ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

A GEOGRAPHIC STUDY OF FACTORS AFFECTING AN ADOPTION OF FAMILY PLANNING SERVICES: THE CASE OF SODDO ZURIA WOREDA, SNNPRS, ETHIOPIA

By

SIMEON EMANE

OCTOBER, 2002

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A GEOGRAPHIC STUDY OF FACTORS AFFECTING AN ADOPTION OF FAMILY PLANNING SERVICES: THE CASE OF SODDO ZURIA WOREDA, SOUTHERN NATION NATIONALITIES AND PEOPLE'S REGIONAL STATE

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Declaration

This thesis is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

Name _____

Sign_____

Date_____

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

Name _____

Signature _____

Date_____

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ACRONYMS

AHA - African Humanitarian Action

CPR - Contraceptive Prevalence Rate Usually Expressed in % to the Total population in Age bracket (15-49) in a given country or region.

CPS - Contraceptive Prevalence Survey

CSA- Central Statistical Authority of Ethiopia

EDHS- Ethiopian Demographic and Health Survey

FGAE- Family Guidance Association of Ethiopia

FP Family planning

ICE- Information education and Communication service in family planning

ICPD- International Conference on Population and development

IFFP- International Family Planning Perspectives

IPPF- International Planned parenthood Federation

IUCD- Intrauterine Contraceptive Device

MCs- Modern contraceptives

MSIFPSD- Management strategies in improving Family Planning Service Delivery

NGOs- Non-Government Organizations

PAs- Peasant associations

PIP- Population Information Program

PRB- Population Reference Bureau

RWDA- Rural Women's development Agents

SNNPR- Southern Nation Nationalities and Peoples Region

UNFPA- United Nation's Fund for Population Activities.,

WB- World Bank

WFS- World Fertility Survey

Abstract

This community based cross-sectional study on factors determining modern contraceptive acceptance by currently married women in age bracket (15-49) was conducted in Sodo Zuria Woreda in SNNPR Wolaita Zone. The method of data collection was using pre-tested questionnaires administered to randomly selected women by trained interviewers at the homes of respondents. A semi-structured questionnaire was also administered to four health personnel currently engaged in FP services in four government health organization and one NGO that provide FP service to the community. This was done to assess the quality of FP service in the woreda.

A total of 396 currently married women in ages (15-49) were interviewed. Mean ideal number of children desired was very large (9.7); when 'God Knows' answers was taken as 8 children on average. It significantly varied across educational, religious; and residential background of the respondents. More than 80% of the study population have Knowledge to modern contraceptives and above 76% also have a positive attitude to wards modern contraceptives. Among the Sample population 46.2% were using modern contraceptives at the time of the interview. From these 92% were spacers, and 8% used it because they wanted no more children. A number of socio-economic and geographic factors, which have been assumed to have an influence on ideal family size preference, knowledge to modern contraceptives, discussion to use modern contraceptives, modern contraceptives ever and current use and future intention to use modern contraceptives were studied. Ideal family size preference significantly varied with variation in literacy level, religion, and residence. Discussion to use modern contraceptives only significantly associated with literacy. That is, the literates are more likely to discuss to use modern contraceptives than their counterparts. modern contraceptives ever and current use are significantly associated with literacy, residence, and NGO-intervention.

In all levels of FP adoption (Knowledge to modern contraceptives, discussion to use modern contraceptives, contraceptive ever and current use, and intention to use modern contraceptives) the strongest association was observed with literacy level of the respondents.

CHAPTER ONE

INTRODUCTION

World population has passed through different stages of demographic transitions largely in response to socio-economic development achieved by mankind (Seccombe, 1992, Bandarage, 1997 and Flandrin, 1979). The time period required for these transitions also varied from region to region, nation to nation and one social group to the other because of the variations in socio-economic and cultural factors. Though, the exact period for consciously guided demographic transition that centered on birth control is not known, it goes back to the 1700s when coitus interrupts was widespread in southern France because of many egalitarian social and religions group movements in the then period (Flandrin :1979). What so ever the cause may be most of the present, western world, eastern and southern Europe have moved close or below replacement fertility levels since the 1950s. Total fertility in Asian and Latin American countries also declined from 5.87 and 5.92 in 1980/85 to 3.93 and 3.71 children per woman in 1950/55 respectively due to massive adoption of modern contraceptives.

This figure in Africa has never been below 6 children per woman since 1950 (UN, 1991 a: 182). Regarding total fertility in Ethiopia it is one of the highest in the world. In the period 1985-90 when total fertility in Africa was 6.2 children per woman, it was 6.8 children per woman in Ethiopia (UN, 1991a:25). Total fertility in Ethiopia at present,

according to PRB (2000), is 6.7 children per a woman, with no change from 1991. This indicates the dismal level of contraceptive adoption in the country.

The major reasons attributable to the low level of contraceptive adoption in developing countries like Ethiopia according to UNFPA(1999) and Bandarage(1997) are poverty, lack of access to health care, side effects of contraceptives, and the socio-economic conditions prevailing in these parts of the world. Thus, at present development programs that focus women empowerment as a poverty reduction strategy are accepted as a quick fix solution of population growth and economic development (UNFPA, 1999). Women empowerment (Provision of better educational and employment opportunities to women) is accepted as a gravedigger of large family behavior in developing countries like Ethiopia. However, Jain (1994) in his studies in south East Asia also concluded that contraceptive knowledge and practice can be significantly raised in conditions of extreme poverty if service delivery programs are adapted to local conditions.

In this study an attempt is made to assess the level of contraceptive adoption and factors affecting contraceptive acceptance by currently married women in Soddo Zuria Woreda, Wolaita Zone, SNNPR. This was done to find whether voluntary based FP intervention by government and non-Government organizations has brought about change or not in the contraceptive behavior of the population.

1.1 STATEMENT OF THE PROBLEM

Family planning services- (dissemination of information and provision of modern contraceptives) are recent introduction, and therefore new to the majority of the population in the developing countries. As a result their adoption is greatly challenged by social, economic, cultural, religious, psychological and physical barriers (Bandarage, 1997).

It is often argued that parents in traditional societies want large family for several reasons. Children are seen valuable to peasant households as labour force in rendering services and directly participating in production activities. Because of this fact people in these traditional societies remained reluctant to accept MC/FP/ (Mohmoud cited by Mueller, 1976 and Boserup, 1985).

Furthermore, the old age security value of children in peasant societies also prohibits contraceptive use. Repetto (1976) and Arnold et. al.(1975) in their studies in southeast Asian countries and USA-Hawii state have revealed that couples who want children for current economic and future security reasons (rural and urban lower class) tend to have higher actual and desired fertility than those who want children primarily for psychological reasons (urban middle class). This indicates that, old age security value of

children also works against contraceptive adoption by the poor majority of the population in the developing countries. Furthermore, Bandarage (1997) and Shane (1997) have also indicated that, couples under uncertain and insecure social and economic conditions(people who are illiterate, living in rural areas) in peasant societies take high fertility as an efficient strategy to strengthen their social and economic positions and hence are reluctant to use contraceptives. In addition, Shane (1997) and Bandarage (1997) have also pointed out that, the majority of people in developing countries are reluctant to use modern contraceptives even when they have a wide spread knowledge to the benefits obtainable from family planning due to many social, economic, and cultural reasons. This indicates that, couples in developing countries like Ethiopia are unable to regulate fertility because of various social, economic, cultural, psychological and demographic reasons.

In Ethiopia, according to EDHS (2000:53) the knowledge of contraceptive method to all women and men in ages (15-49) is found to be 82% and 86%, respectively. And this figure to currently married women and men is 86% and 92%, respectively. The urban/rural variation in knowledge of contraceptive methods in the same survey for currently married women and men is found 98.1 and 83.5 respectively .As opposed to this high level of knowledge; Contraceptive practice for women and men currently married (15-49) years of age is found to be 6% and 11.7%, respectively in the same survey. However, this figure in Kenya and Zimbabuwe from Sub-Saharan Africa (UN, 1996) is 17.1% and 36.1% respectively. Further more, in most of Asia and Latin America above

20% of women in age bracket (15-49) practice contraceptives since the 1980s. To mention some, Singapore 73% in 1982, Bangladesh 24.4% in 1989 and 36% 1993-94, Puerto Rico 62% in 1982 and Honduras 32.9% in 1987 (UN, 1996:54). Thus, contraceptive usage in Ethiopia below 6% for currently married women in ages (15-49) in 2000 compared to some of sub-Saharan African countries above 17% in 1980 and in most of the Asian and Latin American countries above 20% since 1980s indicates the dismal level of contraceptive adoption by the eligible social groups in the country.

However, there are a few studies done in Ethiopia regarding the level of contraceptive adoption and factors affecting acceptance of MC. Studies by Hogan et. al.(1999) in SNNPR and that by Fikreab (1989) in North Showa- Tegulet and Bulga Awaraja tried to assess determinants of contraceptive use, and confirmed that women better educated and living in urban areas are more likely to use modern contraceptives than rural illiterate women. The findings of the above researchers confirmed WFS in different periods. However, there are no studies except that by Hogan et. al. (1999) which has spatial element as a passing remark in including samples from agro-climatic zones i.e. kolla, Woina Dega and Dega. Therefore, to make a modest contribution in filling this gap samples were taken at increasing distance from Soddo town, with the assumption that towns are spring boards in family planning services. This is to assess the impact of a geographical separation in MC usage by rural people.

On the other hand no other study has made comparative assessment of family planning adoption in NGO intervened and non-NGO intervened areas in family planning service. Thus, the other purpose of this study is to fill this gap. To do this the samples were taken from kebeles in which there have been family planning services by NGOs and those from which there have been no family planning service by NGOs in the last 9 years, (1991-1999). In Soddo Zuria Woreda, family planning service is provided to the population both by NGOs and the government in the existing health institutions. The Woreda has 42 kebeles from which NGOs had been covering only 21 rural and 5 urban kebeles whereas the government has been covering all the kebeles in its two rural clinics, one health station and one zonal Hospital at Soddo Town. This means that the effect of government intervention is the same for all the existing 42 kebeles in the woreda. Because the government health institutions provide FP service-dissemination of information and provision of service only on clinic basis; where as NGOs have been rendering FP service on both clinic and outreach basis. This means that FP service by the government hae been limited to people who come to health in institutions in need of it, where as FP service by NGO has been available to people in the community. Regarding the affordability of the cost for MCs since 1991; except sterilization all MC methods are freely available for needy women. The difference lies in the way it is made available. The government health intuitions supply services to the women who come to health institutions, but the NGo have been distributing at homes of needy women using CBD works.

1.2. OBJECTIVE OF THE STUDY

The major objective of this study is to assess the influence of socio- economic and physical factors on contraceptive adoption, i.e. knowledge, attitude and practice of modern contraceptives in Soddo Zuria Woreda by currently married women in age bracket (15-49).

The specific objectives are:

1. To assess the difference in knowledge, attitude and practice of MC by currently married women in ages (15-49) with the difference in socio-economic variables such as (education, occupation, religion, residence) and NGO intervention.
2. To investigate spatial variation of FP acceptance.
3. To point out the policy implication of the study.

1.3 RESEARCH QUESTIONS

To achieve the objectives stated, the following research questions were formulated:

1. What are the major socio-economic factors that have significant impact on FP adoption (knowledge, attitude towards MC, actual practicing of MCs and future intention to use MCs in the Woreda by currently married women?
2. Does Ideal family size preference significantly vary with variation in socio-economic factors (education, occupation. religion, residence)?
3. Does Modern contraceptive (knowledge and attitude) significantly vary with the variation in selected socio economic factors in the woreda?
4. Is there a significant variation in discussion to use MC, MC ever and current use, and intention to use MC with variation in selected socio-economic factors (education, religion occupation, residence and NGO- intervention)?

To answer the research questions raised the following methods of data acquisition and analysis were designed.

1.4. DATA AND METHODOLOGY

The data required for the study are collected using structured and semi-structured questionnaires. Structured Questionnaire is presented to sample women currently married in ages (15-49) to obtain their response with respect to Knowledge, attitude, and practice of MC, and intention to use MC.

The semi-structured questionnaire is presented to health workers both in Government and Non-government Organizations providing family planning service currently. At present there are two rural clinics, one Health station and one Zonal Hospital at Soddo town and one NGO-named African Humanitarian Action providing the woreda population with FP information and service. Hence, the semi-structured questionnaire is presented to the health personnel providing FP information and services to the population in these five organizations in the woreda. This is to obtain information on the state of FP services in the Woreda.

1.4.1 SELECTION AND MEASUREMENT OF VARIABLES

a) Dependent variables

The major aspects of contraceptive adoption such as

1. Ideal family size preference
2. Knowledge of MC
3. Discussion to use MC
4. Ever and current use of MC
5. Future intention to use MC, are five sets of dependent variable selected in the study.

b) Independent Variables

Five sets of independent variables such as education, occupation, religion, residence and NGO intervention and Non-NGO intervention in FP service were selected as independent variables in the study.

1.4.2. SAMPLING DESIGN AND SAMPLE SIZE

a) Sampling Design

In this study purposive, cluster, random and systematic random sampling techniques as appropriate were used. The Woreda has a total of 42 kebeles: 10 urban and 32 PAs.

In selecting sample kebeles purposive sampling is used. This is done to include the sample kebeles from the nearest and the most distant areas from Soddo town in order to observe the effect of geographical separation on FP acceptance. As towns are usually springboards in case of FP information and service, this is a viable step in the selection of sample kebeles. In addition, for the last 9 years (1991 - 1999) there was family planning service intervention in 21 PAs and five urban kebeles. This means, from the total 42 kebeles in the Woreda, the population of 26 kebeles had better exposure to FP information and service while the population in the remaining 16 kebeles had lower exposure to FP information and service in the last nine years. Because of this fact purposive sampling was used to include sample kebeles from the nearest and the most distant places both from those in which there was NGO intervention in FP service and those in which there was no FP intervention by NGOs in the last nine years.

