ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF DETRMINANT FACTORS ON PREFERENCE AND PRACTICE OF MODERN CONTRACEPTIVE USE AMONG WOMEN OF REPRODUCTIVE AGE GROUPS AT SHIRE ENDASLASIE TOWN, NORTHEN ETHIPIA 2O11

BY: WEYZER TILAHUN (BSC N)

A THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES, SCHOOL OF NURSING, IN PARTIAL FULFILLMENT OF THE REQUIREMNET FOR THE DEGREE OF MASTER IN REPRODUCTIVE HEALTH AND MATERNITY NURSING

JUNE, 2011

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF DETRMINANT FACTORS ON PREFERENCE AND PRACTICE OFMODERN CONTRACEPTIVE USE AMONG WOMEN OF REPRODUCTIVE AGE GROUPS AT SHIRE ENDASLASIE TOWN, NORTHEN ETHIPIA 2O11

BY: WEYZER TILAHUN (BSC N)

ADVISOR: DANIEL MENGISTU (RN, BSC.N, MSC.N)

A THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES, SCHOOL OF NURSING, IN PARTIAL FULFILLMENT OF THE REQUIREMNET FOR THE DEGREE OF MASTER IN REPRODUCTIVE HEALTH AND MATERNITY NURSING

JUNE, 2011

ADDIS ABABA, ETHIOPIA

Approved by the board of the examiner

This thesis by Weyzer Tilahun is accepted in its present form by the Board of examiners as satisfying thesis requirement for the degree of Masters of Science in Maternity and Reproductive Health in nursing.

Internal examiner:

_____	_____	_____	_____ .
Full name	Rank	Signature	Date

Research advisor:

_____	_____	_____	_____ .
Full name	Rank	Signature	Date

June, 2011

Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

Approved sheet by the board of examiner

This thesis has been examined by

Name: _____

Signature: _____

Date of examination: _____

Acknowledgement

I would like to thank God for enabling me to write this paper. I am also very grateful to thank my advisor Ato Daniel Mengistu for his support and effort from preparation of proposal to finalize this paper.

My Special thanks also go to Dr Teklay Kidane (MD, MPH), Sr Emebet Birhane (RN, BSN, MSN and Lecturer of Addis Ababa University) and Ato Luel Mekonnen (RN, BA in management), Shire Endaslasie Woreda head office for sincere support and assistance, valuable advice, information and encouragement they provided to me.

My heartfelt gratitude is goes to AAU, College of Health Sciences Department of Nursing and Midwifery for providing this opportunity and financing the project.

I would like to forward my gratitude to both Nursing and Public Health librarians for their uninterrupted co-operation to get available and updated reference materials.

My thanks also go to of Tigray regional state Health bureau and Mekelle University for giving permission and duplicated Questioners.

I extend my appreciation to all participants including data collectors, supervisors and all women respondents of shire Endaslasie town, for their co- cooperation.

Finally, my gratitude goes to my family member's special thanks to my son and daughter for being on my side throughout the study.

TABLE OF CONTENTS

CONTENTS **PAGES**

List of Tables

List of Figures

Acronomy

CDC:	Centers for Disease Control
CI:	Confidence Interval
CPR:	Contraceptive Prevalence Rate
DHS:	Demographic Health Survey
FGAE:	Family Guidance Association of Ethiopia
FP:	Family Planning
IPPF:	International Planned Parenthood federation
IUD:	Intra Uterine Device
LAPMs:	Long Acting and Permanent Methods
MCM:	Modern Contraceptive Method
MCP:	Modern Contraceptive Pill
MOH:	Ministry of Health
NGO:	Non-Governmental Organization
OCP:	Oral Contraceptive Pill
OR:	Odds Ratio
PI:	Principal Investigator
PP:	Preference, Practice
SPSS:	Statistical Package for Social Science
STI:	Sexual Transmitted Disease
TFR:	Total Fertility Rate
VCT:	Voluntary Counseling and Testing
WHO:	World Health Organization

Abstract

Introduction: A woman's preferences, practice and tolerance for various methods attribute vary according to the type of relations and other aspects of her life. The discrepancy between fertility preferences and contraceptive practice is regarded as an indicator of unmet demand for family planning. So far, it is explained that there is alarming increase in population. Ethiopia is one of the highest ranking countries in reproductive health risk worldwide with a maternal mortality ratio 673 per 100,000 deliveries.

Objective: To assess factors determining preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia

Method: A Community based cross – sectional study designs were employed on 367 sample women of reproductive age groups in Shire Endaslasie town in 2011. Stratified sampling techniques were used to select the study subjects. The sample size has been obtained by a single population proportion formula. Three kebeles were selected randomly from all five kebeles in the town. The required sample size was obtained from the sum of all sample population in each kebeles or stratum using systematic random sampling technique. K^{th} was calculated from each selected kebeles to get the sample of each stratum. After developing a structured questionnaire, pretest was under taken on 10% of the study subjects one week before data collection i.e. 37 mothers on similar and non-selected community. Data was collected from February 01/2011 to 21/2011 February days and 15 voluntary kebele oriented outreach workers and above 10 grade data collectors were assigned after appropriate modification of the questionnaire have been done. Then, data was collected through face to face interview using structured questionnaire.

Data-entry, cleaning and statistical analysis was done using Version 16 SPSS soft ware. Prior to the study, approval of ethical clearance was obtained from Addis Ababa University, College of health sciences, Department of Nursing and Midwifery and Mekelle Regional health Bureau.

Result: A total of 367 study participants were approached; of these 294 (80.1%) respondent use of MCMs but 73 (19.9%) not use of MCMs. Reason for using MCMs the majority of them 170 (57.8%) for child spacing and 112(38.1%) for preventing unwanted pregnancy. Reason for not using MCMs most respondent don't have sexual partner at present 25 (34.2%).

Conclusion and Recommendation: This study have clearly described that women use MCMs after they had higher number children and less desire to limit family size. It recommended that strong behavioral change intervention targeting the high fertility desire of women and MCMs utilization is needed.

Key words: Preference, Practice and modern contraceptive Methods

CHAPTER ONE

1. INTRODUCTION

1.1. Back ground

Worldwide contraceptive prevalence is estimated to be 58 % in 1993. In the more developed countries, regional prevalence variations fall within a relatively narrow range, from 69 % in Eastern and Southern Europe to 78 % in Northern Europe. Among the less developed countries, contraceptive prevalence is lowest in Africa. Use of contraception among married women in less developed countries varies from a low of 8 % in Western Africa to a high of 83 % in Eastern Asia [1].

Modern methods account for the majority of currently global contraceptive practice; almost it covers 9 out of every 10 contraceptive users. Female sterilization, intra - uterine devices (IUD) and oral pills account for more than two – thirds of all contraceptive practice worlds wide [1].

In the less developed countries, modern methods account for a much larger share of total contraceptive use (90 %) than in the more developed countries (70 %). This is largely because certain traditional methods including withdrawal and various forms of the calendar rhythm method are commonly used in the more developed regions [2].

Contraceptive prevalence at the global level will need to be at least 66 % – 75 % in the more developed regions and 67 % in the less developed regions to attain the projected decline in fertility by the year 2025 [2]. Those estimates imply a nearly 60 percent increase in the number of contraceptive users among married women. The largest proportional increase will be in Africa where projections call for the number of users to more than double up to 2005, and to continue

increase rapidly. Unmet need is higher in sub-Saharan African countries (averaging 26.8 per cent of women currently in union. [2]. Fertility is highest among sub-Saharan Africa countries at an average of 5.3 children per women [3].

Ethiopia is one of the highest ranking countries in reproductive health risk worldwide with a maternal mortality ratio 673 per 100,000 deliveries [4].

Two organizations that form the back bone of family planning service delivery in Ethiopia are the Family Guidance Association of Ethiopia (FGAE) and Marie Stops International Ethiopia (MSIE) [2]. Many factors: Cultural, economic, political, and Demographic help to explain the low coverage in contraceptive prevalence. Ethiopia is one of the Subs – Saharan countries with alarming population growth rate 2.7% and the total fertility rate is nearly six [5].

Fertility Preferences 78 % of married women say that they either want to delay the birth of their next child or to have no more children (including those sterilized). Fertility preferences are closely related to the number of living children a woman has. In general, as the number of living children increases, the desire to want another child decreases. For example, 58% of currently married women with 5 living children say they want to have no more children or have been sterilized, in contrast to 9% of women with no children **[**6].

The discrepancy between fertility preferences and contraceptive practice is regarded as an indicator of unmet demand for family planning. So far, it is explained that there is alarming increase in population.

Therefore, the solution for this problem is family planning, which is a decision made by an individual or couple about how many children one would like to have, when to start having children, when to stop having children and how long to rest between each pregnancy [7].

Contraceptive methods are grouped into two: modern and traditional. Modern methods include female sterilization, pill, IUCD, injectable, implants, condom, and lactation amenorrhea method (LAM). Traditional methods include periodic abstinence, withdrawal, and folk methods [8, 10].

Overall, the 2005 EDHS found that 15 % of married women are using some method of contraception. The majority of users rely on a modern method. Use of modern contraceptive methods has more than doubled from 6 percent of currently married women in the 2000 EDHS to 14 % in the 2005 EDHS [10].

The most commonly used modern method is injectable (10 percent), followed by the pill (3 %) .The focus of this study is on factors affecting reproductive age Women's Preference and practices of modern contraceptive methods in Tigray regional state, shire Endaslasie Town, Ethiopia.

1.2. Problem statement

The highest TFR is observed in sub-Saharan Africa 5.4 percent, followed by Latin America 3.1 percent and Asia 3.0 percent given such uncontrolled population growth and its impact on the socio economic development of the society great emphasis has been given to family planning, which plays a substantial role to reduce fertility worldwide. [1]

Inadequate family planning strategies have continuously exacerbated the vulnerability of developing countries, culminating into high maternal and infant mortality, increasing hard core poverty, disintegration of the extended family system, high incidence of HIV/AIDS and sexually transmitted infections and a high incidence of morbidity and mortality. At least 25% of all maternal deaths can be prevented by family planning. One in four infant deaths in developing countries can be prevented by spacing birth at least two years apart (3,5).

Ethiopia's reproductive health indicators showed that the total fertility rate is 5.9 children per women; Maternal mortality Ratio (MMR) stands among the highest in the world with 850 maternal deaths per 100,000 live births in 1999 and only 6% of the women in the reproductive age use modern contraceptives in 1999 and MMR reduce to 673 per 10,000 live birth in 2005[3].

Abortion places many young women at risk as the termination of pregnancy is usually conducted under unsafe conditions. Unwanted pregnancy followed by unsafe abortion can be avoided by using different contraceptive methods, including modern contraceptive. Information on preference and practice of modern contraceptives among women is particularly important because of high rates of unwanted pregnancies as well as soaring STI and HIV/AIDS rates [4].

Ethiopia has long standing problems of obtaining adequate contraceptive supplies and arises from a combination of logistical difficulties, government apathy, and general shortages of supply. According to Ethiopian Demographic Health Survey (EDHS) in 2000 revealed that more than 80 percent of Ethiopian women know about contraception and only 8.1 percent use either modern or natural family planning methods. It is estimated that about 36 percent of married women have an unmet need for contraception [5].

EDHS 2000 and 2005 reported that fewer than 10% married girls' ages 15-19 used any modern method, 15% of women ages 20-24 used any modern method and half of young unmarried women 15-24 reported that they used some form of modern contraception [10].

Contraceptive use differ significantly across regions, with about 3% of women in the Somali region reporting using modern contraception compared to about 60% in Addis Ababa. Urban women are five times more likely to use contraceptives than rural women. The most popular modern methods of contraception are implants and the contraceptive pills. Less than 1% of currently married adolescents ages 15-19 and 1% of currently married women ages 20-24 reported using a condom as a family planning method. The unmet needs for 15-19 year old women are twice as high as the unmet needs for women ages 45-49. Rural women (15-49) have twice as high unmet needs (39%) than women in urban areas (17%). Education is positively associated with contraceptive use. Married women aged 15-19 with secondary or higher education, are five times more likely to use any modern method of contraception than their peers [12].

There are also other factors which affect the preference and practice of modern contraceptive in addition to supply shortage, These are:-illiteracy, fear of side effect, religions factors, negligence of health workers, client flow, socio economic status etc. According to the FMOH health indicators report EFY 2001, the Distribution of contraceptives was Pill 3.8%, Depo-Provera 15.5%, Norplant, Implant, jadelle 72.7%, IUCD 0.2% , Condom 5%,Other method 2.7% [7]. Contraceptive prevalence of Tigray is 67.8 % the prevalence of Shire Endasilase is 48% in 2002 E.C [13].

Modern contraceptive coverage in Shire Endaslasie Town was 48% in 2002. The percentages of different contraceptive methods used by women in Shire town as the woreda annual performance report are as follows: Pill 10%, Depo-Provera 76%, Norplant 6%, IUD 1% male condom 7% and permanent (sterilization) method of contraception are not offered .

Although the Family Planning services are available in most places, the national as well as the regional CPR is still low. In addition there is insufficient distribution of modern contraception and wide range of modern contraceptive choice is also lacking to meet the demand of clients.

Therefore, the purpose of this study is to assess determinant factors on preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia [14].

1.3. Significance of the Study

Although many studies are conducted on modern family planning methods, little is known about the determinant factors on preference and practice of modern contraceptive use among women of Reproductive age groups in the study area**.** As contraceptive women's choice and practice is a key element of quality care in family planning service program, knowing determinant factors of client preference and practices among modern contraceptive methods is a crucial one.

Though as shown in many countries unintended pregnancies are high, wide spread use of modern contraception could prevent very high numbers of unintended pregnancies and abortions. The reproductive Health Impacts of unintended pregnancy and unsafe abortion are high among women's especially in developing countries including Ethiopia. They are also likely to face pregnancy and childbearing complications leading to high maternal mortality [15].

So, preventing unintended pregnancies is the first step for improving the family planning services for the reduction of maternal morbidity and mortality.Inadequate family planning services are problematic in Ethiopia. Understanding determinants in contraceptive methods use may be instructive in the design of interventions to improve family planning outcomes [16].

Finally, this study will be used as base line information for researchers to conduct other related findings on modern contraceptive uses. It will help also to maximize health professionals' effort in improving family planning service and policy makers to redesign the existed program towards family planning services to determinant factors on preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia**.**

CHAPTER TWO

2. LITERATURE REVIEW

Family planning entails planning when to have children. It also deals with birth control and other methods to carry out these plans. It is using effective methods of birth control to limit the number of children one wants to have and also space the children by timing pregnancy. A considerable amount of resources, physical, emotional and financial are required to raise children. Planning can help make these resources available as required to each child one decides to have. Health has also to be considered. The female should be at least 18 years old to ensure good maternal and child health. It is advisable to have a gap of at least two years between the children. So, spacing is important. It is healthy to wait at least 6 months after a miscarriage or abortion [2, 17].

Family planning information and services help individuals to maintain their overall health. Family planning improves community health by helping men and women have children when they are physically, emotionally, and financially prepared to take on the responsibility. Family planning information and services help to reduce incidence of un intended pregnancy [4]. Risk identification and management, and initiate needed changes in diet, exercise, smoking and drinking that help ensure a health pregnancy [5].

Family planning is a burning issue which is of concern to the governments in both developing and developed countries. In developing countries the issues are twofold the control of a growing population and the spread of sexually transmitted disease.

In developed countries, population is not an issue rather the incidence of rampant unprotected sex which is happening at an increasingly younger age. The consequence has been a rise in unwanted pregnancies and single mothers and the spread of STDs, especially the dreaded HIV [8, 11].

The international planned parenthoods federation (IPPF) has play great role in the expansion of family planning programs worldwide. Today the federation works in over 140 countries, serving millions of clients, IPPF has adopted the concept of sexual and reproductive health agenda in its vision 2000.In 1994,the international conference on population and development (ICPD) held in Cairo gave great attention to IPPF'S reproductive health and most important quality service. Services should be accessible, acceptable, and convenient to contraceptive users [1].

The World Health Organization and governments the world over have increased budgets on family planning and have intensified efforts in this direction. Pharmaceutical companies have been encouraged to find better, more effective and more acceptable methods. The condom, for example, is an effective barrier against both an unwanted pregnancy and STDs. Yet in many cases, it is considered unacceptable and discarded on grounds that the condom interferes and diminishes sexual pleasure [2].

Iran has also been successful in reducing the birth rate after implementing the policy of family planning. The US provides family planning services for those in need. However, funding for the same has declined while Medicaid has increased at the same time [11].

Improving maternal health, through reducing maternal mortality by two third by the year 2015, is one of the eight Millennium Development Goal. Each year about 536.000 maternal deaths takes place world wide and 99% of these deaths take place in developing countries.

About 13% maternal deaths worldwide are due to complication related to unsafe abortion. Most of the deaths occur in countries where abortions legally restricted, leading to procedures performed under unsafe condition. In Ethiopia maternal mortality ratio is 673/100,000 live births [1, 18].

In Ethiopia about 25,000 women die every year due to pregnancy and child birth complications and abortion is estimated to account for about 32% of these deaths and for nearly 60% gynecological and almost 30% of all obstetric and gynecological admissions Cheap and effective family planning methods are available to prevent un intended pregnancy [1, 8, 14].

The Center for disease control (CDC) characterizes family planning as one of the 10 top public health achievements of the 20 century. In year 1800, women have an average of 7 children; today woman has average 2.1 children [5].

Despite the availability of numerous modern contraceptive methods in Ethiopian, their use remains very low: with oral contraceptive and injectable the most common used methods. Thus helping to reduce maternal mortality and promote the general welfare of population. The IUD is an under-utilized method in Ethiopia, making up only 0.1% of modern contraceptive use [6, 19].

