAPMs, communication on LAPMs with husband/friends, husband attitude on LAPMs, participant attitude on giant family effect on MCH and family economy.

4.3.2 Data collection procedure

The principal investigator trained the data collectors and supervisors. The two days training session has consisted of instruction in qualitative methods, a revision of all of the study guides, role-plays, and a review of informed consent, respectful approach of participants, ethical procedures and general information on contraceptive and the objective of the study in general. Data collectors and the three supervisors were assigned to different site of the town after zoning it. The data collectors visit sampled households carrying there questionnaire and when they got in to the houses they give information for their visit. Then data collectors took a participant randomly by lottery method (when there are more than one female of reproductive age group in a house) for the questionnaire survey and had informed consent before collecting data. There were up to two additional visits for each household if not available at first visit. Those who are not found in two revisits, give incomplete response (>10% questions not answered) and who are unwilling to participate are considered as non-response. In the case of FGDs after identifying discussants appropriate time and usual and comfortable place of meeting was selected and organized. While conducting FGDs, explanation and elaboration of the need to do the FGDs was done and participants were participated voluntarily. Note taker and recorder assigned while the principal investigator facilitate the discussion. The FGDs were conducted separately for males and females.

4.3.3 Data quality control

To maintain the quality of data in the quantitative survey the questionnaires were pre-tested in the near by town, Keyafer and adjustments like age estimation/tracing system, asking additional opinion of participants was made. Moreover, there was training for 10 data collectors and 2 supervisors' and regular and surprise follow up was

made by the supervisors and the principal investigator to monitor quality of the data collection process. Moreover, regular checkup for completeness and consistency of the collected quantitative data was done. In addition, questionnaires were edited and coded for computerization by the investigator. In the case of FGDs, all were tape recorded in addition to taking notes. The data collected from FGDs were transcribed to Amharic on daily basis and translated to English for further processing.

4.4 Data processing and analysis

Quantitative data was entered using Epi Info version 3.3, exported and cleaned using SPSS version 13 and analyzed by SPSS. Socio demographic data, reproductive health, knowledge, attitude data were summarized and presented by frequency tables and summary statistics and the contraceptive use data were summarized and presented by graphs, tables and other summery measures. For all statistical significance tests, the cut- off value set was $p<0.05$ as this was considered statistically reliable for analysis of this study. In the bivariate analyses, crude odds ratios of use of LAPMs were estimated for all independent variables. All the covariates were categorical. Since crude OR does not take in to account the effect of the confounding variable(s), a multivariate analysis was used to estimate the adjusted odds ratios of use of LAPMs to control for confounding factors.

The transcripts and English translated FGD data were first thoroughly read to be familiar with it to help easy identification and categorization of data when themes emerge. Then it was reviewed, examined meticulously, categorized in to primary themes and then data reviewed and pooled in to broader concepts. Moreover, quotes of participants that illustrate key concepts were used directly during analysis. Finally, the concepts were developed in to major themes under each discussion guides. The result of

both the qualitative and quantitative study components were presented using quotes, explanations, different graphs, tables, charts and other summery measures.

4.5 Ethical consideration

Data collection was carried out after approval of the project proposal by the ethical clearance committee of AAU, South Omo Zone health department, Jinka town health office and lastly verbal consent was obtained from individual participants. All the participants in the questionnaire survey and FGD were told that participation is on voluntary basis and confidentiality of information they give is kept. Moreover, the purpose, procedures of the study, advantages and disadvantages (missing some minutes to hour) were told to participants.

4.6 Dissemination

The findings of the research will be submitted to the School of Public health,
CORHA, South Omo zone health department, Jinka town health office and other responsible bodies. The result will be presented to the School of Public Health and in different seminars, meetings and workshops. Finally; the findings will be published and disseminated through different journals, scientific publications.

5. Result

5.1 Quantitative Result

5.1.1 Socio demographic and economic characteristics of the study subjects

Seven hundred sixty three women of reproductive age group participated in the quantitative survey making a response rate of 94.4%. The majority, 554 (89.4%) of participants were in the age group of 15-39 with mean age of-28.3years (Rangs from 15-49, SD-8.16 years, median age-28). Nearly half, 368 (48.2%) of participants were Amharas by ethnicity, followed by Ari-122 (16%) and Gofa-51 (6.7%). Orthodox is the major religion contributing for 469 (61.5%) of all followed by Protestant, 189 (24.8%) and Muslim 82 (10.7%). Significant number, 535 (70.1%) of

participants were married, followed by singles, 148 (19.4%) and widowed, 42 (5.5%). Furthermore, more than half of participants, 449 (58.8%) were housewives followed by students, 146 (19.1%) and Gov/NGO employees, 119 (15.6%). Moreover, about 505 (66.2%) of them have modern education and above, and out of which 98 (12.8%) have college/university education (See table 1).

Table 1.Sociodemographic characteristics of study subjects, Jinka town, 2008

Socio demographic Characteristics of participants	Frequency	Percentage (%)
Age group of participants(763)		
15-19	130	17.0
20-24	117	15.3
25-29	207	27.1
30-34	100	13.1
35-39	119	15.6
40-44	42	5.5
45-49	38	5.0
***Non response	10	1.4
Marital Status(763)		
Married	535	70.1
Single	148	19.4
Divorced/ Separated	38	5.0
Widowed	42	5.5

Educational Status(763)			
	Illiterate	171	22.4
	Read and write	81	10.6
	Modern edu.(1-12)	407	53.3
	College/Univ.	98	12.8
	No response	6	0.9
Occupation(763)			
	Student	146	19.1
	Gov/NGO	119	15.6
	House wife	449	58.8
	Others	35	4.6
	No response	14	1.9
Religion(763)			
	Orthodox	469	61.5
	Muslim	82	10.7
	Protestant	189	24.8
	Catholic	15	2.0
	No response	8	1.0
Ethnic Composition(763)			
	Amhara	368	48.2
	Ari	122	16.0
.	Gofa	51	6.7
	Wolayta	36	4.7
	Besketo	32	4.2
	Malie	16	2.1
	Oromo	14	1.8
	Gamo	14	1.8
	Non Response	59	7.7
	Others	51	6.8

***Age not exactly known, but still having regular menses, in school life...

When we see the house facilities and economic condition of participants, about two third, 516 (67.6%) of them perceived their social status to be medium, followed by poor, 200 (26.2%) and rich, 19 (2.5%). Moreover, the average monthly income of participants was found to be 697.2 Et.Birr (SD-641.1 Et.Birr, Range: 30-4500 birr). Significant number of participants, 342 (44.8%) earn <500 birr per month and 584 (76.5%), 489 (64 %) and 406(53.2%) of houses of participants have electricity, radios, and televisions respectively. In addition, 325 (49.4%) of participants have at least one cattle in their home. (See Table 2)

Table 2 Economic indicators of study subjects, Jinka town, 2008

Economic Indicators	Frequency	%
House Facility(763)		

	Radio	489	64.0
	Television	406	53.2
	Electricity	584	76.5
	None	65	8.5
	No response	15	2.0
Monthly Income (763)			
	<500 birr	342	44.8
	500-1000 birr	220	28.8
.	>1000	92	12.1
	No response	109	14.3
Perceived social status(763)			
	Very poor	12	1.6
	Poor	200	26.2
	Medium	516	67.6
	Rich	19	2.5
	Very rich	1	0.1
	No response	15	2.0
No. of cattle in the family			
	One	90	11.8
	Two	94	12.3
	Four and above	141	18.5
	None	374	49.0
	No response	64	8.4

5.1.2. Reproductive Health Characteristics of the Study Population

Of the total participants, majority, 576 (75.5%) were ever pregnant, 567 (74.3%) were married and have been pregnant. About 343 (45%) participants have more than four family size and the average family size of participants was 4.95 (SD-2.2, Ranges from 1-15). Moreover, nearly two third, 485 (63.5%) of participants want to have three or more children and married participants have 3.3 children on average. Three hundred twelve, (40.9%) participants have their first marriage before 18 years and 372 (48.8%) have their first birth at or after age of 18. Moreover, 336 (44%) of the participants want to have 3-4 children and 565 (74%) give birth after marriage. Of those married participants, 99 (12.6%), and 68 (8.9%) have abortion and still birth respectively.

Those single participants want to have their first pregnancy on average at the age of 25.14 years (SD-3.1, min-18, max-36 years). Furthermore,

when we see the sex preference of participants more than half, 335 (43.9%) prefer to have both sexes and 170 (22.3%) prefer males than females. (See table 3)

Table 3 Reproductive health characters of participants, Jinka town, 2008

Reproductive Health Characteristics	Frequency	%
Family size(763)		
<4 in number	320	41.9
>=4 in number	338	44.3
No response	105	13.8
Age at marriage(615)		
age<18	312	50.7
age>=18	301	48.9
No response	2	0.4
Ever pregnant(763)		
Yes	576	75.5
No	183	24.0
No response	4	0.5
Age at 1st birth(580)		
<18 years	183	31.6
>=18 years	372	64.1
No response	25	4.3
Total children (580)		
1-2 children	229	39.5
3-4 children	207	35.7
>4 children	132	22.8
No response	12	2
Total children wanted (763)		
1-2 child	214	28.1
3-4 children	336	44.0
5 and above	149	19.5
No child(0)	23	3.0
No response	41	5.4
Planed age for 1st pregnancy for never pregnant (183)		
15-19	1	0.5
20-24	34	18.6
25-29	62	34.0
30-34	7	3.8
35-39	1	0.5
Don't have planed time	71	38.8
No response	7	3.8
Sex preference of participants(763)		
. Male	170	22.3
Female	49	6.4
No choice	76	10.0
Both	335	43.9

	God knows	104	13.6
	No response	29	3.8
Decision maker on No of children(763)			
	Husband	38	5.0
	Wife	40	5.2
	Both	525	68.8
	No response	155	20.3
	Others	5	0.7
No. of still birth(763)			
	One	55	7.2
	Two	12	1.6
	Three	1	0.1
	None	510	66.8
	Not applicable	183	24.0
	No response	2	0.2
No. of abortion(763)			
	One	66	8.7
	Two	24	3.1
	Three	6	0.8
	None	483	63.3
	Not applicable	183	24.0
	No response	1	0.1
Pregnancy(763)			
	After Marriage	565	74.6
	Before Marriage	13	1.7
	Not applicable	183	24.0
	No response	2	0.2

5.1.3 General Awareness on LAPMs

Of the total participants of the questionnaire survey, only 138 (18%) participants have knowledge about LAPMs (95% CI: 15.4-20.9). Majority, 110 (80%) of those with knowledge (14.4% of total participants) concerning LAPMs are married women, followed by singles, 14 (10.1%). In addition, 94 (68%) of those with knowledge have modern education (from grade one to twelve) and above, but very great proportion, 153 (89.4%) of illiterates have no knowledge on LAPMs.