Hence, four PAs two from NGO intervention in FP service and two from Non-NGO intervention in FP service; and two urban kebeles in the same way were selected for this study. The sample rural kebeles both from NGO intervention in FP service and non-intervention in FP service were selected- one at 5km and the other at 22-23km distance from Soddo Town. This is done to assess the impact of residence (urban/rural) on FP service.

All in all three kebeles from NGO intervention and three from non- NGO intervention, a total of six kebeles, accounting for 14% of the total kebeles in the Woreda were selected for the study.

The population of currently married women in the age bracket (15-49) formed the target population for the study.

b) The selection of Households and sample size

Because of resource constraints (money and time) and larger number of variables to be analyzed in social research Kish (1965) and Som (1973) suggested a sample size of about 11% to be sufficient for the study.

Because of this fact 10% of households in ages (15-49) in the sample kebeles were considered a sufficient sample size for this study. Selection of Households in PAs and urban kebeles followed slightly different steps. In the case of PAs, as all PAs have four clusters (Idir) one cluster (Idir) is selected at random. To include the sample households systematic random sampling was used at random start at one corner of the cluster. The first household is signed as a sample household starting at a given corner of a cluster, and every fourth household is taken progressively until the sample size is completed proportional to the target population from that specific PAs. When the sample size decided proportional to that specific PAs is not completed in a selected cluster the cluster immediate to the selected cluster is used to include the sample households following the same step.

While marking and counting the sample households, those households in which the woman was found above age 49 or widowed were avoided by asking different preliminary questions that can indicate the woman's age and her marital status. In stead, the household immediately before or after that household is looked at as if the woman in either household is in the age bracket (15-49) and included as a sample. This was found as a good technique that can widen the probability to include currently married women in ages (15-49) during pilot survey.

In the case of urban kebeles, major roads crossing the kebeles and those bounding the kebeles are used as clusters. Hence, clusters were decided using these roads, and signing and counting sample households was continued until the sample size was completed in that specific kebele following the same step as in PAs.

Table 1: Reported and sampled number of households and Number of Interviewed women by sampled kebeles.

kebele category	Name of sampled kebele	Distance in km from Soddo town	Reported No of total Household	Households with women in ages (15-49) 60%of T.H.H	Sample size 10% of H.H with women in age (15-49)	No of women Interviewed
Kebeles from NGO-intervention in FP service	Waraza Shoho	5	1229	737	74	74
	Amachok odo	23	1370	822	82	81
	Soddo-Town 1-0-2	-	987	592	59	59
Kebeles from No NGO intervention in FP service	Kokate marchare	5	989	599	60	60
	Tome-Gerara	22	1223	734	73	73
	Soddo town 2-0-2	-	817	490	49	49
Total	6	-	6615	3774	397	396

Source: Total No. of Households and the number of households with women in ages (15-49) are obtained from updated lists of H.H for the sampled kebeles

1.4.3. METHOD OF DATA ANALYSIS

At the first stage of analyzing and describing the data preliminary descriptive statistics such as mean and percentages were calculated.

Furthermore, a chi-square statistic analysis is employed so as to measure whether there is a significant variation in the selected dependent variables (such as the number of children preferred, knowledge of MC, discussion to use MC, ever and current use of MC, and future intention to use MC), with variation in the selected independent variables such as education, occupation, religion, residence and NGO intervention or not. In addition a binary logistic regression and its Odds Ratio (OR) were calculated to identify the independent variable that have stronger association with the dependent variables.

1.5 Limitation of the Study

The form of measurement used in this study has some limitations. The high level of MC approval above (76%) was found inconsistent with current use of MCs (46.2%). This shows that respondents may have been reserved and concealed their true attitude towards contraception and answered 'yes' to some of attitude question, or there might be Socio-economic conditions that discourage MCs use, even when they have a favorable attitude towards MCs . But, this study does not reveal whether positive attitude precede practice of MCs or vice versa. More over, from 183(46.2%) of MCs current users; when asked the measure they would take

if they feel discomfort with a method being used, 170(93%) responded as they would discontinue use while; very small porpotion13 (7%) responded as they would consult health worker and continue usage of MCs. This indicates that the current level of MCs usage by the study population is not dependable unless continuation rate is clearly studied. And this is possible with either a longitudinal research or document analysis of MCs usage. However due to lack of complete lists of MCs current users for a longer period (at least one year or above) and due to shortage of time and resources it was impossible to indicate continuation rate of MCs usage by the study population.

1.6 The Organization of the Study

This study is organized in to five chapters. Chapter I presents the introductory frame work of the study that include, Statement of the problem, the objective, the research questions, method of data acquisition and analysis and Limitation of the study. Chapter II presents the literature review in which theoretical context of the study is laid out. It reviews studies conducted on the subject and the specific studies conducted on the variables used in this study. Chapter III discuss the general Background of the study area.

Chapter IV deals with presentation and analysis of data. Finally in chapter V a summary of the major findings of the research, Recommendation and areas for further research are indicated.

CHAPTER TWO

Review of the Literature

2.1 Population Growth and Fertility

World population according to UN (1998:6) is growing at an alarming rate about (1.48%) between 1990 – 1995 that results in annual increment of about 81million persons in the above period .What is more interesting is that 95% or 77 million of the total population increase originated in less developed regions of the world (UN,1998:6). Total fertility per woman in 1990-1995 periods was 3.1; 1.7; 3.5; 5.8 and 6.5 for the world total, more developed regions, less developed regions, least developed regions, and Eastern Africa from least developed regions, respectively (UN, 1996:44).

Regarding the situation in Ethiopia total fertility per woman in 1990 - 1995 periods is found as 6.7 children which is higher compared to the least developed regions 6.5 per woman (UN, 1996:44). Crude birth and death rates in the Ethiopia

is 45 and 21 per 1000 people respectively (UN, 1996:46). This is also higher compared to other less developed countries.

When age structure of the population is considered 45% are below 15, 52% between 15-65 and 3% above 65 years. This further indicate high fertility potential in the foreseeable future.

2.2 Family Planning in Ethiopia

Family planning service provision begun in Ethiopia by FGAE as an indigenous NGO in 1966 on clinical basis with an aim to contribute towards the national effort to harmonize the rate of population growth and the capacity of the country for development and rational utilization of natural resources in the process of welfare maximization of the society at large (FGAE:2000). However, family planning service (dissemination of family planning information as well as distribution of contraceptives) was secret (officially illegal) until 1991 in Ethiopia (FGAE: 2000). This clearly shows that though, the country had no population policy before 1991 the pronatalist socialist out look had dominated issues of population regulation until the down fall of the Derge regime. Hence, the anti-natalist population policy that focus on harmonizing population growth to socio-economic development is only a decade of age in the country.

Contraceptive prevalence rate is one of the major indices to measure family planning services. However, it is found 4.7% and 6.9% for any modern method for all women and men respectively (EDHS, 2000:53). This figure for currently married women and men in the same survey was found as 6.3% and 8.8% respectively. This level of achievement compared to the 50% and above contraceptive prevalence in most developing nations of Asia and Latin America in the 1990s and 17.1% and 36.1% for Kenya and Zimbabwe respectively from sub Saharan Africa is very low (UN,1996:46). Thus we can conclude that, family planning service provision is at its dismal level in the country.

2.3 Social, Economic and Health Benefits of Family Planning

The world fertility survey confirms that infant, childhood and maternal mortality and morbidity increase with too early, too close, too many and too late child bearing. All that can be largely reduced using family planning services. Pregnancies closely spaced are more likely to result in low birth weight, vulnerable to infectious diseases and are less likely to survive the first year; and if they survive the first year they are $1^{1}/2$ times more likely to die before age five than children whose births were spaced at least two years apart (Shane:1997).

Again, mortality rate for children born fourth or later is also found higher (Shane:1997) and (PIP:1985).

Though, there are no extensive studies made in Ethiopia; according to (Maine et al:1990) infant deaths in 1985-1990 in Cameroon, Ghana, Kenya, Lesotho, Senegal and Sudan would be reduced by 22%, 17%, 20%, 5% and 19% respectively if all births were spaced at least by two years; and if intervals were extended to four or more years the reductions would be Considerable.

Regarding the benefits of family planning services in reducing maternal mortality, Pellegrom (1996) reported that half a million women die every year from causes related to child bearing; and 50% of those deaths result from illegal abortions in developing countries, many of which occur because women lack access to family planning services. According to Fathalla (1996) providing family planning service to women that want to avoid unwanted pregnancies in developing countries would save the life of 1 in 100 women; and a total of not fewer than 900,000 women per annum in the world.

Maternal mortality would be as high as 1000 per 100,000 live births in parts of Africa (Salas, 1985). In case of Ethiopia, a community based study in Addis

Ababa Kwast (1985), Seyoum Yoseph and Getahun Kifle (1988) and Agonafer Takalegn (1988) has revealed a maternal mortality rate of 566; 960 and 700-900 per 100,000 live births respectively. The (EDHS, 2000:xxi) has also shown maternal mortality of 871 death per 100,000 live birth; which indicates no further improvements from the conditions in 1980 and 1990s; that further reveal low level of acceptance of FP methods.

To sum up, closely spaced too many births deny mothers more time for breast feeding and enforce early weaning and aggravate children competition for limited household resources. The net result being, nutritional depletion for both children and the mother. It further results in the general deterioration of quality of life for the whole family (Shane,1997). Hence, family planning service as a relief from these social, economic and health problems is highly essential and need to be considered as an integral part of family health and all welfare programs of the community.

2.4 Determinants of Contraceptive use

2.4.1 Knowledge About Contraceptive methods

Though the exact time when man started to realize contraceptive methods to avoid unwanted pregnancies is not clearly known; it goes back to the 1700s when coitus interruption was widespread in Southern part of France; when there were egalitarian movements both in political and religious spheres of the then society (Flandrin, 1979). There is belief that all modern methods have been put in to use after this traditional method in time period between the 1700s to 1960s which marked to be a period of contraceptive revolution (Bandarage, 1997). However, the degree of contraceptive knowledge and practice still vary in time and space and from one social group to the other whether it is modern or traditional method (UN, 1996).

According to Gupta and Simon (1996) and Shane (1997) and many others acceptance of family planning methods is directly related to knowledge of contraceptives among the eligible couples. At present, world fertility surveys confirm that a very high proportion of women; three out of four in every country knew at least one modern method. In countries like Bangladesh, Fiji, Indonesia,

Jordan, Malaysia and Pakistan 83; 100; 78; 97; 93 and 76 percent of women respectively knew at least one modern method (UN, 1996:113-4). Regarding the situation in Ethiopian, 86% of women and 92% of men currently married knew at least one modern method (EDHS, 2000).

There is evidence for a direct link between knowledge about contraceptives and its usage. Recent world surveys based on estimates from developing countries has revealed that higher knowledge of MCs and their source is related to higher utilization and vice versa, (UNFPA, 1999), (Mishra et. al., 1999) and (Casterline et. al., 2001).

Despite these associations, however, misconceptions about different modern contraceptive in these parts of the developing world may lead to low approval of a method. Regarding this Khalifa (1988) in her study in Sudan has confirmed that, inspite of a high level of knowledge of vasectomies; approval was low due to misconceptions. In addition Gupta and Simon (1996) have also reported that many women have misconceptions of various types about different modern contraceptives; mainly about modern contraceptives repercussions on their health. For instance 32 and 22 percent of women in India did not accept IUCD and pills respectively; and also a significant figure in Mexico believe pills to cause nervousness and cancer Gupta, and Simon (1996:115). Hence, such perceived after

effects and misconceptions might prevent women and men from adopting those modern contraceptives.

2.4.2 Fertility Attitudes of the Spouses

According to Freedman (1988) and Saw (1989) spouses with better education, urban residence and paid work in non-agricultural sectors are more likely exposed to family planning information and, hence, develop a positive attitude towards it. In addition Mahmood and Ringheim (1996 and 1997) have indicated that, better education, urban residence and paid labour in non agricultural activities are associated with positive attitudes towards MCs, and higher inter-spousal communication on family planning and higher contraceptive use.

On the other hand, in patriarchal cultures of developing countries inter-spousal communication on family planning and contraceptive use might not exist or if it xist may lead to husband's disapproval because of many socio-economic reasons. Regarding this (Swar-Eldahab, 1993:371) in his studies of reproductive behavior of married men and women in Sudan stated the following:

> *"Most husbands in Sudan, irrespective of their social class are more likely to reject methods that involve them, such as condom, rhythm; withdrawal or postpartum sexual abstinence, than they are to oppose exclusively female methods. Also a view exists among traditional, illiterate populations that vasectomy is unethical and socially unacceptable".*

Hence, this indicates that husbands in developing countries have a bimodal negative or positive influence according to their attitude to family planning and contraceptive use. Furthermore, Tizazu (1994) in his study in south Ethiopia, Dalle Woreda has also indicated that, inter-spousal communication is related to higher level of family planning (contraceptive usage). And duration of use for women whose husband approves use was found one and half times higher than their counterparts.

Sex preferences and fatalistic reasoning such as " it is up to God to decide the number of children one may have "also affect attitude towards contraceptive use. In most of Asian culture women wanting no more children, but have no sons continue child bearing even at high parity level in the hope of having a son (Srikantan, 1993). It is also obvious that those having fatalistic reasons towards fertility are most probably non-users of contraceptives and at the same time may discourage other users (Swar-Eldahab, 1993).

Parity alone can also influence contraceptive use. Different periods of WFS and CPS shows that contraceptive use increases sharply as parity rises from zero to two or three children and remain fairly steady thereafter. But, incase of Ethiopia, and many developing countries women do not practice contraception until they reach their desired family size, even though they have knowledge to it (Hogan et. al., 1999) and (Westoff, and Bankole, 2000). The mean ideal number of children preferred by currently married women (15 – 49) in Ethiopia is 5.8 EDHS (2000:93); and it varies with variation in a residence and educational level. That is ideal number of children preferred by rural and urban women is 5.6 and 4.1, respectively; and 5.7; 4.4 and 3.5 for women with no education, primary and secondary and above respectively (EDHS, 2000:93).