According to health and health related indicator of Ethiopia by ministry of health, the prevalence of modern contraceptive at national level 56.2%.The prevalence of contraception of Tigray is about 67.8% [6, 7].

In nearly all developing countries, the number of women of reproductive age (ages 15 to 49) will grow between 2005 and 2015 because of the large numbers of young people in these countries.

In addition, the demand for contraceptives is projected to grow due to couples' desires for smaller families. As a result, the total cost of contraceptive supplies to meet couples' needs is projected to rise by nearly 50 percent [20].

A report from ministry of health demonstrated that Ethiopia has a very young population; 40% of 77 million in habitants are younger than 15 years. Ethiopia faces a very rapid population growth, with an estimated 2.6 million additional people a year.

This places serious challenges for poverty reduction and development. Early age at marriage and extremely low use of contraceptives are key behavioral factors contributing to the high fertility in country [16, 17].

Another study conducted in Woreta town, Ethiopia, showed that 89 % of respondents were aware of modern contraceptives. Among this, 88% they know of at least 2 methods, and 12% knew only 1 method. More than 90% of respondents reported positive attitudes toward modern contraceptive use. The major reasons for non use of modern contraceptive methods (MCMs) were being single and a desire for more children. Injectable were the most commonly preferred modern contraceptive (63.2%) followed by oral contraceptive pill (21.2%). Few women reported a preference for the use of condoms (9.5%) or implants (6.1%) [17, 18].

A woman's preferences, practice and tolerance for various methods attribute vary according to the type of relations and other aspects of her life .A recent review of women's perspective on fertility regulating devices concluded that almost universally, women need highly effective methods that are perceived to be safe and free of side effects. Beyond these factors, only direct involvement of the use in choice of methods, advance information on possible side effects and spousal support have consistently predicated up take and continued use of methods (18, 21).

Various studies showed that preference and practice of modern contraceptive use can be influenced by Socio demographic characteristics (age, marital status, educational status, religion, occupation, income, family size and economic status).

A study done in Dawro community, Ethiopia, showed that socio-demographic and cultural factors like residence, ethnic group marital duration religion were not associated to preference and practices of modern contraceptive use in Reproductive age groups but educational status at high school level and above was positively associated with , women aged 25-34 and greater 34 years were 1.6 and 2.4 times more likely to use contraceptive respectively, women with large family size of greater than 10 were 9 times more likely to use contraceptive [22].

A study done in jimma the awareness and determinants of family practice. Most women's contraceptive knowledge and practice was influenced by low social status and lack of formal education for women was identified as a key factor in preventing change in the patterns of contraceptive knowledge and use by women in this part of Ethiopia [23].

On the other hand, a study done in South Wollo, urban Reproductive age groups modern contraceptive use higher in the age group 20-24 (26.6%) and 25-29 (28.4%). Higher number of married women were practicing modern contraceptive in both rural and urban study area than unmarried, divorced and widowed women (81.6%) in rural and (82.9%) in urban. Ethiopia revealed that majority of rural women used modern contraceptive methods for the first time after the birth of higher number of children as compared to urban and most rural users were housewives, elementary school students, have lower monthly income and less power to decide to use modern contraceptive methods as compared to urban users [24].

The 2005 Ethiopia Demography and Health survey that in Ethiopia modern contraceptive use higher in age group 25-29 (14.4%) and 35-39 (14.4%). In addition contraceptive use differs across educational categories, current use increase fivefold from (10%) among women with no education to (53%) along with secondary and higher levels of education.

Also a study done in Bahrdar 2002, women educated up to high school level and above was 2 times more likely to use modern contraceptives as compared to illiterates [1, 30].

The 2005 Ethiopia Demography and Health survey and other studies showed that contraceptive use related to reproduction and fertility characteristics of current users (gravidity, parity, number of live children). In Ethiopian women will have had more half of her life time birth by age 30, and nearly three –fourth by age 35. The interval between births is relatively long. The median number of months since the preceding birth is 33.8% and 21% of no first birth occur within two years of previous birth, 35% occur between 24 and 35 months later and 44% occur at least 3years after previous birth.

The report also demonstrated that contraceptive use among women with one or two children (17%) and lowest among women with no children 3% at the time with no children and 4% after the birth of their first child [6, 10, 24].

A study done in India showed that contraceptive use among reproductive women was 52%; the most common method was tubal ligation. Educated women used spacing methods more often than uneducated women. The study concluded that women had adequate awareness regarding type of contraceptives available but had no idea about the timing of starting contraception after delivery and about emergency contraception.

The low-income urban population is aware of the importance of limiting the family size and has family planning facilities yet has less contraceptive usage because of low level of education, increased rate of discontinuation, and lack of proper knowledge of the use of contraception [25].

Another study done in Russia revealed that abortion is a common means of controlling fertility in Russia. Women undergo repeat abortions throughout their reproductive lives, but recent studies of abortion trends in the Russian Federation suggested that abortion rates are on the decline, use of modern contraceptives is increasing, and women dislike abortion as a method of fertility control [26].

A study done in Turkey, reported that they were aware of family planning and they have knowledge about the different methods. Seventy percent of the women were using any family planning method whereas 30.0% were not using. The most preferred method was coitus interrupts. The desired number of children was found as two. The results were similar to those of the previous studies and it can be concluded that the study group was in a transition period from rural to urban in terms of fertility and family planning preferences [28].

The study show in Iran, in all 300 women who were using withdrawal took part in the study. Of these, 210 women (70%) indicated that they were used modern contraceptive methods previously. The mean duration for withdrawal use was 6.5 (SD = 4.9) and for modern contraceptive it was 2.3 (SD = 2.9) years. The most common reasons for using withdrawal were no cost involvement did not need medical advice, having fewer side effects and easier to use than other methods. The main obstacles to use modern contraceptives were: health concerns, fear of side effects, misinformation, lack of confidence and sexual dissatisfaction [27].

Conceptual frame work

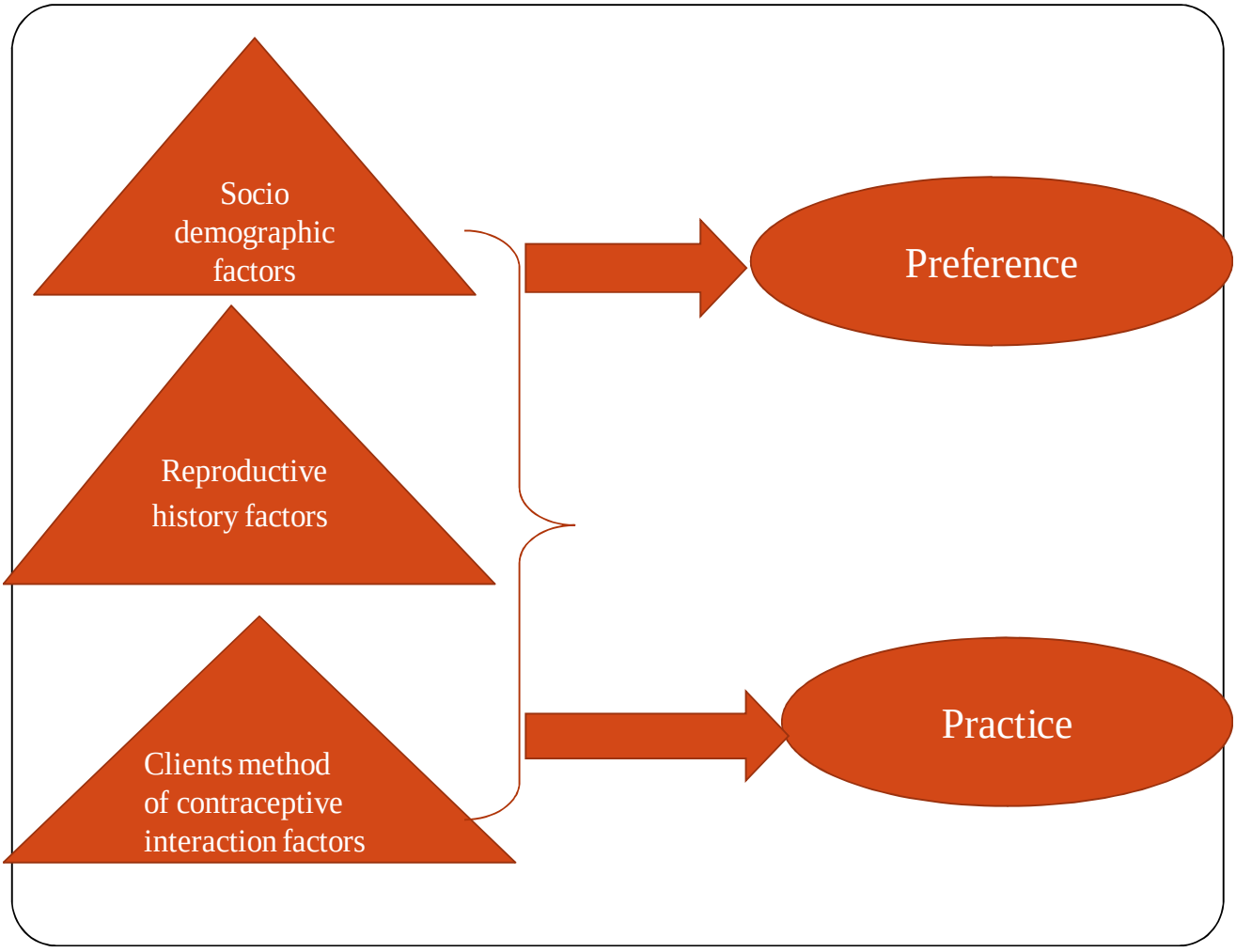


Figure1: The conceptual frame work of for the assessment of Determinant factors of Modern contraceptive use among reproductive age group.

Source: - Conceptual frame work modified by the principal investigator from FHI logo. Impact of family planning and reproductive Health on female's lives; conceptual frame work

CHAPTER THREE

3. OBJECTIVES

3.1. General objective

To assess factors determining preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia

3.2. Specific Objectives

1. To assess socio-demographic characteristics of women reproductive age group in Shire Endaslasie town.
2. To assess the magnitude of modern contraceptive use among women of reproductive age group.
3. To identify factors affecting practice of modern contraceptive use among women of reproductive age group.
4. To assess the preference of modern contraceptive use among women of reproductive age group.
5. To assess factors affecting preference of modern contraceptive among women of reproductive age group.

CHAPTER FOUR

4. METHOD AND MATERIALS

4.1. Study Design

The study was employed community based cross-sectional study design to assess factors determining preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia**.**

4.2. Study area and period

The study was conduct in Shire Endasilase town from October, 2010 and May, 2011. Shire Endaslasie is situated 1087 km away from Addis Ababa in Northern Ethiopia. The town is found in Northern west direction at a distance of 304Km from Mekelle (capital city of Tigray regional state) the woreda has one hospital, one governmental health center and one MCH center managed by both the regional government and nongovernmental organization (NGO).

The total population in Shire town is from 2006/07 census report 51,197 of which 26,031 are females. Women of childbearing age (15-49 years) are also 12,031 and house hold 11,636 .The woreda is divided in to five kebeles. The name of kebeles; zero 0ne kebele (Dedebit), zero two kebele (Suhule), zero three (Hibret), zero four kebele (Adikentibay), zero five kebele (Yekatit). From five kebeles 3 kebele randomly selected (zero 0ne kebele (Dedebit) , zero three (Hibret) , zero five kebeles (Yekatit)) The number of population, females, women of childbearing age and house hold are (10.293 , 5.250 , 2,419 and 2,340) , (10.998 , 5.609 , 2,585 and 2,499) and(8,995, 4,588, 2,114 and 2,044) respectively.

4.3. Source of population

The source populations for this study were women of reproductive age group (15-49) who reside in shire Endasilase town.

4.4. Study population

All selected women of reproductive age group from 3 selected kebeles in shire Endasilase town and included in the study.

4.5. Eligible criteria

4.5.1. Inclusive criteria

Women whose ages were within reproductive age group (15-49), willing to participate in the study and who can give consent.

4.5.2. Exclusion criteria

All women who were pregnant, critically ill and involuntary to participate were excluded from the study.

4.6. Sample Size Determination

The sample size for quantitative study design is calculated by using the single population proportion formula:

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

Where

P = Regional Modern contraceptive coverage (68%)

n = required sample size

d = desired absolute precision (margin of error) (0.05)

$z_{\alpha/2}$ = Coefficient at level of significance =1.96

$$n = \frac{(1.96)^2 (0.68) (0.32)}{(0.05)^2} = 334.37 + 10\% \text{ non respondents}$$

n = 367

By taking Tigray Regional contraceptive coverage of 68% with 95% confidence interval at marginal error of 5% and 10% of non respondents, the total sample size is **367.**

4. 7. Sampling Procedures and techniques

4.7.1. Sampling Technique

Probability sampling method was employed and Stratified sampling technique was used to select the study participants. Of these 5 kebeles, three kebeles (kebeles 01, 03, &05) were randomly selected using lottery method. Then, the study subjects were selected through systematic sampling every "k^{ith}" intervals.

To determine the K^{th} value the kebele's households were the sampling frame of the sample. The number of households in kebeles 01, 03, and 05 were 2.340, 2,499, and 2,044, respectively.

Whereas the first house hold was selected by simple random selection then continuing every K^{th} house hold, if no respondent in the house hold continue to the next until the desired sample size attained.

4.7.2. Sampling Procedure

The sample frame of the study subjects was obtaining during the data collection period using the following formula.

To calculate the k^{th} interval using the formula of: Stratified sampling (proportional allocation)

$nj = n/N \times NJ$

NJ = stratum population size (Total number of women)

nj = sample population from each selected kebeles (n_1, n_2 and n_3)

n = total sample size ($n_1 + n_2 + n_3$)

$N = N_1 + N_2 + N_3$ total population size (Reproductive age group)

1. Adikentibay (01 kebeles) sample size

$nj = n/N \times NJ$

$368/7118 \times 2419$

$=125$

$K^{th} =$ House hold/Sample size (n1)

$= 2340/125 = {}^{= 19th}$

2. Hibret (03 kebele)

368/7118 x2585

= 133

k^{th} =2499/133=19^{th}

3. Yekatit (05 kebeles)

368/7118 x2419

= 109

k^{th} = 2044/109=19^{th}

K^{th} = 19^{th}, therefore, the subjects were selected every 19^{th} interval until the desired sample size.

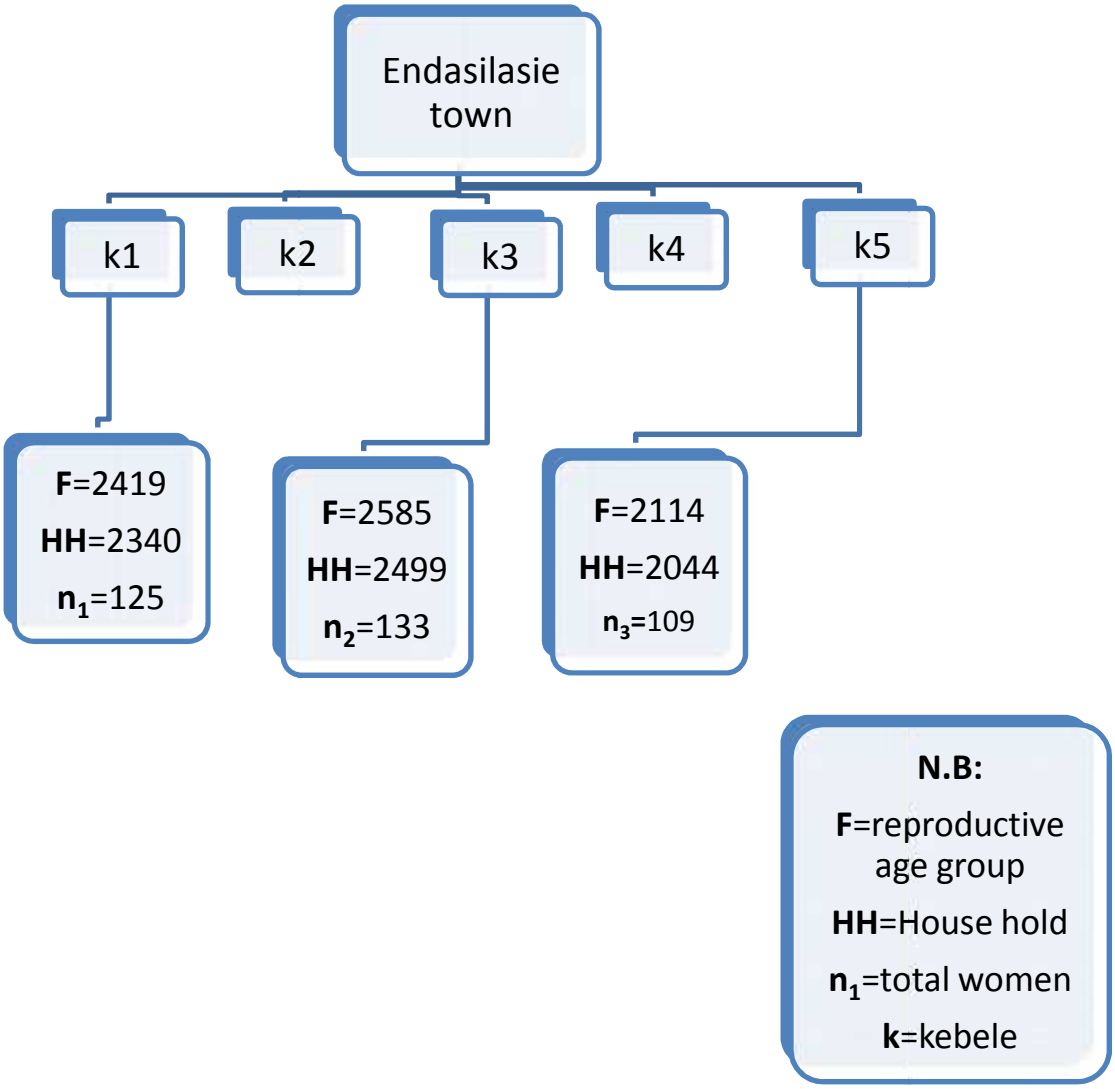


Figure 2.Schematic presentation of sampling procedure

4.8. Data collection tools and procedures

4.8.1. Data collection tools

For quantitative study, the questionnaire consists of three parts. The first part was socio-economic and demographic questions, the second part Reproductive history and the last consists of questions related to contraceptive interaction. The questionnaire was translated into Tigrigna language and back to English for its consistence and validity.