Regarding the general uses of LAPMs as any contraceptive methods, about three quarter, 103 (74.6%) of those with knowledge know that

LAPMs are useful to prevent unwanted pregnancy and 107 (77.5%) know that LAPMs are useful for child spacing. Furthermore, 87 (63%) participants know that LAPMs are useful for deciding on family size and 67 (48.6%) are aware of its contribution in preventing maternal mortality and morbidity. The greatest part, 128 (92.8%) of those with knowledge about LAPMs got the information from health institution and 96 (69.6%) participants know at most two methods. From the LAPMs (Implant, IUCD, Male sterilization (Vasectomy) and Female sterilization), Implant is known by most, 105 (76.1%) participants followed by female sterilization, 55 (39.9%), and IUCD, 53 (38.4%). (See table 4)

Table 4 General Awareness on LAPMs, Jinka town, 2008

General Knowledge Questions on LAPMs	Frequency	Percentage
Knowledge of any LAPMs (763)		
No	625	81.9
Yes	138	18.1
Prevent unwanted pregnancy(138)		
No	35	25.4
Yes	103	74.6
Use for child spacing(138)		
No	31	22.6
Yes	107	77.4
To decide on the family size		
No	51	37.0
Yes	87	63.0
Prevent maternal and child mortality and morbidity(138)		
No	71	9.3

Yes	67	8.8
Know >=3 general uses(138)		
No	71	51.4
Yes	67	48.6
Methods of LAPMs known(138)		
IUCD	53	38.4
Implant	105	76.0
Tubal ligation	55	39.8
Vasectomy	24	17.4
Know <=2 methods	96	69.6
Know >= three of the methods	28	20.3
Source of information (138)		
Health facility	128	92.8
Others sources	10	7.2

5.1.4 Knowledge on IUCD, Implant, Vasectomy and Female sterilization

Of the total participants who have knowledge about LAPMs, 33 (23.9%) do not know anything about IUCD. When we see those who know about IUCD 15 (10.9%) and 84 (60.9%) participants have very good and good knowledge on IUCD respectively. Moreover, 72 (52.2%) know that it is very effective, 45 (32.6%) know that it is long term (used usually for more than ten years). Besides, 37 (26.8%) participants know that it is long acting and very effective, 131 (94.9%) don't know that it not good for female at high risk of getting STIs. Only 9 (6.5%) and 3 (2.2%) participants know that it had minimal side effect and has no interaction with medicine respectively. However, none of the participants knows that IUCD has no effect on breast-feeding; no interference with sexual intercourse and that it is immediately reversible (becoming pregnant quickly when removed). (See table 5)

Table 5 Knowledge on IUCD, Jinka town, 2008, (N=138)

Knowledge Questions on IUCD	Know/Yes #(%)	Don't Know /No #(%)
It is very effective	72(52.2)	66(47.8)
It is long acting	45(32.6)	93(67.4)
No effect on breast feeding	0(0.0)	138(100.0)

Not good for female at high risk of getting STIs	7(5.1)	131(94.9)
No effect on sexual performance and sensation	0(0.-)	138(100.0)
No interaction with medicine	3(2.2)	135(97.8)
Immediately reversible	0(0.0)	138(100.0)
Had minimal side effect	9(6.5)	129(93.5)
Very good knowledge	15 (10.9)	123(89.1)
Good knowledge	84 (60.9)	54(39.1)
Poor knowledge	6(4.3)	132(95.7)
Now nothing about IUCD	33 (23.9)	105(76.1)

Of the total participants who have knowledge about LAPMs 21 (15.2%), don't know anything about Implant. When we see those who knows about Implant, 10 (7.3%) and 103 (74.6%) have very good and good knowledge respectively. Moreover, less than half, 61 (44.2%) of the participants know that it is very effective, 76 (55.1%) know that it has long-term use (used for up to five years) and 33 (24%) know that it is long acting and very effective. Besides, no more than 9 (6.5%) participant know that it had minimal side effect and only 5 (3.6%) know that it has no interaction with medicine. To the contrary, most of the participants, 116 (84.1%), don't know that it is immediately reversible, 130 (94.2%) don't know that it has no effect on breast feeding, and only few 9 (6.5%) participants know that it has minimal side effect. (See table 6)

Table 6-Knowledge on Implant, Jinka town, 2008,(N=138)

Knowledge Questions	Know/Yes #(%)	Don't Know /No #(%)
It is very effective	61(44.2)	77(55.8)
It is long acting method	76(55.1)	62(44.9)
Has no effect on breast feeding	8(5.8)	130(94.2)
Requires minor surgery	27(19.6)	111(80.4)
No effect on sexual performance and sensation	24(17.4)	114(82.6)
No interaction with medicine	5(3.6)	133(96.4)
Immediately reversible	22(15.9)	116(84.1)
Had minimal side effect	9(6.5)	129(93.5)

Very good knowledge	10 (7.3)	127(92.7)
Good knowledge	103 (74.6)	35(25.4)
Poor knowledge	4(2.9)	134(97.1)
Know nothing about Implant	21(15.2)	117(84.8)

Of all participants of the questionnaire survey who have knowledge on LAPMs, 66 (47.8%) have good knowledge on vasectomy but half, 69 (50%) of them do not know about vasectomy. Moreover, about three quarter, 103 (74.6%) do not know that vasectomy is very effective but only 27 (19.6%) know that vasectomy is very effective and permanent method. In addition, greater number of participants, 127 (92%) don't know that it needs simple and safe surgery, 136 (98.6%) don't know about its effectiveness after 20 ejaculation or after months of surgery and 134 (97.1%) don't know that it have no known major long term side effect. However, about 45 (32.6%) participants know that vasectomy is permanent method, 10 (7.2%) know that there is no need for supplies to get/no repeated clinic visit and 26 (18.8%) know that it has no effect on sexual performance and sensation. (See table 7)

Table 7 -- Knowledge on Vasectomy, Jinka town, 2008, (N=138)

Knowledge Questions on Vasectomy	Know/Yes #(%)	Don't know /No #(%)
It is very effective	35(25.4)	103(75.6)
It is permanent(Irreversible)	45(32.6)	93(67.4)
Need safe and simple surgical procedure	11(8.0)	127(92.0)
No supplies to get/no repeated clinic visit	10(7.2)	128(92.8)
No problem on sexual performance and sensation	26(18.8)	112(81.2)

Fully effective after 3 months	2(1.4)	136(98.6)
No known long term side effect	4(2.9)	134(97.1)
Needs counseling and informed consent	8(5.8)	130(94.2)
Very good knowledge	1(0.7)	137(99.3)
Good knowledge	66(47.8)	72(52.2)
Poor knowledge	2(0.2)	136(99.8)
Know nothing about Vasectomy	69(50.0)	69(50.0)

When we look at the knowledge of participants on female sterilization, about a quarter, 37 (26.8%)) of participants with knowledge on LAPMs don't know anything about female sterilization, while 6 (4.4%) and 90 (65.2%) participants have very good and good knowledge on female sterilization respectively. However, 75 (54.3%) know that it is permanent method and 18 (13%) know that female sterilization is very effective and is permanent method too. Only 5 (3.6%) participants know that female sterilization helps to protect from ovarian cancer and 11 (8%) know that it has no known long term side effect. However, majority, (82.6%) don't know that it is very effective, 114 (89.1%) don't know that it need simple and safe surgery, 104 (75.4%) don't know that it have no effect on sexual performance and sensation and 126 (91.3%) don't know that it requires counseling and informed consent. (See table8)

Table 8 Knowledge on Female Sterilization, Jinka town, 2008,(N=138)

Knowledge Questions on Female Sterilization	Know/Yes #(%)	Don't know /No,#(%)
It is very effective	24(17.4)	114(82.6)
It is permanent(Irreversible)	75(54.3)	63(45.7)
Need safe and simple surgical procedure	15(10.9)	123(89.1)
No supplies to get/no repeated clinic visit	9(6.5)	129(93.5)

No problem on sexual performance and sensation	34(24.6)	104(75.4)
Helps to protect from ovarian cancer	5(3.6)	133(96.4)
No known long term side effect	11(8.0)	127(92.0)
Needs counseling and informed consent	12(8.7)	126(91.3)
Very good knowledge	6(4.4)	132(95.6)
Good knowledge	90(65.2)	48(34.8)
Poor knowledge	5(3.6)	133(96.4)
Know nothing about female sterilization	37 (26.8)	101(73.2)

5.1.4 Attitudes and Intention to use LAPMs

Nearly half, 379 (50.3%) of participants used to communicate on LAPMs and 374 (98.7%) of those who communicate with their partner /friends support use of LAPMs. In addition, majority, 689 (90.3%) of participants support use of LAPMs and 468 (68%) participants who support use of LAPMs have also intention /plan to use LAPMs. Concerning their friends/husbands attitude, greater part, 471 (61.7%) of participants explained that their friend/husband support use of LAPMs and 76 (10%) said that their partners/friends are against use of LAPMs (Implant, IUCD, Vasectomy and female sterilization). Furthermore, majority, 545 (71.4%) of participants need to know more on LAPMs and of those who want to know more 290 (53.2%) have also tried to know more and the rest 195 (25.6%) participants don't want to now more on LAPMs. While participants answering to the responsibility of using LAPMs, majority, 605 (79.3%) answered that it is the couples responsibility, 61 (8%) said that it is wives' responsibility and 38 (5%) said it is husband's responsibility. Additionally, most of participants, 747 (97.9%) and 744 (97.5%) believe that having giant family size poses great problem on economy and maternal health respectively.

In general, about 332 (43.5%) participants have good attitude towards LAMPs and 239 (31.5%) participants have poor attitude. (See table 9)

Table 9- Attitudes on LAPMs, Jinka town, 2008

Characteristics(Attitude factors)	Frequency	%
Support use of LAPMs (763)		
Yes	689	90.3
No	41	5.4
No idea	16	2.1
Don't concern me	8	1.0
No response	9	1.2
Communication with friend/Husband on LAPMs (763)		100.0
Yes	379	49.7
No	375	49.1
No response	9	1.2
Friend/Husband attitude on LAPMs (763)		
Support	471	61.7
Against	76	10.0
Neutral	5	0.7
I don't know'	133	17.4
Don't concern me	71	9.3
No response	7	0.9
Need to know more on LAPMs (763)		
Yes	545	71.4
No	195	25.6
No idea	17	2.2
No response	6	0.8
Tried to know more on LAPMs (763)		
Yes	293	38.4
No	435	57.0
Don't concern	16	2.1
No response	19	2.5
Responsibility in using LAPMs(763)		
Wife	61	8.0
Husband	38	5.0
Both	605	79.3
Don't know	13	1.7
Don't concern	40	5.2
No response	6	0.8
Large family has problem on economy (763)		
Yes	747	97.9
No	8	1.0
Don't know	3	0.4
No response	5	0.7
Large family has problem on MCH (763)		
Yes	744	97.5

No	10	1.3
Don't know	4	0.5
No response	5	0.7
Intention/plan to use LAPMs (763)		
Yes	478	62.6
No	208	27.3
No idea	16	2.1
Don't concern me	54	7.1
No response	7	0.9
Attitude on LAPMs composite measure(763)		
Good attitude	332	43.5
Poor attitude	239	31.3
Non response	192	25.2

When we see intention to use LAPMs of contraceptive with different factors, 90 (53%) of illiterate, 51 (64.6%) of those who read and write, 276 (68.3%) of those with modern education, 57 (58.2%) of those with college education have intention to use LAPMs. In addition, 119 (81.5%) singles, 340 (64%) married women, 13 (34%) divorced/separated women and 6 (14.3%) widowed women have intention to use LAPMs. Moreover, 7 (58.3%), 111 (55.8%), 334 (65.4%) and 13 (68.4%) participants who perceive their social status to be very poor, poor, medium and rich respectively have intention to use LAPMs of contraceptives. Furthermore, 85 (62.5%) of those with awareness and 392 (63.3%) with out awareness and have intention to use LAPMs of contraceptives.