2.4.3 Socio-Economic Factors

Many research findings confirm that contraceptive knowledge and practice is positively correlated with education, income and urban residence. With regard to this UNFPA (1999) reported that poverty is closely connected to poor health and high birth rates. Because of this realization UNFPA (1999) has claimed urgent poverty reduction programs that empower women to achieve lower birth rates. Because women who afford to see a doctor or visit a clinic are found more likely to use family planning services than rural poor women that have neither

transportation nor time to spare. Moreover, rural separation keeps people unaware of both modern family planning and modern health practice. Many poor people in cities also have no means to plan their next meal let alone planning their families (UNFPA, 1999)

Regarding the impact of socio-economic development on family planning Singh, (1996) reported that stagnant or slow growing economies in many developing countries denied women their chances to education and vocational training and deprived them the opportunities to engage in alternative roles other than motherhood. The net result of this being their early marriage and early child bearing that further deteriorates their physical, emotional and psychological wellbeing. However, according to Jain, (1994) contraceptive knowledge and practice can be significantly raised in conditions of extreme poverty if service delivery program are adapted to local conditions.

Furthermore, Srikantan (1993) in his studies of contraceptive knowledge and practice in sub-Saharan African countries like Kenya, Zaire etc found that higher socio-economic status i.e. either or both spouses better educated, live in urban areas and working for cash is correlated with higher contraceptive use. And urban couples with secondary school education are also more likely to use contraception than their counterparts. Again Saw (1989), Weinberger (1994) and Stycos etal.

(1988) and many other authorities have also confirmed that rapid and sustained adoption of the available contraceptives is highly related to higher literacy rate relatively higher income, urban residence and gainful employment opportunities to women in non-agricultural activities. Saw (1989) in his studies of Muslim Singapore Malays has also found that higher literacy rate, non-agricultural occupation to females, urban residence and higher income to families easily erode traditional and religious mentality towards large family size and encourage contraceptive use. According to Saw (1989) these groups are also more likely to get information of family planning methods first and develop attitudes necessary for practicing them; while farmers in the rural areas and poorly paid urban workers retain economic values to large family; assuming several potential workers to be a kind of social insurance during old age and unemployment.

Supporting this fact, Chaudhury (1982) also stated that, in a society where the economic and social environments are uncertain, and where there are no institutionalized support to the older and disabled and where the cost of child rearing is low with the child providing current and future help (material and emotional) to the parents it is rational on the part of the couples to desire and have as many children as possible. According to Chaudhury (1982) unless acceptable alternatives to children as a source of security are found, it is unlikely that couples would accept any program designed to reduce high fertility.

In support of the above reality UNFPA (1999) more recently has claimed urgent poverty reduction programs that mainly involve women empowerment i.e. providing women greater opportunity for education, vocational training and employment that would give them the chance and power to earn more, to decide their own fertility, to delay marriage and child birth if they wish; for successful implementation of family planning and reproductive health programs.

2.4.4 Religion

Though, it is not investigated much in Ethiopia, studies in different countries confirm that religion has a profound influence on contraceptive use and fertility pattern. To mention some, survey for contraceptive use in 1975 in India for Bangalore state has found that 15.6% of Hindus and 12.5% of Muselims were using modern contraceptives, and Muslims were found much fewer to Hindus in the adoption of both sterilization and other temporary methods for Bangalore and all other states in all social groups in the nation (Srikantan, 1993).

According to Royston and Armstrong (1989) the Roman catholic church's opposition to intercourse with protection and Jewish law opposed to

sterilization considering it to be surgical impairment of reproductive organs and hence " deliberate interference with natural practice of generation " can also profoundly influence their followers. However, as Srikantan (1993) argues religions like Islam, Hinduism, the Orthodox and protestant Christian denominations have no spiritual basis for opposing family planning, but they might still discourage it subliminally in their teachings.

2.4.5 Access to Family Planning

As a general rule, rural people are more difficult to reach with information of family planning and their access to services is also more restricted by greater distance from clinics and sources of supply (UNFPA, 1999). According to Bandarage (1997) and studies by others, large segments of the population concentrated in rural areas in developing countries face considerable difficulty in obtaining low-cost, high quality family planning services; and Ethiopia is no exception.

The rural people lack both knowledge to range of methods, availability and where to get them. Regarding women's knowledge of sources of supplies of modern contraceptives, studies by Mahmood and Ringhiem (1996) confirmed that, it is

strong predictor of contraceptive use. Furthermore, studies by Shelton (1999) on the underlying reasons for rise of contraceptive prevalence in many developing countries in the 1990s, found that, intensive community based distribution projects of modern contraceptives to be the major source of knowledge where to get and how to use, in the period mentioned. According to Shelton (1999) poor services are the major barriers to usage of MCs in these areas. Studies by Royston and Armstrong (1989) in Mexico, south Korea, Bangladesh, Thailand and Philippines also confirmed that the closer a woman lived to a source the more likely she was to use contraceptives. These findings clearly indicate the distance decay effect in the family planning services in developing countries. However, the impact of distance on service delivery in developed areas at present is entirely removed by developments achieved in communication and transportation.

2.4.6 Health Concerns

The fact that MCs have observed side effects and rumors exaggerating the side-effects of different modern contraceptives can significantly reduce use. Regarding this reality Shah and Shah (1984) and Hashimi etal. (1993) identified that fear of side-effects as one of the most powerful obstacles to contraceptive use. Studies by Bongaart and Bruce (1995) cited by Casterline etal. (1997) and

Casterline etal. (2001) also confirmed that health concern is found to be a major source of Husbands disapproval of a method.

Hence, according to Srikantan (1993) providing complete information on the side effects of different modern contraceptives, and well organized follow-up medical care, when there are complaints and complications, are very essential for the program success.

2.4.7 Providers views of Modern Contraceptives and family planning Delivery system

Providers lacking knowledge of modern contraceptives usually attempt to demonstrate empathy and professionalism by exaggerating the side effects of some modern contraceptives. As a result they impose restrictions of age, maternal status, menstruation and laboratory test that most clients can not easily meet while they come to obtain contraceptives, which in turn impede their access to modern contraceptives (Stanback and Twum-Baah, 2001). Therefore, it is essential to improve technical competence of providers as well as remove provider restrictions on some reversible methods like pills and injectables to expand access in family planning services. Furthermore, establishing warm relationship with a client i.e.

identifying clients needs, providing information on the side-effects of client's preferred method, where to get such method, and how to use a method chosen can greatly expand demand for modern contraception and raise Contraceptive Prevalence (Leon et al, 2001).

On the other hand, delivery system also can affect access to family planning services. Studies in three Brazilian states Rio-Granda-de-norte, Pariba, and Pernambucco in 1980 on past, current and non program clients in the community based distribution program has revealed that, larger proportion of past and current clients were in favour of health post delivery, while large proportion of non program clients were found to favour home delivery followed by health post delivery (PIP, 1985). Hence, assessing the needs of current and future clients in the delivery system is essential to maximize program success.

CHAPTER THREE

3. GENERAL DESCRIPTION OF THE STUDY AREA

3.1 Physical Back-Ground

3.1.1 Location

The study area, Soddo Zuria Woreda, is found in former North Omo zone, and currently at the center of Walaita Zone of SNNPR, and the land of Walaita Zone is located between the Sidamo and Gamo-Goffaa high lands in the South central part of the country. More specifically, Soddo Zuria Woreda is bounded in the East and North East by Damot Woyede and Damot Galle Woredas, in the South by Humbo and Offa Woredas, in the West, Northwest and Southwest by Kindo Koisha, Boloso Sorie and Offa Woredas respectively. Astronomically, the Woreda is located approximately between 6^{o} 50'N-7^{o}53'N and 37^{o}36'E-37^{o} 53'E (Fig. 1).

3.1.2. Relief and Climate

Most of the land area of the woreda is found in the altitude range 1400 meter above sea level to 2950 meters above sea level at Damota Mountain. The land area of the Woreda is dominated by rolling hills, plateaus and plains that extend into the low lands of Damot Wayde and Humbo Woredas which are part of the lowlands of rift valley that extend to lake Abaya.

Most part of the Woreda experience Woinedega (warm to cool) type of climate (Fig. 2). Except the mount Damot top areas that experience colder climate some times. The South and south west peripheries of the Woreda experience a transitional type of climate (warm to hot) (Woinedega to Kolla) mainly due to the South east rift valley that cross the surrounding Woredas (Damot Woyde and Humbo) and run in to the low lands of lakes Abaya and Chamo which are rift valley lakes.

The climatic condition of the woreda is similar to most of southern parts of the country. The maximum (summer) rain fall comes between June-August and the minimum (spring) rainfall very important for agricultural activities in the Woreda comes between March to May. Maximum rainfall ranges between 1200mm-

1300mm per annum. Maximum Temperature also ranges between 20°C-25°C with average minimum 10°C-15°C.

The Woreda is crossed by both perennial and seasonal rivers. Major perennial rivers include river Hamassa and river Bissare which originate at the foot of mount Damotta, but flow longer distances in Humbo and Damot Wayde Woredas, respectively in the south easterly direction before joining river Bilate which end in Lake Abaya.

Soddo Zuria covers an area of 481.25 square kilometer. The total population is about 200866. And the crude density is about 417.6 people per kilometer square. From the total population 99,979 and 100,887 are males and females respectively. Regarding variation in residence 36,287 and 164,579 are urban and rural which account for about 18.1% and 81.9% respectively (CSA, 1994).

The projected population for 2001 is about 254,291 from which 126,559 and 127,732 are males and females respectively, that pick up the crude population density to 528 people per square kilometer at present.

3.2. Socio-Economic and Demographic Characteristics

3.2.1 Socio-Economic Characteristics.

The economy of the people of Soddo Zuria Woreda is entirely based on agriculture. It is one of the ‘’*Enset*’ culture parts of the country; and *Enset*; (False Banana) is grown as a staple food. Other crops grown in the Woreda include root crops such as sweet potatoes, cereals such as maize, sorghum, wheat, barely, *teff*, and pulses. Pulses are mostly grown inter-cropped because of shortage of land. According to Tegegn (1994) the average plot size per farm household in the woreda and the whole Wolaita ranges between 0.5 hectare to 1.75 hectare, and 47%of peasants have farm plots less than 0.5 hectare that resulted from high population growth rate (4%) which is above the national average.

Further more, agricultural land holding in SNNPR in general and Soddo Zuria in particular is highly fragmented. In Soddo Zuria it is common to find individual house holds to own small farm plots in different locations. Because of this fact, as a guarantee to land owner ship right, most of individual house holds having small plots of farm land in different locations enter in to a polygamous marriage that is known to encourage women to have large families and avoid use of contraceptives (Hogan etal:1999)

3.2.1.1. Marriage and Cultural Values of Children in Soddo Zuria Woreda

According to Caldwell and Caldwell (1987 and 1990) extended family system that protect individual family from bearing the full coast of high fertility is common in sub - Saharan Africa. Regarding the situation in southern Ethiopia Hogan etal (1999:303) 65% of women begin marriage in an extended family where Soddo Zuria is no exception. According to above researchers and many others extended family structure promote high fertility by encouraging early and universal marriage, by spreading the costs and burdens of child bearing throughout a network of kin, and by motivating couples to reproduce through inducements such as increased social status and greater political and economic security. Regarding the situation in the whole Wolaita and in Soddo Zuria Woreda women in earlier times win high social prestige (celebration day) known as "Gimmuwaa" at her tenth live birth if all her nine passed birth are living. During this day each of the community members, particularly those who have a kin relation ship are forced to provide gifts according to the decision made by the elder in the kinship. The major gift items were cattle. Hence the ,elder decide the number of cattle one has to provide as a gift depending on the number of cattle possessed by all the relatives expected to provide the gift during "Gimmuwaa" i.e. celebration day. This social practice in earlier times in Welaita society indicate that larger number of children

to a family are the means to maintain strong social economic and political positions in the community.

At present the cumulative effect of this social and economic value of children in Southern Ethiopia in general and in Soddo Zuria in particular resulted in high land shortage for families to provide for their children which is traditionally a prerequisite to marriage. As a result there is delay of marriages in these parts of the country (Hogan etal: 1999). According to these researchers young family members in rural areas of Southern Ethiopia are migrating; unable to live at home as a response to this crisis. However, the above researchers indicated that fertility has remained high and contraceptive use still at a low level in the region.

3.2.1.2. Access of Women to Health Service in Soddo Zuria Woreda

UNFPA (1999) reported hat rural separation and poverty in developing countries like Ethiopia denied women their access to modern health services. Lack of health facilities /institutions on average walking distance intervals i.e. 5 - 6 Kms MSIFPSD (1995) and lack o f better educational and employment opportunities to women to be the major barriers of modern health and family planning services.

Regarding the situation in Soddo Zuria, there are only two rural health clinics and one health station at the Wreda capital (Soddo town). These are the health institutions that give health and family planning services to people in 481.25 square kilometer of area. This means that each health institution at present give service to people in 160.41 square kilometer of area. While the national standard is 25 square kilometer. General health service coverage in the Woreda in 2000 according to zonal health department's report is 27.2%. And education service coverage in Soddo Zuria Woreda according to zonal education department's report in 2000 for elementary and secondary level is 62 and 10 percent respectively.