4.8.2 Data collection procedures and techniques

For quantitative study, closed ended questionnaires have been modified by the PI from previous study in Bahrdar (1). 15 voluntary kebele oriented outreach workers and above 10 grade data collector assigned to collect the required data through face to face interview. Data collectors got the willingness of participants after explaining the purpose of conducting this project. Data collectors and supervisors were trained for one day on the objective of the study, contents, consistence and logical order of the questionnaire and how to maintain confidentiality and privacy of the participants. The collected data were checked by supervisors and PI on daily basis. Data were collected from February 01/2011 to 21/2011 February days.

4.9. Variables of the study

4.9.1. Dependent Variables

Modern contraceptive preference and practice

4.9.2. Independent Variables

- **Socio-demography characteristics** like Age, Religion, Ethnicity, Marital status, Literacy Status, occupation, monthly income and travel distance to health care center.
- **Reproductive History** like Parity, Gravidity, birth interval, still birth, Abortion, Age at first pregnancy, age when you get married, no of live children,.
- **Client method of contraceptive Interaction** like ease and convenient time to using of contraceptive, convenient of the routine activity, discontinuing using contraceptive and self assessment of after using contraceptive.

4.10. Operational definitions

Preference: the woman's choice of contraceptives

- Modern contraceptive method preferred by the study subjects the highest percent is well preferred
- Modern contraceptive method preferred by the study subject the lowest percent is less preferred.

Practice: utilization of any modern contraceptive method to space the child and to Protect unwanted pregnancy.

4.11. Data quality assurance

The structured questionnaire was translated to Tigrigna and back to English to maintain its consistency. Pre-test was undertaken in Adidaero town, which are not included on this study. Pretest was under taken one week before data collection on 10% of the sample size (37mothers) of Reproductive age groups in Adidaero town by PI. Based on the pre-test findings, the instrument was revised, edited and modified if unclear or confusing questions are found. In addition, training was given to data collectors and supervisors on the objective of the study and procedures of data collection. The collected data was checked on daily basis for its completeness and consistence under the supervision of supervisors and principal investigator. Incompleteness and inconsistence occurs, data collectors were gone back to respondent's house to refill the questionnaire.

4.12. Data Processing and Analysis

After data collection is completed, data entry, cleaning, and analyzed was done by using SPSS version 16 program.

In order to describe the summary statistic in relation to variables, frequency and percent was calculated. To determine the association between the dependent and independent variables using statistical analysis: chi-square and odds ratio would be calculated, in this statistical analysis, in order to determine the association, if p value was less than 0.05, it was considered as statically significant.

4.13. Ethical Consideration

Approval of ethical clearance was granted from Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery. Permission was also obtained from Tigray Regional State Health Bureau and Shire Endasilase Woreda Health office. Verbal and written consent was also be received from individual study subject after provided adequate information by reading the information sheet that describes the purpose of the study and its confidentiality. Being participant in the study does not have direct benefit and has no harm on the study subjects. In order to ensure the confidentiality of the information, all data were kept in secret and coded in anonymity.

4.14. Dissemination and utilization of the results

After presenting the finding in Addis Ababa University, College of Health Science, Department Nursing and Midwifery as a partial fulfillment of master's degree in nursing. The result of the study will communicate to the Ministry of health, Tigray health Bureau, and Shire woreda health Bureau. The findings will present in different seminars, meetings and workshops. Hard and soft copy was available in AAU, Department of Nursing and Midwifery library, for graduate students, under graduate as well as for other concerned readers. Attempts will also be made for publication in national and regional scientific journals.

CHAPTER FIVE

5. RESULT

5.1. Socio demographic characteristics

In this study 367 Reproductive age group women were participated. All distributed questionnaires were filled completely and consistently. This made the response rate of 100%. Out of the total study subjects 106 (28.9%) were 25-29 years. Whereas 17 (4.6%) were found to be 45-49 years. Nearly 87% were Tigrian, Amhara were 32 (8.7%). Regarding to religion 278 (75.7%) were orthodox, 69 (18.8%) were Muslim and 14 (3.8%) were catholic. One hundred and one (27.5%) were elementary, 79(21.5%) above high school and 75 (29.4%) were illiterate. Majority, 229 (62.4%) were married where as 62 (16.4%) were single and 44 (12%) were widowed. One hundred thirty four (36.5%) were private workers, while 86 (23.4%) were merchants. More than half 214 (58.3%) monthly income were 100-500 ETB where as 82 (22.3%) were 501-1000 ETB. 152 (41.4%) participants were residing 11-20 minutes walking distance from the family planning service. Nearly 65% study subjects were resided 5-10 minutes distance by car from family planning while 152 (41.4%) were 11-20 minutes (See table 1).

Table 1: **Distribution of the study subjects by socio – economic and demographic characteristics among Reproductive age group in Shire Endaslasie town (n=367), Northern Ethiopia, March 2011**.

Variables	Frequency	Percent
Age in years		
15-19	23	6.3
20-24	66	18.0
25-29	106	28.9
30-34	55	15.0
35-39	61	16.6
40-44	39	10.6
45-49	17	4.6
Ethnicity		
Tigray	318	86.6
Amhara	32	8.7
Oromia	9	2.5
Eretria	8	2.2
Religion		
Orthodox	278	75.7
Muslim	69	18.8
Catholic	24	3.8
Protestant	6	1.6
Marital Status		
Married	229	62.4
Single	62	16.9
Widowed	44	12.0
Divorced	32	8.7
Educational status		
Illiterate	75	20.4
Read and write	46	12.5
Elementary	101	27.5
High school	66	18.0
Above high school	79	21.5
Occupation		
Government employs	54	14.7
Retie red	19	5.2
Privet worker	134	36.5
Merchant	86	23.4
Farmer	7	1.9
House wife	67	18.3

5.2. Reproductive related variables

Reproductive and fertility related variables of women reproductive age groups were considered. Among the study subjects, most of them who got marriage 216 (70.8%) found between age 15 to 19 years of age and the least 1 (0.3%) got marriage at 35 and above years of age. Most of respondents 314 (85.6%) reported as they were pregnant in their life time. Of this majority of them 280 (89.2%) reported as they were pregnant after marriage and 27 (79.4%) had had 1-2 times being pregnant before marriage. Majority of them 190 (60.5%) had got in pregnancy for the first time were found to be between 15 to 19 years of age while only one respondent had got her first pregnancy between age groups of 35 and above years of age. Regarding to age of women when their first children was born, 143 (45.5%) were found between 20 to 24 years and the least 2 (0.6%) were found in age groups of 35 and above years of age. 183 (58.3%) mothers have had 1-2 number of live births and the least 11 (3.5%) have had 8 and above number of live births. Among the respondents 61(16.6%) and 85 (23.2%) were experienced still births and abortions in their live time respectively. The greatest average birth interval was between 24 to 35 months of age while the least was 72 months (6 years). More than half of the respondents 210 (57.2%) wanted to have 3-5 number of children and 42 respondents (11.4%) perceived to have 1-2 number of children (see table 2).

Table 2: Distribution of study subjects Reproductive history among reproductive age group in Shire Endaslasie town, Northern Ethiopia, March 2011

Variables	Frequency	Percent
Age when she get married(n=367)		
Less than 15 years	41	13.4
15 - 19 years	216	70.8
20 - 24 years	37	12.1
25 - 29 years	10	3.3
30 - 34 years	62	16.9
35 and above years	1	0.3
Had pregnant(n=367)		
Yes	314	85.6
No	53	14.4
Pregnancy in relation to marriage(n=314)		
Before marriage	34	10.8
After marriage	280	89.2
Number of pregnancy before marriage(n=34)		
1 - 2 times	27	79.4
3 - 4 times	6	17.6
5 and above	1	2.9
Age in the first pregnancy (n=314)		
Less than 15 years	12	3.8
15 - 19 years	190	60.5
20 - 24 years	89	28.3
25 - 29 years	20	6.4
30 - 34 years	2	0.6
35 and above years	1	0.3
The age your first child was born(n=314)		
Less than 15 years	9	2.9
15-19 years	124	39.5
20-24 years	143	45.5
25-29 years	33	10.5
30-34 years	3	1.0
35 and above years	2	0.6
Number of live birth(n=314)		
1-2children	183	58.3
3-5children	94	29.9
6-7 children	26	8.3
≥8 children	11	3.5
The number of live children Total(n=314)		
1 - 2 Children	169	53.8
3 - 5 children	111	35.4
6 - 7 Children	25	8.0
8 and above children	9	2.9

Birth interval (n= 314)	12<months	38	12.1
	12-23months	94	29.9
	24-35 months	120	38.2
	36-47 months	22	7.0
	48-59 months	15	4.8
	60-71 months	13	4.1
	72 and above	12	3.8
The number of children you want have (n= 367)	1 - 2 Children	42	11.4
	3 - 5 Children	210	57.2
	6 - 8 Children	115	31.4

5.3. Preference and source of modern contraceptives

In this study, the most commonly preferred modern contraceptive method was injectable 202 (55%), the second 61 (16.6%) was oral contraceptives and the third 47 (12.8%) was Norplant. Condom 31 (8.4%), IUD 14 (3.8%), female sterilization 7 (1.9%) and others were less commonly preferred methods. Two hundred sixty nine (91.5%) of respondents had got contraceptive method according to their choice and only 25 (8.5%) had got without their choice. The major sources of supply of MCM 95 (32.7%) were from governmental health center and the second most important source of supply was in hospital followed by MCH health center (NGO) 46 (15.3%) and from health extension workers 48 (15.3%). The majority of respondents preferred governmental institution (health center 127 (34.6%), health extension 105 (28.6%), hospital 70 (19.1%) followed by FGAE 21 (5.7%), NGO 21 (5.7%) and others (private clinic and pharmacy) composed least proportion (see table 3).

Table 3: Distribution of study subjects for preference of modern contraceptives related variables among women Reproductive age group in Shire Endaslasie town, Northern Ethiopia March, 2011

Variables	Frequency	Percent
Getting modern contraceptive methods of your choice (for current users)(n=294)		
Yes	269	91.5
No	25	8.5
The place that you get modern contraceptive method (for users)(n=294)		
From private clinic	11	4.6
From government hospital	64	22.0
From health extension	48	14.7
From health center	95	32.7
From FGAE	6	2.1
From NGO	46	15.3
From Pharmacy/Drug vendor	24	8.6
The place that you prefer to get family planning service (n=367)		
From private clinic	17	4.6
From government hospital	70	19.1
From health centre	127	34.6
From health extension	105	28.6
From FGAE	21	5.7
From NGO	21	5.7
From Pharmacy/Drug vendor	6	1.6

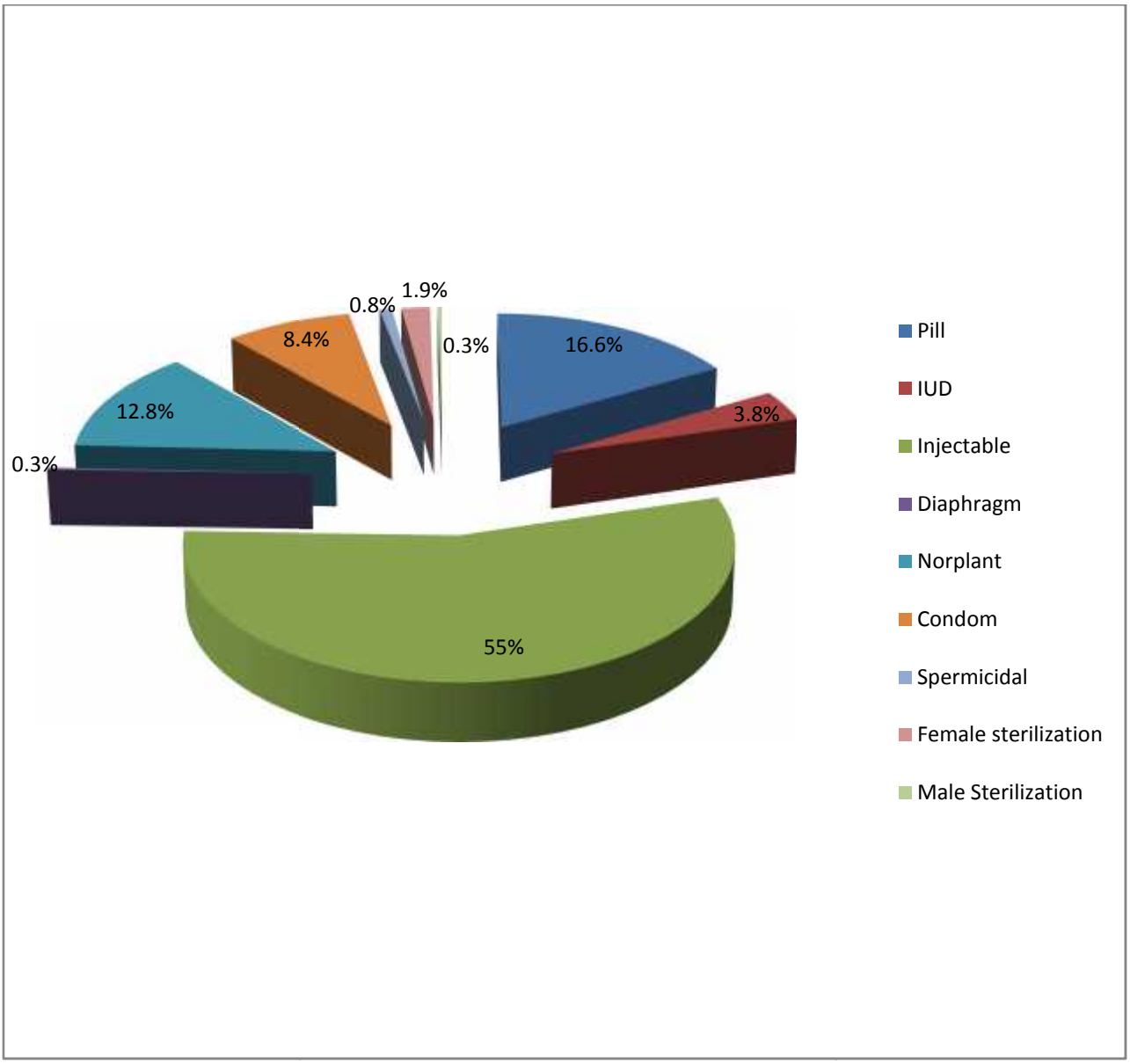


Figure 3: Diagrammatic presentation of modern contraceptive preference among study subjects in Shire Endaslasie town (n=367), 2011.

5.3.1. Reason for preferring pill

The most commonly mentioned reason for preferring pill among women reproductive age group from the given options, 42 respondents (64.6%) said because of very effectiveness of pill followed by 40 (61.5%) said as it is reversible, 38 (58.5%) were reported as it has fewer side effects and 29 (44.6%) said as it is convenient. Regarding to daily dose of pills, most respondents 57 (87.7%) answered one times per day, 6 (9.2%) answered as they didn't know how many times they should take pills and 2 (3.1%) did not give responses. The respondents were also asked, what to do if they forgot daily dose of pills, the majority of respondents 34 (52.3%) answered correctly and take pills as soon as you remembered and take it together with the next dose at regular time while least of them 1 (1.5%) did not give responses (table 4).

Table 4: Distribution of Reasons on the study subject who prefer pill among Reproductive age group in Shire Endaslasie town (n=65), Northern Ethiopia March, 2011

Variables		Frequency	Percent
Very effective			
	Yes	42	64.6
	No	23	35.4
It is convenient			
	Yes	29	44.6
	No	36	55.4
Reversible			
	Yes	40	61.5
	No	25	38.5
Fewer side effects			
	Yes	38	58.5
	No	27	41.5
Easy available			
	Yes	25	38.5
	No	40	61.5
Doesn't affect Lactation			
	Yes	12	18.5
	No	53	81.5
The time of taking pill			
Don't know		57	87.7
One every day		6	9.2
No response		2	3.1
The action for missed pills for one days			
Take it as soon as you remembered it/take it together with next dose at regular time		34	52.3
Take only the next dose at regular time		10	15.4
Discontinue to take the rest pills		4	6.2
Don't know		16	24.6
No response		1	1.5

5.3.2. Reason for preferring IUD

Many reasons were given for preferring IUD during interview. The majority of women mentioned more than one reason. The most common reason mentioned was as they 14 (100%) didn't need replacing IUD before 8 years and 8 respondents (57.1%) reported IUD was preferred due to its reversibility, half of them 7 (50%) preferred as it had no effect during lactation and 5 respondents (35.7%) reported nothing to remember constantly 2 (14.3%) reported as it was very effective and 2 respondents (14.3%) mentioned other reasons. The main reason that respondents 14 (100%) came to health institution before their appointment was due to heavy bleeding and irregular menstrual cycle, 13 respondents (92.9%) due to pelvic or abdominal pain followed by fever within 2-3 days and only respondent (7.1%) didn't know the reason for preferring IUD (table 5).