5.1.5 LAPMs use and Reasons for not use

The over all prevalence of contraceptive among participants was about 39.5% (301) clients or (278) 52% in married couples, of which majority, 242 (31.6%) were users of modern contraceptive (other than LAPMs)

followed by LAPMs users, (56) making the prevalence of LAPMs use 7.3% (95% CI: 5.6%-9.5%)/10.5% in married women. The rest, 3 (0.4%) clients were users of natural method (Periodic abstinence) (See figure)

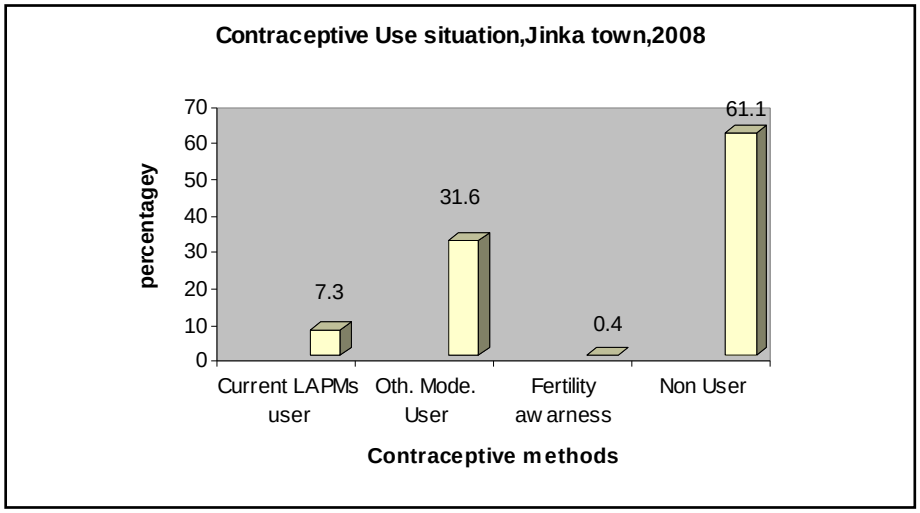


Figure 2-General Contraceptive use situation of women of age 15- 49, Jinka, 2008

Among current LAPMs users half, 28 (50%) were Implant users followed by female sterilization, 20 (35.7%) and IUCD, 7 (12.5%). The least used method from LAPMs was vasectomy (only one user). Further more, most, 46 (72%) LAPMs users started using it in the age group of 20-34 with mean starting age of 28.3 years (min.-18,max-39,SD-4.864) and all,(56) current users got LAPMs from government health facilities and the previous users (2) got it out of government institution.

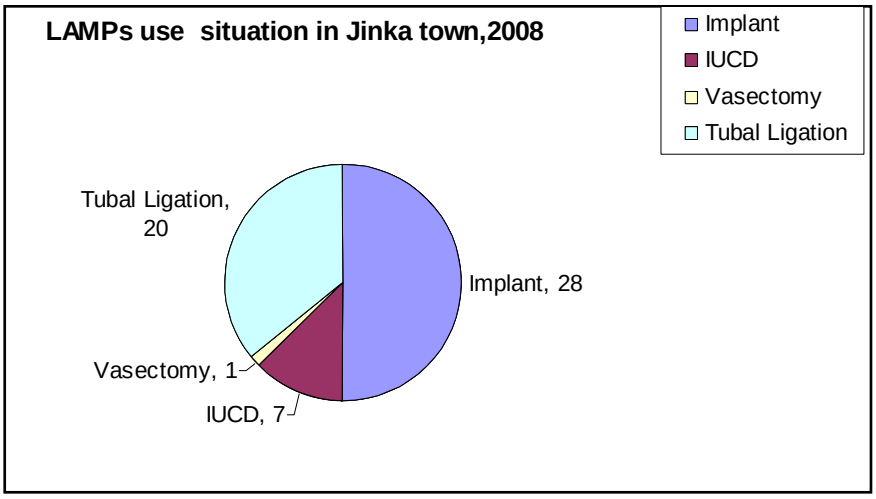


Figure 3 Types of LAPMs used in Jinka town,2008

There were several reasons for not using LAPMs among 598 participants who answered for this. Ninety-seven, (16.2%) participants said that they were not using it because they are single, equal amount of participants, 66 (11%), were not using because they want to be pregnant and they have health problems and 65 (11%) are not using due to fear of health effect. Moreover, 57 (9.5%) participants do not use because they use other methods, 54 (9%) due to fear of sterility, 44 (7.4%) because they do not know LAPMs and many other were not using it for different reasons. (See table 10)

Table -10 Reasons for not using LAPMs, Jinka town.2008

Reasons for not using LAMPs	Frequency	Percent(%)
Fear of Side effect	65	11.0
Due to health problem	66	11.0
Fear sterility	54	9.0
Husband disapproval	33	5.5
Its sinful act	9	1.5
To get pregnant	66	11.0
Am divorced	9	1.5
Am widowed	19	3.2
Use other modern method	57	9.5
Am single	97	16.2
Don't know about LAPMs	44	7.4
Am infertile	6	1.0
Others	73	12.2
Total	598	100.0

In addition to the above-mentioned reasons, there were many other reasons and misconception towards not using LAPMs. Some of the reasons were:-unwillingness to use, cultural disapproval, age getting old, being sexually inactive, having satisfaction with the method they are using, on lactation by now, being pregnant by now, unavailability of LAPMs at the time she want to use, fear of sterility , having marriage quit recently, not having any/enough children and other reasons too. There were only two previous user and they discontinued due to end of Implant use (5 years) and divorce respectively.

5.1.6 Factors affecting LAPMs use

Several socio demographic, reproductive health and other factors like :- age, sex, education level, occupation, religion, ethnic composition, monthly income, perceived social status, family size, age at marriage, total children available, total children wanted to have, sex preference, and many others were tested for the presence of association with LAPMs ever use by using binary logistic regression analysis. Variables like age of participants, education, monthly income, family size, total number of children participants want to have, knowledge on LAPMs and presence of communication with husband or friends were found to be significantly associated with LAPMs use on binary logistic regression analysis. These factors were further analyzed using multiple logistic regression using enter stepwise elimination method.

Knowledge on LAPMs was found to be an important predictor of LAPMs use (OR:145.6 (29.03-730.2)). Those with knowledge on LAPMs are 145.6 times users of LAPMs than those with out knowledge on LAPMs. Moreover, people in the age group of 25-34 (OR= 6.51 (1.44-29.49)) and 35-49 (OR=6.22 (1.28-30.36)) were more than six times users of LAPMs compared to those in the age group of 15-24. (See table 11)

Table 11 Predictors of LAPMs ever use, Jinka town, 2008

Variables	LAPMs Ever use		Crude OR (95%CI)	AOR (95%CI)
	Yes	No		
Age				
15-24	4	241	1	
25-34	28	275	6.14(2.12-17.73)	6.51(1.44-29.49)
35-49	26	173	9.06(3.10-26.15)	6.22(1.28-30.36)
Education				
Illitrate	8	132	1	1
Read and write	8	72	2.25(0.81-6.23)	0.57(.09-3.61)
Modern edu(1-12).	24	379	1.28(0.56-2.92)	0.40(.09-1.79)
College/Univ.	17	81	4.25(1.76-10.26)	0.95(0.16-5.67)
Monthly income				
<500 birr	17	321	1	1
500-1000 birr	28	192	2.75(1.469-5.163)	2.05(0.65-6.42)
. >1000	9	83	2.05(0.88-4.76)	1.24(0.29-5.42)
Family size				
<4 in number	14	305	1	1
>=4 in number	35	300	2.54(1.34-4.82)	1.20(.44-3.31)
Total children wanted				
1-2 child	7	206	1	
3-4	28	305	2.70(1.158-6.301)	0.8(0.23-3.54)
5 and above	19	130	4.30(1.76-10.52)	2.294(0.43-12.31)
Communication with husband/friend				
No	3	370	1	
Yes	55	324	20.94(6.488-67.56)	1.99(0.45-8.80)
Knowledge on LAPMs				
No	5	614	1	1
Yes	53	84	77.48(30.12-199.32)	145.6(29.03-730.2)

p-value<0.05 ,Adjusted for socio demographic, reproductive, knowledge and attitude factors and * indicates those with significant association.

5.2 Qualitative Result

5.2.1 General description of the FGD conducted

A total of 33 discussants participated in four FGDs; each FGD containing 7-9 discussants. The participants have different socio economic, religious and cultural backgrounds and all are from Jinka town. The FGDs were conducted separately for males and females and before conducting FGDs, about twelve FGD guides were developed to ensure subject areas are covered systematically and for uniformity of FGDs. While conducting FGDs, explanation and elaboration of the need to do the FGDs was done and participants were participated voluntarily. The FGDs took from1-2 hours and all were tape recorded in addition to notes. The data collected from FGDs were transcribed to Amharic on daily basis and translated to English for further processing.

5.2.2 General Knowledge of Contraceptive

As an entry question, discussants' knowledge concerning contraceptives in general was raised. Majority of the participants expressed that most of them and community members have knowledge concerning family planning and many people are using family planning methods too. Moreover, most of participants believe that it is mandatory to use family planning methods especially due to the current difficult living condition. In addition, most discussants have also expressed that there are many activities concerning contraceptive in towns and most of the users are those living in towns. However, most discussants feel that there are limited activities concerning family planning in rural areas and that is why there is poor knowledge and use of contraceptive in the rural population. Furthermore, discussants recommend further provision and expansion of health education service to the community giving emphasis

to the rural people by using health extension workers, CBRH agents and different health and non-health personnel.

Large amount discussants also expressed that people readily accept education on contraceptives in most of the time. One of the participant, (male, 30, Orthodox), while expressing his sister's experience said:

"...There was my sister's neighbor who is guard. On day, he asked my sister the reason why she had only two children with in eight years gap. She told him that she has education concerning family planning to limit her family size. After knowing the reason, the guard was regretted saying that it was unknowingly that he had many children. By now, his wife has prepared herself to use family planning service; hence, routine and continuous education is mandatory... "

Another discussant, (25, M, Orthodox), while expressing his view on the town people's knowledge on family planning methods said:

"..In previous days people in this town give birth to too many children thinking they will be helped when they are old, but now they have stopped it because they are educated and are getting health education on family planning methods..."

On the contrary, some discussants don't agree that there is better knowledge and use of contraceptive in general even in towns since most of the town and rural communities don't get appropriate, routine and programmed education. One discussant, (18, F) expressed her thought saying:

"...The community has no knowledge since it is new innovation. Hence, the community should get education & boast their knowledge. Secondly, there

should be assigned persons in town & rural area to educate the community on LAPMs....".

5.2.3 Knowledge on LAPMs

Generally, most discussants expressed their view saying that there is very low knowledge and use of LAPMs in their community, even some participants said that they heard about it right after the start of FGD. One of the discussant, (30, F) expresses his view saying:

"....I know LAPMs since we occasionally got educations on it from health facilities, but the community mostly use depo provera than LAPMs. If there is use of LAPMs at all, sure, it is too minimal from the total and I think there is too little knowledge too. Those who live in towns may have the knowledge but they use depo despite their knowledge..."

From the LAPMs, which were raised for discussion, majority of those who know, are only familiar with Implant. Moreover, some discussants expressed that there is good knowledge and use of Implants. Furthermore, most discussants said that there is almost no knowledge and use of IUCD and vasectomy. In addition, many discussants explained that there are many misconceptions and complaints among users of Implant. A participant, (32, F) has said:

"...Mostly, the communities know about Implant. However, I don't think the communities have better knowledge about IUCD and male sterilization. There is thinking that IUCD and female sterilization can cause internal problem to the user. I heard that there is a method of family planning by sterilizing males but I don't heard about the use of male sterilization in my locality. If it is available, I think males can use. To the contrary, there are husbands who don't want their wife to use family planning because they

can get bride price ("Koyta" "Tilosh") from their female children. By tackling these problems, improvements can be seen in the future... "

5.2.4 Attitudes on LAPMs

In general, most participants had positive attitude towards using contraceptives. Most participants agreed that the use of contraceptives in general and long acting methods in particular, especially Implant for birth spacing are good to the health of children, mothers and family. Moreover, limiting family size is important for a country and society. One discussant, (30, F) expressed her view saying:

"...It is good if every one uses family planning methods because of the current difficult living condition. Moreover, mothers suffer much due to birth, can die during birth and also children may die due to frequent birth hence, it is better to use family planning methods .Therefore, limiting the number of children and using family planning is good in my opinion..."

Most participants seriously express that it is very essential to limit family size due to the current harsh living condition. In order to limit family size most participants thought that it is better to use shorter acting and long acting once rather than permanent methods. A femal participant, (46, F) from Jinka town said:-

"...Those who will be born in the future should be limited. Nevertheless, there shouldn't be sterilization for both male and female rather using injection contraceptive is good. Previously, people born 10-15 children and they were in good health than the present people..."

