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Women with Unmet Need for Contraception and their Reasons for not Using a Method in Oromiya Region, Bale Zone, Goba Woreda

By

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List of Acronyms and Abbreviations

amsl – above mean sea level

CBD – Community Based Distribution

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CPR – Contraceptive Prevalence Rate

CSA - Central Statistical Agency

DHS – Demographic and Health Survey

EDHS – Ethiopia Demographic and Health Survey

EGDHS – Egypt Demographic and Health Survey

FGD – Focus Group Discussion

FHI – Family Health International

FP- Family Planning

GDHS – Ghana Demographic and Health Survey

HEWs- Health Extension Workers

IEC – Information Education and Communication

MCH – Maternal and Child Health

MOA- Ministry of Agriculture

MOH- Ministry of Health

NFFS – National Family and Fertility Survey

NGOs – Non Governmental Organizations

PRB – Population Reference Bureau

RH – Reproductive Health

SPSS – Statistical Package for Social Scientists

TFR – Total Fertility Rate

UNDP – United Nations Development Programme

UNFPA – United Nations Fund for Population Activities

UNICEF – United Nations Children's Fund

UNS – United Nations Secretariat

VIF – Variable Inflation Factor

WHO – World Health Organization

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Abstract

Context: *Sub Saharan African countries lag behind the remaining of world in contraceptive prevalence rate (CPR). The level of unmet for family planning is also highest for the region. Being part of the region, Ethiopia is not an exception to this situation. It is evident that unmet need for family planning has many undesirable consequences. Among other things, maternal morbidity and mortality, unwanted pregnancy which could end up with unsafe abortion, and infant mortality are the most noted consequences of unmet need. The ultimate goal of this study is to identify the socioeconomic, demographic and family planning program related causes of unmet need among currently married women of reproductive age in Oromiya region, Bale zone, Goba Woreda. Moreover, the study was aimed at assessing reasons for current and future non use of contraceptive methods among women with unmet need.*

Method: *A community based cross-sectional study design was employed to achieve the stated objectives. Multi-stage stratified sampling and systematic random sampling were used to select the 827 women for interview. To analyze the data both bivariate and multivariate techniques of data analysis were applied. Chi square test was employed to see association between each predictive and outcome variable. Logistic regression is also fit to identify determinants of unmet need for contraception using Statistical Package for Social Scientists (SPSS Ver.15). Qualitative data were also generated using FGD and personal interview with health worker to supplement and further interpret the results of the quantitative data.*

Results: *The results indicate that majority of the respondents were rural residents (55.3%), orthodox Christians (47%) with no formal education (58.5%), and only one third (33.1%) of them currently working. Oromo is the single most dominant (69.9%) ethnic group among the women. Substantial proportions (22.9%) of women were also found in the age group 25-29 years. In terms of their declared reproductive status the fecund, pregnant, amenorrheic and menopausal/infecund constitute for 46.7%, 9.6%, 25.4% and 18.4% respectively. Knowledge about family planning is found to be very high (92%) among respondents. More interestingly, 50.5% of the respondents know four and over methods of family planning. With regard to spousal communication, half (49.5%) of the study subjects never discussed family planning with their husbands. Moreover, four fifth (79.1%) and greater than three fifth (63.1%) of the respondents never discussed with health extension workers and never visited a health facility respectively.*

The level of unmet need for contraception in the study area (i.e.32.5%) is almost closer to the national average (34%). Unmet need for spacing (17.3%) is slightly greater than unmet need for limiting (15.2%). As it is evidenced elsewhere the level of unmet need is higher among rural women than their urban counterparts (42.5% versus 20.3% respectively). The logistic regression model depicts, among other variables, number of living children, spousal communication, visit of a health facility, discussion with health extension workers, age and ethnicity are determinants of unmet need.

Conclusion: *Number of living children that women have increases the likelihood of unmet need among women. Conversely, discussion with health extension workers and husbands, increasing age of women, and women's visit of health facility where family planning is integrated in to MCH reduce the chance of having unmet need among women. Finally, the study recommends that women in their lower reproductive age should be given top priority. Moreover, MCH program should be expanded to areas where it is absent and family planning programmers should exert due effort to encourage males to discuss with their wives about FP and take part in contraceptive use.*

Chapter One

1. Introduction

1.1. Background of the Study

World wide since the 1960's the percent of married women using contraception has steadily increased (PRB, 2006; UN Population Division, 2005). Owing to this, since the early 1990's more than half of all married women in the world were using some form of contraception (Prata, 2007). Because of increased use and practice of contraception, in both developed and some developing countries fertility has declined and still declining. For instance, the total fertility rate of South Korea fell from an average of six children in 1960 to an average of 1.7 during the 1998. Moreover, in Columbia total fertility fell from 6 to 3.5 in only 15 years after contraceptives become widely available in 1968 (Potts ,2000). Similarly, some African countries have also achieved such reduction in their total fertility rate. This situation is particularly true for Southern African countries (i.e. South Africa, Swaziland, Lesotho, Botswana and Namibia) and North Africa (Prata, 2007). For instance, the total fertility rate of Egypt declined from 5.3 in 1980 to 3.6 in 1995 (EGDHS, 1998) and currently the total fertility rate of Egypt is as low as 3.1 (PRB, 2007).

Despite overall progress, enormous differences exist between countries and regions of the world regarding contraceptive use and the corresponding fertility decline. Unlike other regions of the world, Sub Saharan Africa shows the lowest contraceptive use and high level of fertility globally. In relation to this (Bongarts, 1994; Westoff and Bankolle, 1995) confirmed that, after nearly three decades of family planning programming in the region, fertility levels remain, for the most part, unchanged although substantial members of women continue to indicate a preference towards lowering their levels of childbearing. Recent reports also indicate similar result for the region. Using data from Demographic and Health Surveys (Sdegh, et.al, 2007) reported that between the periods 1990 to 1995 and 2000 to 2005, unmet need for family planning declined only by 2% in Sub Saharan Africa and reached 24%. However, in other regions of the developing world including Latin America and the Caribbean, North Africa and West Asia, and South and South East Asia more progress has been made and unmet need has fallen between 4% and 7%.

Family planning is an effective way of controlling fertility and low fertility leads to slower population growth. It has long been acknowledged as an effective public health intervention, highly cost effective in decreasing maternal and child health burden of diseases (World Bank,

1993). Thus, globally the use of modern contraceptive methods and the desire for smaller families has been increasing (PRB, 2004). Contrary to this, Sub Saharan Africa happens to be the region which has responded least to family planning stimulus. Fertility rates remain high with women having on average, 6.2 children each, compared to 3.5 children average for woman in the entire developing world. Similarly, the percentage of population using modern contraception lags behind the remainder of the developing world; 11 percent versus 49 percent respectively (PRB, 1995). Similarly, Westoff and Bankolle (2001) observed an increase in contraceptive prevalence rate in most parts of Sub Saharan Africa which has not affected their fertility as desired. Very recent studies in family planning also show that the region is still lagging behind in contraceptive prevalence rate even though there are some improvements in this regard. According to PRB (2003) World Population Data Sheet, in Vietnam, 92 percent of women who had two living children said that they did not wish to have any more children. However, in Nigeria (a Sub Saharan African country) the corresponding figure was only 4 percent.

Being a Sub-Saharan Africa country, Ethiopia is not an exception to the prevailing situation of low contraceptive prevalence rate and high total fertility rate. According to the first NFFS conducted in 1990, the total fertility rate of Ethiopia was 6.4 and it declined to 5.9 by the year 2000 (CSA and ORC Macro, 2001). The total fertility rate further declined to 5.4 by the year 2005 (CSA and ORC Macro, 2006). Even though total fertility is decreasing, the pattern and level in which it is decreasing is not significant compared to other countries that made further progress in CPR. As a result, during the 15 consecutive years (from 1990 to 2005) total fertility rate fell from 6.4 to 5.4 which was simply a dropout of only one child was achieved. However, in Columbia fertility fell from 6 to 3.5 in only 15 years after contraceptive become widely available in 1968 (cited earlier). This clearly indicates that Columbia achieved a much higher drop (2.5) of children than Ethiopia (1) during the same length of time (i.e. 15 years period). Moreover, in Ethiopia, according to the first NFFS conducted in 1990, only 4.8 percent of currently married women were using modern methods (CSA and ORC Macro, 2001). The contraceptive prevalence rate, though it remains low, has doubled during 2000 and was estimated at 8% using all methods and 6% using modern methods (CSA and ORC Macro, 2001). Recently, in Ethiopia the contraceptive prevalence rate reached 15% (CSA and ORC Macro, 2006). Thus it is possible to say that with low use of family planning, fertility has remained high in Ethiopia.

Not more than ten years back Potts (2000) reported that, every day more than 400,000 conceptions take place around the world. Almost half are deliberate happy decisions, but half are unintended and many of these are bitterly regretted. He further explained that an estimated 120 million couples in developing countries do not want another child soon but have no access to family planning methods or have insufficient information on the topic. Consequently, pregnancy too often brings despair instead of joy. Similarly, Shane (1996) and Govidasamy and others (2000) reported the number of women in developing countries who want to delay or stop child bearing and not using contraception. Very recently, Ross and Winfrey (2000) reported the number of women in developing countries with unmet need to be 113.6 million. Here, one can clearly understands that there is mismatch between the actual fertility and desired level of fertility among women of reproductive age. To put it another way, there is a gap between the desire to use contraception and actual fertility behavior. Such women of reproductive age who prefer to postpone or stop child bearing but not using method of contraception are best regarded as women with unmet need for family planning.

Dealing with unmet need for family planning is of great significance because it has implication on the level of fertility. As to Pritchet (1994), measuring the unmet need for family planning can be a way of evaluating how effective family planning is in responding to unwanted fertility. Among other developing regions, the highest unmet need was observed in sub Saharan Africa. During 2000 to 2005 the percentage of married women with unmet need for family planning is around 24 percent. However, the corresponding figure for other developing regions like Latin America and the Caribbean, South and South East Asia and North and West Asia is 12%, 11% and 10% respectively (Sedgh et.al, 2007). Accordingly, there existed a huge cross regional variation in the level of unmet need between and among the developing regions themselves; the highest being in Sub-Saharan Africa.

Even with in the sub Saharan African countries there are huge disparities in contraceptive prevalence rate and level of unmet need. Some countries like Ghana achieved success in decreasing unmet need. In Ghana, unmet need decreased from 35% to 23% (Westoff, 2001). Contrary to this, the level of unmet need is very high and remained high in Ethiopia even though the CPR showed some improvement. By the year 2000, the level of unmet need was around 36% (CSA and ORC Macro, 2001) and it slightly decreased with in the next five yeas and reached 34% (CSA and ORC Macro, 2006). This clearly shows that Ethiopia failed to meet the unmet need for family planning unlike Ghana. Thus, the different factors that hindered the success of meeting the unmet need should be clearly identified. In line with this, the purpose of

this paper will be identifying the root causes or factors of unmet need that hindered the effort of meeting the unmet need in Oromiya regional state of Ethiopia.

1.2. Statement of the Problem

Having studied fertility and modern contraceptive use in 73 less developed countries for the period of 1977-1983, Lapman and Mauldin (1985) found out strong inverse relationship between total fertility rate and contraceptive prevalence rate. Moreover, in Indonesia, Gertler and Molineaux (1994) found that contraceptive use contributed to 75% of the fertility decline. From these two findings it is natural to further expect low fertility where there is high contraceptive prevalence rate and organized family planning service delivery. However, the prevailing situation in sub Saharan African countries is very far from such situation except few countries ; because of the high unmet need and low contraceptive prevalence rate.

In Ethiopia the level of unmet need for family planning was 36% during the year 2000 (CSA and ORC Macro, 2001). Between the years 2000 to 2005 the level of unmet need was 34% with out showing significant deviation from the previous quantity (CSA and ORC Macro, 2006). Moreover the contraceptive prevalence rates were 8% and 15% during the years 2000 and 2005 respectively. This condition shows that the level of unmet need is even higher than the average value for the whole Sub Saharan Africa which is at 24%. In addition to this, Ethiopia shows great variation in its level of unmet need between and among its different regions. Table 1 shows these variations in the level of unmet need among different regions of Ethiopia.