Table 5: Distribution of according to reason why preferred IUD among Reproductive age group in Shire Endaslasie town n= (14), Northern Ethiopia March, 2011

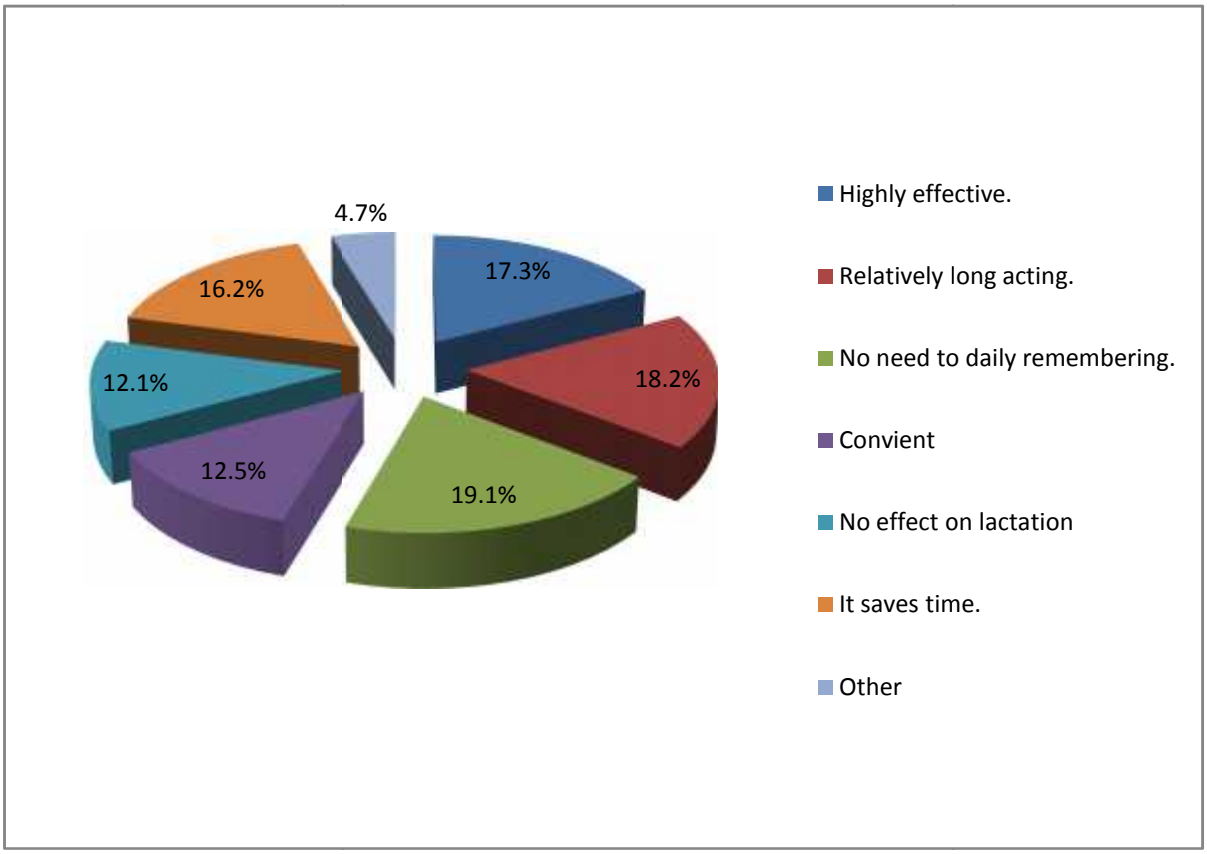
Variables		Frequency	Percent
Very effective			
	Yes	2	14.3
	No	12	85.7
Nothing to remember constantly			
	Yes	5	35.7
	No	9	64.3
Doesn't affect lactation			
	Yes	7	50.0
	No	7	50.0
Reversible			
	Yes	8	57.1
	No	6	42.9
Doesn't need replacing before 8 years			
	Yes	14	100.0
	No	0	0.0
Relatively long acting			
	Yes	2	14.3
	No	12	85.7
Fever within 2-3 days.			
	Yes	10	71.4
	No	4	28.6
Pelvic or abdominal pain.			
	Yes	13	92.9
	No	1	7.1
Heavy bleeding.			
	Yes	14	100.0
	No	0	0
Amenorrhea			
	Yes	14	100.0
	No	0	0
I don't know			
	Yes	1	7.1
	No	13	92.9

5.3.3. Reason for preferring injectable

Choices were given for the reason of preferring injectable. Most women choose more than one reason. The highest choice of respondents 135 (66.8%) were no need to daily remembering other contraceptives. The second reason 33 (16.3%) was its high effectiveness 122 (60.4%) and the least 33 respondents (16.3%) were due to other reasons. Majority of respondents 184 (91.1%) and 17 (8.4%) answered as it was taken in every three and two months respectively and one respondent answered as injectable was taken at any time. Several respondents 158 (78.2%) came back to health institution out of normal program were due to amenorrhea, 154 (76.2%) prolonged or heavy bleeding, 111 (55%) headache (persistent) and the least 22 (10.9%) (See table 6).

Table 6: Distribution of according to reason why preferred injectable among Reproductive age group in Shire Endaslasie town (n=202), Northern Ethiopia, March 2011

Variables		Frequency	Percent
❖ **How often do you Get injectable contraceptive**			
	Every two months	17	8.4
	Every three months method	184	91.1
	Any other time	1	0.5
❖ **When, which Problem appears you come back to Health institution**			
Headache (persistent)			
	Yes	111	55.0
	No	91	45.0
Weight gain			
	Yes	90	44.6
	No	112	55.4
Amenorrhea			
	Yes	158	78.2
	No	44	21.8
Prolonged or heavy bleeding			
	Yes	154	76.2
	No	48	23.8
Don't know			
	Yes	47	23.3
	No	155	76.7
No response			
	Yes	22	10.9
	No	180	89.1



N.B: Other = Reversible and can be easily obtained

Figure 4: Reason for Preferring Injectable by study population), Shire Endaslasie town (n=202) , North Ethiopia 2011

5.3.4. Reason for preferring Norplant

Among the study subjects, 40 respondents (85.1%) reported as they preferred due to no need of remembrance and 37 (78.7%) preferred as it was long acting, and few of them 6 (12.8%) preferred due to other reasons. Out of 47 (12.8%) respondent of preferring Norplant, 19 respondents (40.4%) answered as it was left inside for three years after insertion 17 respondent (36.2%) answered for five years and 11 (23.4%) answered as they did not know for how long it stayed. In addition, 42 respondents (89.4 %) who mentioned the reason for which they would go to health institution were due to irregular and heavy bleeding and 35 (74.5%) due to headache (severe) and 2 (4.3%) had no response (see table 7).

Table 7: Distribution of according to Reason why preferred Norplant among Reproductive age group in Shire Endaslasie town (n = 47), Northern Ethiopia March, 2011

Variables		Frequency	Percent
Highly effective			
	Yes	32	68.1
	No	15	31.9
Long acting			
	Yes	37	78.7
	No	10	21.3
No need to remember			
	Yes	40	85.1
	No	7	14.9
Reversible			
	Yes	35	74.5
	No	12	25.5
Convenient			
	Yes	25	53.2
	No	22	46.8
Doesn't affect Lactation			
	Yes	6	12.8
	No	41	87.2
The answer of women's about length of Norplant left inside			
	3 years	19	40.4
	5 years	17	36.2
	Don't know	11	23.4
Problem's come back to health institution			
Irregular heavy bleeding.			
	Yes	42	89.4
	No	5	10.6
Head ache (severe)			
	Yes	35	74.5
	No	12	25.5
Infection at Normal insertion site			
	Yes	32	68.1
	No	15	31.9
Don't know			
	Yes	5	10.6
	No	42	89.4
No response			
	Yes	2	4.3
	No	45	95.7
When I feel sick			
	Yes	31	66.0
	No	16	34.0

5.3.5. Reason for preferring condom, female sterilization and spermicidal

The reasons for preferring condom method among the respondents were mentioned different reasons. But most women 30 (96.8%) responded that condom was preferred as it protects against STI, 29 (93.5%) responded as it protects against HIV/AIDS, 15 (48.4%) preferred due to its accessibility and the rest 11 (35.5%) preferred as it was convenient. On the other hand, majority of the study subjects 7 (100%) decided not to have more children. So, all seven women preferred female sterilization method of contraceptive. From the study subjects the highest response were very effectiveness of spermicidal, if it was used together with condom 3 (100%) and 2 respondents (66.7%) preferred spermicidal due to its less side effectives. (See table 8)

Table 8: Distribution of according to Reason preferred Condom, female sterilization and spermicidal among Reproductive age group in Shire Endaslasie town, Northern Ethiopia March, 2011

Variables		Frequency	Percent
❖ **Condom (n=31)**			
Protects against STI	Yes	30	96.8
	No	1	3.2
Convenient	Yes	11	35.5
	No	20	64.5
Can be easily Obtained	Yes	15	48.4
	No	16	51.6
Protect HIV/AIDS	Yes	29	93.5
	No	2	6.5
❖ **Female sterilization (n=7)**			
Decided to have no more children	Yes	7	100.0
Permanent method	Yes	3	42.9
	No	4	57.1
Highly effective	Yes	3	42.9
	No	4	57.1
❖ **spermicidal (n=3)**			
Less side effective			
	Yes	2	66.7
	No	1	33.3
Reversible			
	Yes	1	33.3
	No	2	66.7
Protect against STI			
	Yes	0	0.0
	No	3	100
Very effective, If used together with condom			
	Yes	3	100.0
	No	0	0.0

5.4. Utilization (practice) of modern contraceptive

Regarding modern contraception practices, current users 294 (80.1%) were much more than non users 73 (19.9%). This shows that there is good awareness on practices of modern contraceptive methods. Majority of them 121 respondents (41.2%) started modern contraceptive practice between 20-24 years and the least 6 (2.0%) started at 35 and above years of age. The Injectable contraceptive method was the most commonly used 152 (51.7%). The second most commonly used method was pill 55 (18.71%). The third commonly used was Norplant 32 (10.88%). The least used methods were Condom, IUD, Diaphragm, Spermicidal, Tuba ligation and vasectomy. The reasons for changing the first contraceptive method among the respondents were mentioned different reasons. Majority of respondents cited more than one reason. Fear of side effects 50 (65.8%) was the most frequently mentioned reason, followed by medical problem 46(60.5%) and fear of infertility 29(38.2%). The majority of women mentioned more than one reason not to practice MCs and the most common reason mentioned was as they did not have marriage or sexual partner 25(34.5%) and second frequently mentioned reason was desire to have more children 19 (26%), followed by fear of side effects 15 (20.5%), medical problem 13 (17.8%), fear of infertility 13 (17.8%) and only three (4.1%) reported as far service place to get contraceptive methods was another reason not to practice MCs. The most commonly mentioned reason for using contraceptive among currently users was for child spacing 170 (57.8%), for prevention of STI 5 (1.7%) and the least was unwilling to have any more children 4 (1.4%) and the rest was for medication 3 (1%) (See tables 9-11).

Table 9: Distribution of study subjects Clients Practice on modern contraceptive methods among Reproductive age group in Shire Endaslasie town, Northern Ethiopia March, 2011

Variables		Frequency	Percent
Utilization of modern contraceptive methods (n= 367)	Yes	294	80.1
	No	73	19.9
Age started modern contraceptive use (n= 294)	Less than 15 years	7	2.4
	15 - 19 years	93	31.6
	20 - 24 years	121	41.2
	25 - 29 years	47	16.0
	30 - 34 years	20	6.8
	35 and above years	6	2.0
Method of contraceptive use (n = 294)			
.	Pill	55	18.71%
	IUD	14	4.76%
	Injectable	152	51.70%
	Condom	28	9.52%
	Norplant	32	10.88%
	Diaphragm	4	1.36%
	Spermicidal	7	2.38%
	Tubal ligation	1	0.34%
	Vasectomy	1	0.34%

Table 10: Distribution reason for changing the first contraceptive method on Practice modern contraceptive methods among Reproductive age group in Shire Endaslasie town (n= 76), Northern Ethiopia March, 2011

❖ Variables		Frequency	Percent
Fear of side effects			
	Yes	50	65.8
	No	26	34.2
Medical problem			
	Yes	46	60.5
	No	30	39.5
Fear of infertility (For ever-users only)			
	Yes	29	38.2
	No	47	61.8
Cultural taboo			
	Yes	5	6.6
	No	71	93.4
Preferred method Is not available			
	Yes	2	2.6
	No	74	97.4
Desire to have more Children			
	Yes	9	11.8
	No	67	88.2
Spouse disapproved			
	Yes	12	15.8
	No	64	84.2
Lack of knowledge			
	Yes	2	2.6
	No	74	97.4
Don't have marital or sexual Partner at present			
.		11	14.5
	Yes	65	85.5
	No		
Long waiting time to get the method			
	Yes	1	1.3
	No	75	98.7
Service place is far from my residence			
	Yes	1	1.3
	No	75	98.7
Widowed/divorced/separated			
	Yes	5	6.6
	No	71	93.4

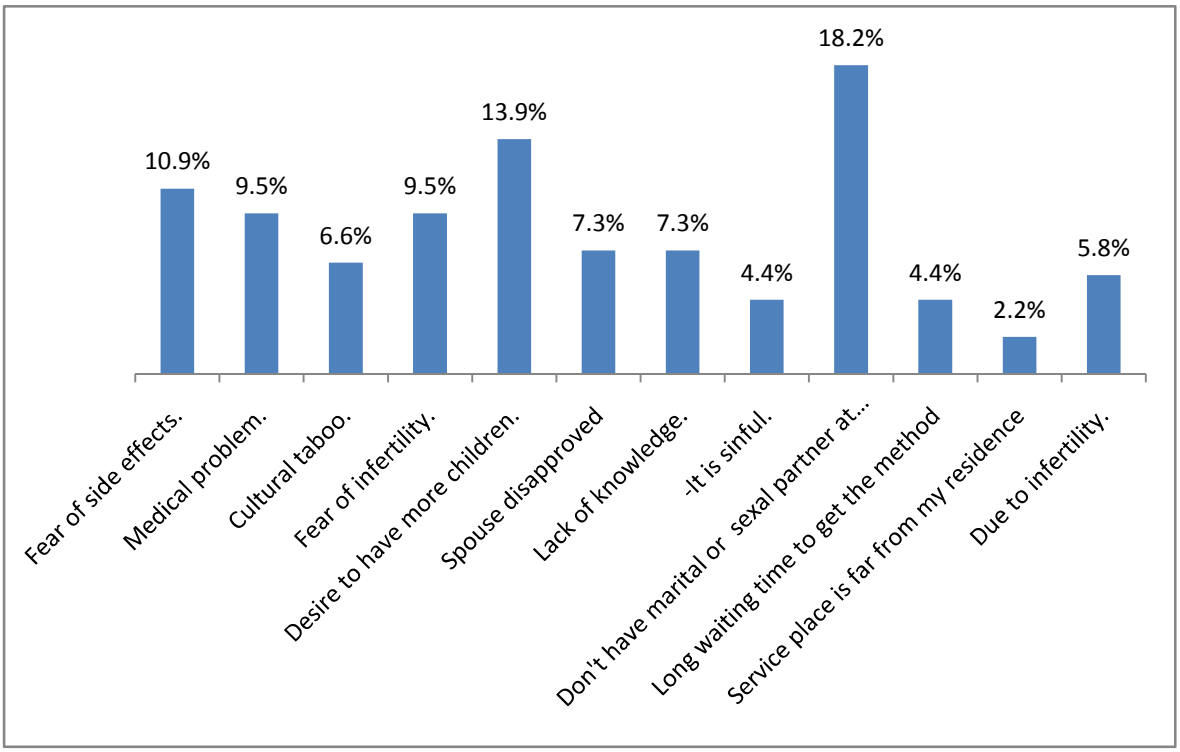


Figure 5. Reason for non use of modern contraceptive use by study population, Shire Endaslasie town (n= 73), Tigray, Ethiopia, March 2011.