Another male participant, (31, M, protestant), from town put his view saying:

"...The permanent methods can cause regret if a LAPMs user, having one or more children, wants to have additional child when he/she improve economically. Hence, rather than using permanent methods it is better to use methods like depo and IUCD. In addition, providing education concerning permanent methods is mandatory..."

A female, (18, F), discussant while expressing community's perception said:

"...The communities don't want totally to stop giving birth, but want to limit the number of children to two or three by using contraceptive methods. If couples do not have birth at all the community attitude towards them may not be good..."

There was very poor attitude concerning vasectomy by most male participants. One male participant, (54, M, Orthodox), expressed his view saying:

"*...If I have vasectomy, I can't have birth. Why should I use this method?! Shouldn't I replace my self?! Nobody should use vasectomy, unless by legal punishment. In previous times, there was no issue about male sterilization. It is what the new generation brought to us. We should work together by all our occupation and develop our country rather than thinking about it...''*

Another young male (26 years, Orthodox) participant expressed his view saying:

"...I can decide the number of children that we want to have with my wife. So what is the need for male sterilization?! I am confused of it..."

One participant was so astonished even to discuss on the issue of vasectomy and he expressed his view as"*.. Vasectomy is new for us and I think it is dangerous to use..*"

Nevertheless, some women discussants have emphasized that men should share females burden by starting use of vasectomy given that females are suffering at all times due to frequent childbirth.

Almost all participants want to know more on LAPMs and to disseminate health information concerning LAPMs. They emphasized that there is a need for extensive health education to improve knowledge and avoid misconceptions. Moreover, discussants said that if they got education on LAPMs, they can use it in the future, they could educate their families, neighbors and other people too.

A male participant, (20, M, Protestant), from town expresses his views: *"..I want to know more about LAPMs because, due to our mothers and fathers mistakes, now there is very great population, which has caused negative impact on our economy. However, after now onwards, using these methods as contraceptive is very essential. We can educate about LAPMs through "Edir", on funeral ceremonies and other social contacts. Generally, it is better to use all possible social networks to educate about LAPMs..."*

A female participant, (33, F), put her view saying: *"..I want to know more because, in the future when I reach to good position and had marriage, I may have child, so to keep up my child healthy and for his better growth, there is a need to know about and use contraceptives. Moreover, after we know more about LAPMs we can educate others..."*

5.2.5 Preference, Use and Factors affecting use of LAPMs

Majority of participants prefers long acting methods rather than permanent methods. For their preference, they site different reasons. Participants also suggest that permanent contraceptives should be used by those who want no more children, HIV/AIDS patients, street children and others with no income.

Almost all discussants certainly explained that there is low use of LAPMs, especially permanent contraceptives (Vasectomy) and IUCD. Participants witnessed that there are some Implant and female sterilization users. Moreover, participants raised many factors and misconceptions that hinder use of LAPMs like:-husband disapproval, considering children as assets, fear of sterility lack of knowledge, cultural and religion disapproval and fear of several side effects (heavy period, slipping out during heavy work (for IUCD), vertigo) they are hearing and encountering. One male discussant, (20, M, protestant) said-

"...I know about Implant and IUCD since I have learned about it in my high school life. One day, I was talking with my neighbor about long acting family planning methods and she says" I want to use Norplant for family planning purpose but, it has its own side affects like preventing work by the hand where it is inserted". In addition one of her friend told me she has used IUCD and it slips out during heavy work..."

Large numbers of participants believe that family planning methods are just the concerns of females and using or not using contraceptives is under great influence of males. One participant expressing his view said:

"...I heard about male contraceptive method right now. Only females are using all methods like Implant and female sterilization still now. Even, there are males who do not want their wife to use any type of contraceptive methods. They say you cannot give birth, you are mare or

you want another husband that is why you do not want to be pregnant from me. One of my neighbors was using injection contraceptive secretly but her husband knows it lastly and had conflict with her, than she stopped and gave frequent births. Subsequently, at her last pregnancy, she was operated and had tubal ligation. Hence, it is better to give education to such type of males..."

On the discussions some of participants also raised that optimum family size should be to a maximum of six and minimum of four if couples have economic capacity to satisfy all the needs of their children and family size should be decided by the mutual agreement of couples.

5.2.6 Comparison of LAPMs with other FP methods

Discussants expressed that LAPMs are advantageous when compared to other contraceptive methods in the following aspects:-there won't be frequent visit, help for long year spacing, decreases expense for contraception purpose and other many reasons. One male participant (20, protestant) put his view saying:

"....Using LAMPs method is very essential for it helps to space child birth by several years, prevents frequent health institution visit, economically feasible and have no worry of forgetting use as that of shorter acting methods. The disadvantage or side effect of using it by community is that one can't have birth if he/she lost child..."

Another female participant (30, F) expressed her views saying:

"*...When compared to other contraceptive methods, LAPMs help for having better education of children by spacing for long period. Their will be great problem if we don't space as well as, currently the living condition is very difficult...."*

5.2.7 Ways to improve knowledge, attitude and use of LAPMs

A number of solutions were raised for improving the knowledge, attitude and use of contraceptives in general and LAPMs in particular. All discussants express the need for continuous education concerning LAPMs both in towns and rural areas but giving due emphasis to the rural communities. Moreover, participants suggest training of health professionals and ensuring supply of LAPMs for service continuity.

Discussants also raise the use of all available institutions (like health, education etc), social contacts (like markets, Edirs, funeral ceremonies, coffee ceremonies) for imparting knowledge for the community. Additionally, discussants suggest education and training on LAPMs not only by health professional but also by LAPMs client, kebele leaders, Edir leaders and other important opinion leaders of the community.

Furthermore, some discussants have suggested that health professionals working with family planning service should give due emphasis in counseling of LAPMs since most of clients, even those using other modern contraceptives, rarely heard about LAPMs in health facilities.

6 Discussions

The study has assessed the prevalence and the factors affecting use of LAPMs in Jinka town. Moreover, it has assessed the knowledge and attitudes on LAPMs in the study area. A total of 763 participants have filled the survey questionnaires and 33 discussants were involved in FGDs from both sexes.

Less than a quarter, (18%, 138) of participants have named one or more of LAPMs (i.e. at least one of the four LAPMs considered by this study). This is relatively lower than that of EDHS 2005 findings which were 22.4% for Implant, 18.4% for female sterilization, 14.8% for IUCD and 6.6% for vasectomy and also lower than other study in Ethiopia (Amhara, Wollo, Tehuledre woreda) (6,19). This may be due to lack of describing and probing of methods not mentioned spontaneously by participants, unlike in EDHS 2005, (where the interviewer describes and probes for whether the respondent recognized it). Furthermore, the study in Tehuledre is among clients of long acting and permanent methods users and many other factors, which need further investigation. The result of this study is comparable with other studies in the big regions of Ethiopia (21). Furthermore, 10%, 9.8%, 9.4% and 6% of the participants have knowledge (besides naming the method) on implant, female sterilization, IUCD and vasectomy respectively.

Generally, knowledge concerning LAPMs was very low which is consistence with other similar studies. It was also raised by most focused group discussants that there is very low knowledge on LAPMs probably for there were no routine health education programs on LAPMs targeting

the whole community rather than education that is given as campaign and to those who have health institution visit (6).
Moreover, those with knowledge on LAPMs were married and those with some education, which is consistent with many other studies and with the FGD result (6, 19).

Most participants of focused group discussants suggested that optimum family size should be to the maximum of four this is also comparable with other studies done in big regions of Ethiopia (21). Moreover, it is relatively inconsistent with EDHS 2005 finding where three out of five women preferred an ideal family size of four or more children (6).

There is good level of knowledge for the general contraceptive as mentioned by FGD discussants. This is consistent with EDHS finding (For example, knowledge for pills is 83%) and a study in Tehuledere among users of LAMPMs (>90%) (6,19).

Considerable amounts, 63.5% (95% CI: 59.9%-66.9%) of participants have intention to use LAPMs one time in the future after getting further information on it which is consistent with other studies in Ethiopia (19). Moreover, it is in line with EDHS 2005 finding where 42% women want no more children while they were asked about their fertility intention and among those with unmet need 14% having an unmet need for limiting (6). This result is also consistent with a study in Bure where among users of a method due to unavailability of their method of choice, 57.9% had preference to LAPMs. Furthermore, in the same study it was found that among those who have unintended pregnancy due to lack of there preferred method about 43.1% preferred LAPMs (23). There is also very high intention to use contraceptives in general as suggested by FGD participants. This is similarly seen in other studies like 15% in Pakistan

to 73% in Nepal married women have intention to use contraceptives and about half, (52%) married women who were not using any contraception at the time of the survey intend to use a family planning method some time in the future (2).

In general, most participants have positive attitude towards using contraceptives in general as expressed by FGD discussants. This is similarly seen in other studies (Gonder) that 72% of the females and 69.6% of the males had positive attitude towards future use of contraceptives (20).

The over all prevalence of contraceptive use for women of reproductive age in the town was found to be 39.5% (301 clients or 52% for married couples) of which 56 were LAPMs users making the prevalence of LAPMs use 7.3% (95 CI:5.6%-9.5%)/ 10.5% in married women. Both the over all prevalence of contraceptive and prevalence of LAPMs are much higher than the EDHS 2000/2005 findings (CPR=15%, LAPMs CPR=0.6% in married women EDHS 2005), findings in Bure, West Gojjam (use of IUD and Norplant were found to be -0.2% and 0.2% respectively) and other studies in Ethiopia (20, 21, 23). These may be due to the recent provision of training and supplies of long acting methods by many NGOs working in the area, attitude change of people towards using long acting methods and different changes through time (it is three years from EDHS 2005). Furthermore, majority, (66.1%) of participants have modern (1-12 grades) or college education and provision of female sterilization methods to those visiting hospital for delivery. In addition, further investigation is mandatory for better explanation of the relatively high LAPMs use in the town. Furthermore, need for LAPMs was seen to exist in other studies too, though not very great as what was found in this study (17).

LAPMs prevalence, 7.3% or 10.5% in married women, found in this study is comparable with that of Zambia (8%) and lower than that of South Africa (19.7%). This finding is very low when compared to some Latin American countries like Dominican Republic where LAPMs contribute for three forth of the already high contraceptive use and India (Hooghy district) which is 34.5% (19,13).

Of the LAPMs users half, 28 (50%) or 3.7% of all participants use Implant which is higher than studies in our country these may be due to the recent introduction of two sticks Implant which is easy for insertion and accessed at health center level by trained nurses and other staffs. Moreover, females might have understand and shift towards using understanding Implant because there is no frequent visit, no frequent expenses, no fear of forgetting use as these factors were also raised by FGD discussants as advantageous aspects of LAPMs (6,20).

The second most used method among LAPMs was female sterilization contributing 2.6% of all contraceptive users (35.7% of all LAPMs) which is higher than some studies in Ethiopia (6). However, it is very low compared to that of the study in Tehuledere, Ethiopia (47% of all LAPMs), Tunisia (12% of all CPR in 1998) , Bangladesh (8% in 1985) and it was (5%,1985) in Jordan (19,22). Furthermore, it is very low when compared to Asia and Latin America, where the overall proportion of users relying on female sterilization ranged from 29% to 39%, reaching 42–43% in Asia and in Latin America and the Caribbean in 2000–2005. These different may be due to different socio demographic, cultural and service related factors in different areas (12).

The least used method of LAPMs is IUCD (7, 0.9%) and vasectomy (1, 0.1%) which are comparable with many other studies in Africa. The

lowest IUCD use is also the common problem in many African countries (southern Africa-0.2%). The reasons for low use of IUCD may be several factors raised as side effect of it and also lack of knowledge (as also expressed in FGDs) (6,10,21).

As many other African country, Vasectomy is almost non existence in Jinka town, which is consistent with EDHS but very much lower than in a study conducted in Tehuledere, Ethiopia. This may be due to low knowledge of vasectomy, misconception about it, negative attitude of family planning clients and many other reasons as identified by most FGD discussants and many other studies else were in Africa(6,10,19).