Table 1: Percentage of Currently Married Women with Unmet Need, Met Need and Total Demand for Family Planning, Ethiopia 2005

Region	Unmet need for Family planning	Total demand for family planning	Percentage of demand satisfied
Tigray	24.1	40.7	40.9
Afar	13.4	20.0	33.0
Amhara	29.7	46.0	35.4
Oromiya	41.4	55.2	25.0
Somali	11.6	14.8	21.3
Benishangul Gumuz	29.7	41.1	27.7
SNNPR	37.4	49.6	24.6
Gambella	23.5	39.6	40.7
Harari	22.4	56.2	60.2
Addis Ababa	10.3	68.2	84.8
Dire Dawa	14.8	48.2	69.8

***Source*:** *Ethiopia Demographic and Health Survey (2005).*

As it is observed from Table 1, the highest unmet need for family planning was observed in Oromiya region (41.4%), of which 24.9% for spacing and16.5% for limiting. Unmet need for spacing is higher than unmet need for limiting which indicates the interest of women to have more children in the future. The level of unmet need in Oromiya regional state for the year 2005 (41.4%) is even grater than the previous figure for the year 2000 which accounts for 36.4% (CSA and ORC Macro, 2001). This increase in the level of unmet need is due to the corresponding rise in the total demand for family planning which was around 55.2% by the year 2005 (CSA and ORC Macro, 2006). Providing an effective family planning services and meeting the unmet need for family planning is one of the best ways in reducing fertility. For instance, Westoff and Bankolle (1999) reported that the total fertility rate of developing countries would decline 20-24% if the unmet need for family planning has been met.

On the other hand, there is a strong negative correlation between maternal mortality and contraceptive prevalence. Contraceptive use decreases the risk of maternal death by decreasing the odds of being pregnant (WHO/UNFPA/ UNICEF, 1999). Thus, the use of family planning could potentially play a protective role among women at high risk for maternal mortality such as during adolescence, older age, high parity and short birth intervals (Martson and Cleland,

2004). Abouzahr (2001) also confirmed that improved access to family planning could avert perhaps 100,000 maternal deaths world wide.

The use of family planning is also an important factor in reducing infant mortality. Infant mortality is expected to be high in societies where the unmet need for family planning is high. According to Guttmacher Institute report (2002), the likelihood of babies dying before their first year is affected by the age at which women have their children and the length of interval between births. These factors, in turn, are strongly affected women's use of modern contraceptive methods to control the timing of their births. In Ethiopia, because of the high unmet need and low contraceptive prevalence rate, both the maternal and infant mortality rates are high. The maternal morality rate is 673/100,000 and the infant mortality is 77/1000 and both are the highest figures in Africa which witness the above statements (PRB, 2007).

It is also clear and evident that abortions are the results of unwanted pregnancy which is again caused by low level of met need for family planning. According to WHO (2004) report, there were an estimated 80 million unwanted pregnancies and more than 19 million unsafe abortions annually. Even though, it is very difficult to get accurate data on abortions in Ethiopia, one might expect higher rates. This is due to the existence of high TFR, low contraceptive prevalence rates and high unmet need for family planning. Abortions, in the absences of effective family planning can be used to control fertility. However, evidences show that given the options most societies prefer contraception to abortion (Casterline and Sinding, 2000).

In Ethiopia child bearing begins early. The median age at first birth is 19.2 years for younger cohorts (age 25-29). Moreover, 17% of women aged 15-19 years have already become mothers or pregnant during 2005 (CSA and ORC Macro, 2006). This remarks that there is a big tendency of being experiencing teenage pregnancy and childbirth. However, this condition is very problematic. As to Guttmacher Institute report (2002), many adolescent women, especially in poor countries are physically immature, which increase the risk of suffering from obstetric complication. For these reasons, babies born to teenage would be more likely to die than those born to women in their 20's and 30's.

Above all, in countries where contraceptive prevalence rate is low and unmet need for family planning is high, the TFR is also expected to be high. In this regard Ethiopia can be best example. In Ethiopia the TFR is 5.5 which are still very high when compared to most other African countries. Putting this in mind the current population of 81.2 million expected to be more than double by 2050 (UNFPA, 2007). In such country plagued with recurrent drought and food shortages where 50% of the population lives below poverty line, a new mouth to feed is source of great anxiety (PRB, 2004). Last but not least, frequent births do have an impact on the

participation of women in different economic activities and production process. This is due the fact that frequent child birth forces women to expel the labor force and look after children until they become mature.

Thus, to overcome problems related to unmet need for family planning, the different factors that hindered the effort of meeting the unmet need should be clearly identified.

1.3. Objectives of the Study

1.3.1. General Objective

The broad objective of the study is to assess the underlying factors of unmet need for contraception among currently married women in Goba Woreda of Bale Zone; Oromiya region.

1.3.2. Specific Objectives

The study has the following specific objectives

- To describe the characteristics of women with unmet need
- To identify demographic, socioeconomic and family planning program related factors of unmet need for contraception
- To assess major reasons for nonuse of contraception among women with unmet need for family planning.
- To assess the relative importance of demographic, socioeconomic and family planning program factors in explaining variations in unmet need for contraception
- To suggest some feasible recommendations through which the use of contraception can be promoted by developing suitable strategies.

1.4. Hypothesis

To investigate the problem of unmet need in Goba Woreda, Bale Zone, Oromiya region, the researcher seeks to test the following hypotheses.

i. Utilization of maternal and child health (MCH) services decrease the likelihood of unmet need for contraception among women.

ii. Bringing family planning services to door step through HEWs has a positive influence in meeting the unmet need for contraception.

iii. Frequent spousal communication about family planning tends to decrease the level of unmet need.

iv. Women with less number of living children have lesser unmet need than women with larger number of living children.

v. There is an inverse relationship between educational attainment of women and unmet need for contraception

vi. Urban women tends to have lesser unmet than their rural counterparts.

1.5. Significance of the Study

Like most Sub Saharan African countries the level of unmet need for family planning is quite high in Ethiopia. The same situation also prevails in Oromiya regional state. Thus, examining the different demographic, socio economic and family planning related factors affecting need for family planning is of great importance for professionals in the field to effectively monitor, address and administer while implementing family planning programmes.

The proper use of family planning services ensures not only desired number of children for couples but also health of mothers. Moreover, it decreases the risk of death of infants which is again explained by health of mothers and interval between successive births. Thus, information regarding family planning is one of the major concerns of health planners because of its impact on infant mortality and maternal health risks.

In line with the above stated ideas the findings of this study may help policy makers and experts in the field of family planning programmes to effectively formulate policies and design strategies through which the policies are going to be implemented. Moreover, such kind of research has not been done in the region either at small or large scale. Therefore, this study may serve as stepping stone for others who want to conduct further investigation on similar issue. Above all, the results that are obtained from this study may become important for various purposes in the field of reproductive health in the region.

Chapter Two

2. Review of Related Literatures

Various studies tried to identify reasons why women who are currently married and able to reproduce do not use contraception even though they want to stop or space child birth. This is because of the fact that understanding the root causes of unmet need for family planning is of great importance to effectively intervene and meet the unmet need. Thus, an essential first step in planning to eliminate unmet need is to understand its underlying causes.

In relation to this, using data from Demographic and Health Sureys, Bongarts and Bruce (1995) identified lack of knowledge, fear of side effects and husband's disapproval of family planning as factors influencing unmet need for contraception. Moreover, Westoff and Bankolle (1995) identified lack of information about contraception, opposition to family planning and ambivalence about future child bearing as underlying causes of unmet need. A recent review of literature on the barriers of fertility regulation from a consumer's perspective identified limited method choice, financial cost, women's status, medical and legal restrictions, and provider bias as reasons for non use of contraception (Cambell, Sahin- Hodoglugl, Potts, 2006). However, for the sake of convenience the various factors affecting unmet need for contraception are grouped here under in to three major categories as demographic, socio-economic and family planning related factors and each of them discussed as follows.

2. 1. Factors Affecting Unmet Need for Contraception

2.1.1. Socioeconomic Factors

Urban and rural women vary in their use and practice of modern contraceptives either to limit or space childbirth. In most cases urban women are more likely to use modern contraceptives than their rural counterparts. There are lots of reasons for such differences in contraceptive use or contraceptive prevalence by place of residence. For instance, Chamratrithirong and others (1984) identified accessibility of services in terms of travel time to source and cost of certain methods as major contributors to such variation in contraceptive use. Similarly a study conducted in Kenya by Omwango and Khaskhala (2006) confirmed that urban women have lesser unmet need than women residing in rural areas. According to these writers, better access to range of contraceptive choices and relatively better knowledge of contraceptive methods among urban women contributed for higher CPR in urban community.

In Sub-Saharan Africa as well, the difference in contraceptive prevalence between urban and rural areas is the highest. According to Curtis (1996), the contraceptive prevalence rate in urban areas is twice larger than rural areas. The difference in contraceptive prevalence between urban and rural areas was also found to be strong in Ethiopia. The 2005 EDHS report depicts that almost on in two women (47%) in urban areas use contraceptives as opposed to one in ten (11%) in rural areas. Conversely, unmet need for family planning in Ethiopia was lesser among women in urban areas (17%) compared to rural women which was at 36% (CSA and ORC Macro, 2006). Thus, rural women most of the time have unmet need while urban women have satisfied need for family planning.

Education is also another factor that affects the need for family planning. Educated women are more likely to know the different kinds of contraceptives and use them appropriately. Moreover, educated women have also the power to use contraception and to have their own income unlike women with no education. Education is also expected to increase women's access to information and exposure to new technologies regarding contraceptives. In light of this, a study made in Tanzania showed that better educated women have better access to service providers even to private sources because of their confidence and ability to buy contraceptives unlike women with limited education (Miniam et.al, 1999). Moreover, a study made in 71 developing countries using Demographic and Health Surveys and Reproductive Health Surveys showed that, contraceptive use is high among women with more education (Zlidar, et.al, 2003). Omwago and Khaskhala (2006) also found that the level of unmet need is lesser among couples with better education. The study further stated that couples who have better education are more likely to be urban residents, have wider opportunity to range of method choices, able to buy contraceptives and desire to have smaller number of children.

The 2005 EDHS also confirmed that CPR is high among women with better education. The study showed that contraceptive prevalence (current use of contraception) is more than five times higher (53%) among women with secondary and above education than women with no formal schooling, whose contraceptive prevalence was found to be only 10%. The same survey report once again showed that unmet need for contraception among women with no education is more than two times higher than women with secondary and higher education (CSA and ORC Macro, 2006). Similarly, using data from the 2000 EDHS, Antenane (2002) reported that better educated women (Secondary and above) were 61% less likely to have unmet need for contraception than women with no education. Studies conducted on unmet need for contraception in Amhara regional state, Ethiopia, by Nega (2008) and Mekides (2003) also

come up with similar findings to the above stated literatures. Thus, better educated women have higher CPR and lesser unmet need than women with formal no schooling.

Like other social factors, religion is also the one that may influence need for family planning. There are certain religious doctrines that strictly prohibit the use of artificial birth control. However, other religions are relatively less tight in this regard. For instance, Shapiro (1994) confirmed that the non Catholic religious groups had higher prevalence of contraception than Catholics in the study conducted in Kinshasa. On the other hand, a study made to assess the prevalence and determinants of unmet need for family planning in district of eastern region of Nepal confirmed that Muslim women are almost three times more likely to have unmet need than women who were followers of Hindu religion (Bhandari,G.P., et.al, 2006). Ross and others (1999) also reported that religious objections to contraceptive practice have contributed to wider prevalence of unmet need for contraception in Pakistan. Conversely, a study made by Cleland in 1992 showed the positive contribution of religion to contraceptive use in Indonesia and Thailand (PRB, 1992). Above all, religion seems to have no consistence influence on CPR and unmet need for contraception.