3.2.2 Ethnicity, Religious composition, and Demographic characteristics of the population

a) Ethnic and religious composition of the population

The ethnic and religious composition in Soddo Zuria Woreda according to CSA (1994) is presented as follows

Table 2: Ethnic composition of Soddo Zuria Woreda (CSA, 1994)

Ethnic Groups	No	%
1. Wolaita	186,415	92.8
2. Dorzie+Gamu-Goffa	3,514	1.7
3.Guragie- Sebatbet+sodo, Siltie	2,988	1.5
4. Amara	5,226	2.6
5. Oromo	1,240	0.6
6. Konta+Kull+Mello & others	818	0.41
7. Tigraway	543	0.27
8. Worji	122	0.6
Total	200,866	100

Table 3: Religious composition of Soddo Zuria Woreda population (CSA, 1994)

Religion Groups	URBAN		RURAL		TOTAL	
	No	%	NO	%	No	%
1. Orthodox	23,045	63.5	81,465	49.5	104,510	52
2. Protestant	9,847	27.1	81,465	47	86,489	43.1
3. Catholic	419	1.2	4,400	2.7	4,819	2.4
4. Muslim	2,699	7.4	534	0.3	3,233	1.6
5. Other	194	0.5	893	0.3	1,087	0.5
6. Traditional	8	0.02	460	0.3	468	0.2
Not stated	75	0.2	185	0.1	260	0.1
Total	36,287	100	164,579	100	200,866	100

According to CSA (1994), the dominant ethnic group in Soddo Zuria Woreda about 93%, is Wolaita, followed by Amara (2.6%) and Guragie group (1.7%) and others altogether account 2.7%. Regarding the religious composition the orthodox and protestant groups account 52% and 43.1%, respectively. The others altogether account for about 4.9%. Thus, Christian denominations, particularly the orthodox and Protestant groups are the dominant religions in the woreda. This shows that the Catholic and Muslim denominations would have insignificant impact on contraceptive behavior of the study population.

b) Demographic Characteristics of the Population

Age and sex structure, age at first marriage, total fertility, crude birth and death rate, infant and child mortality, and maternal morality are some of the demographic indicators of a given population. Accordingly, the broad category of sex and age structure of the Soddo Zuria Woreda Population in 1994 census is given as follows:

Table 4: Broad age and sex structure of Soddo Zuria Woreda population (CSA, 1994).

Age group	Male	Female	Total	%
0-14	44,550	43,973	88,523	44.1
15-34	35,437	37.207	72.644	36.2
35-49	15,909	16,559	32,468	16.2
50^{+}	4083	3148	7,231	3.5
Total	99,979	100887	200,866	100

Data on total fertility and infant and child mortality are missing for Woreda level. However, according to CSA (1994) infant and child mortality in North Omo zone in which Soddo Zuria is the third most populous next to Bolosso Sore and Damot Galle, is 154 and 231 per 1000 live births respectively. Total fertility for a woman in North Omo is also found 4.3. However the condition in Soddo Zuria is expected to be different from those in North Omo Zone. According to Hogan et. al. (1999) total fertility for a woman is expected to be seven and above.

The present population density in Soddo Zuria woreda is above 528 people per square kilo meter. This population density is extremely high in such part of the country whose economy is entirely based on primitive agriculture. Furthermore, population in the age bracket (15-49) is about 52.4% that indicate high fertility potential in the foreseeable future. Thus, to overcome problems related with population explosion; adoption of effective fertility regulation and economic diversification programs seem very urgent in the woreda.

CHAPTER FOUR

4. Presentation and Analysis of Data

4.1 General Profile of the Respondents

Adoption of certain new technology or services largely depends on the level of socio-economic development a country or a community has achieved. In addition cultural tenets that members of the community share has also a profound influence on the adoption of certain new services.

Therefore, the respondents of this study by some of the selected socio-economic and socio-demographic factors that could influence the use of MC is presented as follows:

4.1.1 Respondents by Their Socio-Economic Characteristics

The major socio-economic factors selected that would influence the contraceptive behavior of the population in this study were education, religion, occupation, and residence. Regarding the educational attainment of the respondents, as can be seen

from table 5, from the total 396, 177 (44.7%), 162(41.0%) and 57 (14.4%) were found illiterate, 1-8 and Grade 9 or above, respectively.

As to the religious composition of the respondents 192 (48.8%), 176(44.4%), 14(3.5%), 13(3.3%) and 1(0.4%) were Orthodox, Protestant, Muslim, Catholic and others, respectively. As to the occupation of the respondents, 367(92.7%), 16 (4.1%), 9(2.3%), 3(0.8%) and 1(0.3%) were house wives with no job except motherhood, merchants, government employee, daily laborers, and others, respectively.

Place of residence is known to be one of the major factor in the adoption of MC. A number of WFS and CPS indicate that urban residence is positively correlated with higher contraceptive knowledge and practice as it promotes access to both information and services of FP. Regarding the residence of the respondents of this study 286(72.2%) 110(27.8%) were rural and urban respectively.

Table 5: percentage Distribution of respondents by Their Socio-Economic Characteristics

Socio-Economic and cultural Back Ground		N	%
1. Educational level	Illiterate	177	44.7
	1-8	162	41
	9 and above	57	14.4
	Total	396	100
2. Religious Composition	Orthodox	192	48.8
	Catholic	13	3.3
	Protestant	176	44.4
	Muslim	14	3.5
	Others	1	0.4
	Total	396	100
Occupation	Gov't Employee	9	2.3
	Merchant	16	4.1
	Daily Laborer	3	0.8
	House Wife	367	92.7
	Others	1	0.2
	Total	396	100
4. Place of Residence	Urban	108	27.3
	Rural	288	72.7
	Total	396	100

4.1.2 Respondents by their Demographic Back Grounds

There are a number of demographic variables that have association with fertility regulation (FP) acceptance by a given community members. Some of these variables according to Shane (1997) and UN (1996) are too early, too close, and too late child bearing in turn related with high under one and under five mortality rates, which are further associated with non-use of MC/FP to space or limit births. Thus, respondents of this study by some of the selected demographic variables that would have association with MC/FP adoption were presented as follows.

4.1.2.1 Mean Age at First Marriage

As can be seen from table 6, mean age at first marriage for women ranges from 15.5-18.9 years. When the urban and rural areas of the Woreda is separately considered it is 18.9 and 16.6 years, respectively. This indicates that age at first marriage in rural areas is at least two years earlier than in urban areas of the Woreda. The difference of age at first marriage for urban and rural areas is found very small (2.3 years). This might be delay of marriages in rural areas that might be related with lack of land for families to provide their children Hogan etal:(1999) which is the prerequisite of marriage in rural areas or the changing trand of female educational enrollment that is known for delay of marriages in

both urban and rural areas. Furthermore, mean age at first marriage for the rural and urban areas on average is 17.2 years, which indicate the rural domination over urban areas. This in turn indicates that FP Programs that cannot influence rural parts of the Woreda would not bring change in the fertility pattern of the study population.

Table 6: Mean Age at First Marriage of the Study Population

Sample Kebeles		No of cases	Sum of ages	Mean age
Urban	1.0-2	59	1095	18.6
	2.0-2	49	952	19.4
Total	2	108	2047	18.9
Rural	Waraza Shoho	74	1344	18.2
	Amacho Kodo	81	1259	15.5
	Kokate Marachare	60	1003	16.7
	Tome Gerera	73	1161	15.9
Total	4	288	4767	16.6
Grand Total	6	396	6814	17.2

4.1.2.2 Age at First Birth

As table 7 depicts, about 52% of the respondents gave to their first birth between age 12-18 years, and 40.1% in the age range 19-23. Very small proportion of the respondents, about 5.6%, gave to their first birth at age 24 and above years. Hence, this indicates that very large proportion of the respondents, above 92.1 %, have very long child bearing /reproductive age/ that deserves sustainable adoption of MC, as to control rapid population growth.

Table 7: Percentage distribution of respondents by their Age at First Birth

Age at first Birth	No of cases	%
Have no child	10	2.5
12-18	265	51.8
19-23	159	40.1
24.28	17	4.3
29+	5	1.3
Total	396	99.96

4.1.2.3 Respondents by Number of Under Five Mortality of Children

Use of MC/FP/ is known to reduce both infant and child morality rates. According to Shane (1997) and Maine et. al. (1990) pregnancies closely spaced are more likely to result in low birth weight, vulnerable to infectious disease and are less likely to survive their first year; and if they survive their first year they are one and half times more likely to die before age five than children whose births were spaced at least two years apart. This fact reveals that contraceptive use greatly reduces the number of under five mortality. Regarding the respondents of this study as can be seen in table 8, 22%; 7.1% and 0.9% of respondents had experienced 1-2; 3-4 and 5 or more number of under five mortality of children, respectively.

To sum up, as shown in table 8, 70% of the respondents have not experienced under five mortality of children. But, this does not mean that contraceptive prevalence has reached the level of 70%.

Table 8: Percentage Distribution of Respondents by Their experience of Under Five Mortality

Number of Under Five Mortality	No	%
0	278	70.2
1-2	87	22
3-4	28	7.1
5 and above	3	0.9
Total	396	100

4.1.2.4 Respondents by Number of Living Children

As table 9 reveals, about 38.5% of the respondents have surpassed small family size; and 31.6% who have already given to 3-4 children will also surpass small family size in short period of time unless they use MC for limiting birth. This in turn indicates that about 70.1% of the respondents in the study area should use MC to limit birth rather than to space birth in order to achieve the national population policy statement of 1993 of Ethiopia that aims to lower total fertility from the current 6.7 children to 4 children per a woman during the year 2015.

Table 9: Percentage Distribution of Respondents by Number of Living Children

Number of Living children	N	%
0	14	3.5
1-2	105	26.5
3-4	125	31.6
5 & above	152	38.5
Total	396	100

4.1.2.5 Study Population by Age

As shown in table 10, during the survey 117 (29.5%) of the study population have more than 25 years of child bearing age. If this group uses MC to space birth at least by three years they would have 8.3 children as their total fertility provided that they all reach year 49. Again those in ages 25-34, 212(53.5%) of the total study population have more than 15 years of child bearing age. If this group also practices MC to space birth at least by three years they will have 5 children until they reach their menopause stage excluding their current living children. Hence, to maintain total fertility at 4 children to a woman 83% of the study population should space their birth at least by four years or use MC to limit birth after their forth birth. Unless otherwise, total fertility per a woman in the study population will remain at the present 6.7 children per woman in the foreseeable future (15-20) years.

4.1.2.6 Study Population by Age at First Marriage

Age at first marriage can indicate the potential years of childbearing or how young is a given married population. The legal age at first marriage in Ethiopia is 18 and above. However, as indicated in table 10, 121 (30.5%) of the respondents have married in ages between 12 and 15 years. This shows that about 30% of the study population has married before reaching the legal age at first marriage in the country. This means that 30% of the study population is characterized by too early marriage. A significant proportion 222 (56%) of the study population married at ages between 16 and 19 which is acceptable age at first marriage. Thus, in order to limit birth at five children about 30% of the study population needs to space their birth at six years and 56% at five years which is impractical in such a backward agrarian society. And this greatly contradicts the 1993 population policy of Ethiopia that aims to reduce total fertility from the current 6.7 children per woman to 4 children per woman in the year 2015.

Table 10: Distribution of study population by age, and age at first Marriage

Age Group	N	%
Below 20	25	6.3
20-24	92	23.2
25-29	132	33.3
30-34	80	20.2
35-39	47	12
39-49	20	5.0
Total	396	100
Age at Marriage	N	%
12-15	121	30.5
16-19	222	56
20-23	39	9.8
24-27	11	2.8
28+	3	0.75
Total	396	100

4.2 Contraceptive Behavior of the Study Population

4.2.1 Ideal Family Size Preference by Selected Socio-Economic Background

In societies where women have high Socio-Economic status (better educational and employment opportunities) they tend to aspire for smaller family size (limit) their fertility (Caldwell and Caldwell, 1987 cited by Hogan et. al. 1999:302). According to these researchers higher socio-economic status to women and their involvement in domestic decision making are key factors for the wider diffusion of contraceptive knowledge and usage. The net result of this becomes the accompanying long term reduction in fertility in developing countries. Furthermore, Mueller (1976) and Boserup (1985) have also indicated that women in traditional societies want large family for several reasons. Therefore, it is essential to investigate factors that have significant association with ideal family size preference. In this study the desire to have 5 or more children and 'God knows' responses were taken as large family behavior. And the study population by their ideal family size preference were indicated in table 11.

Education, occupation, religion and residence were some of the major factors selected as to have profound impact on ideal family size preference. As can be seen in table 11, 10 (2.5%) said that they desire no children. The rest 33 (8.3%), 119 (30%), 73 (18.4%), 161 (40.6%) responded as they desire 1-2, 3-4, 5 or more, and 'God knows', respectively. Thus, it can be concluded that, 234 (59%) of the study population were characterized by large family behavior.

Regarding variation in the desired number of children by educational level, percentage of respondents desire from 1-2 and 3-4 children increased as educational level rose (illiterate to grades 9 and above). While the percent of those responded as they desire 5 children or more, and 'God knows' decreased as educational level rose. But the reverse is true for illiterates (percentage desired 5 or more, and 'God knows' increases in the case of illiterates). Illiterates were found to be more than half times more likely to desire five or more children than those in grades 9 and above. This shows that as educational level rises people are more likely to aspire less number of children.

The variation in desired number of children by educational level was also statistically significant (P=0.005). However, we cannot conclude that, the literates have developed responsible contraceptive behavior, because, very large proportion of literates (56.7% of those in grades 1-8, and 35.1% of those in grades 9 and

above) responded as they desire 5 or more number of children and 'God knows' respectively.

Variation in desired number of children by occupational character was found statistically in significant (P=0.157). However, this might be due to the domination of similar occupation i.e., house wives 341 (86.1%) from the total 396 respondents. Those in other occupations accounted only for 13.9%.