Many factors were raised to be affecting the knowledge, attitudes and use of LAPMs in the town by FGD discussants and participants of questionnaire survey. Among these, the main once were lack of education which rendered low knowledge, poor counseling by family planning providers, fear of side effects and existing health problems and several misconceptions as it is also reported in many other studies (6,21).

FGD discussants have also raised factors like religion, culture and other socio demographic factors have effect on the acceptance and use of LAPMs that is consistent with other study (13).

To the contrary, religion and income were not found to be associated with LAPMs use in the quantitative survey, which is inconsistent with other study and FGD discussion result of this study (13). This may need further investigation in large-scale study.

7. Strengths and Limitation of the Study

Strengths of the Study

-The study uses both qualitative and quantitative methods. Moreover, males were involved in the FGDs to have better picture of the situation of LAPMs use and related factors.
-Study subjects were selected randomly and pre-tested questionnaires were used.

Limitations of the study

-The study is conducted only in the town that doesn't represent the great majority of the rural community.
-The view of service providers, NGOs working with LAPMs in the locality and those working at the health offices were not included.
-Resource constraint in terms of finance and transport
-Lack of adequate literatures in Ethiopian situation, which prevents further elaborating the discussion
-As any cross sectional study cause and effect relationship was not possible to establish for the factors dealt in the study for it is impossible which factor occur first.

8. Conclusion

The study had demonstrated that there was low knowledge and relatively fair level use of LAPMs in the context of Ethiopia. The over all prevalence of contraceptive use in Jinka town in women of reproductive age is somewhat high (39.5%). Moreover, LAPMs prevalence of 7.3% in Jinka town is relatively high.

Ethiopia being the poorest country in the world has very scarce resources including resources for health service for family planning service with no exception; hence, the observed relatively increased users of LAPMs will help for the best use of the scarce resource.

Generally, there was lower knowledge on LAPMs in the town (18%) and several factors:-socio demographic, reproductive health and other factors were identified to be affecting LAPMs knowledge and prevalence.

Most of the participants have intention to use LAPMs in the future after getting appropriate information, education and counseling together with their partner.

There are relatively better progress in family planning service availability and use in the town area as identified by FGD discussants. Moreover, there is continuous training and employment of health extension workers, short training and assignment of CBRH agents that has helped to raise the use of contraceptives in the town. Hence, this should continued and strengthened in the future.

9. Recommendation

Based on the findings of this study, the following recommendations were given to the relevant government bodies, NGOs and other responsible bodies.

1. South Omo Zone health department should have routine monitoring and evaluation of family planning programs quality, continuity and logistic management of both private and government facilities since different problems on family planning service provision were raised by FGD participants.
2. The zonal health department should maintain continuous health education programs on contraceptives in general and LAPMs in particular by collaborating with Edirs, female and youth associations and other relevant organizations.
3. Special campaign should be organized to educate the community on Vasectomy. Since there is very low knowledge and poor attitude towards it the campaign will help to change the existing situation if it is also accompanied by routine health education sessions.
4. To ensure continuity of service, training should be given to staffs on LAPMs including supply of long acting contraceptives.
5. Boosting source of LAPMs service by using private clinics and NGOs is mandatory. These may help those who can afford for service and those who want to get service quickly since most of government institutions have great client load with few and continuously changing health workers. Hence, the zonal health department, regional health bureau NGOs working with LAPMs and private health institution of the locality should deal on the issue.
6. NGOs working on contraceptive service, supply and training provision should work with integration for reducing wasting of resources.

7. IEC activities, which are planned and implemented by NGOs and other concerned bodies concerning LAPMs, should focus on tackling the main misconceptions on LAPMs and also advantageous parts of LAPMs as compared with other methods.

8. Local opinion leaders, religious leaders and other influential persons should get appropriate information on LAPMs to elicit discussion on different occasions.

9. Federal MOH and regional health bureau should motivate and attract NGOs working with LAPMs since there is a need to use LAPMs by most people.

10. Further training and assignment of CBPH agent and health extension workers should be continued.

11. Conducting further research:- detailed and large study which considers NGOs perspective , service providers and health service managers views on similar issues should be conducted for identifying factors for the existing relatively high LAPMs use and weather there is changing trend on contraceptive use.

10. References

1. Optimum Population Thrust, Youth Quick, Population, Fertility and Environment in the 21st century, UK, 2007

2. Population Report, The Reproductive Revolution Continues, Johns Hopkins Bloomberg School of Public Health, Volume XXXI, Number 2 Spring 2003

3. CSA, Statistical Abstract 2006, A.A, FDR Ethiopia, June 2007

4. Ahmed Jelaludin and Genet Mengistu ORC Macro Calverton, Maryland USA, Evaluation of program options to meet unmet need for family planning in Ethiopia, November 2002

5. Assessment of Youth Reproductive Health Programs in Ethiopia, Youth Net Assessment Team, April 2004

6. Central Statistical Agency, ORC.MACRO. Ethiopia Demographic and Health Survey 2005, Addiss Ab aba, Calverton, Maryland, USA, 2006

7. ACQUIRE evaluation and research studies, Factors Affecting Vasectomy Acceptability in the Kigoma Region of Tanzania, E and R studyNo.5, June 2006 8. Barbara Janowitz, Commercial sector's role in providing long acting and permanent methods, USAID,USA, August 2006

9. Roy Jacobstein, Erin McGinn, Beyond the Barriers: Strategies for "Jumpstarting" the IUD in Africa, 2000

10. ACQUIRE Project, Get a Permanent Smile'—Increasing Knowledge of, Access to, and Utilization of Vasectomy Services in Ghana, USAID, Ghana, No.3, 2006.

11. Family Planning: A Possible intervention in maternal mortality, Ifeyinwa Flossy Obuekwe and Chinwe Lucy Marchie, Faculty of Pharmacy, University of Benin, Benin City. Nigeria

12. Eric E. Seiber, Jane T. Bertrand and Tara M.Sullivan, Changes in contraceptive method mix in developing countries, Volume 33, Number 3,

September 2000

13. Bratati Banerjee, Socioeconomic and cultural determinants on acceptance of permanent methods of contraception, Hooghy district, West Bengal, India, 2000
14. L.K. Dwivedi, Usha Ram, Baishali Goswami, Understanding Contraception Use among Muslims of India, Pakistan and Bangladesh, Mumbai, India.
15. Mass education and child bearing, research brief, Nepal, December 2001
16. Arwen Bunce, Greg Guest, Hannah Searing, Veronica Frajzyngier, Peter Riwa, Joseph Kanama and Isaac Achwal, Factors Affecting Vasectomy Acceptability in Tanzania, International Family Planning Perspectives Volume 33, Number 1, March 2007
17. Population Reports, Approval of voluntary sterilization growing in Islamic countries, Nov. 1900
18. Central Statistical Agency, ORC.MACRO. Ethiopia Demographic and Health Survey 2000, Addiss Ababa, Calverton, Maryland, USA, 2006)
19. Mengistu Asnake, Lakachew Walie, Yilma Melkamu, Improving the range of contraceptive choices in rural Ethiopia, Tehuledere woreda, in South
Wollo zone, Amhara Regional State, Ethiopia, September 2000
20. Yigzaw Kebede, Contraceptive prevalence and factors associated with usage of contraceptives around Gondar Town, Ethiop. J. Health Dev. 2000; 14(3):327-334
21. Amare Dejene, Dehab Belay, Reasons for the low use of IUCD, Dec. 2003
22. Yilma Melkamu, Mulgeta Betre, Effects of Contraceptive Shortages and Coping Mechanisms in Selected Regions of Ethiopia, CORHA, 2005.
23. Lamesgin Alamineh, Assessment of family planning method mix and effects of lack of preferred contraceptive methods in Bure woreda, West Gojjam zone, Amhara Regional State, Ethiopia, March 2007

24. South Omo zone health department annual work plan, 2007(unpublished document)
25. http://en.wikipedia.org/wiki/Debub_Omo_Zone, accessed Dec. 2007
26. http://en.wikipedia.org/wiki/Jinka, accessed Dec. 2007

11. Appendixes

Annex 1 Structured questionnaire for quantitative research part

Greeting

Hello! There is a research to be conducted here in Jinka and if you are willing, you may participate. You will not have any risk in participating except losing part of your time. Moreover, you can get the chance to now more on contraception and contribute your part in future improvement of the service in your area. I would like to ask you some questions about modern contraception, specifically we will discuss more on long acting and permanent contraception like IUCD, Implant, Voluntary sterilization (Female Sterilization and Vasectomy). The main aim of this study is to asses the knowledge, willingness and use of the above-mentioned methods in Jinka town women's of reproductive age group wishing it would help in improving family planning service in the future. All the information you will be giving of your own accord will be kept confidential and we won't use your names. Moreover, you are not forced to answer to all questions and you can have some break time during the interview.

Can we proceed to the questioner? On the other hand, there is some thing vague that I should clarify.

Y☐ ☐

If you have some thing to ask concerning the study, any time you can contact the principal investigator by Phone No. 0911071149, P.O.Box 8069, Getachew Mekonen. Thank You!

Time of visit

	First visit	Second visit	Third visit and above
Date			
Result			

Result code given

1. Complete response
2. Incomplete response
3. No response
4.Respondent an available
5.Other, specify

N.B For choice questions circle the possible answer(s)

A. 1.Identification

No	Questions	Response	Skip to
001	Questionnaire no.		
002	Name of data collector	_____	
003	House hold No.	Woreda..... Kebele..... No.....	
004	Visiting time a. first visit b .second visit c. third visit and above	Result code 1. Complete response 2. Incomplete response 3. No response 4.Respondent an available 5.Other, specify	
005	Could you tell me about your long acting and permanent (methods used for many years or permanently just after having it once) use situation?	1.current user 2.Non user 3.Previously user 4.user of other method 5.Others,specify	
006	Date of interview(in Ethiopian calendar)	[___/___/___] Date, month, year	
007	Supervisor Name	_____	

B. Socio-demographic and economic characteristics

No	Questions	Response	Skip to
101	What is your age (in completed years)?	_____-	
102	Marital status of participant?	1.Single 4.Widowed 2.Married 5.Separeted	

		3.Divorced	
103	Family size of respondent?	Enter the No…….	
104	What is your religion?	1.Orthodox 2.Muslim 3.Protestant 4.Catholic 5Others,specify	
105	What is your ethnicity?	_____	
106	Educational status?	1.Illitrate(can't read or write) 2.Read and write 3.Formaleducation(1-12) (enter grade) 4.College/University level	
107	Occupation of respondent?	1.Student 2.Private Business 3.Government or NGO employ 4.Hose wife 5.Daily laborer 6.Merchant 7.other,specify	
108	Perceived social status?	1.Very poor 2.Poor 3.Medium 4.Rich 5.Very rich	
109	Total monthly income of Family or household?	Enter the no. in birr_____	
110	How many oxen and\or cows do you have	1. One 2. Two 3.three 4.4 and above	
111	Which is available in your house? Radio Television Electricity	 1.Yes 2.No 1.Yes 2.No 1.Yes 2.No	

**If participant can't guess age by her self, better ask different questions to help her guess.(weather she is still having menses, age at marriage, age at first school, birthday and any other means to guess her age.)

C. Reproductive Health History

No	Questions	Response	Skip to
201	What was your age at time of marriage?	_____-	
202	Have you ever been pregnant?	1.Yes 2.No(if no go to Q no209)	209
203	If your answer is yes to Q no. 202 when was it?	1.Before marriage 2.After marriage	
204	If your answer is yes to Q no.202 was it wanted?	1.Yes 2.No	
205	If your answer is yes to Q no.202.what was your age at time of first birth?	Enter age in completed year	
206	How many live children do you have?	Total....M...,F....	
207	How many abortions do you have?	1.1 4.None 2.2 3.3and above	
208	How many still births do you have?	1.1 4.None 2.2 3.3and above	
209	How many children you want to have?	Enter no_____(If answer is 0 skip to 301)	301
210	What is the sex of child you want more?	1.Male 3.No preference 2.Femal 4.Both	
211	Who decide on the no of children you want to have?	1.Husband 4.Others,specify----- 2.Wife 3.Both	
212	If your answer is No to Q no.302. at what age do you want to have your first birth?	Enter in number.....	