Being closely explained by education and other factors the status of women has immense impact on the use and practice of family planning or contraceptives. If the status of the women is high, then she has part in decision making on how many children to be born, and use of contraception (Roudi and Ashford, 1996). Employment, which shows the status of women in the household, has also impact on use of contraceptives. According to Shapiro (1994), women working both as employed and self employed respectively used contraceptives more likely than those women who are not working. The EGDHS (1995) also reported that women working and paid for cash are more likely to use contraceptives and have lesser unmet need than their counterparts (i.e. women not working). Similarly, Antenane (2002) confirmed that women who were working at the time of the 2000 EDHS reported higher contraceptive use and lesser unmet need than other groups of women. Thus, high status and employed women have satisfied need than others.

Media exposure also exerts a considerable influence on unmet need. For instance , Antenane (2002) reported that women exposed to any one of the three media namely radio, or TV, or newspaper, have lower unmet need , higher contraceptive use and larger share of them have demand satisfied for family planning than women with no media exposure. Again, Mekides (2003) in her study of factors of unmet need in Amhara regional state found similar results.

However, both researchers confirmed that exposure to media is not a determinant of unmet need for contraception.

2.1.2. Demographic Factors

Different studies have identified various demographic factors affecting the use of contraceptives and unmet need for family planning. These include, age of woman, number of living children, child loss, children ever born, age at first marriage, age at first birth, and ideal number of children.

Age of woman is one of the demographic factors affecting the use of contraceptives. Sathar and Chidambram (1984) found out in their comparative study of developing countries that during early part of reproductive life, the incidence of contraceptive use is low; it increases in the middle age and again falls at older ages. The reason behind this pattern seems that younger women have strong desire to have a child and need contraception for spacing rather than limiting. On the other hand, those women in the middle of their reproductive age may have achieved desired number of children and use contraception for limiting than spacing. Furthermore, those older women may not use contraceptives because they might believe that they are no longer at risk of conception. Supporting this idea, Robey (1992) confirmed that in most countries contraceptive prevalence rate is lowest among young women, reaches a peak among women in their thirties and declines among older women. Conversely, unmet need for contraception tends to decline with increasing age of women. According to Antenane (2002), even though unmet need for contraception remained high at all ages among Ethiopian women, it gradually declines from its highest level (at 15-19 years) to lowest (at 35+ years) except it fluctuates at the age group 30-34 years. He further stated that women aged 35 years and over were 67% less likely to have unmet need than women aged 15 to 19 years. A study conducted in the district of eastern region of Nepal once again confirmed that the less likelihood of unmet need for contraception as age of women increase (Bhandari, G.P., et.al, 2006). This study revealed that as age increase by one unit the probability of having unmet need decreases by 9%. However, some studies showed that unmet need increases with increasing age of women. For instance, a DHS finding from Egypt revealed that unmet need tends to increase with increasing age of women.

Another demographic factor affecting need for family planning is child loss. In society where child death is quite high one may definitely expect low use of contraceptives and frequent birth

of child. This is due to the fact that parents or couples want to produce more number of children with the view that few of them will survive. On the contrary, the opposite situation may happen where child death is quite low. In this case couples may tend to use contraceptives either to limit or to stop child bearing. In this regard, the study made in Malaysia indicated that infant mortality rate seemed to correlate negatively with contraceptive practice, suggesting that better health and living conditions lead to higher level of contraceptive use (UNS, 1987). The findings of lower levels of contraceptive use among higher parity women who experienced a child death are mainly due to the desire to replace a child or to ensure future child mortality. Thus, child mortality is one of the determining factors of need for family planning.

Other than child death the number of living children among couples might also affect their decision either to use or not to use contraception. In light of this, Bertrand and others (1985), in Bas Zaire, identified that contraceptive use was negligible among women with no living children and increased after parity level of at least one. In addition to this UNS (1986) reported that in many developing countries especially those in Asia and Africa, childless women are very unlikely to use contraception. This indicates that women who have more surviving children want to limit their fertility rather spacing and those women with no children might not want to use contraceptive. In Ethiopia, using the 1990 NFFS, Daniel (1995) studied determinants of contraceptive nonuse and unmet need among married women in urban areas. His findings showed that the number of living children and ideal family size are the most important determinants of unmet need for family planning in urban Ethiopia. Moreover, studies conducted in Ethiopia by Antenane (2002), Mekides (2003), Nega (2008) identified that the number of surviving children women have is strong determinants of unmet need. According to these studies, unmet need is positively correlated with number of surviving children women posses. A study conducted in Kenya by Omwago and Khaskhala (2006) also revealed that higher likelihood of having unmet need for contraception among women with more number of living children than their counterparts.

Moreover, in many traditional societies, like the developing world, the age at first marriage is considered as the time to have the first sexual intercourse and socially acceptable childbirth. Those women who marry early have a chance to be exposed to longer period of reproductive life unlike women who married late. Moreover, early age at first marriage would imply early age at child birth unless it is controlled (CSA and ORC Macro, 2001). A rising age at marriage is strongly associated with higher levels of education and labor market participations for women. Hence, higher demand for contraception. Thus, women who marry early might achieve

desired number of children sooner and want to limit than spacing child birth unlike women who married later.

2.1.3. Family Planning Factors

Today most family planning programs are based on the assumption that access to modern contraceptives eventually will promote the level of use (Population Reports, 1985; Wilkinson et.al, 1991). The term access refers to both physical availability of a method and the requirements for its use, involving counseling from a convenient source, at low financial cost (Amna M. Swar Eldahab, 1993). A study of family planning programmes in India's rural Bihar state indicated that improved access to services, expanded choices of available methods, and increased knowledge family planning were important for acceptance of contraception (Rudranand et.al., 1995). Similarly, Bongarts and Bruce (1995) in their study of family planning in 10 selected countries concluded that CPR and geographic distance to family planning facilities are inversely related. Thus, if family planning is inaccessible to women, then they are likely to have unmet need keeping other factors constant.

Many potential informational barriers also exist to contraceptive use. Among these barriers, one is knowledge and awareness of contraceptive use. The numbers of modern and traditional methods that a woman knows and the woman's past experience of use of contraception have paramount importance on the level of unmet need. In several cross-sectional studies, this type of knowledge is strongly associated with unmet need for contraception (Bongarts and Bruce, 1995). Moreover, Westoff and Bankole (1995) confirmed that the prevalence of unmet need is high in sub Sahara Africa due to lack of knowledge of contraceptive methods. In addition, a DHS finding in Dominican Republic revealed that unmet need was high among women who knew fewer methods than women who knew six and above methods (PRB, 1996).

Furthermore, an Empirical research conducted during 1990's makes evident that women's perception that their husbands oppose family planning is a dominant factor discouraging contraceptive practice in wide variety of settings in Philippines (Casterline, et.al., 1997). Moreover, according to demographic and health surveys, many married women who want to avoid pregnancy are not using contraception because of husbands objects. For instance, using data from DHS, Drennan (1998) reported that nearly one in ten married women with unmet need cited husband's disapproval as principal reason for nonuse of contraception. Similarly, DHS analysis for Sudan depicts that 44% of women with unmet need reported that their

husbands do not support use of contraceptives (Bongrats and Bruce, 1995). Such women who are under the control of their husbands are more likely to have unmet need for contraception. These women even though want to use contraceptives, their husbands may hinder them not to use, a situation which increases unmet need for family planning on part of females. Thus, husband's attitude towards contraceptive use is an important determinant of demand for family planning.

Spousal communication is an important precursor to the adoption of family planning. Couple's frequent discussion on matters of family planning such as number of children to be born, time to use contraceptives and what type of contraceptive to use has an important implication on the level of unmet need. In light of this, Toure (1996) come to conclude that spousal communication has a negative association with family planning method use. Again FHI (1999) report revealed the importance of spousal communication in raising contraceptive use. According to this report, in Ghana and Zambia, nine in ten women who were contraceptive users had at least one discussion about family planning with their husbands. Moreover, a study conducted in six selected sub Sahara Africa countries showed that 68% of women who thought that their husbands disapprove use of family planning never discussed family planning issues with their husbands (Bongarts and Bruce, 1995). Moreover, Women's communication with members of the society is an important thing in the concept of demand for family planning. According to (CSA and ORC Macro, 2001), exchange of information related to family size and contraception is likely to motivate couples to use contraception.

Family planning programmes recognize that contact with women both at home or at health facilities is important in addressing questions and concerns about contraceptives and are crucial to adoption of family planning. By bringing family planning services closer to users, it is possible to improve accessibility and availability of contraceptives. For instance, FHI (2000) reported that the CBD approach to family planning in many parts of Ethiopia proved to be successful in making methods accessible with better quality. Furthermore, a study conducted in Limu revealed the increase in CPR from 1.3% to 15% with in five years of implementation of CBD project in the area (Pathfinder International, 2000). Similar results were also found in rural areas of Ethiopia where there were interventions from community based family planning services (Korra, 1997, Walie and mengistu, 2001). In his 2000 EDHS analysis, Antenane (2002) also observed that women who have been visited by family planning field workers at home are twice as likely to use contraceptives as women who have not been visited by family planning field worker.

Integration of family planning with MCH is also proved to be successful in the effort of meeting the unmet need. For instance, Antenane (2002) reported that women who visited a health facility and told of family planning are 53% less likely to have to have unmet need than women who never visited a health facility.

In addition to the above, available data from recent Demographic and Health Surveys from Sub Saharan African counties show that the wanted total fertility rate is almost always lower than the actual or observed total fertility (Prata, 2007). This means that when the gap between wanted total fertility and actual total fertility is high, there exists high unmet need for family planning and vice versa.

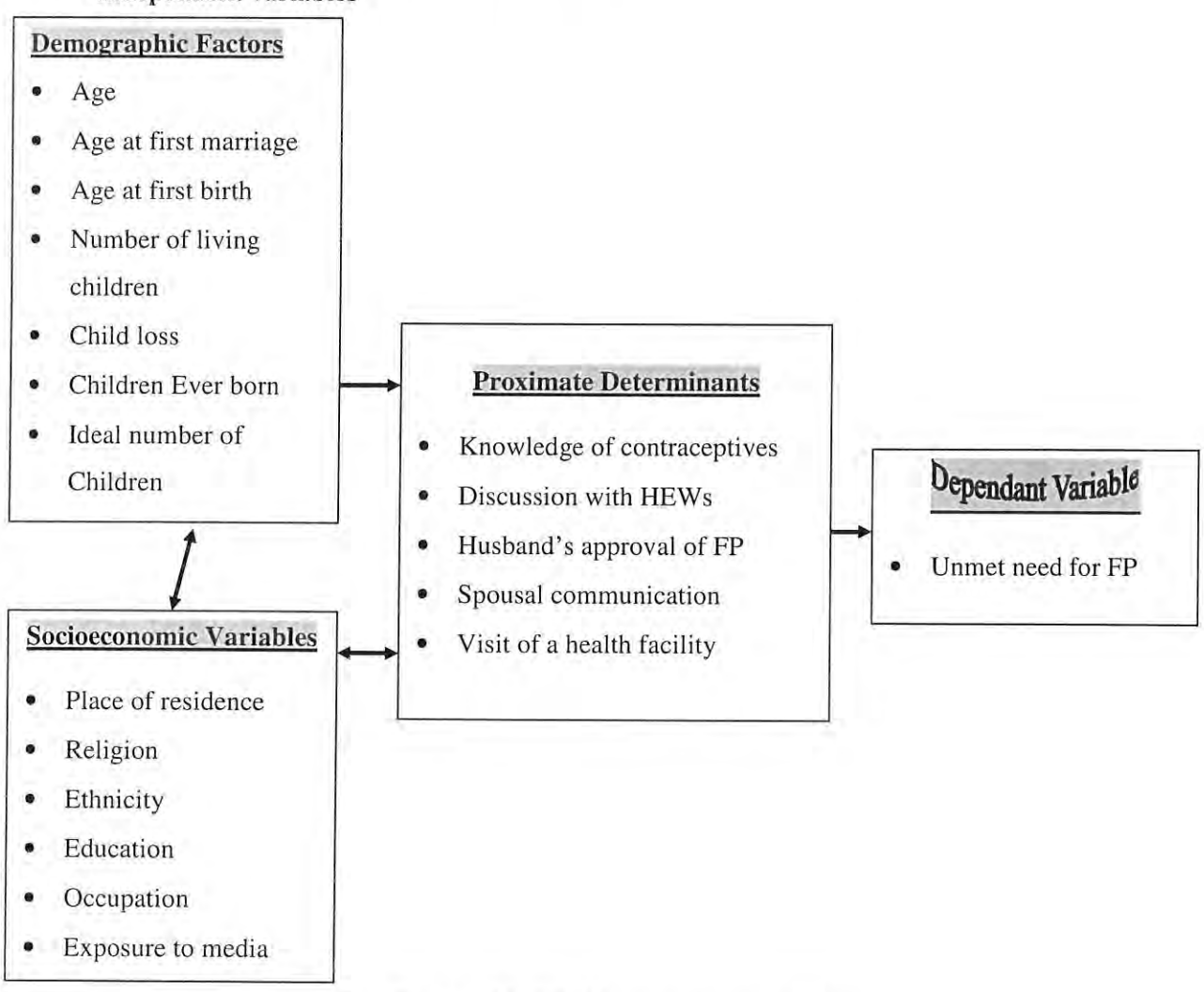
2.2. Reasons for Nonuse of Contraception among Women with Unmet Need