Table 11: Distribution reason for practicing modern contraceptive methods related variable among Reproductive age group in Shire Endaslasie town, Northern Ethiopia March, 2011

❖ Variables		Frequency	Percent
Practicing the same method currently (n=294)			
	Yes	218	74.1
	No	76	25.9
Long you practice this method (n=119)			
	2 years or less	56	47.1
	3 - 5 years	43	36.1
	10 and above years	20	16.8

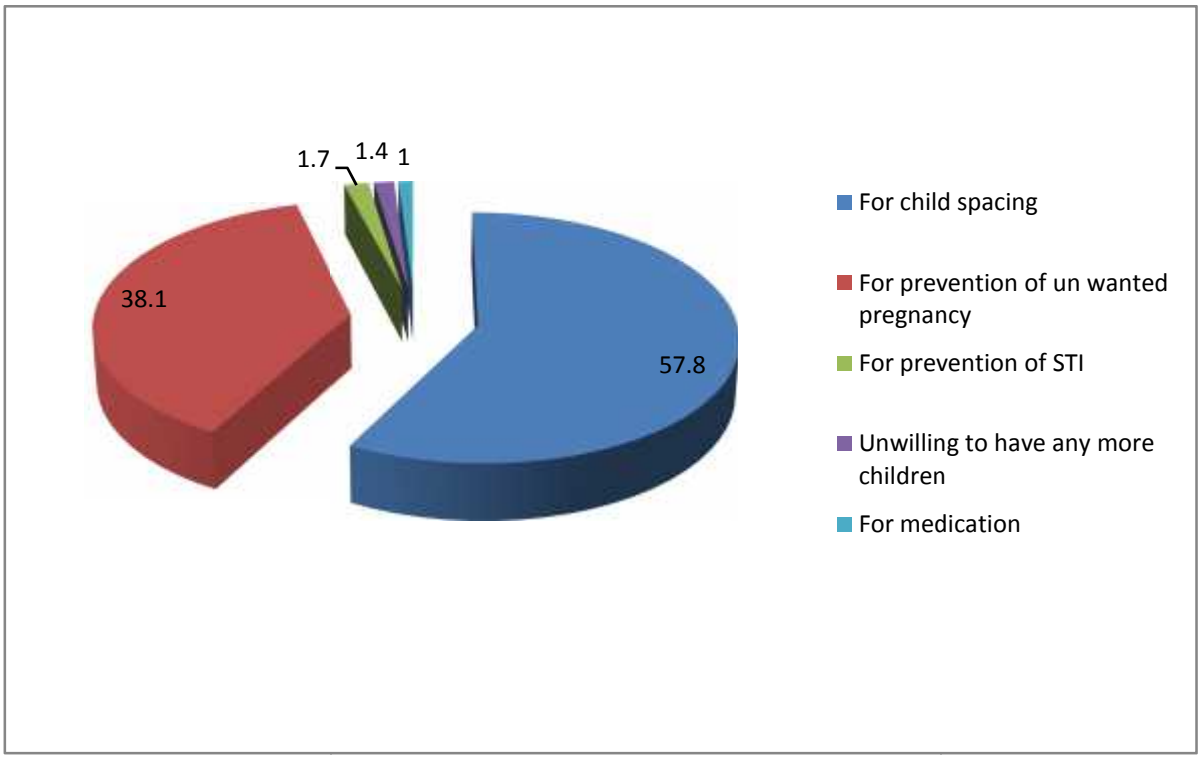


Figure 6. Reason for modern contraceptive practice by study population, Shire Endaslasie town (n=294), Tigray, Ethiopia, March 2011.

5.5. Client- Contraceptive Interaction

Regarding to interaction of client with contraceptive in shire town, majority of them 161 (54.8%) reported as it was satisfactory on ease and convenient time for contraceptive use and the least 4 (1.4%) were reported as it was not convenient and ease at all. The interaction of women's with contraceptive majority of them 121 (41.2%) reported as it was satisfactory on convenient of the routine activity for contraceptive use and the least 9 (3.1%) were reported as if was not convenient for routine activity. Also the majority of women 171 (58.2%) were never, the least 5 (1.7%) were always discontinuing using contraceptive method. In addition, almost half of the study subjects 141 (48.0%) were always used self-assessment of after using contraceptive while the least 16 (5.4%) had seldom interaction with modern contraceptives.

Table 12: Distribution of study subjects Client-Contraceptive Interaction among Reproductive age group in Shire Endaslasie town (n = 294), Northern Ethiopia March, 2011

Variables		Frequency	Percent
Ease and convenient time to using of contraceptive			
	Not at all	4	1.4
	Little	24	8.2
	Satisfactory	59	20.1
	Fairy	161	54.8
	Extremely	46	15.6
Convenience of the Routine activity			
	Not at all	9	3.1
	Little	14	4.8
	Fairy	90	30.8
	Satisfactory	121	41.2
	Extremely	60	20.4
Discontinuing using Contraceptive			
	Never	171	58.2
	Seldom	49	16.2
	Sometimes	55	18.7
	Often	14	4.8
	Always	5	1.7
Self-assessment of after using contraceptive			
	Never	22	7.5
	Seldom	16	5.4
	Sometimes	22	7.5
	Often	93	31.6
	Always	141	48.0

5.6. Association between use of modern contraceptive method Practice and socio-demographic variable

When compared to the age group under 15-19 years, those respondents in the age group of 20-24 years were 4.5 times more likely to use modern contraceptive, (COR = 4.5; C1=1.249, 16.241; P=.021). The odds of practicing modern contraceptives in the study area was 4.76 (COR=4.76; 95% C1= 1.43, 15.84; P=.011) times higher among 25-29 years as compared to women of 15-19 years of age. The odds practicing modern contraceptives among reproductive age groups of 30-34 years was 5.24 (COR = 5.24; 95% CI =1.31, 20.90; P =.019) times higher their reproductive age groups of 15-19 years. The odds of using modern contraceptives between 35-39 years was 4.18 (COR = 4.18; 95% C1 = 1.07, 16.26; P =.019) times higher as compared to 15-19 years of reproductive age groups. The odds of practicing modern contraceptive between 40-44 years of study subjects was 8.17 (COR = 8.17; 95% C1=1.83, 36.47; P =.006) higher as compared to 15-19 years of reproductive women. But being 45-49 years of age had no statistical association with modern contraceptives uses. The odds of practicing modern contraceptive among married women was 2.47 (COR = 2.47; 95% CI = 1.15, 5.3; P= 0.02) times higher than single women. But other variables such as divorced and widowed had no association with modern contraceptive use. The odds of practicing modern contraceptive, where educational status was high school, was 3.28 (COR=3.28; 95% CI=1.09, 9.92; P =.035) times higher than who were not be able to read and write. Among socio demographic variables, occupation monthly income and religion had no association with modern contraceptives among reproductive age groups of women in shire town.

Table 13: Association between use of modern contraceptive method Practice and socio-demographic variable in Reproductive age group, Shire Endaslasie town yes (n=294), No (n=73) Northern Ethiopia March, 2011

❖ Variables		Use of modern contraceptive method Practice		COR(95% CI), P-Value
		Yes	No	
Age in years *	15-19	14	9	1.00
	20-24	55	11	**4.50, (1.249, 16.241),0 .02**
	25-29	88	18	**4.76, (1.431,15.841), .011**
	30-34	46	9	**5.24, (1.314, 20.898),0 .01**
	35-39	47	14	**4.18,(1.074, 16.264) ,0 .03**
	40-44	33	6	**8.17,(1.830, 36.473),0 .00**
	45-49	11	6	1.38, (.277, 6.950),0 .69
Religion	Muslim	58	11	1.00
	Catholic	13	1	1.99, (.207, 19.213),0 .55
	Orthodox	220	58	0.66., (.296, 1.510),0 .33
	Protestant	3	3	0.155, (.023, 1.063),0 .06
Ethnicity	Tigray	258	60	1.00
	Amhara	22	10	0.57, (.218, 1.490),0 .25
	Oromia	8	1	1.24, (.132, 11.657),0 .85
	Eretria	8	2	0.70, (.109, 4.547),0 .71
Marital status*	Single	42	20	1.00
	Married	196	33	**2.47, (1.154, 5.297),0 .02**
	Widowed	31	13	1.27, (.443, 3.656),0 .65
	Divorced	25	7	1.50 , (.471, 4.781),0 .49
Literacy status*	Illiterate	57	18	1.00
	Read and write	32	14	0.57, (.220, 1.482),0 .24
	Elementary	77	24	0.95, (.420, 2.162),0 .90
	High school	58	8	**3.28 , (1.087, 9.924),0 .03**
	Above high school	70	9	2.31, (.802, 6.693),0 .12
Occupation	Government employees	48	6	1.00
	Retired	11	8	0.50, (.101, 2.528),0 .40
	Private worker	104	30	1.52, (.455, 5.122),0 .49
	Merchant	70	16	1.35, (.395, 4.590),0 .63
	Farmer	7	0	1.00, (6.985, 9.662),0 .99
	House wife	54	13	2.22, (.567, 9.075),0 .24
Monthly income in ETB	< 100	29	12	1.00
	100 – 500	166	48	1.53, (.634, 3.712), .342
	501-1,000	71	11	2.35 , (.773, 7.158), .132
	>1,000	28	2	3.76, (.655, 21.608), .137

5.7. Association between use of modern contraceptive method practice and Reproductive history variable

Age when you get married, age when you first got pregnant and age when your first child born of respondents were the factors which had on association with preference of modern contraceptive methods. Other like number of live birth, number of pregnancy before marriage, total number of Children and number of children you want doesn't have association. The odds of practicing modern contraceptive among women who get marriage between 20-24 years of age was 0.01 (COR=.01;95% C 1= 0.001,.15, P =.001) times higher as compared to these who got marriage before 15 years of age . This age group, other had no association with modern contraceptive. Regarding to number of live births, the odds of practicing modern contraceptives was 376.66 (COR=376.66,95% C1 =10.43, 13599.9, P = 0.001) times higher among women who had 6-7 live births as compared to those who had 1-2 live births like ways .015 times higher among 8 and above live births as compared to 1-2 live births. Considering total number of children, the odds of practicing modern contraception among the study subjects who have 3-5 children was .007 (COR=.007;95% C1=.001,0.17; P = 0.003) times higher as compared to those who have 1-2 children other variables like number of pregnancies before marriage and determination on number of children did not have association.

Table 14: Association between use of modern contraceptive method practice and Reproductive history variable in Reproductive age group, Shire Endaslasie town, Northern Ethiopia March, 2011

Variables		Use of modern contraceptive method Practice		COR(95% CI), P-Value
		Yes	No	
Age when she get married*	Less than 15 years	40	7	1.00
	15 - 19 years	195	40	**039, (0.005,0 .465),0 .01***
	20 - 24 years	28	12	**010 , (0.001,0 .148),0 .00***
	25 - 29 years	10	1	**021, (0.001,0 .402),0 .01***
	30 - 34 years	2	1	**007, (0.000,0 .335),0 .01***
	35 and above years	0	1	000, (0.000 , -),0 .99
	Total	275	62	
Number of live birth*(children)	1 – 2	154	34	1.00
	3-5	79	17	1.138, (.296, 4.374),0. 85
	6-7	24	2	**376.6, (10.432, 13599.944), 0.00***
	8 and above	10	1	**0.01, (0.001, 0.400),0.01***
	Total	267	54	
Age when your first child birth in years	Less than 15	7	3	1.00
	15 - 19	101	27	0.00, (0.00 , -),0 .99
	20 - 24	128	16	0.00, (0.00 , -) ,0.99
	25 - 29	28	6	0.00, (0.00, -), 0.99
	30 - 34	2	1	0.00, (0.00, -), 0.99
	35 and above	1	1	0.00, (0.00, -), 1.00
	Total	267	54	
Number of pregnancy before marriage	1 - 2 times	177	38	1.00
	3-4 times	74	12	1.56, (0.458, 5.313),0 .47
	5 and above	16	7	0.10, (0.008, 1.535),0 .10
	Total	267	57	
Total number of Children*	1 – 2	145	27	1.00
	3 - 5	94	20	0.30, (0.086, 1.083),0 .06
	6 - 7	20	6	**0.00, (0.000,0 .173), 0.00***
	8 and above	8	1	89.968, (0.636, 12718.900), 0.75
	Total	267	54	
Number of children you want	1 - 2	29	10	1.00
	3 - 5	163	44	0.15, (0.019, 1.211), 0.07
	6 - 7	74	14	0.62, (0.067, 5.727),0 .67
	8 and above	28	5	0.39, (0.027, 5.848),0 .50
	Total	294	73	

5.8. Association between modern contraceptive method for preference of (pill, injectable and Norplant)

Regarding this study subject age 20-24 years and 30-34 years, were 0.12- 0.27 times more likely to preferred pills as compared to 15-19 years with ADR= 0.12, 95% CI (.032, 456), 0.27 95% (.85, 880) Respectively. Married women were 5.3 times more likely to preferred injectable ADR = 5.3 95%CI (2,360, 12, 140), than single. And also married and widowed women were 0.17-0.13 times more to preferred Norplant ADR= 0.17, 95% CI (067,470), 0.13 (038, 473), than single.

Table 15: Association between modern contraceptive method for preference of (pill, injectable and Norplant) in Reproductive age group, Shire Endaslasie town, Northern Ethiopia March, 2011

	Pill as dependent Yes= 61 (16.6%) No = 306 (83.4%)	**COR(95% CI), P-Value**	**Adjusted(95% CI), P-Value**
Age in years*	15-19	1.00	1.00
	20-24	.093, (.022, .399).001	**.121, (.032, .456), .002***
	25-29	.286, (.091, .904), .033	**.**409, (.152, 1.103), .077
	30-34	.186, (.047, .736), .017	**.273, (.085, .880), .030***
	35-39	.315, (.084, 1.175), .085	.413, (.140, 1.212), .107
	40-44	.431, (.115, 1.620), .213	.563, (.181, 1.752), .321
	45-49	.292, (.052, 1.645), .163	.402, (.088, 1.825), .238
	Injectable as dependent Yes = 202 (55%) N0=16.5 (45%)		
Marital status*	Single	1.00	1.00
	Married	.317, (.166, .608), .001	**5.35, (2.360, 12.140), .000***
	Widowed	.279, (.129, .604), .001	1.61, (.640, 4.069), .310
	Divorced	.168,(.069, .411) ,.000	1.19, (.440, 3.236), .729
	Norplant as dependent Yes = 47(12.8%) No= 320 (87.2%)		
Marital status*	Single	1.00	1.00
	Married	.590, (.191, 1.827), .361	**.177, (.067, .470), .001***
	Widowed	2.055, (.717, 5.892), .180	**.134, (.038, .473), .002***
	Divorced	5.386, (1.774, 16.356), .003	.454, (.143, 1.444), .181
Occupation*	Government employees	1.00	1.00
	Retired	2.522,(.437, 14.557), .301	1.065, (.397, 2.857), .901
	Private worker	1.043, (.310, 3.514), .946	1.171, (.318, 4.317), .813
	Merchant	.236, (.053, 1.049), .058	.691, (.299, 1.595), .386
	Farmer	.000, (.000, -.), .999	.169, (.048, .593), .006
	House wife	1.044, (.265, 4.114), .951	.000, (.000, -.), .999

N.B: = statistically significant at $p \leq 0.05$

5.9. Association between use of modern contraceptive method Practice and socio-demographic variable

Multiple logistic regression (enter model) was used to adjust for the effects of confounding if any existed. On multivariate analyses socio – demographic variables like religion, ethnicity, occupation and monthly income showed no statistically significant difference. But women in the age group 40-44 years, were 8.1 times more likely to use modern contraceptive as compared to all age category (15-39 years) and the age 45-49 years 1.38 times less likely to use modern contraceptive(see table 15). Multivariate analysis also showed significant difference for that marital status, married women were 2.4 times more than single and literacy status, where those educated to above and high school level were to use contraceptives 2.3-3.2 times more than the illiterate ones respectively. In this study the above mentioned and women who ever had history of age at marriage, number of live births and total number of children had association in both Bivariate and multivariate analysis. This means that the effects of the above variables were appeared independently on modern contraceptive practice among reproductive age group in Shire Endaslasie town (see table 16).

Table 16: Association between use of modern contraceptive method Practice and socio-demographic variable in Reproductive age group, Shire Endaslasie town, Northern Ethiopia March, 2011

Variables		Use of modern contraceptive method Practice		COR(95% CI), P-Value	Adjusted(95% CI), P-Value
		Yes	No		
Age in years*	15-19	14	9	1.00	1.00
	20-24	55	11	4.50, (1.249, 16.241),0 .02	**3.71, (1.139, 12.089), .030***
	25-29	88	18	4.76, (1.431,15.841), .011	**4.21, (1.367, 12.991), .012***
	30-34	46	9	5.24, (1.314, 20.898),0 .01	**4.60, (1.283, 16.531), .019***
	35-39	47	14	4.18,(1.074, 16.264) ,0 .03	**3.59, (1.042, 12.430), .043***
	40-44	33	6	8.17,(1.830, 36.473),0 .00	**6.71, (1.711, 26.386), .006***
	45-49	11	6	1.38, (.277, 6.950),0 .69	1.57, (.362, 6.831), .546
	Total	294	73		
Marital status*	Single	42	20	1.00	1.00
	Married	196	33	2.47, (1.154, 5.297),0 .02	**2.70, (1.329, 5.518), .006***
	Widowed	31	13	1.27, (.443, 3.656),0 .65	2.11, (.947, 4.722), .068
	Divorced	25	7	1.50 , (.471, 4.781),0 .49	1.71, (.654, 4.521), .272
	Total	294	73		
Literacy status*	Illiterate	57	18	1.00	.1.00
	Read and write	32	14	0.57, (.220, 1.482),0 .24	.615, (.262, 1.445), .265
	Elementary	77	24	0.95, (.420, 2.162),0 .90	1.04, (.492, 2.204), .915
	High school	58	8	3.28 , (1.087, 9.924),0 .03	**3.55, (1.273, 9.933), .015***
	Above high school	70	9	2.31, (.802, 6.693),0 .12	2.21, (.881, 5.557), .091
	Total	294	73		
Age when you get married*	Less than 15 years	40	7	1.00	1.00
	15 - 19 years	195	40	039, (0.005,0 .465),0 .01	.281, (.076, 1.041), .057
	20 - 24 years	28	12	010 , (0.001,0 .148),0 .00	**.110, (.025, .492), .004***
	25 - 29 years	10	1	021, (0.001,0 .402),0 .01	**.062, (.011, .358), .002***
	30 - 34 years	2	1	007, (0.000,0 .335),0 .01	.106, (.007, 1.633), .108
	35 and above years	0	1	000, (0.000 , -),0 .99	.000, (.000, -), 1.000
	Total	294	73		
Number of live birth*	1 – 2 Children	154	34	1.00	1.00
	3-5 children	79	17	1.138, (.296, 4.374),0, 85	.808, (.288, 2.266), .685
	6-7 children	24	2	376.6, (10.432, 13599.944), 0,00	**8.67, (1.411, 53.263), .020***
	8 and above children Total	10	1	0.01, (0.001, 0.400),0 .01	.436, (.105, 1.812), .253
		294	73		
Total number of Children*	1 - 2 Children	145	27	1.00	1.00
	3 - 5 children	94	20	0.30, (0.086, 1.083),0 .06	**5.24, (1.202, 22.877), .027***
	6 - 7 Children	20	6	0.00, (0.000,0 .173), 0.00	**5.66, (1.414, 22.681), .014***
	8 and above children	8	1	89.968, (0.636, 12718.900), 0.75	4.88, (.509, 46.927), .169
	Total	267	54		

NB = * statistically significant at p ≤ 0.05

CHAPTER SIX

6. DISCUSSION

6.1. Discussion

One of the eight millennium Developmental goal is improving maternal health through reducing maternal mortality by two third. This could be achieved by quality reproductive health and family planning service. Family planning improves community health by helping both men and women to have children when they are physically, emotionally and financially prepared to take the child bring up responsibility. As IPPF gave grate attention to reproductive health for best quality service improvement accessibility, acceptability and convenience are important for contraceptive users.