B. Knowledge of Modern contraceptive (LAPMs)

No	Questions	Response	Remark
301	Do you know about	1.Yes	

	LAPMs contraceptive methods (methods used for many years or permanently just after having it once)	2.No (if answer is no go to Q no. 401) _____-	
302	If yes to Q 301 what general uses of LAPMs as any contraceptive method do you know? (Tick all mentioned)	1. Helps for prevention of unwanted pregnancies 2. Prevention of possible maternal and child death and ill health. 3. Reduction in family size 4. Child spacing	
303	If yes to Q 301which method of LAPMs do you know?(circle all mentioned by the respondent)	1.IUCD 2.Implant 3.Vasectomy 4.Tubal Legation	
304	What is your source of information?(circle all mentioned by the respondent)	1.Health sector 2.Family 3.Fraind 4.Mass media 5.NGO 6.others	
305	What do you know about IUCD? (circle all mentioned by the respondent)	1.It is very effective 2.It is long term(used usually for more than ten years) 3.No effect on breast feeding 4.Not good for female at high risk of getting STIs 5.No interference with sexual intercourse 6.No interaction with medicine 7.Immediatly reversible(becoming pregnant quickly when removed) 8.Had minimal side effect 9.Others,specify	
306	What do you know about Implant? (circle all mentioned by the respondent)	1.It is very effective 2.It is long term(used for up to five years) 3.No effect on breast feeding 4.Insertion and removal require minor surgical procedure 5.No interference with sex 6.Can be used by females of any reproductive age 7.Immediatly reversible(becoming pregnant quickly when removed)	

		8.Had minimal side effect 9.Help to prevent some diseases like anemia 10.Others,specify	
307	What do you know about Vasectomy? (circle all mentioned by the respondent)	1.It is very effective 2.It is permanent(Irreversible) 3.Safe and simple procedure 4.no supplies to get/no repeated clinic visit 5 .No effect on sexual performance and sensation 6. fully effective after 3monthes (20 ejaculations) 7.No known long term side effect) 8.Requiers counseling and informed consent 9.others,specify	
308	What do you know about female sterilization? (circle all mentioned by the respondent)	1.It is very effective 2.It is permanent(Irreversible) 3.Safe and simple procedure 4.no supplies to get/no repeated clinic visit 5 .No effect on sexual performance and sensation 6.Helps to protect from ovarian cancer 7.No known long term side effect) 8.Requiers counseling and informed consent 9.Others,specify	

C. Attitude towards Modern contraceptive (LAPMs)

No	Questions	Response	Skip to
401	Do you discus about LAPMs contraceptive methods with your partner or friends?	1. Yes 3. Don't concern me 2. No - 4. Any other idea, explain _____	
402	Do You approve using LAPMs contraceptive?	1. Yes 2. No 3. No idea 4. not applicable	

403	Is it good to use LAPMs for contraception?	1. Yes 2. No 3. No idea 4. Not applicable	
404	What is your partner's attitude towards using LAPMs?	1. Supporting 4. Don't know 2. Against 5.Not applicable 3. Neutral 6. Any other idea, explain_____	
405	Do you want to know more about LAPMs?	1.Yes 2. No 3. Neutral 4. Not applicable	
406	Do you try to know more about LAPMs?	1. Yes 2. No 3. Neutral 4. Not applicable	
407	Do you have plan/intention to use LAPMs in the future?	1. Yes 2. No 3. Not applicable	
408	Whose responsibility is practicing contraception, including LAPMs?	1. Wife 6.Others,explain 2. Husband 3. Both 4. I don't know 5. Not applicable	
409	Does large family size affect economic condition?	1. Yes 2. NO 3. No response 4. I don't know	
410	Does large family size affect the health condition mothers and children?	1. Yes 2. No 3. No response 4. I don't know	

F. Practice and Perception towards Modern contraceptive LAPMs

No	Questions	Response	Skip to
501	Have you ever use LAPMs contraceptive methods?	1. Yes 2. No (If No go to Q No. 508) 3. Am using it now	508
502	If yes to Q No. 501 when do You start?	Enter the starting age..... Enter how long client use.....	

503	If yes to Q No. 501 what is/was source of service?	1. Government Health sector 2. NGO 3. Private 4. Others,specify	
504	If yes to Q No. 501 which method have you used or still using?	1. Implant 2. IUCD 3. Vasectomy 4. Femal sterilization	
505	If yes to Q No. 501 are you still using it?	1. Yes (if yes end the questionnaire) 2. No	
506	If No to Q No 505 what happened to it? (for only IUCD and Implant users)	1. Change method 2. Stope using contraceptive method	
507	If you stop/change the method what is\could be the reason?(only for long acting contraceptive users) (circle possible answers)	1. Fear of side effect 2. Medical problem 3. Fear of infertility 4. Partner disapprove 5. To get pregnant 6. It is sinful 7. Cultural taboo 8. Others	
508	Do you use other modern contraceptive method?	1.Yes 2.No	
509	If you don't practice any of LAPMs why is the reason?	1. Fear of side effect 10. Am single 2. Medical problem 3. Fear of infertility 4. Partner disapprove 5. To get pregnant 6. It is sinful 7. Cultural taboo 8. Lack of knowledge 9. Service unavailable 11. Others, specify	

Any additional idea, opinion and/or further elaboration on issue/issues in our survey that you want to add? Finally I would like to express my heartfelt thank for your voluntary participation in this study. You have contributed your best.

Annex 2 FGD discussion guide

Greeting!

Hello,participants. Wishing it would help in improving family planning service in the future in your locality we would have this FGD. We hoped that the discussion we would be having with you is very much useful to strength quality, availability and access to contraceptive in general and to long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception in particular. In doing this discussion I will raise some questions concerning long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception knowledge, attitude, use and determinant factors. Before entering to the FGD I wish to forward my bottomless appreciation for all the voluntary participants.

Discussion topics

1. How does the community understand about contraception? How about your understanding concerning contraceptives?
2. What do you / the community knows about long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception?
3. Why do you/ the community /why don't you/ the community use long acting (IUCD,Implant) and permanent (voluntary sterilization) contraception?
4. What are the advantages/disadvantages of long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception over others?
5. Do you want to know more about long acting (IUCD, Implant) and Permanent (voluntary sterilization) contraception? What could be the reason?
6. What is the knowledge and attitude of the community regarding long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception?

7. When should people start to use long acting (IUCD, Implant) and permanent (voluntary sterilization) contraception?
8. What is the optimum family size you think?
9. Is having large family size useful or harmful? What is the reason you think?
10. Who should decide about family size? What is the reason you think?
11. Who should use long acting and permanent contraception?
12. Which method (from IUCD, Implant, and Voluntary sterilization) do you prefer to use?
13. What is your attitude and communities perception concerning the use of vasectomy in this community?
Is there any additional idea that you want to add on our discussion on LAPMs and related issues?

Finally I would like to express my heartfelt thank for your voluntary participation in this focused group discussion study. You have contributed your best.

Annex 3 Amharic Translated Questionnaires

Tlu[cw ›kõ SÖ“© ¾[ïU Ñ>²?“ ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ Ó”³u?' KSÖkU ðnÅ˜ƒ“ }ÖnT>'ƒ Ø“ƒ ¾}²ÒË SÖÃp cLU

”ÅU” 'i/' ƒ:: u²=I uÏ”" Ÿ}T ¾[ïU Ñ>²?“ ²LKT© ¾¨K=É Sq×Ö]Á ²È ‹” u}SKŸ} ¾ ¨<kƒ' KSÖkU ÁK õnÅ˜ƒ“ }Ön'T>ƒ” KT¨p ›”É Ø“ƒ Ã"H@ÇM “U ›”^/ `e ðnÅ— ŸJ”i/'< uØ“~ Ãd}óK<<:: u²=I Ø“ƒ uSd}õ ŸØmƒ Ñ>²? uk` ¾T>ÁÖ<ƒ 'Ñ` ¾KU' 'Ñ` Ó” eKŸ}Tª ¾u?}cw U×'@ ›ÑMÓKAƒ u}SKŸ} KT>Å[Ñ¨< Ø“ƒ wKAU ŸØ“~ KT>Ñ–¨< ¨<Ö?ƒ¾^e” ›e}ªê* ”Çu[Ÿ~ Áeu<ƒ:: u}ÚT]U T”—¨<U `e ¾T>cÖ<ƒ S[Í KK?L ›"M }LMö ›ÃcØU ¾ `eU eU uSÖÃl LÃ ›MVLU::uSÖÃl LÃ G<K<”U 'Ñ` ”Ç=VK< ›ÃÑÅÆU ÅÓTU uSÖÃl SGM uðKÑ< Ñ>²? [õƒ K=¨eÆ Ã‹LK<::

SkÖM ”‹LK” ¨Ãe ÓMê ”Ç=J”Mi/ ¾Uƒ ðMÑ>¬/¾T>ðMÑ<ƒ 'Ñ` ›K;

”‹LK” ☐ ›”‹MU ☐

u}ÚT]U ›”^/ `e Ø“~” u}SKŸ} T¨p ¾Uƒ ðMÑ>¨</¾T>ðMÑ<ƒ "K÷ ›e}Á¾ƒ "K KuKÖ S[Í ¾²=I Ø“ƒ ª“ ›Ø–>¨<” u²=I ›É^h TÓ– ƒ ƒ‹ÁKi:- e.l. 0911071149 þ.d.l 8059 ›.› Ñ@ †¨< S¢""

›ScÓ“KG<::

¾Ñ<w˜ƒ Ñ>²?

	¾SËS]Á Ñ>²?	G<K}— Ñ>²?	Fe}— Ñ>²?
¾Ñ<w„ƒ Ñ>²?			
¨<Ö?ƒ			

K¨<Ö?~ ¾}cÖ ¢É

1. S<K< ULi ¾cÖ<
2. S<K< ULi ÁMcÖ<
3. ULi ÁMcÖ< /ðnÅ— ÁMJ'/
4. uSÖÃl Ñ>²? ÁM}Ñ–<
5. K?L "K ÃÖkc<

KU`Ý ØÁo ‹ ULg<” uT¡uw ÃUK<

G. SKÁ

}.I	ØÁo	¾}cÖ SMe	¨Å }.I Ã´KK<
001	¾SÖÃl lØ`	----------	
002	¾SÖÃl ›p^u=	----------	
003	¾}Ö¾k u?ƒ	¨[Ç--------	
		kuK?---------	
		¾u?ƒ lØ` /¢É-----	
004	¾SÖÃl °Kƒ u›=ƒÄåÁ ¾k" ›q×Ö`	----------/---------/--------	
		d" & ¨`& ›.U	
005	¾}q××]¨< eU	----------	
006	¾}Ôu–uƒ k"	¨<Ö?ƒ	
	G. ¾SËS]Á Ñ<w˜ƒ	1.S<K< ULi ¾} cÖuƒ	
	K. ¾G<K}— Ñ<w˜ƒ	2.ÁM}TL ULi ¾}cÖuƒ	
	N. ¾fe}— Ñ<w˜ƒ	3.ðnÅ— ÁMJ'< /ULi ÁMcÖ<	
		4.uSÖÃp Ñ>²? ÁM}Ñ–<	
		5.K?L U¡"Áƒ "K----------	
007	eK ¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ /›"É	1. u›G<'< Ñ>²? }ÖnT> ˜	
	Ñ>²=¾ uSÖkU K›S ƒ ¨ÃU K²K›U ¾T>ÁÑKÓM ²È	2.}ÖnT> ›ÃÅKG<U	
	/ }ÖnT> 'ƒi Mƒ'Ó]˜ ƒ‹ÁKi	3.}ÖpT@ ›¨<nKG<	
		4.K?L ²S"© ²È ÖkTKG<	
		5.K?L "K ÃÓKè	
N. Y' }ªMÊ Ö?" SÖÃp			
201	ue"ƒ ›Sƒi ƒÇ` Á´i;	----------	
202	'õcÖ<` J'i ¨<mÁKi;	1.›	¨Å 209
		2.›L¨<pU (SMc< ›L¨<pU ŸJ'....)	
203	'õcÖ<` J'i '"¨pi SŠ 'u`;	1.Ÿƒ Ç` uòƒ	
		2.Ÿƒ Ç` u%EL	
204	'õcÖ<` J'i '"¨pi `Ó´"< ¾}ðKÑ 'u`;	1.›	
		2.›ÃÅKU	
205	ue"ƒ ›Sƒi 'u` ¾SËS]Á ¨K=Éi;	----------	
206	uIÃ¨ƒ ÁK< e"ƒ MÐ‹ ›K<i;	›ÖnLÃ----- ¨-- c?---	
207	¨<`Í ›ÒØVi Á¨<nM; U" ÁIM Ñ>²?;	1. 1 2.2 3.3" Ÿ²=Á uLÃ	