There could be various reasons that prohibit women with unmet need from using contraceptives. For instance, using data from GDHS that were collected in 1988 and 1998, Govindasamy and Boadi (2000) assessed the different reasons that were hindering Ghanaian women with unmet need from using contraceptive methods. According to their results, larger proportion of women cited fertility related reasons such as infrequent sex, Menopausal/subfecund, postpartum/breastfeeding, and wanting more children as principal reasons for non use. Method related reasons, particularly fear of side effects were also mentioned reason for nonuse. Moreover, a study that was conducted in Uganda revealed that opposition to use (especially religious opposition) hindered community mobilization in family planning programmes. In the 2005 EDHS, reasons for non use were also categorized in to fertility related reasons, method related reasons, opposition to use and lack of knowledge.

2.3. Conceptual Framework

Based on the objectives of the study and review of related literature, the framework of the study is prepared in advance. The conceptual frame work consists of two sets of variables. These are the independent and dependant variables. The independent variables are factors influencing or explaining variations in the dependant variables. The independent variables are categorized into three as demographic, socio-economic and family planning factors. On the other hand the dependant variable is contraceptive use status which is dichotomous (met or unmet need for contraception).The over all relationship between variables is presented here under in Fig1.

Fig1: Conceptual Framework of the Study



Source: *Modified from Antenane (2002)*

Chapter Three

3. Data and Methodology

3.1. Profile of the Study Area

3.1.1. Location

Bale administrative zone is part Oromiya regional state which is located in the South Eastern part of Ethiopia. The zone is bounded with Somali region in the east and south east, Borena zone in the south, Southern Nation and Nationalities People Region (SNNPR) in the west, with Arsi and West Hararghe zones in the north. The zone extends from $5^0$17'N to $8^0$11' N latitude and 38^0 40'E to 46^0 3'E longitude. It also has an area of 99,441 square kilometer (Mesfin Girma, 1996). The capital of the zone is Robe which is located 430 kilometers south east of Addis Ababa.

3.1.2. Relief

Bale zone is part of the South Eastern high lands of the country. Bale massifs tower over the Wabe shebelle Valley in the east and Genale Valley in the west. Mount Tulu Dimtu (4,377m amsl) and Mount Batu (4307m amsl), the second and third highest mountains of the country respectively, are also found in Bale Zone. In most cases the Bale massifs are flat on tops and rugged along their sides. Apart from the massifs, the zone terrain is generally flat both in low lands and highland areas (MOA, 1980:24).

3.1.3. Climate

According to MOA (1980), the former Bale administrative zone has six types of climate. These are cool ('Kur'), cool temperate ('Dega'), temperate ('Woinadega'), warm ('Kola'), semi desert ('Kifle Bereha') and desert ('Bereha') climates. However, the present administrative zone of Bale has all agro-climatic regions with the exception of the desert climate. The Wurch agro-climatic zone is found at the Peak of Bale Mountains around Sannete plateau. At this place the temperature falls up to -4^0c during winter. According to Yigezu (2004), the highest temperature ever recorded in the zone is 32^0c in the low land area bordering the Somali region. However, the daily temperature of the zone most of the time ranges between 3.5^0c - 28^0c at different places. In the mixed farming highland zone the average annual rainfall ranges between 800mm to 1000mm while in the lowland areas the amount of rainfall ranges from 400mm to 600mm (MOA, 1980).

Table 2: The Area Coverage and Percentage Distribution of Rain Fall in Bale Zone

Amount of Rainfall in (mm)	Amount of Rainfall in Percent	Area Coverage of rainfall distribution (in Square Kilometer)
>1200	3.2	2155
1000-1200	10.6	7069.6
800-1000	16.5	11109.38
600-800	33.5	22555.41
500-600	19.3	12994.61
400-500	17	11446.03

Source: *Yigezu (2004)*

Table 2 shows that the largest part of the Bale Zone gets an annual rainfall ranging from 600mm-800m and covers an area of 22555.41 sq km. It makes 33.5% of the annual rain fall distribution of the zone.

3.1.4. Soil

Bale zone has different types of soil which varies from altitude to altitude. The soils of alpine areas (>3000m amsl) are generally brown and black with high organic matter. The soils prevailing between 2500m to 3000m amsl are generally red in color, have more clay content, often poor in phosphorous and high in oxides and strongly acidic in PH. Soils of medium altitude (2000m-2500m) have the characteristics of clay and clay loam texture and are dark in color. Soils of lower elevation (1500m-2000m amsl) have silt texture and are grayish to light brown in color due to high calcium carbonate content and these soils are slightly acidic to neutral in PH (MOA, 1980).

According to Yigezu (2004) the black, red, brown and other groups of soils constitute 43%, 40.5%, 13% and 3.5% of the zone's soils types respectively. As far as the texture content of the soils is concerned, the sandy soil makes the largest part (31%). On the other hand, the clay, the silt and the loam soils constitute 25%, 21% and 23% respectively.

3.1.5. Vegetation

According to MOA (1980), vegetation type in Bale zone changes with altitude, but modified by local conditions of relief and drainage. The alpine vegetation zone which is above the altitude of 3000m is dominated by Erica arborea and Hypericum revolatum with patches of alpine

grasslands. Vegetation in the area between 2500m-3000m amsl, is dominated by Hagenia, Juniperus and Podocarpus forest and open grasslands. Between altitudes 2000m-2500 m amsl, podacarpus, acacia trees and open grasslands dominate the area.

3.1.6. Demographic and Socioeconomic Characteristics

According to the Central Statistical Authority (1984), the population of Bale administrative zone were about 1,017,336 out of which 503,193 (49.5%) were males and 514,143 (50.5%) were females. This proportion makes the sex ratio of 98 males for every 100 females. During this time the total area of Bale was 128,300 sq. km and with a crude density of 7.9 persons per kilometer square. In 1984 only 7.8% of the total populations were living in urban areas and the remaining 92.2% were rural dwellers.

On the other hand, the result of 1994 census indicates that the population of Bale has grown to 1,271,864, out of which 603,986 (49.6%) were males and 613, 969 (50.4%) were females, making the sex ratio of 98.4 males for every 100 females. The total area of the Bale zone during this census was about 99.411 km square which gives a crude density of 12.3 persons per kilometer square. In 1994 only 10.7% of the populations were urban dwellers and the remaining 89.3% were living in rural areas. The growth rate of population between the two censuses was about 1.8% per annum.

In 1984 census the young, the old and the overall dependency ratio of Bale administrative zone were 136.9, 20.9 and 157.8 respectively (CSA, 1989). However all dependency measures showed slight declination during the next ten years. Accordingly, in 1994 census, the young, the old and overall dependency ratio of Bale zone were 108.8, 9.6 and 118.4 respectively (CSA, 1996:95).

However, it must be noted that the true dependency ratio, ratio of non workers to workers, in the population was very much higher than indicated by the convectional dependency ratio. Because not all persons found with in the working age group were actually engaged in work. For instances, in 1984, 38.6 percent of the populations of Bale in age group 15-64 were economically inactive.

As far as the ethnic composition of the zone's population is concerned, the Oromos are the single most dominant ethnic group which comprises almost nine tenth (88.93%) of the total population followed by the Amhara (7.65%) and Somali people which accounts for 1.39% (see Table 3).

Table 3: The Numerical and Percentage Distribution of the Population of Bale by Major Ethnic Groups (With 1000 or More People in 1994)

Major Ethnic Group	Total Population	Percentage (%)
Oromo	1,083,050	88.93
Somali	16,944	1.39
Amhara	93,173	7.65
Sidama	9956	0.82
Guraghe	3390	0.28
Siltie	1220	0.1
Wolayita	1464	0.12
Tigrawai	1710	0.14
Others	6957	0.57
Total	**1,217,864**	**100**

Source: *(CSA, 1996:181-182)*

Muslim is the dominant religion of the majority of the population of the zone. The Muslims constitute 76.71% of the population which is greater than two third of the total population of Bale during the 1984 census. Next, Christianity (20.3%) is the second dominant religious belief among people of the zone while followers of other religions constitute only small percentage share of the total population (see table 4).

Table 4: The Numerical and Percentage Distribution of the Population of Bale Zone According to their Religion (1994)

Religion	Total Number	Percentage
Christian	247,263	20.3
Orthodox	231,579	19
Protestant	14,061	1.2
Catholic	1,623	0.1
Muslims	934,150	76.71
Traditional religion	2,102	0.17
Others	33,721	2.77
Not stated	628	0.05
Total	**1,217,864**	**100**

Source: *(CSA, 1996:362)*

3.1.7. Economic Base

The economic base of the population of Bale mainly rests on livestock husbandry and crop production. The livestock production is usually more exercised in lowland areas. Crop production which is characterized by its subsistence nature is practiced in highland area along with animal husbandry. According to Yigezu (2004), of the total land area, only 534114 hectare (7.93%) was cultivated and out of which 506609.101 hectare (94.86%) was occupied by peasant farmers, 16311 hectares (3.05%) by state farms and 11194.79 hectares (2.09%) was owned by investors in 2004. Again out of the total cultivated area, 530669 hectares (7.88%) gave production by using rainfall where as 34458 hectares (7.88%) developed by using irrigation (Table 5).

Table 5: The Land Use Types of Bale Zone

Land	Land area in hectare	Percentage
Farming	534114.	7.93
Grazing	2465430.16	36.62
Forestry	2639481.106	39.21
Settlement (urban and Rural)	244584.96	3.62
No Use	849348.02	12.62

Source: *Yigezu (2004)*

As the table 5 indicates only small percent of the total land area was cultivated and the majority of the land was covered with forest and plants in 2004. Perhaps this may be an indication that the zone contains small number of population.

Generally, the population of the study area depends on crop production and animal husbandry both for household consumption and market purpose.

3.2. Sampling

3.2.1. Sampling Method

To accomplish the objectives of the study, a community based cross sectional survey was conducted among currently married women of reproductive age (15-49 years). A multi-stage stratified sampling technique was employed in the process of selecting participants (women). In the first stage the Woreda was stratified in to two strata; urban and rural respectively. Accordingly, the only urban center (i.e. Goba town) was selected purposefully to conduct the study. Moreover, both sub cities of the town ('Mi'erab' and 'Misarak' Goba) were included in the survey with the idea of maximizing sample representativeness. On the other hand, out of the

23 rural Kebeles of the woreda six of them were selected with the use of simple random sampling method. These include, Sinja, Ghama Taja, Fassil Sura, Fassil Tillo, Alloshe Shabeke and Kedu. Finally, after getting complete list of households from each of the selected rural Kebeles and the two sub cities of the town, systematic random sampling method was used to select currently married women of reproductive age on the basis of sampling frame. Furthermore, the sample size was allocated to each kebele based on the proportion to size of each selected kebele.