This study focus on the assessment of determinant factors for preference and practice of MCM use among women reproductive age group.

The study areas Shire Endaslasie town has showed significant difference in socio demographic characteristics such as age, marital status and education. There was also a statistical significant difference by some reproductive characteristics such as age on time of married, number of live birth, total number of children and number of children you want to have.

In this study the age of respondents more than 20 years were significantly associated with modern contraceptive use. Unlike the study done in south wollo zone, in 2010, that was 26.6%, the proportion of women under the age group of 20-24 years were 18.0% (29). This result is also similar to the study done in Ethiopian Demographic and Health survey in 2005, MCM user were higher in age group 25-29 years (10, 30).

The age of respondents was less likely associated with the preference of pills. This is similar to the study conducted in Bahrdar town in 2005, that the age of respondents was negatively associated (4).

Regarding marital status, the result showed that most respondent were married (62.4%) and were 2.70 times more likely to use modern contraceptive than unmarried women. This is unlike to the study done in south wollo zone, in 2010, that was 82.9% among married women (24, 29). Even in the preference of contraceptive, married women were 5.35 times more likely to prefer injectable as compared with unmarried women, but it showed that married women were less likely to prefer Norplant contraceptives than single women. This is unlike the study result in south east Ethiopia, in 2004, that married women were more likely to prefer Norplant than single women. This might be related to the probability that the married women needs to conceive child with in short period of time, since injectable is shorter duration than Norplant (8).

Related to educational status, those with high school were more likely to use modern contraceptive method than illiterate. This is like the Demography and health survey study conducted in Ethiopia, 2005, that educated women were more likely to use modern contraceptive than illiterate. In addition, a study done in Bahrdar 2002, women educated up to high school level and above was 2 times more likely to use modern contraceptives as compared to illiterates. It is also similar to the study done in India, showed that the likelihood of modern contraceptive use was higher among educated women than illiterate (10). It may be related to that the educated women have awareness about contraceptive. The educational status was not associated with the preference of contraceptive uses (25).

When calculated the age at marriage, those with age of 20-24 years, 25-29 years were less likely to use modern contraceptive than those with age at early marriage.

It may be early married mothers have many children that leads to use contraceptive. Unlike to the study done in Bahrdar 2002 those 20 and above at first marriage more use of modern contraceptive than early marriage (1).

The respondent women with number of live birth 6-7 were more likely to use modern contraceptive than those with 1-2 live birth and also statistical significant . This might be related to the limit of number of children among those with 6-7 live births. Unlike study done in Bahrdar 2002 still birth was a statistical significant (1).

Women with number of children 6-7 had highly associated with use of modern contraceptive. The result indicates that women tend to use contraceptive after they had desire children. This is like the study conducted in Dawro town 2005 that it was positively associated with the use of modern contraceptive (2, 22).

In this study number of child you want to have been significantly associated with modern contraceptive use. This is similar to the study conducted in Woreta community 2008, which were positively associated (18).

The present study showed that women use modern contraceptive methods for the first time after they had higher number of children for most of them 1-2 children 145 (27%) and the least 6-7 children 20 (6%). In Ethiopia contraceptive use among women with one or two child (17%) and lowest among women with no children (12%), about 6% of all women first used a method of family planning when they had 4 or more children 3% at the time with no children at 4% after

the birth of their first child. Most women below age 30 started using contraception after they had one child (10).

The majority of respondents reported that the reason for using MCM by women were 170 (57.8%) child spacing, 112 (38.1%) prevention of unwanted pregnancy and the least 3 (1.0%) for medication. The fact women in the study area have access to information, education, communication, health, facilities, occupation and monthly income. This is similar to the study conducted in Bahir-Dar, town in 2002 (1).

In study area the majority of women preference of MCM (61%) injectable and the least (0.3) male sterilization. This show they were aware of family planning and they have knowledge about the difference methods. Like a study done in woreta town, Ethiopia, in 2008, the most commonly preferred MCM (63.2%) was injectable (18). Unlikely a study done in turkey 70% women were using any family planning method where as 30% were not using. The most preferred method was coitus interrupts (28). In addition the study show in Iran in all 300 women who were using with drawal took part in the study of these, 210 women (70%). The most common reasons for using with drawal were no cost involvement, did not need medical advice, having fewer side effects and easier to use than other methods (27).

In the present study reason for not using MCMs the majority of women mentioned more than one reason not to practice MCs and the most common reason mentioned was as they did not have married 25 (34.5%) & second frequently mentioned reason was desire to have more children 19 (26%). Followed by fear side effect 15 (20.5%), medical problem 13 (17.8%), fear of infertility 13 (17.8) and only 3 (4.1%) reported as for service place to get MCM was another reason.

Almost the same the study show in woreta the main reasons for non use of MCs were being single and a desire for more children (18). In addition show in Iran, the main obstacles to use MCs were health concerns, fear of side effects, miss information, lack of confidence and sexual dissatisfaction (27).

6.2. Strength and limitations of the study

A. Strength of the study

- In this study it was tried to include all the variables that can affect modern contraceptive preference and practice.
- The study subjects were selected using random sampling .The random sampling helps to avoid selection bias.
- Using logistic regressions to control the possible confounding factors in order to assess the relative effect of independent variables to dependent variables
- There was high response rate (100%)
- Since the study was community based study with appropriate sample size, generalization was possible
- The study uses a primary data, it may serve as baseline data

B. Limitation of the study

- Cross – sectional study design was used in the present study. This type of study design Shows the exposure and out come at the same point in time, but we cannot formulate the cause and effect relationship from this study design.
- The study was a time consuming process
- Because of in adequate allocated budget, qualitative data not included
- Since the study was conducted in Shire Endaslasie town, the journey was too difficult to go now and then.

CHAPTER SEVEN

7. CONCLUSION AND RECOMMENDATION

7.1. Conclusion

- This study conducted among Reproductive age women of Shire Endaslasie town to determine factors which affect modern contraceptive utilization and preference is concluded as:
- **Socio- demographic factors** like residence, ethnic group, religion, occupation and monthly income at the place of the survey were not associated with current contraceptive use. Educational status at high School level and above is positively associated with contraceptive utilization. Women aged 40 - 44 and greater than 20-24 years were 8.1 and 1.2 times more likely to use contraceptives respectively. Also being married was positively associated with modern contraceptive utilization.
- **Reproductive factors** like number of pregnancies, number of age when your first child born, number of pregnancy before marriage, total number of children ,number of children you want, number and history of infant loss, number of living children, and ever still birth were not associated with contraceptive utilization. Ages when you get married, number of live birth and total number of children were found positively associated with contraceptive utilization.
- Injectable was the most commonly preferred method followed oral contraceptive pill and Norplant in the study areas.
- Being married were positively associated with the preference of injectable were as age 20-24 and 30-34 years were negatively associated with the preference of pills. Being married and widow were negatively associated with preference of Norplant modern contraceptive.

- Clients 269 (91%) were highly likely to get the method of their Choice in study area. Only 25 (8.5%) less get according their preference.
- Modern contraceptive methods like diaphragm and permanent method are poorly practiced.
- The reason practice modern contraceptive method at present. The most commonly mentioned reason for using contraception among currently users were 170 (57.8%) for child spacing, 112 (38.1%) for prevention of unwanted pregnancy 5 (1.7%) for prevention of STI and the least unwilling to have any more children 4 (1.4%) for medication 3 (1%).
- The main reason for change of the first method of practicing MCM were found to be Fear of side effects 50 (65.8%), medical problem 46 (60.5%) and fear of infertility 29 (38.2%).
- The reason mentioned by non - users in the study area The most common reason mentioned was do not have marital or sexual partner at present and second frequency mentioned reason was desire to have more children 19 (26%), followed by fear of side effects 15 (20.5%), medical problem 13 (17.8%). Fear of infertility 13 (17.8%).
- Women whose perceived economic status as >1,000 monthly income 3.78 times had more chance to practice modern contraceptive methods more than <100 monthly income.
- Women use modern contraceptive methods were MCMs use after they had high reproductive and fertility and desire to limit family size and history of past unwanted pregnancy.
- Their pregnancy was also earlier. Majority of women use modern contraceptive method for the first time after the birth of higher number of children

7.2. Recommendation

- **To Regional Health Bureau and MOH**

- In general this study identified socio – demographic, Reproductive and fertility variation in relation to modern contraceptive utilization in users and non users so that it lay aground and call the need of strong intervention strategy targeting socio – demographic, reproductively and fertility behavior of women and modern contraceptive utilization,
- Based on the evidences (findings) that obtained from the present study the following specific interventions are recommended.
- Family planning intervention should consider not only the health aspect but also demographic and reproductive rights should be equally considered and collaboration of relevant bodies to a very high fertility desire of population is mandatory.
- Intervention strategies that aimed to control reproductive and fertility should be according to the magnitude of the problem in different ways for the population.
- Information, education and communication (IEC) activities regarding family planning service should be strengthened by the MOH and RH through mass media messages and encouraging and broadening the activities of health workers in the study area.
- It is recommended to include MCMs in the educational curriculum both at elementary and secondary schools by education bureaus so than early knowledge and practice of MCU can be materialized at least for those who are not out of school.
- Sustainable resources especially injectable contraceptive should be ensured.

- **TO FGAE**
    - FGA should be strengthening the establishment of zonal and woreda Family planning services.
- **To woreda Health Office**

- Family Planning IEC Programs in the woreda should target women before marriage in every possible way in schools at junior level and above. Because women in this woreda go for child spacing and birth limiting after they had all the pregnancies and number of children they wanted were born.
- Since the utilization is good the woreda Health office should be maintain and encourage the pattern.

- **To Researchers**

- Finally we recommend similar research to be conducted in other parts of the country to potentiate previous finding and come up with new finding to fill the remaining gap.

REFERENCE

1. Hana Y. Modern contraceptive preference and KAP Study among women of reproductive age group (15-49) in Bahir Dar. MPH thesis, 2002 A.A Ethiopia.
2. Tilahun B. Determinate of modern contraceptive use in Dawro community (mareka) wereda. MPH thesis. April 2005.A.A Ethiopia.
3. Maternal mortality in 2005: estimates developed by WHO, UNICEF, UNFPA, and the World Bank. Geneva, Switzerland 2007.
4. Walle T. Assessment of quality of family Planning services at Bahir Dar special Zone, MPH thesis, Ethiopia, 2005.
5. Ministry of health and UNCEF. Assessment of reproductive health needs and youth friendless of health facilities in selected urban area. March .2006 Addis Ababa, Ethiopia.
6. Ministry of Health. Health and Health related indicator: policy plan and Finance Genera Directorate, FMOH. June 2010
7. Wegene T, Fikre E. knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopian Journal of Health Development Volume 21,Numeber 2,2003,109-182.
8. Abouzahr C, Wardlaw T. Maternal Mortality in 2000: Estimates by WHO, UNICEF & UNFPA: Department of Reproductive health Research World Health Organization, Geneva; 2004 http:// www. Who. In/whom estimates 2000.pdf.
9. Adeleye O.A. Akoria Z.O Shuaib and Ognoloh. O.D. Barriers and knowledge of Benefits Regarding Family planning method among women Attending Antenatal clinics in Southern Nigerian community. Asian Journal of medical sciences, 2010, 2(4): 190 – 194.

10. Ethiopia Demographic and Health survey. Population and housing census commission office: April 2005 to August 2005.
11. Johns H. Center for Communication Programs INFO Project, 2007, World Health Organization, Department of Reproductive Health and Research.
12. Omu A. Family planning: the link to achieving all 8 MDGS. Global health; 2000-2010. http://www.globalehealthmagazine.com
13. Jane T. Bertrand, Karen H, Robert J. Access Quality of care and medical Barriers in family planning programs. International family planning perspectives, 21: 64-69 & 76, 1995, accessed at http://www.dictionary.com
14. Biruk T, Assefa H, Georges R. The prevalence of covert use of contraceptive in Nazareth, Adama town. Population studies and Research center, AAU of 2002.
15. Croix-Rouge susse schweizerisches Rote kreuz Croce Rossa suizzera. Research, Attitude and perception on use of contraceptives and facilities among people of reproductive age 15-49 years- Kosovo 2006.
16. Tesfanesh B. Federal Democratic Republic of Ethiopia Ministry of health, National Reproductive health strategy; 2006-2015. March 2006
17. Tedros A, Tesfanesh B. Federal Democratic Republic of Ethiopia Ministry of health, National Adolescent and youth reproductive health strategy: 2006-2015
18. Weldegerima B, DenekewA. Women's knowledge, preferences, and practice of modern contraceptive method in 2008 Aug8, at woreta Ethiopia: http://www, Prb org/pdfd.
19. Department of Economic and social Affair, Level and trends of contraceptive use as assessed in 1998 (united Nations Publication, Forth coming).

20. FHI logo. Impact of family planning and reproductive Health on female's lives; wsp conceptual frame work. Copy right 2010
21. P o p u l at io n r e f e r e n c e b u r e a u, 2008 Data Sheet, Family Planning Worldwide.
22. Tilahun B. assessment of the determinants of modern contraceptive use in Adawro community (mareka woreda) Dawro zone, 2005 Addis Ababa, Ethiopia.
23. Awareness and determinants of family planning practice in Jimma, Ethiopia, http://onlinelibrary.wiley.com/doi/10.1111/j.1466-7657.2006.00492.x/full
24. Jamal A. Comparison of factors influences utilization of modern contraceptive methods among Rural and Urban women currently using Family Planning Service in South Wollo Zone Amhara National Regional State, 2010 A.A Ethiopia.
25. Manisha K, Jyoti M, Sumedha S, Anju P. Contraceptive Use among Low-Income Urban Married Women in India. Article first published online: 4 OCT 2010, DOI: 10.1111/j.1743-6109.2010.02047
26. . David PH, Reichenbach L, Savelieva I, Vartapetova N, Potemkina R. Women's reproductive health needs in Russia: what can we learn from an intervention to improve post-abortion care?. American Red Cross National Headquarters, 2025 E Street NW, Washington DC 2006, USA.
27. BMC Public Health. Withdrawal users' experiences of and attitudes to contraceptive methods: a study from Eastern district of Tehran, Iran, Rahnama; December 22, 2010; 10: 779.
28. Hakan O, Zuleyha A and Nazan B. Fertility Preferences and Contraceptive Behaviors among Married Women in a Suburban Part of Bursa, Turkey, Research Journal of Medical Sciences, Year: 2010 | Volume: 4 | Issue: 2 | Page No.: 64-67.

29. Jemal Alim,Comparison of factors influencing Utilization of Modern Contraceptive Methods among Rural and Urban women Currently using family planning service in south wollo Zone, Amhara National Regional state, July 2010 A.A Ethiopia.
30. ORC Macro Calverton, Maryland, Ethiopia Health and Demographic Health survey, 2005.

ANNEXES

Annex I. English Version Information Sheet

Good morning/after noon: My name is _____ I am working as data collector in a study done by Sr. Weyzer Tilahun

Title: Assessment of determinant factors on preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia**.**

The objective of this study is to assess factors determining preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town, Tigray Region, Northern Ethiopia.

Annex II. Participant's guidelines

You are being invited to take part in this study genuinely to respond and complete the structured questionnaires through face-to –face interview. The questions will examine the existing factors determining preference and practice of modern contraceptive use among women of reproductive age groups as well as the associated factors with it. Your cooperation and willingness is greatly helpful in identifying the problems related to family planning service. The information that obtained from your response will be used to develop strategies that help to improve family planning service by identifying the risk factors for family planning service.

I would also like to assure you that your name will not be written in this form and will never be used in connection with any information you tell us, it would be kept confidentially. A maximum of 25 minutes may be required to complete the questionnaire.

Participant's Benefits: There is no incentive for participating in this study. But I would like to assure you, participating in this study has no harm or risk of harm related to the study. When the result is disseminated it may help to develop strategies that help all contraceptive users in improving their service compliance.

Participant's right: I would also like to inform you to be aware of that you are not forced to participate in this study your participation is voluntary and you are not obligate to answer any question if you do not want to answer. If you feel discomfort with the question, it is your right to drop it or to skip at any point. If you have any question you can contact Sr weyzer Tilahun, the principal investigator by calling on 0914721487.