		4. ›LÒÖS˜U	
208	V„ ¾}¨KÅ ›ÒØVi Á¨<nM;	1. 1 2.2 3.3“ Ÿ²=Á uLÃ 4. ›LÒÖS˜U	
209	U” ÁIM MÐ‹ ”Ç=•\i ƒðMÑ>ÁKi;	›ÖnLÃ----- ¨-- c?--- /SMc< 0 ŸJ’ ¨Å lØ` 301 ÃKñ/	302
209	u×U ¾Uƒ ðMÑ>¨< ¾MÏ ë U”É”<;	1.¨”É 2.c?ƒ 3.T”—¨<”U 4.G<K~”U	
210	K=•`i uUƒ ðMÑ>¨< ¾MÐ‹ SÖ” LÃ ¨d–< T”¨<;	1. vM 2. T>eƒ 3. G<K ‹”U 4. K?L "K ÃÓKè	
211	’õcÖ<` J’i "L¨pi S¨<KÉ ¾Uƒ ðMÑ>¨< ue”ƒ ›Sƒi ”¨<;	----------	
S. eK ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ Ó”³u? SÖÃp			
301	eK ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È¨‹ Ó”³u? ›Ki;(›”É Ñ>²=¾ uSÖkU K›S ƒ ¨ÃU K²K›U ¾T>ÁÑKÓM ²È)	1.› 2.¾K˜U /¾K˜U ŸJ’ ¨Å 401 ÃKñ/	401
302	Ó”³u? "Ki /"K ƒ ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È¨‹ ›ÖnLÃ ØpV‹ U” U” “†¨<; /¾}Ökc¨< uS<K< Á¡wu</	1.ÁM}ðKÑ ÓÓ´“ SŸLŸM 2.¾ “„‹ Vƒ ”“ SU” SŸLŸM 3.¾u?}cw SÖ” KS¨c” 4.›^`q KS¨<KÉ	
303	Ÿ[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È¨‹ ¨<eØ ¾U ¨<lƒ ²È¨‹ /¾}Ökc¨< uS<K< Á¡wu</	1.K<ý/uTIç” ¾T>kSØ ¾¨K=É Sq×Ö]Á/ 2.u¡”É LÃ ¾T>ku` ¾¨K=É Sq×Ö]Á 3.¾”É ² ` S}LKòÁ vD”vD” Teq[Ø 4.¾c?ƒ ² ` S}LKòÁ vD”vD” Teq[Ø/ TesÖ`	
304	S[Í Ÿ¾ƒ ›Ñ–i/–< /¾}Ökc¨< uS<K< Á¡wu</	1.ŸÖ?“ }sU 2.Ÿu?}cw 3.ŸÕÅ— 4.ŸSÑ“— w²<G” 5.ŸSÁÉ(Ÿ S”Óe © ÁMJ’ É`Ïƒ) 6.K?L "K ÃØkc	
305	eK K<ý/uTIç” ¾T>kSØ ¾¨K=É Sq×Ö]Á ¾[ÏU Ñ>²? ¾u?}cw pÉ ›ÑMÓKAƒ ²È U” ÁIM	1.u×U ¨<Ö? T SJ’<”	

	Á¨<nK<; (¾}Ökc SMe Á¡wu<)	2.K[ÏU Ñ>²? TÑMÑM S‰K<" 3.uÖ<ƒ TØvƒ LÃ ‹Ó` ›KTeŸ}K< 4.u›vK²` ui ¾SÖnƒ ÉL†¨< Ÿõ LK c?„‹ }S^ß ›KSJ'< u¨c=w Ó"–<'ƒ LÃ U"U }ê ŸK?KA‹ SÉG'>„‹ Ò` }n`• ›KS•\ 7.¨Ç=Á¨<'< ŸSIç" uT¨<×ƒ T`Ñ´ S‰K< Ømƒ ¾Ô"Äi Ñ<Çƒ SJ'< 9.K?L "K ÃØkc<	
306	u¡"É eKT>ku[¨< ¾[ÏU Ñ>²? ¾u?}cw pÉ ›ÑMÓKAƒ ²È U" ÁIM Á¨<nK<; (¾}Ökc SMe Á¡wu<)	1.u×U ¨<Ö? T SJ'<" 2.K[ÏU Ñ>²? SÑMÑM S‰K<" 3.uÖ<ƒ TØvƒ LÃ ‹Ó` ›KTeŸ}K< 4.¡"ÉLÃ KSpu`" KTe¨×ƒ ›'e}— kÊ ØÑ" TeðKÑ< 5.u¨c=w Ó"–<'ƒ LÃ U"U }ê • ›K TeŸ}K< 6.ŸK?KA‹ SÉG'>„‹ Ò` }n`• ›KS•\ 7.¨Ç=Á¨<'< Ÿ¡"É LÃ uT¨<×ƒ T`Ñ´ S‰K< 8. Ømƒ ¾Ô"Äi Ñ<Çƒ SJ'< 9.K?L "K ÃØkc<	
307	eK ¾¨"É ¾²` Te}LKòÁ ~x Teq[Ø ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È U" U" Á¨<nK<;(¾}Ökc SMe Á¡wu<)	1. u×U ¨<Ö? T SJ'<" 2.²LKT©/²Ko © ²È SJ'< 3.kLM" ›e}TT˜ ¾qÊ ØÑ" "ÇK¨< 4.}ÅÒÒT> ¾Ö?" É¨Ïƒ ¡ƒƒM ›KTeðKÑ<"/›p`xƒ ›KTeðKÑ< u¨c=w Ó"–<'ƒ LÃ U"U }ê • ›KTeŸ}K< .S<K< uS<K< ŸkÊ ØÑ" Ÿ3 ¨` u%EL ¨<Ö? T SJ'< .¾[ÏU Ñ>²? ¾Ô"Äi Ñ<Çƒ ›KS•\ .}ÖnT> KSJ" ØMp ¾U¡` ›ÑMÓKAƒ TeðKÑ< 9. 9. .K?L "K ÃØkc<	

308	eK c?ƒ ¾² Te}LKòÁ ~x Teq[Ø ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ U" U" Á¨<nK<;(¾}Ökc SMe Á¡wu<)	1.u×U ¨<Ö? T SJ'<" 2.²LKT©/²Ko © ²È SJ'< 3.kLM" ›e}TT˜ ¾qÊ ØÑ" "ÇK¨< 4.}ÅÒÒT> ¾Ö?" É`Ïƒ ¡ƒƒM ›KTeðKÑ<" /›p`xƒ ›KTeðKÑ< .u¨c=w Ó"–<'ƒ LÃ U"U }ê • ›KTeŸ}K< .¾c?ƒ ¾² SU[‰ ›"M ""c` ÃŸLŸLM .¾[ÏU Ñ>²? ¾Ô"Äi Ñ<Çƒ ›KS•\ .}ÖnT> KSJ" ØMp ¾U¡` ›ÑMÓKAƒ TeðKÑ< 9.K?L "K ÃØkc<	
W. eK ¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È ‹ ØÁo			
401	ŸvKu?ƒi /ÕÅ—I Ò` eK ¾[ÏU Ñ>²?" ²Ko ©1.› ¾u?}cw pÉ ›ÑMÓKAƒ ²È ‹ ƒ'ÒÓ^‹G<;	2. ›ÃÅKU 3. ›ÃSKŸ}˜U 4.K?L Gdw ŸK ÃÑKÉ	
402	¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ›ÑMÓKAƒ ²È ‹"1.› SÖkU" ƒÅÓòÁKi/ ÃÅÓóK<;	2.›MÅÓõU 3.›e}Á¾ƒ ¾K˜U 4. ›ÃSKŸ}˜U	
403	¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹" SÖkU Ø\1.› "¨<;	2. ›ÃÅKU 3. ›e}Á¾ƒ ¾K˜U 4. ›ÃSKŸ}˜U	
404	¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹" u}SKŸ}1.ÃÅÓóK< 6. K?L Gdw ŸK ÃÑKÉ ¾vKu?ƒi/ÕÅ—i ›SK"Ÿƒ "Èƒ "¨<;	2.Ãn¨TM ---------- 3.ÑKM}— 4.›L¨<pU 5.›ÃSKŸ}˜U	
405	eK ¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹ }ÚT]1.› T¨p ƒðMÑ>ÁKi;	2.›MðMÓU 3.›e}Á¾ƒ ¾K˜U	
406	eK ¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹ }ÚT]1.› KT¨p Ø[hM;	2.›M×`Ÿ<U 3.›ÃSK¡}˜U	
407	eK ¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹ ¾SÖkU 1.› 2. ¾K˜U ›LT ›Ki;	3. ›e}Á¾ƒ ¾K˜U 4.›ÃSK¡}˜U	
408	¾u?}cw pÉ ›ÑMÓKAƒ(¾[ÏU Ñ>²?" ²Ko © ¾u?}cw pÉ ²È ‹" ßU`) SÖkU ¾T" Lò'ƒ "¨<;	1. ¾T>eƒ 2. ¾vM 3. ¾G<K~U 5. ›ÃSKŸ}˜U	

		4. ›L¨<pU 6. K?L Gdw ŸK ÃÑKÉ	
409	ƒMp u?}cw S•` u›=¢•T> LÃ }ê • Ád`óM;	1. Ád`óM 2. ›Ád`õU 3. ›L¨<pU 5.›e}Á¾ƒ ¾K˜U	
410	ƒMp u?}cw S•` u „‹“ lé“ƒ Ö?“ LÃ }ê • ÁeŸƒLM;1.ÁeŸƒLM 2.›ÁeŸƒMU 3.›L¨<pU 4.›e}Á¾ƒ ¾K˜U		
[. eK ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È ‹ ÁK }ÖnT>'ƒ			
501	¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È }ÖpSi ¨<mÁKi;	1. › 2. ›L¨MpU (›L¨MpU ŸJ' ¨Å.. 3. ›ÃSKŸ}˜U 4. ¾}ÖdUŸ< ˝¨<	508
502	}ÖpSi '"¨pi	¾ËS`iuƒ ÉT@---------- KU" ÁIM Ñ>²? }ÖkUi---------	
503	›ÑMÓKA~" Ÿ¾ƒ ›Ñ–i ;	1.ŸS"Óeƒ Ö?“ É`Ïƒ 2.ŸSÁÉ 3.ŸÓM Ö?“ }sU 4.K?L "K ÃÓKè	
504	}ÖpSi ¾'u[¨< ¨ÃU ¾}ÖkUi ÁKi¨< ¾[ÏU Ñ>²?"1.u¡"É LÃ ¾T>ku` ²Ko © ²È ¾~ ˝¨<;	2.K<ý /uTIç" ¾T>kSØ ¾¨K=É Sq×Ö]Á ²È/ 3.¾¨"É ²` Te}LKòÁ ~x Teq[Ø ¾ 4.¾c?ƒ ²` Tce}LKòÁ ~x Teq[Ø	
505	›G<" ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È }ÖnT>1.› (› ŸJ' SÖÃl" ÃÚ`c<) 'I;	2.›ÃÅKG<U	
506	¾[ÏU Ñ>²? ¾u?}cw ›ÑMÓKAƒ }ÖnT>'ƒi"1.K?L K¨<Ög Ás[Øiuƒ U¡"Áƒ;	2.¾u?}cw pÉ ›ÑMÓKAƒ SÖkU ›qUŸ<	
507	¾[ÏU Ñ>²? ¾u?}cw pÉ ›ÑMÓKAƒ }ÖnT>'ƒi"1.¾Ô"Äi Ñ<Çƒ uSõ^ƒ Ás[Øiuƒ/ ¾K¨Øiuƒ U¡"Áƒ U"É" ˝¨<;	2.uÖ?“ ‹Ô` 3.S'"" "ÇMJ" uSõ^ƒ 4.vKu?, eLM}kuK¨< 5.KSç'e ðMÑ@ 6.GÖ=Áƒ eKJ' 7.vIK? EKTÃðpÉ 8.K?L U¡"Áƒ "K ÃØkc<	
508	K?L ²S“© ¾u?}cw pÉ ›ÑMÓKAƒ ²È1.› ƒÖkT>ÁKi;	2.›MÖkUU	
509	T"—¨<"U ›Ã'ƒ ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ1.¾Ô"Äi Ñ<Çƒ uSõ^ƒ		