3.2.2. Sample Size Determination

According to the Ethiopia Demographic and Health Survey (EDHS), the estimate of the prevalence of unmet need for contraception among currently married and reproductive age women in Oromiya region was 41.4% (CSA and ORC Macro, 2006). Taking this figure into account, the proportion of currently married women with unmet need for contraception (p) in the study area is assumed to be 41.4%. Fixing the level of confidence interval at 95% (i.e. maximum error to be tolerated is 5%) and power at 80%, the sample size **(n)** is determined by the following formula (Woodward, 1992).

$$\mathbf{n} = \frac{[Z\alpha/2 + Z_B]^2 P(1-P)}{e^2} = \frac{[1.96+0.84]^2 X 0.4 X 0.6}{0.05^2} = \mathbf{752}$$

Taking 10% for non response rate (75), the calculated sample **(n) = 827**

Where

Zα/2- the standard normal value corresponding to the desired level of confidence, 95% which corresponds to the value of 1.96. Where α is the risk of type I error [failing to accept the null hypothesis- false positive] usually equal to 0.05.

$\mathbf{Z_B}$ = the standard normal value corresponding to the desired level of confidence which corresponds to the value of 0.84. Where **ß** is the risk of type II Error (failing to reject the null hypothesis – false positive) taken as the value of 0.20.

e2 – the effect of size defined by the alternative hypothesis (the existing difference), 5% is accepted.

Based on the calculated sample size, interview was conducted with selected women using structured questionnaires. As a result the responses of 827 women were recorded on each questionnaire belonging to an individual woman by field workers.

3.3. Method and Instruments of Data Collection

To secure relevant data for the study, structured questionnaire was prepared and successfully administered among currently married women of reproductive age group. The questionnaire was initially prepared in English language which later on translated to Afan Oromo since the area is dominated by Afan Oromo speaking people. Moreover, translation of the questionnaire was also done to Amharic language as there were Amharic speakers in the study area (especially those who were urban dwellers).

The questionnaire was administered to currently married women who were in their reproductive age group by trained female high school graduates who can speak Afan Oromo. However, before administering the questionnaire the researcher gave training for data collectors about the purpose of the study and content of the questionnaire.

Moreover, focus group discussions (FGDs) were held with women of different age in order to generate the qualitative data. For the focus group discussion, guidelines with questions were prepared and training was given for moderators and note takers. In this regard, a total of eight FGDs (four in urban and four in rural area) were conducted. Furthermore, participants of the FGD were selected based on their age and contraceptive use status. Accordingly, FGDs were held with young women (users), young women (nonusers), old women (users) and old women (nonusers) separately in both urban and rural areas.

3.4. Method of Data Analysis

After gathering the necessary data (both qualitative and quantitative), it was classified accordingly, coded and entered to computer using Statistical Package for Social Scientists (SPSS Ver. 15). Thus, with the help of SPSS, bivariate technique of data analysis (Chi square test) was applied to see if there is statistically significant association between each predictive and outcome variable. Moreover, multivariate technique of data analysis was used to determine the most important variables which influence unmet need for family planning. Accordingly, logistic regression model was employed to investigate the relative importance of each independent variable over the dependant one.

In addition to the above techniques of data analysis, simple descriptive techniques were also implemented where it is necessary. In this regard, data analysis techniques like presenting the data in tables and percentages were used to make the issue under investigation more clear.

In this study three different categories of independent variables namely socioeconomic, demographic and family planning factors are used. On the other hand the dependant variable is

unmet need (i.e. dichotomous) for contraception. All the variables included in the analysis with their categories are indicated in table 6.

Table 6: Variables Included in the Analysis

Variables	Categories
Dependant Variable	
Unmet need for contraception	Yes/No
Independent Variables	
Socio-economic Variables	
Place of residence	Urban, Rural
Education	Illiterates, Literates
Religion	Christian, Muslims, others
Ethnicity	Amhara, Oromo, Others
Work status	Currently working, Not Currently Working
Husband's Education	Illiterates, Literates
Exposure to media	No Exposure, Exposure to Radio/TV/Newspaper
Demographic Variables	
Age	15-19, 20-24, 25-29, 30-34, and 35+
Age at first marriage	<16, 16-19, 20+
Age at first birth	<16, 16-19, 20+
Number of living children	0, 1-3, 4+
Child loss	0, 1, 2+
Children ever born	0, 1-3, 4+
Ideal number of children	0, 1-3, 4+ and Non numeric response
Family Planning Variables	
Knowledge	Knows no method, Utmost three, At least four
Spousal Communication	Never Discussed, At least once
Husband's approval of FP	Disapprove, approve, do not know
Discussion of FP with HEWs	Never discussed, discussed at least once
Visit of health facility	Never visited, Visited but not told of FP, Visited and told of FP

3.5. Ethical Consideration

This study has got approval from Addis Ababa University, Institute of population studies up on critical examination of proposal developed for the same sake. Then after, an official letter which bears the stamp of Addis Ababa University, Institution of Population Studies was distributed among Bale Zone and Goba Woreda officials as well as rural kebele leaders in order to get permission to conduct the study in that particular area. Furthermore, the respondents and participants of the study were asked for verbal informed consent before participation. Owing to this, all participants were told about the confidentiality their response and the purpose of the study. It is only after doing such tasks that the information was gathered from them.

3.6. Data Quality Assurance

Proper and adequate training was given to data collectors to keep the quality of the data. Furthermore, the questionnaire was pre-tested in order to identify any defects they have. In addition, close supervision of data collectors was made so as to solve problems that may encounter during the course of data collection.

3.7. Organization of the Study

The study is organized into five chapters to keep logical sequence. Accordingly, chapter one mainly focuses on background, statement of the problem, objectives, hypothesis, and significance of the study. The next chapter presents review of related literatures and the conceptual framework. Methods and materials of the study are treated under chapter three and the background characteristics of the population under investigation (currently married women of reproductive age) are dealt in chapter four. Moreover, the data obtained from primary sources are analyzed and discussed under the same chapter using different data analysis techniques; bivariate and multivariate techniques of data analysis. The last chapter (i.e. chapter five) is part of the study in which conclusions arrived at are presented along with some feasible recommendations.

3.8. Definition of Concepts

- **Women with unmet need** – refers to currently married women of reproductive age who want to stop child bearing or delay pregnancy for at least two years but not using contraception. Moreover, unmet need takes into account pregnant and amenorrheic

women whose last pregnancy and last birth was either unwanted or mistimed respectively.

- **Women with met need**- refers to fecund and currently married women of reproductive age who want to stop child bearing or delay next pregnancy by at least two years and using contraceptive methods at the time of the data collection.
- **Unmet need for limiting** – "refers to pregnant women whose pregnancy was unwanted, amenorrhoeic who are not using family planning, whose last child was unwanted and who do not want any more children, and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning and who want no more children" (CSA and ORC Macro, 2006). Here, it should be noted that all categories of women are currently married. Moreover, it excludes those pregnant and amenorrhoic women who become pregnant while using method.
- **Unmet need for spacing** – "includes women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed or whose last birth was unwanted but now say they want more children, and fecund women who are neither pregnant nor amennorhoeic, who are not using any method of family planning and say they want to wait two or more years for their next birth" (CSA amd ORC Macro, 2006). This definition works for those married women of reproductive age. Moreover, those fecund and married women who are not sure about their desire of next childbirth but not using any method are also included.

- **Zone-** Government administrative hierarchy next to region
- **Woreda-** Government administrative hierarchy next to zone
- **Kebele –** smallest Government administrative hierarchy next to Woreda.

Chapter Four

4. Results and Discussions

4.1. Background Characteristics of the Study Population

This section mainly presents the background characteristics of the 827 women who were subjects of the study. It includes socio economic profiles like place of residence, educational level, religion, occupation, ethnic group and access to media. Demographic factors such as age, age at first marriage, age at first birth, number of living children, child loss, ideal number of children, and children ever born are also included. Furthermore, family planning profiles of respondents such as knowledge about contraception, spousal communication, husband approval of family planning, and discussion with health extension workers are also discussed in detail as part of background information of the respondents.

4.1.1. Socioeconomic Characteristics of the Respondents

Table 7 shows the socio economic profile of currently married women who are in their reproductive age group. Majority (55.3%) of the respondents are rural residents. In terms of religion, Orthodox Christians are dominant (47%) followed by Muslims which comprise for 33.4 % of the total. Among other Christians Protestants make an important share which accounts for 14% of the entire women. With regard to ethnicity, the Oromo take the largest share (69.9%) followed by the Amhara Ethnic group (20.4%). As far as education is concerned, majority (58.5%) of the women had no formal schooling. Women with higher education make a very small share (1.8%) of the total. Compared to their partners the percentage of women with no formal schooling is by far greater, being 58.5% for women and 40.9% for husbands. This clearly indicates that women are less educated than their husbands. With regard to occupation, more than two third (66.9%) of the study subjects are not currently working. Among the working groups those who are engaged in self employed non agricultural activities take greater share and followed by those working in agricultural activities. On the other hand, women working in government sectors take the least share of the total respondents (3.9%). The subjects of the study also reported that less than half of them (44%) do not have exposure to any source of information.

Table 7: Percentage Distribution of Currently Married Women by Their Reported Socioeconomic Characteristics, Goba Woreda, 2009

Socio-economic Characteristics	Total Number	Percentage
Place of residence		
Urban	370	44.7
Rural	457	55.3
Respondent's level of education		
No education	484	58.5
Primary	171	20.7
Secondary	157	19
Higher	15	1.8
Religion		
Orthodox	389	47
Catholic	19	2.3
Protestant	122	14.8
Muslim	276	33.4
Traditional	15	1.8
Others	6	0.7
Respondent Currently Working		
No	533	66.9
Yes	274	33.1
Type of occupation		
Not currently working	553	66.9
Government employee	32	3.9
Agricultural activities	97	11.7
Non Agricultural activities	145	17.5
Ethnicity		
Oromo	578	69.9
Amhara	169	20.4
Tigre	9	1.1
Sidama	17	2.1
Guraghe	33	4
Others	21	2.5
Exposure to media		
No exposure	364	44
Exposure to radio	333	40.3
Exposure to radio & TV	130	15.7
Husband's education		
No Education	338	40.9
Primary	232	28.1
Secondary	199	24.1
Higher	58	7

***Source**: Field Survey, 2009.*

4.1.2. Demographic Characteristics of the Respondents

Table 8 shows the percentage distribution of currently married women of reproductive age group by their demographic characteristics. As it is clearly observed from Table 8, marriage is quite early and universal among the study subjects. In this regard 63.4% of the respondents married before age 18. Those married at age 18 and above make only 36.5 % of the total respondents. With regard to current age ,those women in the age group 25-29 years are dominant than the other groups and accounts for 22.9% followed by women in the age range of 20-24 years making 16.9%. Women whose current age ranges from 15-19 years constitute a minimum share of the entire respondents.

Out of the total respondents 6.6% of them did not gave birth to a child at all. However, the remaining 93.4% of the respondents experienced at least one birth in their life time. Out of these women, 34.6% of them gave their first birth in the age range 15-17 years followed by those women who gave their first birth in the age range 18-20 years (28.9%). Women who gave their first birth below the age that a woman is expected to be fertile (age of 15) comprise around 10.2% out of those women who experienced at least one birth. With regard to the number of living children, respondents with five or more living children being dominant (33.7%) followed by women with one to two living children (30.7%). Women with zero number of living children make a very small percentage share of the total which is only 8.3%.

Table 8 also shows that 36.5 percent of women have experienced the death of one child to the minimum. In terms of ideal number of children, 39.8% of the women wish to have three to four children and followed by women who prefer to have five or more children (26.7%). Unlike this, women whose ideal number of children is zero make only 12.2 % of the total. This fact may indicate that the desire to have larger family size is still very high among subjects of the study. As far as total children ever born is considered more than half of the women (52.6%) have four or more ever born children. However, out of the total women 6.6% of them did not gave birth to a child at all.