Annex III. Informed consent

I, under signed, agree to participate in a study conducted on assessment of factors determining preference and practice of modern contraceptive use among women of reproductive age groups in Shire Endaslasie town

If agree sign her_____ Date_____

If you disagree_____ Sign and go to the next house

Code of data_____ Name of data collector _____ signature

Data of interview _____Time started _____Time finished_____

Supervisor's name _____ Signature _____

Annex IV. English Version Questionnaire

Questionnaire for assessing factors determining preference and practice of modern contraceptive use among women of reproductive age groups at Shire Endaslasie town

O1.Identification number_____

02. Study area: - Woreda_____ kebeles_____

SECTION I. Assessment Socio-demography factors

001. Age _____ in year

002. What is your ethnicity?

- Tigray_____ 1
- Amhara _____ 2
- Oromia_____ 3
- Eretria _____ 4

003. Marital Status:

- Married_____1
- Single_____ 2
- Widowed_____ 3
- Divorced_____ 4

004. Occupation:

- Government employes _____ 1
- Retired _____ 2
- Privet employee _____ 3
- Merchant _____ 4
- Farmer _____ 5
- Housewife_____ 6

005. Monthly income: _____ in birr

006. Literacy status

- Illiterate _____ 1
- Read and write _____ 2
- Elementary_____ 3
- High school _____ 4
- Above high school _____5

007. What is your religion?

- Muslim _____ 1
- Catholic _____ 2
- Orthodox _____ 3
- Protestant _____4

SECTION. II REPRODUCTIVE HISTORY(Questions 021-033)

IF she says "Never married" go to 022		
021	At what age were you married? (for those who were ever married)	Enter age in years_____
022	Have you ever been pregnant?	1. ☐Yes 2. ☐No
		3. ☐No response
023	If "yes", is it before or after marriage?	1. ☐Before marriage
		2. ☐After marriage
		3. ☐No response
024	If you experienced pregnancy before marriage, how many times?	Enter the number _____
025	How old were you when you first got pregnant? (If she had any pregnancy before)	Enter age in years_____
026	How old were you when your first child was born?	Enter the age in years_____
027	How many live births have you had?	Enter the number_____
028	How many live children do you have?	Total_____ M_____ F _____
029	Did you have still birth?	1. ☐yes
		2. ☐No
		3. ☐No response
030	If "yes", how many?	Enter the number____
031	Have you ever had abortion?	0. ☐Not applicable
		1. ☐yes2. ☐No
		3. ☐No response
032	If "yes", how many?	Enter the number____

033	What was your birth interval?	1. ☐12<months
		2. ☐12-23months
		3. ☐24-35 months
		4. ☐36-47 months
		5. ☐48-59 months
		6. ☐60-71 months
		7. ☐72 and above
034	How many children would you like to have?	Total _____ M_____ F_____

III. PREFERNCE ON MODERN CONTRACEPTIVE METHODS

For current users and for those women who intend to use in the future (Questions 035-038)

035	Which modern contraceptive method do you prefer to use? (Tick only one answer)	1. ☐Pill
		2. ☐IUD
		3. ☐Injectable
		4. ☐Diaphragm
		5. ☐Norplant
		6. ☐Condom
		7. ☐Spermicides
		8. ☐Female sterilization
		9. ☐Male Sterilization
036	Do you get modern contraceptive methods of your choice? (for current users)	1. ☐yes
		2. ☐No
037	Where did/do you get from modern contraceptive method you use? (for current and ever users) (Tick only one answer)	1. ☐From private clinic
		2. ☐From government hospital
		3. ☐From health center
		4. ☐From Clinic

		5. ☐ From FGAE
		6. ☐ From NGO
		7. ☐ From Pharmacy/Drug vendor
038	Where do prefer to get family planning Service? (for all women)	1. ☐ From private clinic
		2. ☐ From government hospital
		3. ☐ From health center
		4. ☐ From Clinic
		5. ☐ From FGAE
		6. ☐ From NGO
		7. ☐ From Pharmacy/Drug vendor

Questions 039-041 (for women who prefer pill)

039	Why do you prefer pill? (Tick all mentioned)	1. Yes	2. No
		1.Very effective ☐	☐
		2. It is convenient ☐	☐
		3. Reversible ☐	☐
		4. Fewer side effects ☐	☐
		5. Easy available ☐	☐
		6. Doesn't affect lactation ☐	☐
040	How often should you take a Pill?	1. ☐ One every day	
		2. ☐ Don't know	
		3. ☐ No response	
041	If you forget to take pill for one day, what do you have to do?	1. ☐ Take it as soon as you remembered it/take it together with next dose at regular Time	
		2. ☐ Take only the next dose at regular time	
		3. ☐ Discontinue to take the rest pills	
		4. ☐ Don't know	
		5. ☐ No response	

Question 042-043 (for women who prefer IUD)

042	Why do you prefer IUD? (Tick all mentioned)		1. Yes	2. No
		1. Very effective. .	☐	☐
		2.Nothing to remember constantly	☐	☐
		3. Doesn't affect lactation.	☐	☐
		4. Reversible.	☐	☐
		5. Doesn't need replacing before 8 year.	☐	☐
		6. Relatively long acting	☐	☐
043	Beside the regular check – up visits for what problems, If any, should you come back to clinic? (Tick all mentioned)		1. Yes	2. No
		1. Fever with in 2-3 days.	☐	☐
		2. Pelvic or abdominal pain.	☐	☐
		3. Heavy bleeding.	☐	☐
		4. Amenorrhea.	☐	☐
		5. Don't know.	☐	☐
		6. No response.	☐	☐

Question 044-046 (for women who prefer injectable)

044	Why do you prefer injectable? (Tick all mentioned)		1. Yes	2. No
		1. Highly effective.	☐	☐
		2. Relatively long acting.	☐	☐
		3. Reversible	☐	☐
		4. Nothing to remember but the return visit.	☐	☐
		5. Convenient.	☐	☐
		6. No effect on lactation	☐	☐
		7. It saves time.	☐	☐
		8. Other, specify_____	☐	☐
045	How often should you get an injection?	1. ☐ Every two months		
		2. ☐ Every three months		
		3. ☐ Any other time		

		4. ☐ No response		
046	For what problems, if any, should You come back to the clinic? (Tick all mentioned)		1. Yes	2. No
		1. Headache (persistent) .	☐	☐
		2. Weight gain.	☐	☐
		3. Amenorrhea.	☐	☐
		4. Prolonged or heavy bleeding.	☐	☐
		5. Don't know.	☐	☐
		6. No response	☐	☐

Question 047 – 049 (for women who prefer Norplant)

047	Why do you prefer Norplant? (Tick all mentioned)		1. Yes	2. No
		1. Highly effective.	☐	☐
		2. Long acting.	☐	☐
		3. Reversible.	☐	☐
		4. Nothing to remember But the return visit.	☐	☐
		5. Convenient.	☐	☐
		6. Doesn't affect lactation	☐	☐
048	Would you tell me for how long can be left inside once it is inserted?	1. ☐ 3 years		
		2. ☐ 5 years		
		3. ☐ Don't know		
049	For what problems, if any, should you come back to the clinic? (Tick all mentioned)		1. Yes	2. No
		1. Irregular heavy bleeding.	☐	☐
		2. Head ache (severe).	☐	☐
		3. Infection at Normal insertion site.	☐	☐
		4. Don't know.	☐	☐
		5. No response.	☐	☐
		6. When I feel sick.	☐	☐

Question 050 – 053 (for women who prefer Condom)

050	Why do you prefer condom? (Tick all mentioned)		1. Yes	2. No
		1. Protects against STI.	☐	☐
		2. Convenient.	☐	☐
		3. Can be easily Obtained.	☐	☐
		4. Protect HIV/AIDS.	☐	☐
051	Why do you prefer female sterilization?		1. Yes	2. No
		1.Decided to have no more children	☐	☐
		2. Permanent method.	☐	☐
		3. Highly effective.	☐	☐
052	Why do you Prefer female barrier methods? (Tick all mentioned)		1. Yes	2. No
		1. Less side effective.	☐	☐
		2. Very effective.	☐	☐
		3. Protect against STI.	☐	☐
053	Why do you prefer spermicides?		1. Yes	2. No
		1. Rare side effects.	☐	☐
		2. Reversible.	☐	☐
		3. Protect against STD.	☐	☐
		4. Very effective,	☐	☐
		If used together with condom.	☐	☐

IV. PRACTICE OF MODERN CONTRACEPTIVE METHODS (Questions 054-063)

054	Have you ever used modern contraceptive method in the past?	1. ☐ yes		
		2. ☐ No --- Go to 055		
055	If "yes "to Questions 054 how old was you first started to use contraception?	Enter age in year_____		
056	What was the method you used (Tick only one answer)		1. Yes	2. No
		1. Pill.	☐	☐
		2. IUD.	☐	☐
		3. Injectable.	☐	☐
		4. Condom.	☐	☐
		5. Norplant.	☐	☐
		6. Diaphragm.	☐	☐
		7. Spermicides.	☐	☐
		8. Tubal ligation	☐	☐
		9. Vasectomy.	☐	☐
057	Are you practicing the same method currently? (for current users only)	1. ☐ yes		
		2. ☐ No		
058	If Que. 057 is No, for how long did you practice this method?	Enter the period in months/year_____		
059	Why did you change the first use contraceptive method? Tick all mentioned (please don't read out the list)		1. Yes	2. No
		1. Fear of side effects.	☐	☐
		2. Medical problem modern.	☐	☐
		3. Fear of infertility (For ever-users only)	☐	☐
		4. Cultural taboo.	☐	☐
		5. Preferred method Is not available.	☐	☐
		6. Desire to have more Children.	☐	☐
		7. Spouse disapproved.	☐	☐
		8. Lack of knowledge.	☐	☐

		9. It is sinful ☐ ☐
		10. Don't have marital or sexual Partner at present. ☐ ☐
		11. Long waiting time to get the method. ☐ ☐
		12. Service place is far from my residence. ☐ ☐
		13. Widowed/divorced/separated. ☐ ☐
060	If "No" to Que. 054 Why don't you practice modern contraceptive methods? (for non-users only) Tick all mentioned (Please don't read out the list)	1. Yes 2. No
		1. Fear of side effects. ☐ ☐
		2. Medical problem. ☐ ☐
		3. Cultural taboo. ☐ ☐
		4. Fear of infertility. ☐ ☐
		5. Desire to have more children. ☐ ☐
		6. Spouse disapproved ☐ ☐
		7. Lack of knowledge. ☐ ☐
		8. It is sinful. ☐ ☐
		9. Don't have marital Or Sexual partner at present. ☐ ☐
		10. Long waiting time to get the method ☐ ☐
		11. Service place is far from my residence ☐ ☐
		12. Due to infertility. ☐ ☐
061	Why do you practice modern contraceptive methods at present? (Tick only one answer)	Reason
		1. ☐ For child spacing
		2. ☐ For prevention of un wanted pregnancy
		3. ☐ For prevention of STD
		4. ☐ Unwilling to have any more children 5. ☐ For medication
062	How far family planning service from your residence	Per hour /minute (by walk) _____ Per hour/minute (by car) _____

VI. Client method of Contraceptive Interaction (Questions 064– 067)

S.N	**Questions**	**1**	**2**	**3**	**4**	**5**
		Not at all	Little	Fairy	Satisfactory	Extremely
063	Is using contraceptive ease and convenient to you to take it properly?					
064	The set up to that routine of contraceptive use and other daily activities, does it ever convenient to you?					
Tick from the given options		Never	Seldom	Some times	Often	Always
065	Have you ever been discontinuing using your contraceptive method?					
066	Have you ever done self assessment after using contraceptive?					

Name Signature Date Interviewer

_____ _____ _____ /_____ /_____

Supervisor _____ _____ _____ /_____ /_____

አብ አዲስ አበባ ዩኒቨርሲቲ

ሕክምና ፋካሊቲ

ነርስ ቤት ትምህርቲ

Annex V. Tigrigna Version For Information Sheet

መረዳእታን ናይ ቃል ስምምዕነት መረጋገፂ ሰነድ

ጥዕና የሃበለይ!

አነ ሹመይ ---------- ዝበሃል እንትኾን አብ "ዳህሰሳ መከላኸሊ ጥንሲ ንምጥቃምን ንምምራፅን ዓንቀፍቲ ዝኾኑ ነገራት አብ ክሊ ስነ ተዋልዶ (14-49ዓመት) ዘለዋ ደቂ ኣነስትዮ" ዝካየድ ፅንዓት ከም አካቢ ሓበሬታ ኾይነ ዝሰርሕ እየ። እቲ ፅንዓት ዝካየደሉ ቦታ አብዙይ አብ ሽረ እንዳስላሰ ጣብያ _____ ትግራይ ኢትዮጵያ እዩ ። እዚ ፅንዓት ከም በዓልቲ ዋና ኮይነን ዘካይደኡ ወይዘር ጥላሁን ዝተብሃላ አብ አዲስ አበባ ዩኒቨርሲቲ ነርስ ቤት ትምህርቲ ናይ ካልኣይ ዲግሪ ተማሃሪት እንትኾና ናይቲ ፅንዓት ሽቶ ድማ ብቐዳምነት ናይ መከላኸሊ ጥንሲ ንምጥቃምን ንምምራፅን ዓንቀፍቲ ዝኾኑ ነገራት ንምፍላጥ ይኸውን።

Annex VI. Tigrigna Version For Guidelines
ናይ ተሳተፍቲ መምርሒ፦

ንሰን አብዚ ፅንዓት ተኻፋሊት ንኽኾና ዝተጋበዛ ! አብዞም ዝስዕቡ ሕቶታት መሰረት ተገይሩ አብላዕሊ ዝተጠቀሰ ሽቶ ብምሓዝ መከላኸሊ ጥንሲ ንምጥቃምን ንምምራፅን ዓንቀፍቲ ዝኾኑ ነገራት ንምፍላጥ ስለዝሕግዝ ናትክን ምትሕብባርን ቅንዕናን ነቲ ፀገም ንምፍታሕ ዝዓዘዘ ፋይዳ አለዎ።

ስለዚ ንስኽን ትህባና ምላሽ ዝተመሓየሸ ናይ መከላኸሊ ጥንሲ አመራርፃን አጠቓቕማን ንኽህሉ ዝሕግዝን አብ አጠቓቕማ ዕንቅፋት ዝፈጥሩ ነገራት ብምፍላይን ዘላቒ ዝኾነ መፍትሒ ኸማዕብል ዝኽእል እዩ።

እዙይ እንትብል ብተወሳኺ ኸረጋግፀልክን ዝደልዩ ነገር አንተሃለወ አብዚ ዝሃብክናና ምላሽ ምንም ዓይነት ናይ መንነት መፍለይ ምልክት ከምዘይህሉን ሽምክን ኸምዘይፀሓፍን ከረጋግፀልክን ይፈቱ። ብተወሳኺ እዚ ቃለ መሕተት ተራ ቃለ መሕተት እንትኾን እንተበዝሐ 25 ደቂቃ ይወስድ።

Annex VII. Tigrigna Version For Consent Sheet

ብምስታፍክን ዝርከብ ረብሓ፡ -

አብዚ ፅንዓት ብምስታፍክን ምንም ክፍሊት የብሉን። ካብዚ ብተወሳኺ እቲ ውፅኢት እንትሰራጮ ዝተመሓየሸ ናይ መከላኸሊ ጥንሲ አመራርፃን አጠቓቕማን ንኽተማዕብላ ዝሕግዝ ይኸውን። እዚ እንትኾውን አብዚ ፅንዓት ብምስታፍክን ዝበፅሕ ጉድአት ወይድማ አዝማምያ ከምዘላ የለ ከረጋግፀልክን ይፈቱ። እንትትሳተፉ ዘለክን መሰል ድማ! ቅድሚ ኩሉ ክትፈልጥኡ ዝግባእ እዚ ፅንዓት አብ ድሌት ዝተመሰረተ እዩ። ማንም ሰብ ካብ ድሌትክን ወፃኢ አገዲዱ ከሳትፈክን አይኽእልን። ዘይጠዓመክን ሕቶን ዘይትደልዮኡ ምላሽ እንተሃለዩ ዘሊልክን ክትሓልፈኡ አብ ዝደለኽንኡ ጊዜን ሰዓትን እውን ክተቋርፃ ሙሉእ መሰል አለክን። ስለዙይ ዝኾነ ሕቶ ወይ ድማ ቅሬታ እንተሃልይክን

ወይዘር ጥላሁን ክትረኽበኣ ትኽእላ ወይድማ ብስልኪ ቁፅሪ 0914-72-14-87 ክትድውላ ትኽእላ ኢኽን። ብተወሳኺ ካሊእ ጥርዓን እንተሃሊክን ብስልኪ ቁፅሪ 011-553-87-34 ብምድዋል ንቢሮ RBI ክትጠርዓ ትኽእላ ።

አብ ላዕሊ ብዝተገለፀ መሰረት ንስኽን አብዚ ፅንዓት ክትሳተፉ እንተ ተስማሚዕኽን አብቲ ተዳልዩ ዘሎ ናይ ክታም ቦታ ክታምክን አንብራልና።

ናይ ተሳታፊ ክታም ---------- መዓልቲ----------

ንኽብረትኽን ፍቃድኽን እንተኾይኑ ክቅፅል ዶ?

1. **እወ እንተኾይኑ ቃለ-መሕተት ቐፅሊ**
2. **አይፋል እንተኾይኑ ናብ ቐፃሊ ተሳታፊ ሕለፍ**

ናይ ሐበፊታ ሰውር መለለይ ----------

ስም አካቢ ሓበፊታ ---------- ክታም ----------

ቃለ - መሕተት ዝገበረሉ መዓልቲ ---------- ዝተጀመረሉ ሰዓት-------- ዝተወደአሉ ሰዓት-----

ስም ተቆፃፃሪ---------- ክታም ----------

Annex VIII. Tigrigna Version Questioners

ንምድህሳስ ዓንቀፍቲ ዝኾኑ ነገራት ንምምራፅን ንምትግባርን መከላኸሊ ጥንሲ ኣብ ክሊ ዕድመ ወሊድ ዘለዋ ደቂ ኣነስትዮ አብ ሽረ እንዳስላሰ ከተማ ንዝግብር መፅናዕቲ ዝተዳለዉ ሕቶታት.