When the number of children they desire was asked 15.4% of Catholics, 18.2% of Orthodox, 19.9% of Protestant, 7.1%, of Muslims responded as they desire 5 or more number of children. Furthermore, 7.7%, 35.9%, 45.5%, and 78.6% of Catholics, Orthodox, Protestants and Muslims, respectively, responded as 'God knows'. This shows that, the Catholics are above five, six and ten times more likely to make responsible decisions in fertility regulation than the Orthodox, Protestant and Muslim groups respectively. The variation among religious groups in preference to ideal number of children was also statistically significant (P=0.040).

Regarding variation in ideal family size preference by residence the rural respondents are more than two times more likely to prefer 5 or more number of children than their counterparts (22.2% to 8.3%), respectively. The variation was also statistically significant (P=0.000). However, very large proportion (39.8% and

41.0%) of urban and rural respondents, respectively responded as 'God knows'. This shows that about 40% of respondents both from rural and urban areas were lacking responsible decision on issues of fertility regulation.

4.2.2 **Variation in Knowledge of MCs by selected Socio - economic Variables.**

In order to measure the levels of knowledge of MC the respondents were asked whether they have heard about any method of FP. Those responded positively were further asked to enumerate some of the MC they knew. Those mentioned at least one MC with out promption were considered as having knowledge and those failed to mention were considered as they did not know MC.

As shown in table 12, knowledge of MC by the study population reached to 85.6%. This finding confirmed with the (EDHS, 2000). In order to identify the socio-economic and other factors that have contributed to variation of knowledge of MC at 95% confidence interval, knowledge of MC is cross-tabulated with selected variables such as education, occupation, Religion, residence and NGO-intervention/non-intervention.

Knowledge of MC by educational level in the study population was found as 80.2%, 86.4% and 100% to illiterate, grades 1-8, and 9 and above, respectively. The variation was also statistically significant (P =0.000). The variation in knowledge of MCs by occupation and religion was found statistically insignificant (p=0.611 and P=0.609), respectively. Again world contraceptive prevalence in different periods has revealed significant variation of MC knowledge between

urban and rural areas. But urban/rural variation of knowledge to MC in the present study is found to be insignificant (p=0.075). This might be due to the dissemination of MC knowledge to rural parts of the study area from 1991 to 2001. The statistically significant variation observed between NGO intervened and non-intervened areas in FP services (p=0.000) is an evidence of how NGO intervention has minimized knowledge variation between urban and rural areas.

Table 12: Percentage Distributions of Respondents by Their Knowledge of MC.

Explanation Variable	Have knowledge of MC								
	Yes		No		Total		df	X^2	p-value
	N	%	N	%	N	%			
1) Edu. Level							2	13.829	0.001
Illiterate	142	80.2	35	19.8	177	100			
1-8	140	86.4	22	13.6	162	100			
9 & above	57	100	-	-	57	100			
Total	339	85.6	57	14.4	396	100			
2) Occupation							5	3.584	0.611
- Farmer	23	88.5	3	11.5	26	100			
- Gov Employee	9	100	-	-	9	100			
- Merchant	15	93.8	1	6.3	16	100			
- Daily laborer	3	100	-	-	3	100			
- House wife	288	84.5	53	14.4	341	100			
- Others	1	100	-	-	1	100			
Total	339	85.6	57	14.4	396	100			
3) Religion							4	2.699	0.609
- Orthodox	165	85.9	27	14.1	192	100			
- Catholic	13	100	-	-	1.3	100			
- Protestant	148	84.1	28	15.9	176	100			
- Muslim	12	85.7	-	-	14	100			
- Others	1	100	2	-	1	100			
Total	339	85.6	57	14.4	396	100			
4) Residence							1	3.177	0.075
Urban	98	90.7	10	9.3	108	100			
Rural	241	83.7	47	16.3	288	100			
Total	339	85.6	57	14.4	396	100			
5) NGO - intervention							1	32.359	0.000
- NGO-intervened	203	94.9	11	5.1	214	100			
- Non-NGO-intervened	136	74.7	46	25.3	182	100			
Total	339	85.6	57	14.4	396	100			

Significant at $P \leq 0.05$

Dissemination of FP information and service is about three decades of work in the country since 1966 (establishment of FGAE). This organization as an indigenous NGO has started to expand its services (IEC and actual distribution of MC) by training non-Medical workers (RWDA) since 1980 (FGAE, 2000). Moreover, since 1993 /the formulation of new population policy/ there are a number of NGOs

and government organizations in different parts of the country that are working to diversify and widen sources of FP information and service with an aim to counteract rapid population growth prevailing in the country. And Soddo Zuria woreda of SNNP Region is no exception to all these government and NGO'S efforts to maximize FP information and services.

However, as shown in table 13, the respondents have only one source of information on average. Most of the immediate and common sources of FP information (partner, close relatives and social gathering) were mentioned as FP information source by a few respondents. This might be due to lack of open discussion on issues of FP among close relatives, and partners. However, these are very favorable and effective means that can ensure a wider coverage of FP information and service.

Table 13: Scores of FP Information Source

Sample Kebele	In formation sources							
	Mass media (radio, TV etc)	Social gathering	FP workers	Gov't heath worker	Partner	Close relatives	Other	Total score
1-0-1	30	4	43	37	8	13	-	135
Warza-shaha	-	-	74	1	-	-	-	75
Amacho Kodo	15	-	75	-	1	2	-	93
2-0-2	17	5	6	14	5	5	-	52
Kokatemara Chare	1	-	1	41	1	1	-	45
Tome Gerera	1	-	11	11	14	5	4	46
Total scove	64	9	210	104	29	26	4	446
total Resondents	396	396	396	396	396	396	396	396
Average Score	0.16	0.02	0.5	0.3	0.1	0.1	0.01	1.1

4.2.3 Attitude of Study population Towards MC

Studies by Mahmood and Ringheim (1996 and 1997), Swar-Eldahab (1997) and Tizazu (1994) have indicated that better education, urban residence and working for cash are correlated with higher degree of spousal communication to use MC, positive attitude towards usage of MC and higher Contraceptive usage.

Regarding the attitude of the study population towards MC (FP), four statements that discourage MC usage and four statements that encourage MC usage were presented. The response was obtained on reduced Likert- type attitude scale (Agree-disagree and uncertain)

Agreement to the statements that discourage MC use is taken as a negative attitude toward MC, and agreement to statements that encourage MC use was considered as positive attitude toward MC

The first four statements presented in table 14 are statements that discourage MC usage. From the total 396 respondents, 298 (75%) respondents on average disagreed these statements. This means 298 (75%) of the respondents have shown positive attitude towards MC usage. Regarding the next four statements in the same table that encourage MC use 356 (90%) of the respondents agreed the statements. Hence, we can conclude that roughly 75%-90% of the respondents

have a favorable attitude towards MC use and 10 %-25% have either negative attitude to MC use or were neutral.

Table 14: Percentage Distribution of respondents to Attitude statements.

Statements	Agree		Disagree		Uncertain		Total	
	N	%	N	%	N	%	N	%
1. Using MC is immoral and being a sinner	42	10.6	303	76.5	51	12.9	396	100
2. Using MC reduces sexual satisfaction.	4	1.0	303	76.5	89	22.5	396	100
3. Using MC creates health problem	43	10.9	283	71.5	70	17.7	396	100
4. Having more children brings Happiness to the house hold	69	17.4	304	76.8	23	5.8	396	100
Total	158	39.9	1,193	301.3	233	58.9	396	100
Average	39.5	10.0	298.3	75.3	58.2	15	396	100
5. Having more children brings Pressure to household income	333	84.1	21	5.3	42	10.6	396	100
6. Having more children creates Problem in the house hold life	321	81.1	31	7.8	44	11.1	396	100
7. FP education should be given equally to both husband & wife	380	96.0	2	0.5	14	3.5	396	100
8. Wife and Husband are equally Responsible to practice MC to Control pregnancy	391	98.7	4	1.0	1	.3	396	100
Total	1425	359.9	58	14.6	101	25.5	396	100
Average	356	90	15	3.7	25	6.4	396	100

In order to identify variables that have significant association with attitude towards MC usage, one statement that discourage MC usage was cross-tabulated with selected variables. And the result is presented in table 15.

As shown in table 15 statistically significant variation (P=0.0014), (P=0.014) and (P=0.001) of attitude towards MC was observed in variation to education, religion and residence, respectively. Being illiterate, Muslim, and from rural area were associated with less favorable attitude towards MC than being literate, Christian denomination group and urban domicile. NGO -intervention was found to have no statically significant association with variation in attitude towards MC use.

Table 15: Percentage Distribution of Respondents to the Selected Attitude statement 'using MC is being a sinner'.

Explanatory Variables	Agree		Disagree		Uncertain		Total		x^2	df	p.value
	N	%	No	%	N	%	N	%			
Edu. Level									21.456	1	0.000
Illiterate	17	9.6	124	70.1	36	20.3	177	100			
Literate	25	11.4	179	81.7	15	6.8	219	100			
Total	42	10.6	303	76.5	51	12.9	396	100			
Religion									19.1192	1	0.014
- Christians (Orthodox) Catholic, protestant	36	9.4	294	77.2	51	13.4	381	100			
- Muslims	6	40	9	60	-	-	15	100			
Total	42	10.6	303	76.5	51	12.9	396	100			
-Residence									23.963	1	0.000
- Urban	10	9.3	93	86.1	5	4.6	108	100			
- Rural	19	6.6	223	77.4	46	16.0	288	100			
Total	29	7.3	316	79.8	51	12.9	396	100			
NGO-Intervention									0.579	1	0.749
-NGO- Intervened	23	10.7	161	75.2	30	14.0	214	100			
-Non-NGO-intervened	19	10.4	142	78.0	21	11.5	182	100			
Total	42	10.6	303	76.5	51	12.9	396	100			

Significant at $P \leq 0.05$

4.3. Bivariate Analysis

In order to avoid the influence of extreme cases upon the average, we decided to classify the independent variables into two categories. Then cross-tribulation was done with response variables to determine whether any association existed between the dependent and independent variables. Later, binary logistic regression analysis and their odds ratios at 95% confidence intervals were calculated to assess the strength of the association between the variables.

Being illiterate, not-working for cash (house wives), Muslim, a rural resident and from non-NGO- intervened areas were reference groups and assigned the value = 0) as to have no discussion to use MC, less likely to become MC ever and current user, and also less likely to intend to use MC. And being literate, working out side home for cash, Christian, urban resident and from NGO intervened areas in FP service was assumed to have discussion to use MC, more likely to become ever and current user of MC, and more likely to intend to use MC, and (assigned the value=1).

4.3.1 Discussion to use MC

Discussion to use MC is a preliminary stage in MC acceptance. Regarding the respondents of this study, as shown in table 16, statistically significant (P=0.000) variation was observed between illiterates and literates in discussion to use MC. The literates were found to be more than 1/3 times more likely to discuss to use MC than the illiterates. Statistically no significant variation to discuss to use MC was observed in variation with occupation, religion, residence and NGO - intervention non- intervention.

Table 16: Percentage Distribution of Respondents by their discussion to use MC.

Explanatory Variable	Discussed to use MC			OR	P.value	X^2	df
	Yes	No	Total				
	N %	N %	N %				
1. Edu. Level				2.913	* 0.000	19.685	1
- Illiterate	104 (58.8)	73 (41.2)	177(100)				
- Literate	173 (79)	46 (21)	219(100)				
Total	277(70)	119 (30)	396(100)				
2. Occupation				0.950	0.877	0.024	1
- Working for cash (govt employee, Daily laborer self employed, merchants)	39(71)	16 (29)	55(100)				
- Not working for cash (House wives)	238 (69.8)	103(30.2)	341(100)				
Total	277(70)	119 (30)	396(100)				
3.Religion				0.487	0.222	1.494	1
- Christian (orthodox catholic, Protestant)	269(70.6)	112(29.4)	381(100)				
- Muslims & others	8(53.3)	7(46.7)	15(100)				
Total	277(70)	119(30)	396(100)				
4. Residence				1.321	0.329	.951	1
Urban	75(69.4)	33(30.6)	108(100)				
Rural	202(70.1)	86(29.9)	288(100)				
Total	277(70)	119(30)	396(100)				
5. NGO-Intervention				.980	.929	0.008	1
- NGO-intervened	148(69.1)	66 (3o.8)	214(100)				
-Non-NGO-intervened	129(70.9)	53(29.1)	182(100)				
Total	277(70)	119(30)	396(100)				

Significant at $P \leq 0.05$

As can be seen in table16, from 396 respondents 277 (70%) have discussed to use MC with their partner. Regarding the response of their partner as shown in table 17, 198 (71.5%) of those discussed to use MC reported that the response of their partners were supportive /encouraging/. This shows a wide opportunity to expand FP program. Because, Tizazu (1994) has found out that inter-spousal

communication is predictive of MC use, and also duration of use for women whose husbands approves use is one and half times higher than women whose husband disapproves use of MC. Regarding the present study husband disapproval of discussion to use MC accounted 18%. If this is disseminated to the community, it can prohibit contraceptive acceptance at large.

Table 17: Percentage Distribution of Respondents by the Response of their Partners to the Discussion to use MC.

Responses	N	%
- Supportive	198	71.5
- Neutral	29	10.5
- Disapprove use	50	18.0
Total	277	100

According to Bandarage (1997), Jain (1996), and many others use of MC is a complex issue related with health of users psycho-social and cultural situations that govern a given community or country. As a result its use involves the decision of different members of the society. According to the above researchers, discussion to use MC by couples and approvals of use in their discussion is a priority to sustainable use of MCs for effective fertility regulation. But, couples according to the above researchers may fail to discuss to use MCs for various reasons.

In the present study as shown in table 18, fear of observed and heard side effects of MC on one's health, fear to discuss with partner (shyness), and feeling of "using MCs is being a sinner" accounted 50%; 32.7% and 18.8% respectively were given as reasons for no discussion to use MCs. This shows that health concerns, lack of open culture over sexual matters and religious views are the dominant factors that inhibit discussion to use MCs.