As part of their demographic characteristics, 46.7% of the women declared that they are fecund. The rest of the women are pregnant, amenorrheic, infecund /menopausal which accounts 9.6%, 25.4%18.4% respectively at the time of the survey.

Table 8: Percentage Distribution of Currently Married Women by Their Reported Demographic Characteristics, Goba Woreda, 2009

Demographic Characteristics	Total Number	Percentage
Age		
15-19	49	5.9
20-24	140	16.9
25-29	189	22.9
30-34	139	16.8
35-39	121	14.6
40-44	101	12.2
45-49	88	10.6
Age at first marriage		
<15	217	26.2
15-17	308	37.2
18-22	235	28.4
23+	67	8.1
Age at first birth		
<15	79	9.6
15-17	267	32.3
18-20	223	27
21+	203	24.5
Number of living children		
0	69	8.3
1-2	254	30.7
3-4	225	27.2
5+	279	33.7
Child loss		
0	525	63.5
1	171	20.7
2-3	105	12.7
4+	26	3.1
Ideal number of children		
0	101	12.2
1-2	70	8.5
3-4	329	39.8
5+	221	26.7
Non numeric response	106	12.8
Total children ever born		
0	55	6.7
1-3	337	40.7
4+	435	52.6
Current reproductive status		
Fecund	386	46.7
Pregnant	79	9.6
Amenorrheic	210	25.4
Infecund, Menopausal	152	18.4

***Source**: Field Survey, 2009.*

4.1.3. Family Planning Characteristics of the Respondents

Table 9 presents the distribution of currently married women of reproductive age group according to their reported family planning characteristics. Knowledge of family planning methods is very high (92%) among the respondents. More interestingly, women who know four or more methods of family planning constitute half of the entire respondents (50.2%). From these figures one can understand that knowledge of contraception is becoming universal in the study area. However, it should be known that knowledge does not necessarily mean the practice of the different contraceptive methods rather the concept refers to the fact that respondents have heard of the different family planning methods from various sources.

Participants of the study were also asked whether they have discussed the issue of family planning with their husbands. Accordingly, almost half of them (49.5%) reported that they never discussed followed by women who discussed the issue more often (29.1%) in the last twelve months. Women who have regular spousal communication about family planning in the last twelve months accounts for only 21.4% of the total respondents. As far as the approval of family planning methods is concerned, more than three fourth (78.7%) of the respondents support the practice of contraception. However, only 13.8% of them have the opposite idea. Moreover, 40.7% of the study subjects declared that their husbands do have negative attitude towards the use of contraception. On the other hand half of the women reported that their husbands do have good attitude towards family planning methods.

Table 9 also indicates that 79.1% and 20.9% of the respondents never discussed and discussed at least once with health extension workers respectively. With regard to visit of health facility only 23.7% of the respondents have visited and told of family planning by health workers in health facility. The remaining 76.3% of women either never visited a health facility or visited but not told of family planning by health workers. In terms of source of information about family planning, community event (54.1%) is the dominant source followed by radio which accounts for 46.2%. Place to obtain a family planning method is known to 61.2% of women.

Table 9: Percentage Distribution of Currently Married Women by Reported Knowledge and Attitude of FP, Goba Woreda, 2009

Family Planning Characteristics	Total Number	Percentage
Knowledge of family planning		
Knows no method	66	8
Utmost three	335	40.5
At least Four	426	50.5
Spousal communication		
Never discussed	409	49.5
Once or twice	177	21.4
More often	241	29.1
Women approval of FP		
Disapprove	114	13.8
Approve	651	78.7
Do not know	62	7.5
Husband approval of FP		
Disapprove	337	40.7
Approve	416	50.3
Do not know	74	8.9
Discussion with health extension workers		
Never discussed	654	79.1
Discussed at least once	173	20.9
Health facility Visit		
Not visited	522	63.1
Visited but not told FP	109	13.2
Visited & told of FP	196	23.7
Source of information about contraceptives (***)		
Pamphlet	124	15
Community event	447	54.1
Radio	382	46.2
Television	204	24.7
News Paper	117	14.1
Health extension workers	173	20.9
Respondent knows a place to obtain a method		
No	321	38.8
Yes	506	61.2

*(*** Multiple Response items)*

***Source**: Field Survey, 2009.*

Table 10 presents the percentage of currently married women by the practice of contraception, need status and fertility preferences as part of family planning profile of the respondents. It indicates that the total unmet need for contraception is 32.5 % (i.e. 17.3% for spacing and 15.2

% for limiting) whereas current use of contraception is about 30.3% (i.e. 15.4% for spacing and 14.9% for limiting). It is clear that there is no big difference between spacing and limiting needs in both unmet and met need categories. On the other hand, women who desire birth within two years and infecund/menopausal women accounts for 23.2% and 14% respectively.

Respondents were also asked about their fertility preference and almost half (49.2%) of them declared that they want to have another child even though the timing varied. Contrary to this, the percentage of women who reported that they want no more children accounts for 47.6% of the total respondents ; a figure slightly lower than those who want another child (49.2%). The remaining women reported that they are either sterilized (1.2%) or infecund (1.3%) or not yet decided (0.6%) whether to have or not to have a child.

In terms of current contraceptive practice 69.8% of the women were not using any form of contraception. On the other hand 17.6% and 7.9% of the respondents were using injection and pills respectively. This may indicate that injection is the most popular method of family planning among the respondents. Out of the total study subjects, about 43.7% of them reported that they have ever practiced modern contraception methods whereas as the remaining 56.3% of them did not use any of the modern methods

Table 10: Percentage of Currently Married Women by Their Reported Practice of Contraception, Need Status and Intension to Use Methods of Family Planning

Characteristics	Total Number	Percentage
FP Demand Category		
Unmet need to space	143	17.3
Unmet need to limit	126	15.2
Using to space	127	15.4
Using to limit	123	14.9
Desire birth < years	192	23.2
Infecund, Menopausal	116	14
Fertility Preference		
Have another child	407	49.2
Undecided	5	0.6
Want no more child	394	47.6
Sterilized	10	1.2
Declared infecund	11	1.3
Ever use of any Modern Methods		
No	466	56.3
Yes	361	43.7
Current Contraceptive use by method type		
Not using	577	69.8
Pill	65	7.9
IUD	9	1.1
Injection	146	17.6
Condom	6	0.7
Norplant	1	0.1
Female Sterilization	10	1.2
Natural methods	13	1.6

***Source**: Field Survey, 2009.*

4.2. Determinants of Unmet Need for Contraception

The preceding sections presented a brief description of respondents according to their socio economic, demographic and family planning characteristics. However, the following sections mainly deal with the results of the bivariate and multivariate analysis of women's unmet need for contraception. In this particular study, unmet need for contraception refers to women who want to stop child bearing or want to delay child birth by at least two years before the birth of another. Moreover, the concept includes pregnant women whose last pregnancy was either unwanted or mistimed and amenorrheic women whose last birth was either unwanted or mistimed. Overall, 32.5% of currently married women have unmet need for contraception (i.e. 17.3% for spacing and 15.2% for limiting).On the other hand, around 30.3% of women have met their needs either for limiting or spacing.

4.2.1. Bivariate Analysis

4.2.1.1. Socioeconomic Profiles of Women with Unmet Need

The magnitude of unmet need, met need and total demand for family planning varies across socio- economic characteristics. Such information is presented in Table 11 and Table 12.

Current Residence: There is a clear and remarkable difference in the level of unmet need by place of residence. As it is shown in Table 11 unmet need for contraception is very high among rural residents than their counterparts (42% versus 20.3%). To put it another way, unmet need among rural residents is more than two times higher than women living in urban area. And this may be due to the high current contraceptive use among urban women which accounts for 49.4%.

The same table also shows concrete difference between rural and urban residents in their spacing and limiting needs. In this regard, urban dwellers seem to be more limiters than rural residents. Conversely, rural residents tend to have greater demand for spacing than limiting. Moreover, urban women have higher percentage of their demand satisfied (70.9%) than rural women (25.8%). This situation may be due limited availability and accessibility of contraception method in rural area and rigid culture of the rural community.

Educational Level: As it is illustrated in Table 11 educated women have lesser unmet need than women with no formal education. The level of unmet need is 39% for the illiterate groups and the corresponding value for the literates is 23.3%. On the other hand, when total unmet need is disintegrated into spacing and limiting needs, the level of unmet need for spacing decreases from 19.8% among the illiterates to 13.7% among women with at least primary education. Similarly, the percentage of women with unmet need for limiting dwindled from 19.2% among women with no formal education to 9.6% among women with some level of

formal schooling. Moreover, the level of met need among literate women (51.9%) is almost four times higher than the illiterate groups (14.9%).

The percentage of demand satisfied is also more than two times higher among literate women (69%) than illiterates (27.6%). This could be due to the fact that educated women are more autonomous and aware of the various contraceptive methods due to their exposure to the outside environment and more likely to be urban residents which give them an opportunity of better access to family planning services.

Religion: Some variation in the level of total unmet need is also exists among various religious groups (see Table 11). Highest total unmet need is observed for the Muslim religious groups (43.4 %) and the least total unmet need being for the Christians (i.e. Orthodox, Catholic, and Protestants) which accounts for 27%. In addition to this, unmet need for limiting is highest among the Muslims (26%) and other religious groups (23.8%) respectively.

Conversely, the level of total met need is almost two times higher among the Christians than the Muslims and almost three times higher among the Christians than the other religious groups. Accordingly, the percentage of women with their demand satisfied belongs to Christian women which accounts for 57.5%. One possible reason for such inequalities in the level of met and unmet need among the different religious groups may be difference in their place of residence. In the study site, Christians dominate urban area while Muslims dominate the rural part. As it is evidenced elsewhere urban life gives better exposure to mass media and better access to family planning services where various methods are available with wider range of choices.

Ethnicity: Table 11 indicates that there is also variation in the level of unmet need among different ethnic groups. In this regard, highest unmet need is observed among the Oromos for both spacing (21.8%) and limiting (18%) than other groups. On the other hand, the Amharas have lowest unmet need for both spacing (5.3%) and limiting (4.7%) than other ethnic groups. In case of current use, the percentage of Amharas who are using contraception is almost two times higher than their Muslim counterparts and large enough than other ethnic groups.

Similarly, the highest percentage of women whose demand for family planning satisfied belongs to the Amhara ethnic groups (82.4%). Contrary to this, the Oromos take the least position in the percentage of women whose demand for family planning is satisfied and it is almost two times lesser than the Amhara ethnic group.

Occupation: The data in Table 11 shows that the difference in the level of unmet need is acute between the working and non working women. However, the difference in the level of current contraceptive practice and percentage of demand satisfied among the two groups of women is not as such significant as it is evidenced in other variables. The level of unmet need is slightly

higher (33.3%) among the nonworking groups. The corresponding values of unmet need among women who are currently working (31%) slightly lower than their counterparts. When unmet need is decomposed into spacing and limiting needs unmet need for spacing (19.2%) is high among the nonworking women than women who are currently working (13.5). Conversely, unmet need for limiting is slightly higher among women who are currently working (17.5%) than women who are not working (14.1%). On the other hand, met need, total demand and percentage of demand satisfied for family planning did not show variation with regard to work status of women.

Above all, the association between unmet need and work status is found to be weak (p. value is > 0.05, see Table 12).

Husband's Education: The data in Table 11 indicates variation in the level of unmet need for family planning among women whose husbands are illiterates and at least with primary level of education. It is found that unmet need for both spacing and limiting is higher among women whose husbands are illiterate. On the other hand, current contraceptive practice is higher among women who have literate husbands and the level is found to be 42.8%. It is also true for spacing (21.9%) and limiting (20.9%) needs. Moreover, the percentage of demand satisfied for family planning is almost three times (61.5%) higher among women with literate husbands than women whose husbands had no formal schooling (22.9%). In this regard, literate husbands may be flexible to discuss and allow their women to use contraceptive methods. In addition to this, husbands with good level of education can understand the consequence of frequent births on their wives. Not only this, they may even involve themselves in using some kind of male contraceptive methods. Contrary to this, husbands with no formal schooling may be reluctant to allow their wives to use contraception. Rather they may think that allowing women to use contraception may lead them to sexual promiscuity, may make them infertile and etc.