01. *መለለይ ቁፅሪ* _____.

02. *ዝፅንዓሉ ቦታ ወረዳ*_____*ቀበሌ*_____.

<u>ክፍሊ -1 ምዕሩይ ቃለ መሕተት</u>

I. ማህበረ ሰባዊ ባህርያት

001 *ዕድመ* _____*ብዓመት*

002 *ብሄርክን እንታይ እዩ*

- *ትግራይ*_____ ***1***
- *አምሓራ* _____ ***2***
- *ኦሮሞ* _____ ***3***
- *ካሊእ* _____ ***4***

003 *ናይ መርዓ ኩነታት*

- *በዓልቲ ሓዳር* _____ ***1***
- *ሓዳር ዘይብላ*_____ ***2***
- *ሰብኣያ ዝሞታ*_____ ***3***

- ዝተፋተሐት _____ *4*

004 ስራሕ

- ሰራሕተኛ መንግስቲ _____ *1*
- ጡረተኛ _____ *2*
- ናይ ግሊ ስራሕተኛ _____ *3*
- ነጋዲት_____ *4*
- ሓረስታይ _____ *5*
- ካሊእ_____ 6

005. ወርሓዊ እቶት _____ ብቅርሺ

006. ናይ ትምህርቲ ኩነታት

- ዘይተምሃረት _____ *1*
- ምንባብን ምፅሓፍን _____ *2*
- ቀዳማይ ደረጃ _____ *3*
- ካልኣይ ደረጃ _____ *4*
- ልዕሊ ካልኣይ ደረጃ _____ *5*

007. ሃይማኖትክን እንታይ እዩ?

- እስላም _____ *1*
- ካቶሊክ _____ *2*
- ኦርቶዶክስ _____ *3*
- ካሊእ _____ *4*

	እንድሕር አይተመርዓወትን ናብ ቁጽሪ 022 ኪዲ	

II. ናይ ስነ ተዋልዶ ታሪኽ

021	ኣብ ክንደይ ዕድሜኽን ተመርዒኽን ? (ነተን ዝተመርዐዋ)	ዕድመ ብዓመት_____
022	ጠኒስክን ዶ ትፈልጣ?	1. ☐ እወ 2. ☐ ጠኒሰ ኣይፈልጥን 3. ☐ መልሲ የብለይ
023	«እወ » እንተይልክን ቅድሚ መርዓ ወይስ ድሕሪ መርዓ?	1. ☐ ቅድሚ መርዓ 2. ☐ ድሕሪ መርዓ 3. ☐ መልሲ የብለይን
024	ቅድሚ መርዓ እንተይልክን ክንደይ ጊዜ ጠኒስክን?	ብቁዕሪ ኣእትዊ _____
025	ናይ መጀመሪያ ጥንስኽን ኣብ ክንደይ ዕድመኽ ነይሩ? (እንድሕር ጥንሲ ነይርዋ)	ብቁዕሪ ኣእትዊ _____
026	ብሂወት ክንደይ ወሊድክን?	ብቁዕሪ ኣእትዊ _____
027	ናይ መጀመሪያ ቆልዓ ኣብ ክንደይ ዕድመኽን ወሊድክንኡ/ኣ?	ዕድመ ብዓመት _____
028	ክንደይ ቆልዑ ኣለውኽን?	ብጠቅላላ ---------- 1.ደ/ኣንስትዬ_____ 2.ደ/ተባዕትዮ_____
029	ዝሞተ ቆልዓ ወሊድክን ትፈልጣ ዶ?	1.☐እወ 2.☐ኣይፈልጥን 3.☐መልሲ የብለይን
030	«እወ» እንተይለን ክንደይ?	ብቁዕሪ ኣእትዊ_____.
031	ጥንሲ ከይዱኪ ይፈልጥ ዶ?	1.☐እወ 2.☐ኣያጋጠመንን 3.☐መልሲ የለን
032	«እወ» እንተይልኪ ክንደይ?	ብቁዕሪ ኣእትዊ_____.
033	በቢ ክንደይ ዓመት ኣረሓሒኞክን ትወልዳ?	1.☐ ትሕቲ 12 ወርሒ 2.☐12-23 ወርሒ

		3. ☐ 24-35 ወርሒ. 4. ☐ 36-47 ወርሒ. 5. ☐ 48-59 ወርሒ. 6. ☐ 60-71 ወርሒ. 7. ☐ 72ን ን ካብኡ ንላዕሊ.
034	ክንደይ ቆልዑ ክህልወክን ትመርዋ?	☐ በአጠቃላሊ. ☐ ደ/አንስትዬ ☐ ደ/ተባዕትዮ

III. ምርጫ ናይ መከላኸሊ ጥንሲ

ንተጠቀምቲን ቀፃላይ ክጥቀማ ዝደሊያን ሕቶታት 35-38

035	አየነዋይ መከላኸሊ ጥንሲ ትመርዋ ? (አብቲ መልሲ ራይት ግብሪ)	1. ☐ ክኒን 2. ☐ ናብ ማህፀን ዝአቱ 3. ☐ መርፍእ ዝውጋእ 4. ☐ ዲያፍራም 5. ☐ ናብ ሜዋዳ ዝቅበር 6. ☐ ኮንደም 7. ☐ ካቲ ፈሳሲ ዘምክን 8. ☐ ናይ ደ/አንስትዮ መምከኒ 9. ☐ ናይ ደ/ተባዕትዮ መምከኒ
036	መከላኸሊ ጥንሲ ትረኽበኡ ብምርጫኽን ድዩ? (ብቀረባ ተጠቀምቲ ንዝኸና)	1. ☐ እወ 2. ☐ አይኮነን
037	መከላኸሊ ጥንሲካብይ ትረኽባ? (ተጠቀምቲን ንቀፃላይ ዝጥቀማን) (ሓደ መልሲ ጥራይ ራይት ግበሩ)	1. ☐ ካብ ግሊ ክሊኒክ 2. ☐ ካብ መንግስታዊ ሆስፒታል 3. ☐ ካብ ጥዕና ኬላ 4. ☐ ካብ ጥዕና ጣብያ

		5. ☐ካብ ናይ ቤተሰብ መምርሒ 6. ☐ካብ መንግስትዊ ዘይኮነ ድርጅት 7. ☐ካብ መድሓኒት ቤት መሸጢ(ፋርማሲ)
038	ናይ ቤተሰብ ምጣነ ግልጋግሎት ካበይ ክትረኽባ ትደሊ? (ንኹሉን ደ/አንስትዮ)	1. ☐ካብ ግሊ ክሊኒክ 2. ☐ካብ መንግስታዊ ሆስፒታል 3. ☐ካብ ጥዕና ጣብያ 4. ☐ካብ ጥዕና ኬላ 5. ☐ካብ ናይ ቤተሰብ መምርሒ 6. ☐ካብ መንግስትዊ ዘይኮነ ድርጅት 7. ☐ካብ መድሓኒት ቤት መሸጢ(ፋርማሲ)

ሕቶታት 039-041 (ንደ/አንስትዮ ክኒና ንዝመርግ)

039	ንምንታይ ክኒና መሪፃክን? (ራይት ይገበር)	1.እወ 2.አይኮነን 1. ብጣዕሚ ፅቡቕ ወ.ፂ.ኢ.ት ስለ ዘለዎ ☐ ☐ 2. ዝምቹ ስለ ዝኾነ ☐ ☐ 3. ንቕፃሊ ክጠንስ ስለ ንኽእል ☐ ☐ 4. ሳዕቤኑ ንእሽትይ ስለዝኾነ ☐ ☐

		5. ብቐሊሉ ስለ ዝርከብ ☐ ☐ 6. ካሊእ ☐ ☐
040	እቲ ክኒና ከመይ ይውሰድ?	1. ☐ በቢሓደ መዓልቲ 2. ☐ ኣይፈልጦን 3. ☐ መልሲ የብለይን
041	እንድሕር ሓደ መዓልቲ ክኒና ዘይዋሓጥክን ሓሊፉክን ኮይኑ እንታይ ትገብራ?	1. ☐ ኣብዘስታወስክሞ ሰዓት ይወስዶ ወይም ምስቲ ዝቐፅል ብሓባር ይወስዶ። 2. ☐ እቲ ቀፃሊ ጥራሕ ይወስድ 3. ☐ ዝቀረየ ክኒና የቋርፆ 4. ☐ ኣይፈልጥን 5. ☐ መልሲ የብለይን
042	ንምንታይ ናብ ማህፀን ዝኣቱ መሪፅክን? (ራይት ንኹሉ ዝተጠቀሰ)	
043	ብይዘካ ወርሓዊ ክትትል ብምንታይ ፀገም ናብ ክሊኒክ ትምለሳ? (ራይት ንኹሉ ዝተዘርዘረ)	
044	ንምንታይ እየን መርፍኣ መሪፀን ? (ራይቲ ናብ ንኹሉ ዝተዘርዘረ)	

045	**በቢ ክንደይ ጊዜ እየን መርፍእ ዝውጋኣ?**
046	**ብምንታይ ፀገም ናብ ክሊኒክ ትመለሳ? (ራይት ንኹሉ ዝተገለፀ)**
047	**ንፃምንታይ አብ ጭዋዳ ዝአቱ መሪፀን (ራይት ንኹሉ ዝተገለፀ)**
048	**ኣብ ጭዋዳ ምስ ኣተወ ንኽንደይ ግዜ ከምዝፀንሕ ክትነግራና ትኽእላዶ?**
049	**ንፃምንታይ ፀገም ናብ ክልኒክ ትምለሳ ? (ራይት ንኹሉ ዝተገለፀ)**
050	**ንፃምንታይ ኮንደም መሪፀን (ራይት ንኹሉ ዝተገለፀ)**
051	**ንፃምንታይ ናይ ደ/አንስትዮ መምከኒ ሜላ መከላኸሊ ጥንሲ መርዒክን?**
052	**ንፃምንታይ ናይ ደ/አንስትዮ መምከኒ ፈሳሲ መርፅክን? (ራይት ንኹሉ ዝተገለፀ)**
053	**ንፃምንታይ መምከኒ ፈሳሲ መርፅኪ?**

V. 054-062 ንተጠቀምቲን ንቀፃሊ ክጥቅማ ዝደልያ

ህሞ. 054-062 ንተጠቀምቲን ንቀፃሊ ክጥቅማ ዝደልያ		
054	**መከላኸሊ ጥንሲ ተጠቀምክን ትፈልጣ ዶ?**	1. ☐ **እወ** 2. ☐**ኣይፈልጥን ናብ ቁፅሪ 055 ኪድ**
055	**እድሕር እወ ናብ ሕቶ 056 ኣብ**	

	ክንደይ ዕደመኽን ናይ መጀመሪያ መከላኸሊ ጥንሲ ተጠቒምክን?	ዕደመ በዓመት አእቱ _____.
056	እንታይ ዓይነት መከላኸሊ ጥንሲ ኢኽን ትጥቀማ? (አብ ሓደ ጥራይ ራይት ግበር)	1. እወ 2. አይኮነን 1. ክኒና ☐ ☐ 2. ናብ ማህፀን ዝአቱ ☐ ☐ 3. መርፍእ ☐ ☐ 4. ኮንደም ☐ ☐ 5. ናብ ጭዋዳ ዝአቱ ☐ ☐ 6. ናይ ደ/ኣ ኮንዶም ☐ ☐ 7. መምከኒ ፈሳሲ ወዲ ተባዕታይ ☐ ☐ 8. ናይ ደ/ኣ ማህፀን ትቦ ምቁራፅ ☐ ☐ 9. ናይ ወ/ተ ፈሳሲ መተሓላልፊ ቱቦ ምቁራፅ ☐ ☐
057	ብቀረባ ሓደ ዓይነት መከላኸሊዲኽን ትጥቀማ? (ንቀረባ ተጠቀምቲ)	1. ☐ እወ 2. ☐ አይኮነን
058	ንድሕር ሕቶ 057 አይኮነን መልሲ ንኽንደይ ጊዜ እዚ ዓይነት ተጠቀምክን?	ግዜ ብወርሒ በዓመት አእቱ _____.
059	ንምንታይ እዚ መከላኸሊ ጥንሲ ምጥቃም ኣቋሪፅክን? ዝርዝር አይነበብ ሓደራ)	1. እወ 2.አይኮነን 1. ሳዕቤን ፈርሒ ☐ ☐ 2. ናይ ጥዕና ፀገም ከምፀአለይ ኢለ ☐ ☐ 3. መኻንነት ምፍራሕ (ንዘይ ተጠቀምቲ ጥራይ) ☐ ☐ 4. ንባህሊ ምፍራሕ ☐ ☐ 5. እቲ ዝመርፆ ስለ ዘየለ ብብዝሓት ☐ ☐ 6. ቆልዑት ብዙሓት ክህሉወኒ ስለ ዝደለኹ ☐ ☐ 7. በዓል ገዛይ ስለ ዘይቅበሎ ☐ ☐ 8. ፍልጠት ስለ ዘይብለይ ☐ ☐ 9. ነውሪ ስለኾነ ☐ ☐ 10. ሕዚ ስብኣይ ወይም ናይ ግብረ ስጋ ርክብ ዓርኪ ስለ ዘይብለይ ☐ ☐

		11. ቡዙሕ ጊዜ ስለ ንፅበ ንምውሳድ	☐	☐
		12. ምጣነ ስድራ ዝውሃበሉ ካብ ገዛይ ስለ ዝርሕቐ	☐	☐
		13. ስብኣየ ስለ ዝሞተ ወይም ስለ ዝተፋታሕኹ	☐	☐
060	ንድሕር 055 አይጥቀምን ንምንታይ መከላኸሊ ጥንሲ ዘይትጥቀማ ? (ንዘይጥቀማ) (ንኹሉሎም ዝተዘርዘሩ ራይት ግበራ)		1. እወ	2. አይኮነን
		1. ሳዕቤን ፈርሑ	☐	☐
		2. ናይ ጥዕና ፀገም	☐	☐
		3. ባህላዊ ተፅዕኖ	☐	☐
		4. ምኻንነት ምፍራሕ	☐	☐
		5. ብዙሓት ቆልዑ ክህልወኒ ስለ ዝደለ	☐	☐
		6. ስብኣየ ዘይድግፈኒ ስለ ክኾነ	☐	☐
		7. ፍልጠት ስለ ዝሓፀረኒ ክወስድ	☐	☐
		8. ነውሪ ስለ ዝኾነ	☐	☐
		9. ስብኣይ ስለ ዘይብለይ ወይም ናይ ግብረ ስጋ ርክብ ዓርኪ የብለይን	☐	☐
		10. መከላኸሊ ንምውሳድ ብዙሕ ጊዜ ስለ ንፀንሕ .	☐	☐
		11. ምጣነ ስድራ ዝወሃበሉ ቦታ ካብ ገዛይ ስለ ዝርሕቐ	☐	☐
		12. መኻንነት ስለ ዝምፅእ	☐	☐
061	እንድሕር “አይኮነን” ንቐፅሪ 57 ንምንታይ እቲ ናይ መጀመሪያ ቀይርክነኤ? (ኣብ ሓደ መልሲ ጥራሕ ራይት ይገበር)		1. እወ	2.አይኮነን
		1. ናይ ጥዕና ፀገም	☐	☐
		2. በዓል ገዛይ ስለ ዘይተስማዕመፆ .	☐	☐
		3. ዝመረፅክዎ ስለዘየለ	☐	☐
		4. ጥንሲ ስለ ዘይተኸላኸለለይ	☐	☐
		5. ሳዕቤን ፈሪሐ	☐	☐
		6. መኻንነት ፈሪሐ	☐	☐
062	ግልጋሎት ምጣነ ስድራ ካብ	በስዓት/ደቂቃ/በእግሪ _____.		

	መኖሪያ ገዛኺ	ብስዓት /ደቂቃ/ብመኪና _____.

IV. ርክብ ተጠቀምቲን መከላከሊ ጥንስን

ተ.ቁ	ሕቶ	1	2	3	4	5
		የለን	ብውሕድ	ብመጠኑ	ብዘዕግብ	ካብ መጠን ንላዕሊ
063	መከላኸሊ ጥንሲ ክትወስዳ ቀሊልን ምችዉን ድዩ?	»	»	»	»	»
064	ናይ መከላኸሊ እትወስዳሉ ሰዓትን ካልእ መዓልታዊ ንጥፈታትክን ይጠዓዓሞዶ?	»	»	»	»	»
		ፈጺመ	ሓልሓልፈ	ሓደሓደ ግዜ	መብዛሕቱ	ኩሉ-ግዜ
065	መከላኸሊ ጥንሲ ምውሰድ አቃሪፅክን ትፈልጣ ዶ?					
066	መከላኸሊ ጥንሲ ብስርዓቱ ምጥቃምክን ንሞፍላጥ ዓርስኽን ፈቲሽክንኡ ትፈልጣ ዶ?	»	»	»	»	»

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

Declaration

I, under signed, approved that this is my original work and has never been presented for a degree in any other university and all the resource materials used for this thesis have been acknowledged.

Name: Weyzer Tilahun (BSN, Assistant Graduate I)

Signature: _____

Place of submission: College of health sciences, Department of nursing and midwifery.

Date of submission: _____

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

Name: Mr. Daniel Mengustu (RN,BSC,MSC)

Signature: _____

Date of approval: _____