	²È ¾TƒÖkT> ŸJ' U¡"Á~ U"É"¨<;	2.uÖ?" ‹Ó` 3.S'"" "ÇMJ" uSõ^ƒ 4.vKu?, eLM}kuK¨ 5.KSç'e ðMÑ@ 6.GÖ=Áƒ eKJ' 7.vIK? EKTÃðpÉ 8. ¨<k~ eKK?K„ 9.›ÑMÓKA~ eKKK? 10.eLLÑvG 11 11. K?L U¡"Áƒ "K ÃØkc	

K?L Hdw & }ÚT] ›eÁ¾ƒ ¨ÃU Tw^]Á ŸK;

UeÒ" - uØ"~ LÃ uðnÅ˜ƒ eK}d}õi/ñ UeÒ"Â Lp "¨<

Annex 4 Amharic Translated FGD guide

K›Ã’ © Ø“ƒ KIw[}cw }¨"Ä‹ ¾}²ÒË SÖÃp

cLU :- ¡u<^" }d ò ‹ upÉT>Á Ø]Á‹"" ›¡w^‹G< ðnÅ— uSJ" uSÑ– ‹G< Ÿõ ÁK UeÒ“‹"" “k`vK":: ³_ ¾}KÁ¿ ¾Iw[}cv‹"" ¡õM ¨¡L‹G< ¾}Ñ—‹G< uÏ"" Ÿ}T KT>Å[Ñ¨< Ø“ƒ ›Ò» ÃJ" ²"É u}S[Ö< ¾¨<ÃÃƒ 'Øx‹ LÃ KS'ÒÑ` "¨<:: uT>•[" qÃ u×U ÖnT> uJ'< 'Ña‹ LÃ ¨<ÃÃƒ "Å`ÒK":: ¾ "} }dƒö K¨Åò~ ¾u?}cw pÉ ›ÑMÓKAƒ" uŸ}T‹" wKAU uµ'< ¾}hK KTÉ[Ó ƒMp ›e}ªê* ›K¨<::

¾S¨ÁÁ 'Øx‹

1 .eK ¨K=É Sq×Ö]Á ²È‹ ÁL‹G< Ó"³u? U"É" "¨<; ¾Iw[}cu<e Ó"³u= U"ÁIM "¨<;

2. eK ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È‹ TKƒU K<ý u¡"É ¾T>ku` ¾¨"É ¨ÃU ¾c?ƒ ¾²` S}LKòÁ ~x SsÖ` /Sl[Ø U" ¨<nL‹G<;

3. KU"É" "¨< ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È ‹ w²<¨<" Ñ>²= ØpU LÃ ¾TÃ¨<Kƒ<; ¾UƒÖkS< ŸJ' KU"É" "¨<;

4. ¾[ÏU“ ²Ko © ¾u?}cw pÉ ²È‹ ØpV‡ U" U" "†¨<; Ñ<Ç~e; ŸK?KA‹ ¾u?}cw pÉ›ÑMÓKAƒ ²È ‹ Ò` c='éç`;

5. eK ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È uØMkƒ T¨p ƒðMÒL‹; KU";

6. u¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È‹" LÃ ¾Iw[}cw ¨<kƒ /Ó"³u?/ ›SK"Ÿƒ "Èƒ "¨<;

7. ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È‹" c‹ SÖkU SËS` ÁLv†¨< SŠ "¨<; /¾ ÉT@ ¡MM/

8. um ¾u?}cw SÖ" wL‹G< ¾U eu<ƒ U"É" "¨<;

9. eK ¾u?}cw lØ` SÖ" S¨c" ÁKuƒ T" "¨<;

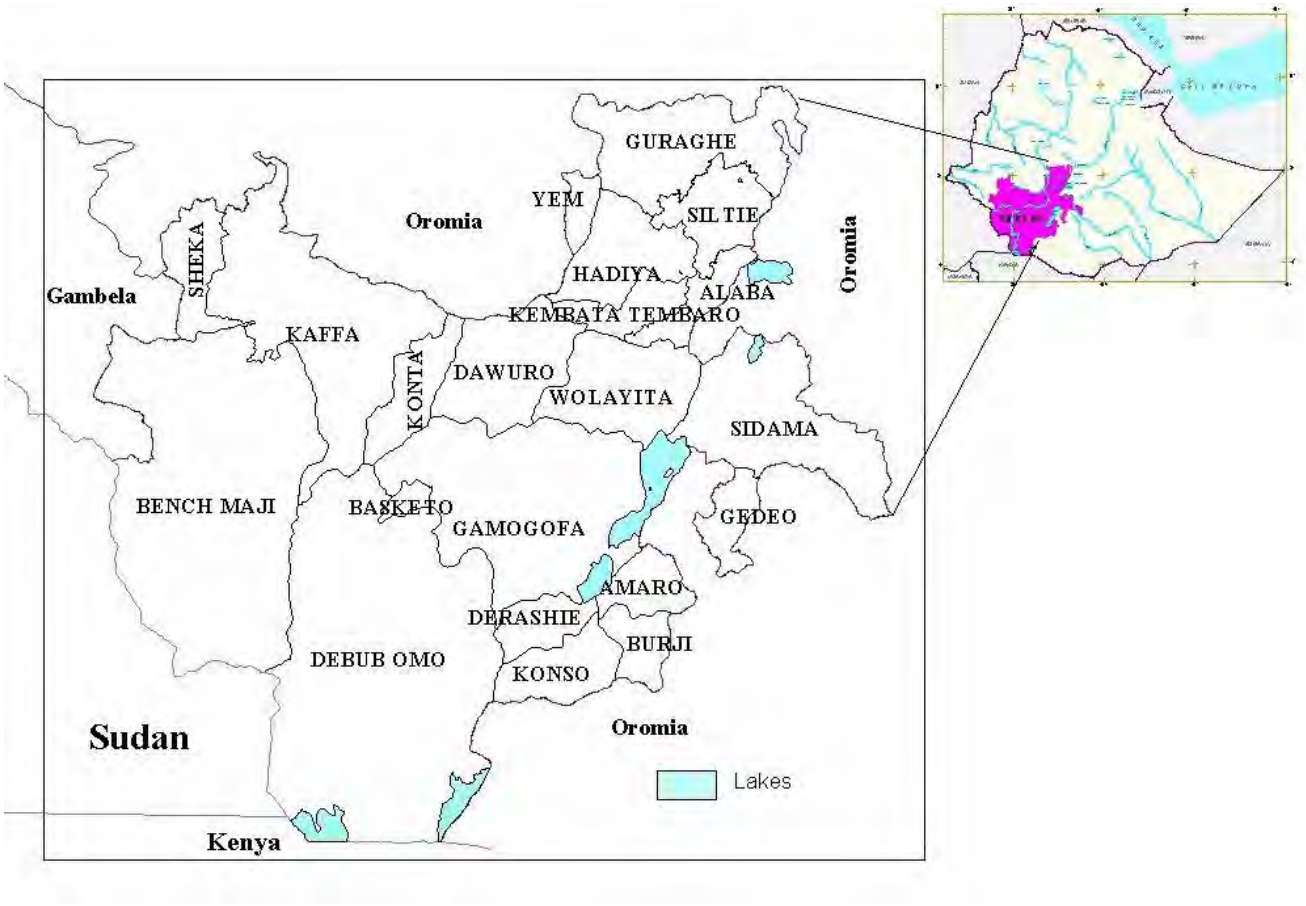
10. ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È‹ ¨<eØ ¾ƒ—¨<" ²È ÃS`×K<; /K<ý u¡"É LÃ ¾T>ku` ¾¨"É/c?ƒ ¾²` Te}LòÁ ~x TesÖ`/Teq[Ø/;‹"

11. ¾[ÏU Ñ>²?“ ²Ko © ¾u?}cw pÉ ²È‹ T" SÖkU ›Kuƒ;

12. ƒMp u?}cw S•\ ÖnT> "¨< ¨Ãe ÔÍ= "¨<; °"Èƒ;

13. eK ¾¨"É ¨ÃU ¾²` S}LKòÁ ~x SsÖ` /Sl[Ø ²Ko © ¾u?}cw pÉ ²È SÖkU ÁL‹G< ›SKŸŸƒ U"É" "¨<; ¾Iw[}cu<e °Ã U" ÃSeLM;

Annex 5 Map of SNNPR and South Omo Zone (source SOZHD)



Annex 6 Knowledge scoring system

Variables	Score
Very effective	1
Perm./long act	1
Immediately reversible	1
Had minimal side effect	1
No interaction with medicine	1
No effect on breast feeding	1
No supply/frequent clinic visit	1
No effect on sex perf. & sens.	1
Fully Effective after 3 month	1
Protect from Ovarian Cancer	1
Not good for STI pron women	1
Need safe & simple surgery	1

Annex 7 Attitude scoring system

Characteristics(Attitude factors)	Scores given
Do you communicate with Husband/fraind	
Yes	1
No	0
Support use of LAPMs	
Yes	2
No	0
No idea	1
Don't concern me	1
Friend/Husband attitude on LAPMs	
Support	2
Against	0
Neutral	1
Don't concern me	0.5
I don't know'	0.5
Is it good to use LAPMs	
Yes	1
No	0
No idea	0.5
Don't concern me	0.5
Need to know more on LAPMs	
Yes	1
No	0
No idea	0.5
Tried to know more on LAPMs	
Yes	1
No	0
Don't concern	0.5
Responsibility in using LAPMs	
Wife	0.5
Husband	0.5
Both	1
Don't know	0
Don't concern	0
Large family has problem on economy	
Yes	1
No	0
Don't know	0.5
Large family has problem on MCH	
Yes	1
No	0
Don't know	0.5
Intention/plan to use LAPMs	

Yes	1
No	0
No idea	0.5
Don’t concern me	0.5
Who make decision on number of children	
Husband	0.5
Wife	0.5
Both	1
Others	0.5

Annex 8 Non-response recording form

Age	Occupation	Social status(Vp, P, M, R, VR)	House Owner(P, R, G)	Income	Others

N.B: VP-very poor, P-poor, M-medium, R-rich, VR-very rich (social status)
P-Privately owned, R-rental from people, G-Rented from government

Declaration

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

Name: Getachew Mekonnen (BSc, Public Health)

Signature _____

Place: Addis Ababa University, School of Public Health, Faculty of Medicine

Date of submission:

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

Name: Dr. Fikre Enquselassie

Signature _____

Date: 29 July, 2007