Exposure to Mass media: Media exposure is one of the factors that have considerable influence on unmet need. Women who are exposed to any of the three media (radio, television, and newspaper) have lower unmet need (28.1%) than women with no exposure to media ((38.2%). On the other hand, women with no exposure to media are unlikely to be current users when compared to women with at least one media exposure. Accordingly it is found that women with no exposure to media are more than two times less likely to have met need than their counterparts (17.8% versus 39.9%). In addition, greater proportions of women (58.7%) with at least one media exposure have their demand satisfied. The corresponding figure for women with no exposure to media is only 31.8% which is almost half less than their counter parts (see Table 11).

Table 11: Percentage of Currently Married Women Who have an Unmet and Met Need for Family Planning and Total Demand for Family Planning by Socioeconomic Characteristics, Goba Woreda 2009

Socio-economic Characteristics	Unmet need			Met need			Total Demand			% Of demand Satisfied	No of Women
	Spacing	Limiting	Total	Spacing	Limiting	Total	Spacing	Limiting	Total		
Current residence											
Urban	30 (8.1)	45 (12.2)	20.3	90 (24.3)	93 (25.1)	49.4	32.4	37.3	69.7	70.9	370
Rural	113 (24.7)	81 (17.7)	42.4	37 (8.1)	30 (6.6)	14.7	32.8	24.3	57.1	25.8	457
Educational Level											
Illiterate	96 (19.8)	93 (19.2)	39	29 (6.0)	43 (8.9)	14.9	25.8	28.1	53.9	27.6	484
Literate	47 (13.7)	33 (9.6)	23.3	98 (28.6)	80 (23.3)	51.9	42.3	32.9	75.2	69	343
Religion											
Christians	70 (13.2)	73 (13.8)	27	90 (17)	104 (19.6)	36.6	30.2	33.4	63.6	57.5	530
Muslims	72 (26)	48 (17.4)	43.4	37 (13.4)	16 (5.8)	19.2	39.4	23.2	62.6	30.7	276
Others	1 (4.8)	5 (23.8)	28.6	0 (0)	3 (14.3)	14.3	4.8	38.1	42.9	33.3	21
Ethnicity											
Amhara	9 (5.3)	8 (4.7)	10	42 (24.9)	37 (21.9)	46.8	30.2	26.6	56.8	82.4	169
Oromo	126 (21.8)	104 (18)	39.8	75 (13)	68 (11.8)	24.8	34.8	29.8	64.6	38.4	578
Others	8 (10)	14 (17.5)	27.5	10 (12.5)	18 (22.5)	35	22.5	40	62.5	56	80
Currently Working											
No	106 (19.2)	78 (14.1)	33.3	77 (14)	82 (14.8)	28.8	33.2	28.9	62.1	46.4	553
Yes	37 (13.5)	48(17.5)	31	50 (18.2)	41 (15)	33.2	31.7	32.5	64.2	51.7	274
Husband's education											
Illiterate	75 (22.2)	63 (18.6)	40.8	20 (5.9)	21 (6.2)	12.1	28.1	24.8	52.9	22.9	338
Literate	68 (13.9)	63 (12.9)	26.8	107 (21.9)	102 (20.9)	42.8	35.8	33.8	69.6	61.5	489
Exposure to Media											
No exposure	74 (20.3)	65 (17.9)	38.2	34 (9.3)	31 (8.5)	17.8	29.6	26.4	56	31.8	364
Expos. to radio & TV	69(14.9)	61 (13.2)	28.1	93 (20.1)	92 (19.8)	39.9	35	33	68	58.7	463

(**Note:** *Numbers in parentheses represent percentages*)

***Source**: Field Survey, 2009.*

Table 12: Socioeconomic Profiles of Women with Unmet Need for Family Planning, Goba Woreda, 2009

Socio-economic Characteristics	Unmet Need for Contraception (Total Unmet)				
	Yes	No	Total	X^2	P. Value
	No (%)	No (%)	No		
Current Residence					
Urban	75 (20.3)	295 (79.7)	370 (100)	45.833	.000***
Rural	194 (42.5)	263 (57.5)	457 (100)		
Educational Level					
Illiterate	189 (39)	295 (61)	484 (100)	26.62	.000***
Literate	80 (23.3)	263 76.7)	343 (100)		
Religion					
Christians	143 (27)	387 (73)	530 (100)		
Muslims	120 (43.5)	156 (56.5)	276 (100)	22.659	.000***
Others	6 (28.6)	15 (71.4)	21 (100)		
Ethnicity					
Amhara	17 (10.1)	152 (89.9)	169 (100)	53.695	.000***
Oromo	230 (39.8)	348 (60.2)	578 (100)		
Others	22 (27.5)	58 (72.5)	80 (100)		
Currently Working					
No	184(33.3)	369(66.7)	553 (100)	0.423	.515
Yes	85(31)	189 (69)	274 (100)		
Husband's Education					
Illiterate	138 (40.8)	200 (59.2)	338 (100)	17.948	.000***
Literate	131 (26.8)	358 (73.2)	489 (100)		
Exposure to Media					
No Exposure	139 (38.2)	225 (61.8)	364 (100)	9.489	.002***
Exposure to radio/TV	130 (28.1)	333 (71.9)	463 (100)		

(**Note:** *Numbers in parentheses represent percentages*)

*(Note: - Significant at *** P. Value < 0.01)*

***Source**: Field Survey, 2009.*

4.2.1.2. Demographic Profiles of Women with Unmet Need for Family Planning

Age: The data in Table 13 reflects some variation in women's unmet need by age. Unmet need for contraception is highest among women aged 15-19 years (55.1%). On the other hand, the least unmet need is observed among women aged 20-24 years which accounts for 25.8%. Except at the age group 20-24 , generally unmet need gradually declines from its highest level at the age group 15-19 years (55.1%) to 29% for women aged thirty five and above years. Similarly unmet need for spacing shows remarkable decline with age from 36.7(at 15-19 years) to 8.4% (at age 35 years and over) except the existence of slight fluctuation at the age group 25-29 years. Contrary to this, unmet need for spacing increases with age from its lowest level (2.9%) at the age group 20-24 years to 20.6% at the age of 35 years and over.

Unlike unmet need for contraception, met need is highest at the age group 20-24 years (42.1%). Women aged 15-19 years have the smallest level (16.3%) of met need than the other groups.

Age at first marriage: Age at first marriage is one of the factors that affect the level of fertility by lengthening or shortening the exposure of women to the risk of pregnancy especially in societies where sex out of marriage is unacceptable. As a result, age at first marriage may have an influence on the level of unmet need. As it is indicated in Table 13, total unmet need gradually declines with increasing age at first marriage from 36.6% for women married before age 16 to 28.4% for women married at age 20 and over for the first time. Contrary to this, the level of met need or current use of contraception gradually increases with increasing age at first marriage from its lowest level (25.8%) for women married before age 16 to its highest level (34.5%) for women married at age 20 and over for the first time. Similar to this, the percentage of women with their demand satisfied increases from 41.3% (for women married before age 16) to 54.9% (for women married at 20 and over).

However, the overall association between age at first marriage and unmet need for contraception is weak where P. value is > 0.05 (see Table 14).

Age at First Birth: Table 13 reflects that women with unmet need for contraception are slightly higher in women who gave their first birth in lower ages than women who gave their first birth at age 20 and over. However, the same Table indicates that the variation in the level of unmet need (total, spacing and limiting) is not significant between women who gave birth at various ages. Women who are married before age 16 exhibit lower demand for spacing (16.3%) and higher demand for limiting (18%) than other groups. However, women who married at later ages tend to exhibit higher unmet need for spacing (18.4%) and lower unmet need for limiting

(13.5%) than their counterparts. From this one can understand that unmet need for spacing increases with age at first birth and unmet need for limiting decreases with increasing age at first birth. It also indicates that the level of met need for contraception is highest among women who gave their first birth at later ages (20 and over). However, met need for limiting gradually decreases with age from 19.9% for women who gave first birth before age 16 to 11.7% for women who gave first birth at age 20 and over. With regard to met need for spacing it increases with age at first birth from 10.8% to 21.8% for women who gave their first before age 16 and at 20 and over respectively.

However, the overall association between age at first birth and unmet for contraception is found to be weak where P. value is > 0.05 (see Table 14).

Number of Living Children: The level of total unmet need increases with increasing number of children. Such a trend is clearly indicated in Table 13. Unmet need increased from 13% for women with zero number of children to 37.9% for women with four or more living children. A similar pattern for unmet need for limiting is also observed. It increased from 0% (for women with zero number of children) to 21% for women with four or more children. On the other hand, unmet need for spacing is highest among women with one to three numbers of living children (19.1%) and it falls to 16.2% for those women who have four or more number of living children.

In addition to these, Table 13 also reflects that women with four or more number of living children are least likely to satisfy their demand for family planning than other groups.

Number of Dead Children: The data in table 13 reflects some variation in unmet need for contraception according to number of dead children. The level of total unmet need exhibits a tendency to increase with increasing number of dead children. Accordingly, the total unmet need increased from 30.2% for women with zero number of dead children to its highest level (42%) among women who experienced death of two or more children. Unmet need for limiting is almost three times higher among women with two or more dead children than women with no dead child. It also shows an increasing pattern with increasing number of dead children. On the other hand, unmet need for spacing exhibits a tendency to decrease with increasing number of dead children. As it is shown in Table 13, unmet need for spacing decreased from 19% among women with no dead child to 12.2% among women with at least two or more number of dead children.

With regard to percentage of demand satisfied, women who lost two or more of their children are most unlikely to satisfy their needs than other groups. Contrary to this, women with zero number of dead children are most likely to satisfy their demand for family planning.

Children ever born: Table 13 indicates that the influence of number of living children and children ever born is almost the same on the level of unmet need.

In the same table the data indicates that total unmet need shows a tendency to increase with increasing number of children ever born. However, when total unmet need is divided in to spacing and limiting needs, it is only limiting need that shows an increasing tendency with increasing number of children ever born. Contrary to this, Unmet need for spacing shows a declining pattern with increasing number of children ever born except for some fluctuation. In terms of demand satisfied, women with zero number of children ever born are most likely to satisfy their needs than other groups. More importantly, the likelihood of satisfying demand decreases with increasing number of children ever born.

Ideal Number of Children: The data in Table 13 shows some variation in unmet need by ideal number of children. However, the chi-square test in Table 14 shows that there is no significant association between ideal number of children and total unmet need for contraception.

Even though the association is weak, it is worth having to mention that level of unmet need is highest (39.7%) among women who provided nonnumeric response (up to God and do not know). These groups of women are also least likely to satisfy their total demand for contraception than other groups of women.