Table 18. Percentage Distribution of Respondents who have never discussed to use MC by there reasons of having no discussions.

Reasons	N	%
- Fear of side effects on health	50	40.0
- Dislike to use MC as it reduce sexual satisfaction	5	4.2
- Feel afraid to discuss with partner	39	32.7
- Feel using MC as being sinner	20	18.8
- others	5	4.2
Total	119	100

4.3.2. MC ever use

As indicated in table 19, contraceptive ever use significantly varied across educational level (P= 0.000), residence (p= 0.007) and NGO-intervention (p=0.018). The literates were about 1/2 times more likely to use MC than their

counterparts. NGO intervention and residence have demonstrated statistically significant associated with MC ever use. That is respondents in NGO intervened rural and urban areas were about 1/3 times more likely to use MC than respondents in NGO-non-intervened rural and urban areas. This in turn implies that literates were 1/2 times more likely to use MC in NGO-intervened as well as non-intervened areas, but NGO intervention raise likelihood ness of MC ever use 1/3 times for both illiterates and literates. Occupation and religion were insignificantly associated with MC ever use. However, this might be due to the domination of similar occupation, house wives 341 (86.1%) in the occupation category, and domination of Christians (orthodox, protestant and catholic) 381 (96%) in the religion category that have almost similar denominations compared to Muslims 15 (4%) in the study population.

Table 19: Distribution of Respondents ever used MC

Explanatory Variable	Ever used MC						OR	P. value	X^2	df
	Yes		No		Total					
	N	%	N	%	N	%				
1. Edu.Level							2.730	*0.000	19.697	1
- Illiterate	50	(28.2)	127	(71.8)	177	(100)				
- Literate	119	(54.3)	100	(45.7)	219	(100)				
Total	169	(42.7)	227	(57.3)	396	(100)				
2.Occupation							1.170	0.612	. 257	1
-working for cash (Gov't employees merchant) Daily laborer, self employed)	27	(49%)	28	(51)	55	(100)				
- Not working for cash (House wives)	142	(41.6)	199	(58.4)	341	(100)				
Total	169	(42.7)	227	(57.3)	396	(100)				
3. Religion							. 554	.311	1.028	1
- Christians (Orthodox Catholic, protestant)	162	(42.5)	219	(57.5)	381	(100)				
- Muslims and others	7	(46.7)	8	(53.3)	15	(100)				
Total	169	(42.7)	227	(57.3)	396	(100)				
4. Residence							. 498	*0.007	7.259	1
- Urban	63	(58.3)	45	(41.7)	108	(100)				
- Rural	106	(36.8)	182	(63.2)	288	(100)				
Total	169	(42.7)	227	(57.3)	396	(100)				
5. NGO- intervention							. 594	* 0.018	5.575	1
- NGO-intervened	101	(47.2)	113	(52.8)	214	(100)				
- Non-NGO intervened	68	(37.4)	114	(62.6)	182	(100)				
Total	169	(42.7)	287	(57.3)	396	(100)				

Significant at $p \leq 0.05$

Contraceptive ever use is an indicator of fertility regulation experiences in a given population. Thus, to know experiences of MC usage, the study population was asked whether they have used MC any time in the past. As indicated in table 19, 169 (42.7%) had an experiences of using MC in the past. The 227 (57.3%) had no experiences of MC usage.

Those respondents who had experiences of MC usage were further asked the purpose for which they used it in the past. As shown in table 20, very large proportions 157 (92.9%) of respondents used MC in the past to space birth. Other purposes for which MCs were used were to limit birth (5.3%), to prevent sexually transmitted diseases (0.6%) and others (1.2%). Hence we can conclude that MCs in the study population were largely used to space birth than for other purposes.

Table 20: Percentage Distribution of Respondents ever used MC by the reasons of Use

Reasons of MC ever use	N	%
- To space birth	157	92.9
- To limit birth	9	5.3
- To Prevent STD	1	0.6
- Others	4	1.2
Total	169	100

Knowledge of MCs ever used by certain eligible group in a given community could help both the government and NGOs embarked in MCs distribution schemes to plan the supply of method mix according to the needs of the society. Regarding the MCs ever used by the study population as indicated in table 21 the most commonly used MCs were injectables (48.5%) and pills (47.9%) which together account for more than 96%. Irreversible method was used by a single woman. On the contrary from the total study population of 396; 152 (38.4%) at present have five and more number of living children (table 9, p.51). This indicates that irreversible methods were not preferred by the study population even when they have reached high parity level. Hence FP programs in the study area should attempt to encourage usage of irreversible methods by those who have reached five and above parity level.

Table 21: Percentage distribution of respondents ever used MCs by the method used.

Method s	N	%
- Pills	81	47.9
- injectables	74	43.8
- Norplant	5	2.9
- Foam / Jelly	-	-
- IUDC / Loop	8	4.7
- Diaphragm	-	-
- Female sterilization	1	0.6
- Total	169	100

As can be seen in table 22, fear of side effects, husband disapproval of MC and desire to have additional children were major reasons for non-use of MC in the past. This might be due to weakness of the IEC programs of FP in the woreda in influencing male contraceptive behavior and persuading the eligible women to use alternative methods during complaints and complications of MC use. However, full understanding of this issue requires further investigation.

Table 22: Percentage distribution of Respondents never used MC in the past by the Reasons of non-use

Reasons for non - use of MC in the past	NO	%
-Husband disapproval of MC	78	34.4
-Fear of side- effects on one's health	80	35.2
-Feeling of 'using MC is immoral and being a sinner'	25	11.0
-To have more children	34	15.0
-others	10	4.4
-Total	227	100

4.3.3. MC Current use

Regarding the adoption of FP services Bandarage (1997) and Chaudhury (1982) and many others have revealed that poor majority in developing countries are reluctant to use MCs. Low level of educational attainment, lack of secure and

certain social environment (lack of institutionalized support to old age and disabled, and low cost of child rearing on the part the parents, and children's provision of current and future help (material and emotional) to the parent in these areas are some of the major factors reported for the low level of contraceptive use. Furthermore, religion and other cultural beliefs that members of a community share can work against the use of MCs while there is a wide spread knowledge to them (Swar-Eldhab, 1993 and Srikantan, 1993).

According to Soddo FP project report in 1999 MC prevalence in Soddo Zuria Woreda was 2.3% in 1991 base line survey, and it was 4% in 1999 during the phase out period of the project. But as shown in table 23, 183 (46.2%) of the study population are currently using MCs. This figure is much higher achievement compared to the national 6.3% MC prevalence for currently married women (EDHS, 2000:53). Thus, we can conclude that voluntary based FP program in the Woreda has profound impact on the contraceptive behavior of the study population. However, it significantly varied across the socio-economic background of the respondents. Educational attainment among other variables has strongest association with current contraceptive usage (p=0.001). The literates were found more than 1/3 times more likely to use MC than their counterparts. Residence and NGO-intervention were also significantly associated with MC current use (P=0.026) and (P=0.001), respectively. Respondents in NGO

intervened rural and urban areas were more than 1/3 times more likely to use MC than those in non-NGO - intervened rural and urban areas in the study population.

As it is the case in MC ever use, occupation and religion were also insignificantly associated with MC current use. This might be due to the reason mentioned in MC ever use, where the association with occupation and religion was also statistically insignificant.

Table 23: Percentage distribution of respondents currently using MC

Explanatory Variable	Currently use MC						OR	P. Value	X^2	Df.
	Yes		No		Total					
	N	%	N	%	N	%				
1. Education Level							2.068	0.001	10.817	1
- illiterate	63	35.6	114	64.4	177	100				
- literate	120	54.8	99	45.2	219	100				
- total	183	46.2	213	53.8	396	100				
2. Occupation Working for cash (Gov. employee, Daily Labourer, Merchants)	30	54.5	25	45.5	55	100	1.262	.446	.581	1
Not working for cash (House Wives)	153	44.9	188	55.1	341	100				
Total	183	46.2	213	53.8	396	100				
3. Religion							.508	.243	1.366	1
-Christians (Orthodox, Protestant, Catholic)	176	46.2	205	53.8	381	100				
- Muslims	7	46.7	8	53.3	15	100				
Total	183	46.2	213	53.8	396	100				
4. Residence							.563	0.026	4.941	1
- Urban	63	58.3	45	41.7	108	100				
- Rural	120	41.7	168	58.3	288	100				
- Total	183	46.2	213	53.8	396	100				
5. NGO intervention							.489	0.001	10.986	1
-NGO intervened	114	53.3	100	46.7	214	100				
-Non-NGO intervened	69	37.9	113	62.1	182	100				
-Total	183	46.2	213	53.8	396	100				

Significant at $p \leq 0.05$

4.3.4 **Spatial variation in MCs current use in the woreda**.

According to UNFP (1999),Mahmood and Ringhiem (1996),Sheton (1999),and Armstrong(1989) rural people are more difficult to reach with information of FP and their access to services is also restricted by greater distance from clinics. This shows that urban areas are spring boards in FP services – dissemination of information and provision or distribution of MCs. Hence, as a general rule one may expect an outward decay of FP service from urban center to the peripheries. However, as can be seen in table 24, this trend in the present study is not maintained in both NGO intervened and non- intervened areas. Percentage of use started to show decreasing rate in the immediate rural kebeles from Soddo town; and started to increase in the peripheral Kebeles selected both from NGO intervened and non-intervened Kebeles for the study. This might be due to the availability of health clinic near the peripheral Kebeles that are selected in the study (table 24) i.e. Amacho-kodo and Tome-Gerera kebeles near Amacho-kodo catholic Church owned Health clinic that provide FP services on clinic basis. However, the result would have been a different one if sample kebeles were selected at successive distance in the direction where there are no health clinics. Thus, we can conclude that it is not a mere geographical distance from urban center that determine MC usage in the Woreda, rather distance from health facilities has demonstrated as important predictor of MCs usage.

Table 24: Percentage distribution of respondents currently using MCs by sampled kebeles.

Sampled Kebeles		Distance from Soddo town in km	Yes		No		Total	
			N	%	N	%	N	%
NGO intervened	1-0-2	-	31	52.5	28	47.5	59	100
	Waraza Shoho	5-6	31	41.9	43	58.1	74	100
	Amacho-Kodo	22-23	52	64.2	29	35.8	81	100
Non NGO intervened	2-0-2	-	32	65.3	17	34.7	49	100
	Kokete Marachare	5-6	12	20	48	80	60	100
	Tome Gerera	22-23	25	34.2	48	65.8	73	100
Total		6	183	46.2	213	53.8	396	100

Women who do not use MC for various reasons while they are eligible i.e. not pregnant and not using any other method of birth control in ages (15 – 49) constitute the 'unmet need' for MCs. As can be seen from table 25 women who do not use MC because they are pregnant and because they are using natural methods of birth control account for about 31.4 and 0.9 percent respectively. Hence, about 32.3% of the non-current users are not eligible to use MCs. Thus, the 'unmet need' for MCs in the study population is about 67.7%. The major reasons for non use of MCs by current eligible women in the order of importance are desire to have additional children (25.4%), faced and heard side effects of MCs on one's health

(21.1%), husband disapproval of MCs (15%), belief on breast feeding as a birth control (2.3%), and belief of 'using MC is being a sinner' (2.3%).

Table 25: Distributions of Respondents not currently using MC by Their reasons For non- use

Reasons for non- use of MC currently	NO	%
- To have additional children	54	25.4
- Currently pregnant	65	31.4
- Currently breast feeding	5	2.3
- Faced/heard side-effects on one's health	45	21.1
- Husband disapproval of MC	32	15.0
- Thinks use of MC being a sinner	5	2.3
- Husband use MC instead of wife	-	-
- You and your husband use natural methods to control Pregnancy	5	2.3
- Others	2	0.9
Total	213	100

As show in table 26, most of current users (91.8%) were spacers. Very few respondents 14 (7.6%) used MC to limit birth. In both ever and current use of MC, spacers accounted for about 92%. However, as shown in table 9, currently, 125 (31.6%) and 152 (38.5%) of the respondents have 3-4 and 5 and more number of living children, respectively. This indicates that about 39% of the respondents have currently entered into a large family size (more than four children) and a

significant proportion 125 (32%) of respondents will enter into a large family size soon.

This fact shows either the weakness of FP program in the study area in persuading clients to use irreversible methods for limiting birth or probably the resistance of the study population to use permanent methods even when they have more than four living children.

Table 26: Distribution of Respondents currently using MC by reasons for Current use.

Reasons for current use of MC	NO	%
- To space birth	169	91.8
- To limit birth	14	7.6
- To prevent STD	-	-
- Others	1	0.7
Total	183	100

Regarding the method being used pills that accounted for about 47.9% in MCs ever use (table 21) dropped to 6.8% (table 27) and use of injectables rose from 43.8% in MCs ever used (table 21) to 67.7% (table 27). This indicates that demand for injectables is rising while demand for pills is falling in the study population. But demand for other MCs such as Norplant, IUCD/loop and female sterilization remained similar in both MC ever and current use, below 5% all together. Diaphram and foam/jelly are hardly needed by the study population.

Table 27: Percentage distribution of respondents using MCs by the methods being used

Methods		
- Pills	49	6.8
- Injectable	124	67.7
- Norplant	4	2.2
- IUCD /Loup	4	2.2
- Diaphragm	-	-
- Foam/Jelly	-	-
- Female stylization	2	1.1
Total	183	100

4.3.5 Intention to use MC

In order to measure future intention to use MC, the non-current users were asked whether they intend to use MC at sometime in the future. The response was cross tabulated with background variables selected in the study. As indicated in table 28, significant variation was observed across educational level (p=0.005). The literates were more than 1/2 times more likely to intend to use MC than the illiterates. The strongest association was observed also with education. This shows that as literacy level rose, people tend to show more responsible and internalized contraceptive behavior. This finding also confirms studies by Saw (1989) in Singapore where

higher literacy level eroded traditional mentality towards large family size in Muslim societies which strongly resist fertility regulation. Thus, in order to raise contraceptive prevalence in the study population priority should be given to improve the literacy level of currently married women.

As it is a case MCs ever and current use occupation and religion have demonstrated statistically insignificant association with intention to use MCs (p=0.858 and p=0.775) respectively. This might be due to the domination of similar occupation i.e. house wives 367 (92.2%), and similar religion i.e. Christian denominations i.e. Orthodox, Catholic and Protestant 48.8%; 3.3% and 44.4% respectively. This means that about 96.5% of the study population have characterized by similar religion regarding fertility regulations (Sirkantan 1993). Residential variation i.e. being rural and urban domicile and being from NGO intervened or non intervened areas FP service; as opposed to MC ever and current use have demonstrated statistically insignificant association with intention to use MCs (p=0.122 and p=0.303), respectively. Thus full understanding of this scenario requires further investigation.

Table 28: Percentage Distribution of Respondents intending to use modern Contraceptives

Explanatory Variable	Intend to use modern Contraceptive									
	Yes		No		Total					
	No	%	No	%	No	%	x^2	df	OR	P. Value
1. Education							8.025	1	2.232	0.005
Illiterate	29	30	85	70	114	100				
Literate	69	70	30	30	99	100				
Total	98	70	115	30	213	100				
2. Occupation							0.032	1	0.933	0.858
Working for cash (government employee, merchants, daily labourers)	14	54.5	11	45.5	25	100				
Not working for cash (house wife)	84	44.9	103	55.1	188	100				
Total	98	46.2	115	53.8	213	100				
3.Religion							0.082	1	0.782	0.775
Christians (Orthodox, Catholic, protestants)	94	46.2	111	53.8	205	100				
Muslims and others	4	46.7	4	53.3	8	100				
Total	98	46.2	115	53.8	213	100				
4. Residence							2.391	1	0.561	0.122
Urban	26	58.3	19	41.7	45	100				
Rural	72	41.7	96	58.3	168	100				
Total	98	46.2	115	53.8	213	100				
5.NGO intervention								1		0.303
NGO intervened	53	53.3	47	46.7	100					
Non NGO intervened	45	57.9	68	62.1	113					
Total	98	46.2	115	53.8	213					

Significant at $p \leq 0.05$

4.3.6. The Interdependence Between Discussion to use MC and Actual Practicing of MC

In order to measure, whether discussion precedes MC use, cross-tabulation was done between discussion to use MC and contraceptive ever and current use. As can be seen in tables 29 and 30, statistically significant association was observed between discussion to use MC and contraceptive ever and current use (p= 0.000), respectively. Women discussed to use MC with their husband were found more than two times more likely to use modern contraceptive in the past. And they were also four times more likely to use MC currently than their counterparts. A few women 29 (24.3%) ever used MC did not discuss to use it with their husbands. This might be to escape husband disapproval of MC use. However, it requires further investigation.

Regarding discussion to use MC and current use of MC, as indicated in table 30, those discussed to use MC with their husbands are five times more likely to use MC currently than their counterparts. This implies that discussion to use MC highly promotes actual usage of MC. Hence FP programs should give more priority to encourage free and open discussion between couples regarding fertility regulation.

Table 29: Discussion to use MC and Contraceptive ever use

Variable	Contraceptive ever use						x^2	df	OR	P-value
	Yes		No		Total					
	N	%	N	%	N	%				
Discussed to use MC=277	140	50.5	137	49.5	277	100	16.606	1	4.728	0.000
Not Discussed to use MC=119	29	24.3	90	76.6	119	100				
Total	169	42.6	227	57.3	396	100				

Table 30: Discussion to use MC & contraceptive current use

Variable	Currently use MC						x^2	df	OR	P-value
	Yes		No		Total					
	N	%	N	%	N	%				
Discussed to use MC=277	167	60.3	110	39.7	277	100	18.133	1	4.907	0.000
Not Discussed to use MC=119	16	13.4	103	86.6	119	100				
Total	183	46.2	213	53.8	396	100				

Significant at $p \leq 0.05$

4.4 Multivariate Regression Analysis

In order to identify explanatory variables that have stronger association with response variables a stepwise logistic regression analysis was employed. The response variable considered for the analysis were MC ever and current use. Regarding MC ever use, education and NGO intervention have demonstrated statistically significant association after all variables included in the study are removed in a stepwise regression analysis (p=0.000, and p=0.002), respectively. In case of MC current use also education and NGO intervention have demonstrated statistically association after removing all other variables included in the study (p=0.000 and p=0.001), respectively. But no other variable in the study has demonstrated statistically significant association after removing education and NGO intervention in both MC ever and current use. (Appendix A_1 and A_2)

This fact shows that education and NGO intervention in their order of importance are powerful influential factors of contraceptive behavior in the study area. Furthermore, the statistically significant urban-rural variation in MC ever and current use (p=0.007, p.70), and p=0.026, p.75), respectively, also implies that literate people are more concentrated in urban areas and are more likely to become MC ever and current users than rural illiterate women. In addition, statistically significant variation in MC ever and current use between NGO intervened and

non-intervened areas (p=0.018, p.70, and p=0.001, p.75), respectively, also implies that NGO intervention has more influence on the contraceptive behavior of literate people than the illiterate ones both in urban and rural parts of the study area. Therefore, FP programs that aim a wider acceptance of MC in the study area should focus on the expansion of educational opportunities to rural women and incorporate rural and urban kebeles which were not included in FP programs undertaken by NGOs in the period 1991-1999.

Binary logistic regression model = $P(y=1)= \frac{1}{1+\exp[-(b_0 + b_1 X_1 + \ldots b_p X_p)]}$

P-value $p \leq 0.05$ is the level of significance decided in the research

$OR = \log \frac{Prob(event)}{Prob(non\text{-}event}$ =OR=1 when explanatory variable and response variable are independent of each other.

OR<1 indicate the relative amount by which response variable

Decrease when explanatory variable increase by 1.0 unit

OR>1 indicate the relative amount by which response variable

Increase when explanatory variable increase by 1.0 unit.

4.5 Desirable Criteria for an Improved Family Planning Service Provision

According to MSIFPSD (1995) a FP program to be successful should have separate clinic hours and or places for different clients (married women and men, and unmarried adolescents), so that clients can become psychologically free and get service with out waiting longer hours in the clinic. Involvement of community members, provision of full set of method mix, provision of full information on the side effects of client preferred methods and expanding demand for modern contraceptives are other most important criteria mentioned for the program success.

Therefore, in order to understand the quality of FP service in the study area a semi-structured questionnaire that mainly focuses on the issues of whether there are:

1. Separate service hours for different clients i.e. currently married women and men, and unmarried adolescents
2. Community members involvement in FP services
3. Client follow up mechanism to identify reasons for discontinuation of MCs usage
4. Full set of MC Mix available in the organizations so as to provide clients according to their needs.

5. Measures taken to expand demand for MC, were presented to health personnel providing FP service in three government health institutions and one NGO named (AHA)

All of the health personnel providing FP service responded that they have separate clinic hours for different clients. However, as observed by the researcher, breast-feeding mothers and others were waiting for the service at the same clinic hours during the survey. In addition, except in Soddo health center, there was no separate room for FP service provision. This might force clients to wait longer hours to get the service, which is known to hamper program success in developing countries. However, in the health institutions in the study area, there is a weakly program in all health institutions. And clients are advised to come on program days or in the every afternoon when work tensions in other medical service sections are reduced. As a result client waiting hour for the service ranged between 5 minute to 30 minute, which is accepted as normal (MSIFPSD:1995).

Another factor that can influence FP service provision is involvement of community members in FP. Participating satisfied clients from different social groups (educational status, religions, income, occupation, and age groups) greatly enhance FP Service provision (MSIFPSD, 1994).

Regarding this study, the health personnel responded that CBD workers are recruited on the basis of their educational attainment (grade nine and above), voluntary and have high interest, and have children three and less participate in ICE and distribution of some MCs. This was done in order to become a practical example to the community in favour of small family size and fertility regulation. However, full realization of community members participation in FP requires involvement of satisfied beneficiaries from different social groups educational, religious, income, age, occupational, etc. (MSIFPSD, 1995).

But according to the respondents many factors are ignored in selecting community members that should involve in FP service. Hence, this fact in the study area needs reconsideration.

As to the client follow up mechanisms for the discontinuation of MC usage, according to health personnel different measures were taken step by step. First discontinuers were identified by CBD workers in a house to house visits. Secondly those identified, as discontinuers were provided with counseling services and alternative methods if they wish as a solution to discontinuation of MC usage. Furthermore, according to health personnel, to reduce over all discontinuation rates of MC use clients were first provided with full information of side effects on their preferred methods, and advised to visit

health personnel for any discomfort with a method being used. This is an appropriate step in providing FP services (MSIFPSD: 1995).

Other than client behavior, there were many problems reported by health personnel which could prohibit FP service in the study area. Some of the major ones include lack of payment for CBD workers on permanent basis, problem of accessibility in rural kebeles (lack of motorable roads), shortage of method mix in health institutions, shortage of trained health personnel in FP service, lack of separate rooms for FP service and husband disapproval of MC use in some instance.

Chapter Five

5. Conclusions and Recommendations

5.1 Conclusions

In the present study many differences have been observed in the contraceptive behaviour of the study population. The findings revealed that:

1. Ideal family size preference is significantly influenced by socio-economic factors such as education, religion and residence. Women who are illiterate, from Muslim religious group and living in rural areas are more likely to aspire more number of children; five and more and 'God knows' than women literate, from Christian denominations, and living in urban area.
2. Knowledge of MC is also significantly influenced by socio-economic factors such as education, residence and NGO intervantion. Women illiterate, living in rural areas and non-NGO intervened Kebeles in FP service are found inferior to those literate, living in urban areas and areas of NGO intervention.
3. Family planning workers (CBD and health workers in government and non-government organizations play the largest role in the dissemination of MC information and in the initiation of MC practice.

4. Women illiterate, living in rural areas and from Muslim religious group are found to have less favourable attitude towards MC than literate, those living in urban areas and from Christian denominations.
5. Discussion to use MC was significantly varied across educational level. That is, the literate women are 1/3 times more likely to discuss to use MC than their counter parts. Other variables selected in the study (occupation, religion, residence and NGO intervention/non-intervention) have demonstrated no significant association with discussion to use MC.
6. Discussion to use MC is found a positive predictor of contraceptive usage. Women discussed to use MCs with their partners were found more than four times more likely to become MC current users than their counterparts.
7. Contraceptive ever and current use significantly varied across the educational level of the respondents. Literate women are 1/2 times more likely to become contraceptive ever and current users than their counterparts.
8. Contraceptive current use is significantly varied with variation in residence. That is, women living in urban areas are found 1/4 times more likely to use MC than their counterparts.
9. The spatial variation MC current use is found not the decreasing trend from urban areas to the peripheral. Rather it is found decreasing away from health clinics.
10. NGO-intervention in FP has also shown a significant association with MC ever and current use. That is, women living in NGO-intervened urban and rural

parts of the woreda are found 1/3 times more likely to use MC than those living in NGO non-intervened parts.

11. About 92% of MC ever and current users are found spacers. That is irreversible methods are very rarely used by the study population. However, at present 125 (31.6%) and 152 (38.5%) of the study population are having 3-4 and; 5 and more living children respectively.
12. Being pregnant, desire to have additional children, fear of side-effects and husband disapproval of MC in the order of importance have been demonstrated to be major reasons for non-use of MC among current non-users.
13. Intention to use MC is only significantly varied across educational level of the study population. The literates are found1/2 times more likely to intend to use MC than their counterparts. Other variables selected in the study (occupation, religion, residence and NGO-intervention) have been demonstrated no significant association with future intention to use MC.

Similar to other numerous studies in FP our analysis has shown that literacy is strongly associated with MC ever and current use.

5.2 Recommendations

Based on the findings the following recommendations are forwarded:

1. The government and NGOs involved in FP services in their development efforts should undertake urgent intensive literacy programs in the woreda. Because, about 45% of currently married women are found illiterate
2. The government and NGOs involved in FP services should organize intensive IEC campaigns that focus on disadvantages of large family and benefits of FP to larger section of the community. In this regard it is important to involve the satisfied beneficiaries of FP from different social groups (education, religion, occupation, residence, etc.).
3. In order to ensure wider expansion of MC Knowledge and acceptance of it the government and NGOs involved in FP should organize discussion groups of currently married women and men on issues of FP.
4. The NGO currently involved in FP service provision named (AHA) should attempt to incorporate kebeles which were not included in FP service provision during the 1991-1999 period FP project in the woreda.
5. Finally, we encourage further investigation on other many factors that influence usage of MCs by currently married women as well as other eligible social groups.

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Appendix = A_1

A Stepwise logistic Regression Analysis for MC ever use.

A Stepwise (Likelihood Ratio)

Variables in the equation		B	S.E.	Wald	df	Sig. (P. value)	Exp (B)
Step 1[a]	X_1	-.920	.172	28.777	1	.000*	.398
	X_2	.438	.260	2.832	1	.092	1.549
	X_3	.512	.222	5.336	1	.021*	1.668
	X_4	-.036	.078	.210	1	.647	.965
	X_5	-.126	.106	1.431	1	.232	.881
	Constant	-.088	.751	.014	1	.907	.916
Step 2[a]	X_1	-.911	.170	28.592	1	.000*	.402
	X_2	.449	.259	3.014	1	.083	1.567
	X_3	.501	.220	5.175	1	.023*	1.650
	X_5	-.128	.106	1.465	1	.226	.880
	Constant	-.292	.604	.234	1	.628	.746
Step 3[a]	X_1	-.926	.170	29.751	1	.000*	.396
	X_2	.407	.255	2.538	1	.111	1.502
	X_3	.493	.220	5.030	1	.025*	1.637
	Constant	-.457	.587	.607	1	.436	.633
Step 4[a]	X_1	-1.015	.161	39.796	1	.000*	.362
	X_3	.499	.219.	5.202	1	.023*	1.648
	Constant	.299	.343	.756	1	.384	1.348
Step 5[a]	X_1	-.990	.159	38.921	1	0.000*	.372
	Constant	1.007	.158	40.609	1	0.000	2.738

$P \leq 0.05$

Variable (s) ententered on the following step.

X_1= Education level - illiterate = 0

- literate = 1

X_2 = Residence - rural = 0

- urban = 1

X_3 = NGO intervention - NGO non intervened = 0

- NGO -intervened = 1

X_4 = occupation Not working for cash (House wife) = 0

- Working for cash (Govt employee merchants, self employed) = 1

X_5 = Religion - Muslims = 0

- Christians (Orthodox, Catholic, Protestant) = 1

Appendix = A_2

A Stepwise logistic Regression Analysis for MC current use.

A Stepwise (Likelihood Ratio)

Variables		B	S.E.	Wald	df	Sig.(P. value)	Exp (B)
Step 1[a]	X_1	.973	.174	31.203	1	.000*	2.647
	X_2	-.134	.262	.260	1	.610	.875
	X_3	-.733	.221	11.058	1	.001*	.480
	X_4	-.006	.076	.006	1	.938	.994
	X_5	-.148	.105	1.995	1	.158	.863
	Constant	.796	.742	1.150	1	.284	2.216
Step 2[a]	X_1	.975	.174	31.533	1	.000*	2.650
	X_2	-.132	.260	.255	1	.614	.877
	X_3	-.735	.220	11.211	1	.001*	.479
	X_5	-.148	.105	2.005	1	.157	.862
	Constant	.762	.604	1.592	1	.207	2.143
Step 3[a]	X_1	1.005	.163	38.084	1	.000*	2.733
	X_3	-.738	.219	11.308	1	.001*	.478
	X_5	-.155	.104	2.224	1	.136	.857
	Constant	.531	.393	1.824	1	.177	1.701
Step 4[a]	X_1	.989	.162	37.329	1	.000*	2.690
	X_3	-.743	.219	11.514	1	.001*	.476
	Constant	.235	.338	.484	1	.487	1.265
Step 5[a]	X_1	.940	.157	35.721	1	0.000*	2.560
	Constant	-.812	.153	28.304	1	0.000	.444

$P \leq 0.05$

Variable (s) ententered on the following step.

X_1= Education level - illiterate = 0

- literate = 1

X_2 = Residence - rural = 0

- urban = 1

X_3 = NGO intervention - NGO non intervened = 0

- NGO -intervened = 1

X_4 = occupation Not working for cash (House wife) = 0

- Working for cash (Govt employee merchants, self employed) = 1

X_5 = Religion - Muslims = 0

- Christians (Orthodox, Catholic, Protestant) =

Appendix (B)

The Questionnaire

Part 1: Background Information

Directions: Here are some questions about the background information of the respondents. Some of the questions require to fill the response of the respondents in the blank space provided. When the questions are in the form of choices, indicate the response of the respondents by marking "x" under the box provided.

1. Age: _____
2. Education status:_____
3. Residence:

   Urban

   Rural
4. Occupation:_____
5. Religion:

   Orthdox

   Catholic

   Protestant

   Muslim

Others Specify_____

PART II. Social Characteristics and Family Planning Behavior

6. How many years have you and your husband been married?_____
7. How many living children do you have at present?

M	F	Total

8. Do you have number of children died before age five? 1) Yes 2) No

9. If yes to Q.8 Hoe many females and males?

M	F	Total

10. How old were you during your first marriage? Enter in years_____
11. How old were during your first birth? Enter in years_____
12. There are various methods of delaying or avoiding pregnancy. Have you ever heard about FT?

    1. Yes 2. No (skip to 15)

13. If yes to Q. 12 can you mention some FT methods?

Pills	1. Yes	2. No
Condom	1. Yes	2. No
IUCP	1. Yes	2. No
Female sterilization	1. Yes	2. No
Injectable	1. Yes	2. No
Implant	1. Yes	2. No
Vasectomy	1. Yes	2. No
Foam/Jellies	1.Yes	2. No
Diaphram	1. Yes	2. No

14. If yes to Q. 12 where do you get Family Planning information currently?

1. From mass media- Radio, Newspapers, etc	1. Yes	2. No
2. Mass gathering	1. Yes	2. No
3. FP clinic service	1. Yes	2. No
4. Health centers	1. Yes	2. No
5. From your marital partner	1. Yes	2. No
6. Close friends	1. Yes	2. No
7. CBD workers	1. Yes	2. No

8. Others Specify_____-

15. Assume you are in your first age marriage and have no children and asked the ideal No. of children you prefer to have. How many would be that ideal number you prefer to have?

1) 1 2) 3-4 3)5 4) 6 5) As many as God's decision

16. Have you ever discussed to use Family Planning methods? With your husband?

1. Yes 2.No (skip to 19)

17. If yes to Q.16 what was the response?

1. Supportive 2. Neutral 3. Negative

18. if yes to Q.16 for what reason have you discussed to use FP method?

1. To space birth 2. To limit birth 3. To prevent STD
4. Others specify_____

19. If No to Q.16 what was the reason for you not to discuss the matter?

1. You dislike use of FP method because it has bad side effects on one's health
2. You dislike FP methods because it decreases sexual pleasure
3. You feel embarrassed to discuss FP with your husband
4. You dislike FP methods because you feel it is interference in God's work
5. Other reasons Specify_____

20. Have you ever practiced modern contraceptive?

1. Yes 2. No (Skip to 23)

21. If yes Q.20 what is the reason for which you have practiced it?

1. To space birth 2. To limit birth 3. To prevent STD
4. Others specify_____

22. If yes Q.20 which of the following modern contraceptives are you familiar with?

1. Pill 1. Yes 2. No
2. Injectable 1. Yes 2. No
3. Implant 1. Yes 2. No
4. Foam Tablets 1. Yes 2. No
5. IUCP 1. Yes 2. No
6. Female sterilization 1. Yes 2. No
7. Others Specify_____

23. If No to Q. 20 what is the reason for your non use?

1. Disapproval of modern contraceptive by your husband

2. Fear of side effects you have heard about modern contraceptives
3. It is transgression of God's law
4. You desire to have as many children as God provides ypu
5. Others Specify_____

24. Are you currently practicing modern contraceptives?

1. Yes 2. No (skip to 31 & 32)

25. If yes to Q. 24 what is the reason for which you are practicing modern contraceptives?

1. To space birth 2. To limit birth
4. Others specify_____-

26. If yes to Q.24 which modern methods are practicing?

1. Pills	1. Yes	2. No
2. Injectable	1. Yes	2. No
3. IUCP	1. Yes	2. No
4. Nor plant/Implant	1. Yes	2. No
5. Foam/Jellies	1.Yes	2. No
6. Diaphram	1. Yes	2. No
7. Strilization	1. Yes	2. No

27. If yes to Q.24 where do you get the method you are practicing?

1. From health centers	1. Yes	2. No
2. Community health post	1. Yes	2. No
3. From Hospital	1. Yes	2. No
4. From pharmacy/private drug rendor	1. Yes	2. No
5. In your home from CBD and out reach service agents	1. Yes	2. No
6 Shops	1. Yes	2. No

28. If yes to Q.24 did you face some problem in obtaining the MC that you are currently practicing? 1. Yes 2. No

29. If yes to Q.28 what are your major inconveniences in obtaining the method you are practicing?

1. Long waiting hours in health Institutions to obtain it

2. Further distance you travel to obtain the method you are practicing from health care institutions
3. Lack of acceptance and courtesy by health workers and CBD agents
4. Cost unaffordable for the method you are using
5. Others specify_____

30. If yes to Q.24 what measures would you take if you feel discomfort with a method you are practicing?

1. Discontinue use 2. Go to health center to get advice and treatment
3. Other specify_____

31. If No to Q. 24 why are you practicing it?

1. Because you are pregnant
2. Because you are lactional amennorhic
3. Because of side effects you have heard/experienced
4. Husband disapproval of modern methods
5. Because it is immoral and sinful to use MC
6. Because your husband use modern contraceptives instead of you
7. Because you and your husband use traditional methods
8. Other reasons specify_____

32. If No to Q.24, do you intend to use modern contraceptives in the future?

1. Yes 2. No

33. If yes to Q.32, what is the reason for which you are intending to use MC?

1. To space birth 2. To limit birth 3. To prevent STD
4. Others specify_____

34. If No to Q.32, what is your reason for no intention to use MC?

1. Fear of side effect 1. Yes 2. No
2. Husbands disapproval of MC 1. Yes 2. No
3.Your desire to have more children 1. Yes 2. No
4. It is immoral and sinful 1. Yes 2. No
5. It decreases sexual pleasure 1. Yes 2. No
6.Because you and your husband intended to use traditional methods

1. Yes 2. No

7. Because you are in fecund 1. Yes 2. No

35. Are you currently pregnant? 1. Yes 2. No

36. If yes to Q.35, is it planned? 1. Yes 2. No

37. Use of modern contraceptives is immoral and sinful

1. Agree
2. Disagree
3. Uncertain

38. Use of modern contraceptives decreases sexual pleasure

1. Agree
2. Disagree
3. Uncertain

39. Use of modern contraceptives is harmful to one's health

1. Agree
2. Disagree
3. Uncertain

40. Too many children are harmful for the health of the mother, and the general well being of the whole family.

1. Agree
2. Disagree
3. Uncertain

41. Too large family strains a family's economic situations

1. Agree
2. Disagree
3. Uncertain

42. A large family makes a happy home

1. 1..Agree
2. Disagree
3. Uncertain

43. Family planning information and services should be equally available for both women and

1. Agree
2. Disagree
3. Uncertain

44. Who do you think should take responsibility for practicing some contraceptive methods

1. The wife
2. The husband
3. Both should be equally responsible

45. Of the following whose opinion about FP do you value most (put in the order of importance).

- My parents
- Spouses parents
- Close friends
- Religious leaders
- Community elders
- My spouse
- Medical personne

Appendix – (C)

Questionnaire for health personnel providing FP services in Government and Non-Government Institutions in Soddo Zuria Woreda.

1. Does your organization provide FP services to unmarried adolescents ?

   1. Yes 2 No

2 Does your organization provide FP services to married women and men?

   1. Yes 2. No

3. If yes to Q. 1 and 2 Does your organization has flexible and convenient clinic hours for those different clients?

   1. Yes 2. No

4. If No to Q. 3 How does your organization provide FP services to these different Age and sex groups? Specify_____

5. How long is an individual client's waiting hour on average for FP service in your clinic, specify _____
   _____

6. Is there any attempt made to improve the length of client waiting time in your clinic for FP service? 1. Yes 2. No

7. If yes to Q.6 What kind of attempts were made so far? Specify
   _____

8. Does your organization involve community members in FP delivery system

   1. yes 2. No

9. If yes to Q.8 How does your organization select those community members expected to involve in the FP service provision? Specify

_____

10. If yes to Q.8 in what activities does your organization involve community members? Specify _____

_____

11. If No to Q.8 Give reasons why organization does not involve community members in FP service provision _____

_____

12. Does your organization has a client follow-up mechanism for identifying causes for client discontinuation of modern contraceptives? 1. Yes 2. No

13. If yes to Q.12 specify the mechanisms your organization use to identify causes for client discontinuation of MC. _____

_____

14. Does your organization analyze causes identified for client discontinuation of MC.

1. Yes 2. No

15. If yes to Q.14 What major causes for client discontinuation of MC were commonly Reported and analyzed, specify _____

_____

16. What corrective measures were so far taken on those major causes for client discontinuation of MC? Specify _____

_____

17. Does your organization has a wide range of MC, so that client can choose methods Appropriate to their reproductive needs and health status? 1. Yes 2. No

18. Does your organization attempt to increase demand for MC? 1. Yes 2. No

19. If yes to Q.18 specify the mechanisms your organization use to increase demand for MC _____
_____

20. Specify your organization's major service delivery approaches in FP service provision_____
_____

21. What are your organization's major problems in FP service delivery? State in the order of importance?

_____
_____
_____
_____

Appendix-(D)

Training Manual For a Study on Factors Influencing adoption of MC by Currently Married Women

-Interviewers should understand the basic concepts of FP and different types of MC. In order to achieve this purpose care was taken during selection and training of the interviewers. That is all the interviewers selected were grade 12 and above, and health personnel engaged in FP service were used during training

-Have good personality and show respect to the respondents

-Able to master interview techniques so as not to embarrass the respondent since FP is a sensitive issue.

-Should be able to speak both Apharic and Wolaita Languages

-Should know how to keep the confidentiality the collected information.

The questions should be presented at their house with face-to-face interview.

-The interviewer should proceed from door to door to locate the respondents.

-Before an interviewer goes to the next household he/she should be sure about the completeness of previous interview.

-The interviewers should know which time is more appropriate to get a woman at home. Early morning and afternoon visits, and visits at non-market and church days and hours are alternatives.

-If the respondent refuses to participate in the study the interviewer should first try to convince the individual and if the condition is unchanged he/she should inform the supervisors or the principal investigator.

-If the respondents do not know her age the interviewer can provide some time or event references.

-Influencing the answers of respondents and deliberate falsification of responses is not allowed.

-If questions are incomplete in the first day the interviewer should complete the questions the next day.

-Interviewers should be warned not to abbreviate or skip questions or not to make recording errors in an attempt to get through the interviews as quickly as possible in order to have time to complete more interviews per day.

-The interviewer should know how to avoid a woman out of the age bracket (15-49) and how to replace another respondent. The interviewer should know how to code the response and complete the questionnaire.

-The interviewer should tell the interviewee the difference between MC ever use, current use and intention to use.