Table 13: Percentage of Currently Married Women Who have an Unmet and Met Need for Family Planning and Total Demand for Family Planning by Demographic Characteristics, Goba Woreda, 2009

Demographic Characteristics	Unmet need			Met need			Total Demand			Percentage of demand Satisfied	No of Women
	Spacing	Limiting	Total	Spacing	Limiting	Total	Spacing	Limiting	Total		
Age											
15-19	18 (36.7)	9 (18.4)	55.1	7 (14.3)	1 (2)	16.3	51	20.4	71.4	22.8	49
20-24	32 (22.9)	4 (2.9)	25.8	42 (30)	17 (12.1)	42.1	52.9	15	67.9	60.7	140
25-29	44 (23.3)	25 (13.2)	36.5	40 (21.2)	28 (14.8)	36	44.5	28	72.5	49.6	189
30-34	23 (16.5)	24 (17.3)	33.8	26 (18.7)	11 (7.9)	26.6	35.2	25.2	60.4	44	139
35+	26 (8.4)	64 (20.6)	29	12 (3.9)	66 (21.3)	25.2	12.3	41.9	54.2	46.5	310
Age at first marriage											
<16	63 (18)	65 (18.6)	36.6	32 (9.2)	58 (16.6)	25.8	27.2	35.2	62.4	41.3	349
16-19	41 (13.8)	49 (16.4)	30.2	52 (17.4)	46 (15.4)	32.8	31.2	31.8	63	52.1	298
20+	39 (21.7)	12 (6.7)	28.4	43 (23.9)	19 (10.6)	34.5	45.6	17.3	62.9	54.9	180
Age at first birth											
<16	27 (16.3)	30 (18)	34.3	18 (10.8)	33 (19.9)	30.7	27.1	37.9	65	47.2	166
16-19	58 (17.1)	60 (17.6)	34.7	42 (12.4)	55 (16.2)	28.6	29.5	33.8	63.3	45.2	340
20+	49 (18.4)	36 (13.5)	31.9	58 (21.8)	31 (11.7)	33.5	40.2	25.2	65.4	51.2	266
Number of Living Children											
0	9 (13)	0 (0)	13	9 (13)	4 (5.8)	18.8	26	5.8	31.8	59	69
1-3	72 (19.1)	43 (11.4)	30.5	103 (27.4)	36 (9.6)	37	46.5	21	67.5	54.8	376
4+	62 (16.2)	83 (21.7)	37.9	15 (3.9)	83 (21.7)	25.6	20.1	43.4	63.5	40.3	382
Number of dead children											
0	100 (19)	59 (11.2)	30.2	105 (20)	86 (16.4)	36.4	39	27.6	66.6	54.7	525
1	27 (15.8)	28 (16.4)	32.2	18 (10.5)	26 (15.2)	25.7	26.3	31.6	57.9	44.4	171
2+	16 (12.2)	39 (29.8)	42	4 (3.1)	11 (8.4)	11.5	15.3	38.2	53.5	21.5	131
Children Ever born											
0	9 (16.4)	0 (0)	16.4	9 (16.4)	4 (7.3)	23.7	32.8	7.3	40.1	59	55
1-3	64 (19)	28 (8.3)	27.3	96 (28.5)	36 (10.7)	39.2	47.5	19	66.5	58.9	337
4+	70 (16.1)	98 (22.5)	38.6	22 (5.1)	83 (19.1)	24.2	21.2	41.6	62.8	38.5	435
Ideal number of children											
0	18 (17.8)	20 (19.8)	37.6	9 (8.9)	7 (6.9)	15.8	26.7	26.7	53.4	29.6	101
1-3	16 (15)	9 (8.4)	23.4	19 (17.8)	20 (18.7)	36.5	32.8	27.1	59.9	60.9	107
4+	90 (17.5)	74 (14.4)	31.9	99 (19.3)	82 (16)	35.3	36.8	30.4	67.2	52.5	513
Non numeric resp.	19 (18)	23 (21.7)	39.7	0 (0)	14 (13.2)	13.2	18	34.9	52.9	25	106

(**Note:** *Numbers in parentheses represent percentages*)

***Source**: Field Survey, 2009*

Table 14: Demographic Profiles of Women with Unmet Need for Family Planning, Goba Woreda, 2009

Demographic Characteristics	Unmet Need for Contraception (Total Unmet)				
	Yes	No	Total	X^2	P. Value
	No (%)	No (%)	No		
Age					
15-19	27 (55.1)	22(44.9)	49 (100)		
20-24	36(25.7)	104(74.3)	140 (100)	17.534	.002***
25-29	69(36.5)	120(63.5)	189 (100)		
30-34	47(33.8)	92(66.2)	139 (100)		
35+	90(29)	220(71)	310 (100)		
Age at first marriage					
<16	128(36.7)	221(63.3)	349 (100)		
16-19	90(30.2)	208(69.8)	298 (100)	4.914	.086
20+	51(28.3)	129(71.7)	180 (100)		
Age at first birth					
<16	57(34.3)	109(65.7)	166 (100)		
16-19	118(34.7)	222(65.3)	340 (100)	0.547	.761
20+	85(32)	181(68)	266 (100)		
Number of Living children					
0	9(13)	60(87)	69 (100)		
1-3	115(30.6)	261(69.4)	376 (100)	17.715	.000***
4+	145(38)	237(62)	382 (100)		
Child Loss					
0	159(30.3)	366(69.7)	525 (100)		
1	55(32.2)	116(67.8)	171 (100)	6.551	.038**
2+	55(42)	76(58)	131 (100)		
Children Ever born					
0	9(16.4)	46(83.6)	55 (100)		
1-3	92(27.3)	245(72.7)	337 (100)	18.103	.000***
4+	168(38.6)	267(61.4)	435 (100)		
Ideal number of children					
0	38(37.6)	63(62.4)	101 (100)		
1-3	25(23.4)	82(76.6)	107 (100)	7.793	.050
4+	164(32)	349(68)	513 (100)		
Non numeric response	42(39.6)	64(60.4)	106 (100)		

(**Note:** *Numbers in parentheses represent percentages*)

*(Note: - Significant at *** P. Value < 0.01, and **P. Value < 0.05)*

***Source**: Field Survey, 2009*

4.2.1.3. Unmet Need and Family Planning Characteristics

Knowledge: The data presented in Table 15 reflects that there is variation in unmet need with the level of Knowledge. Knowledge in this case is measured by the total number of methods (both traditional and modern) that respondents heard of.

In this regard unmet need for contraception shows a tendency to increase with decrease in the level of knowledge. Accordingly, one in two women (50%) have unmet need among respondents with no knowledge and one in four (25.1%) have unmet need among women who know at least four methods. To put it another way, the level of unmet need is two times higher among women who know no method than women with knowledge of at least four methods.

It is obvious that women who know no methods of family planning do not use contraception. It is to mean that all women with no knowledge of family planning methods are not current users. Such a fact is also obvious in Table 15 since the total number of current users is zero. Contrary to this, women who know more methods of family planning are most likely to satisfy their demand than women with limited knowledge of family planning methods.

Discussion with Health Extension Workers: In order to increase the adoption and practice of contraception, contacting women at their home through health extension workers is of great significance. As Table 15 indicates, unmet need among women who never contacted with health extension workers is higher than women who discussed with health extension workers at least once. Accordingly, among women who never contacted with health extension workers about 34% of them have unmet need and among women who have at least one contact with health extension workers the level of unmet need dwindled to 26.1%.This also holds true for spacing and limiting needs .Table 15 also indicates that women who have been visited by family planning workers at home are more likely (68.1%) to satisfy their demand than women who have never been visited by family planning workers (45.2%).

Health Facility Visit: Women's visit of health facility either for their own or their children's health care is one of the factors that affects the level of unmet need. As Table 15 shows, level of unmet need among women who never visited a health facility, visited but not told of family planning and visited and told of family planning is 36.4%, 31.1%, and 23% respectively. From these figures, one can clearly understand that the level of unmet need among women diminishes with women's visit of a health facility. This is true especially when women are told about family planning at health facility by workers.

With regard to demand satisfaction for family planning, women who visited a health facility and told about family planning are two times more likely to satisfy their demand than women who never visited a health facility. In addition to this, women who visited a health facility but not told of family planning are still more likely to satisfy their demand for contraception than women with no visit to health facility.

Husband Approval of Family Planning: The role of husbands is undeniable in family planning decision making process. As a result husbands can shape the reproductive behavior of their wives. As the data in Table 15 indicates, women who believe that their husbands approve family planning have lower unmet need (21.2%) than women who believe that their husbands disapprove or those who do not know their husbands attitude towards family planning which accounts for 43.3% and 7.3% respectively. The percentage of demand satisfied among women for family planning is affected by their husband's attitude towards family planning.

As it is indicated in Table 15, the percentage of women who have satisfied demand for family planning is seven times higher (71.9%) among women who believe that their husband's have a positive attitude towards family planning than women who have the reverse of this belief (10.9%). Moreover, women who do not know their husband's attitude towards family planning are five times less likely to satisfy their demand than women who believe that their husbands approve family planning.

Spousal Communication: Spousal communication about family planning is a strong factor that affects the practice of contraception among women. In this study women were asked how frequently they discuss family planning with their husbands. Accordingly, their response is associated with their demand for family planning (met need or unmet need). Table 15 and Table 16 show such an association between spousal communication and level of unmet need. Women who never discussed about family planning with their husbands are three times more likely (48.9%) to have unmet need than women who discussed family planning at least in the last 12 months which accounts for 16.5 % . Conversely, women who have frequent discussion about family planning with their husbands are more likely to satisfy their demand for family planning. This is also illustrated in Table 15. Women who have discussed at least once with their husbands about family planning are five times (75.7%) higher to satisfy their demand than their counterparts (14.1%).

Table 15: Percentage of Currently Married Women Who have an Unmet and Met Need for Family Planning and Total Demand for Family Planning by Family Planning Characteristics, Goba Woreda , 2009

Family Planning Characteristics	Unmet need			Met need			Total Demand			% of demand Satisfied	No of Women
	Spacing	Limiting	Total	Spacing	Limiting	Total	Spacing	Limiting	Total		
Knowledge											
Knows no method	17(25.8)	16 (24.2)	50	0 (0)	0 (0)	0	25.8	24.2	50	0	66
Utmost three	73 (21.8)	56 (16.7)	38.5	22 (6.6)	25 (7.5)	14.1	28.4	24.2	52.6	26.8	335
At least four	53 (12.4)	54 (12.7)	25.1	105 (24.6)	98 (23)	47.6	37	35.7	72.7	65.5	426
Discussion with HEWs											
Never	118 (18)	106 (16.2)	34.2	93 (14.2)	92 (14)	28.2	32.2	30.2	62.4	45.2	654
At least once	25 (14.5)	20 (11.6)	26.1	34 (19.6)	31 (17.9)	43.3	34.1	29.5	63.6	68.1	173
Health Facility Visit											
Not visited	97 (18.6)	93 (17.8)	36.4	46 (8.8)	61 (11.7)	20.5	27.4	29.5	56.9	36	522
Visited but not told FP	20 (18.3)	14 (12.8)	31.1	29 (26.6)	20 (18.3)	44.9	44.9	31.1	76	59.1	109
Visited & told of FP	26 (13.3)	19 (9.7)	23	52 (26.5)	42 (21.4)	47.9	39.8	31.1	70.9	67.6	196
Husband approval of FP											
Disapprove	88 (26.1)	58 (17.2)	43.3	16 (4.7)	2 (0.6)	5.3	30.8	17.8	48.6	10.9	337
Approve	47 (11.3)	41 (9.9)	21.2	109 (26.2)	117 (28.1)	54.3	37.5	38	75.5	71.9	416
Do not know	8 (10.8)	27 (36.5)	47.3	2 (2.7)	4 (5.4)	8.1	13.5	41.9	55.4	14.6	74
Spousal communication											
Never discussed	121 (29.6)	79 (19.3)	48.9	14 (3.4)	21 (5.1)	8.5	33	24.4	57.4	14.1	409
At least once	22 (5.3)	47 (11.2)	16.5	113 (27)	102 (24.4)	51.4	32.3	35.6	67.9	75.7	418

(**Note:** *Numbers in parentheses represent percentages*)

***Source**: Field Survey, 2009*

Table 16: Family Planning Characteristics of Women with Unmet Need for Family Planning, Goba Woreda, 2009

Family Planning Characteristics	Unmet Need for Contraception (Total Unmet)				
	Yes	No	Total	X^2	P. Value
	No (%)	No (%)	No		
Knowledge of FP					
Knows no method	33 (50)	33 (50)	66 (100)	25.297	.000***
Utmost three	129 (38.5)	206(61.5)	335(100)		
At least four	107(25.1)	319(74.9)	426(100)		
Spousal Communication					
Never	200(48.9)	209(51.1)	409(100)	98.835	.000***
At least once	69(16.5)	349(83.5)	418(100)		
Husband approves FP					
Disapprove	146(43.3)	191(56.7)	337(100)		
Approve	88(21.2)	328(78.8)	416(100)	49.772	.000***
Do not Know	35(47.3)	39(52.7)	74(100)		
Discussed FP with HEWs					
Never	224(34.3)	430(65.7)	654(100)	4.232	.040**
At least Once	45(26)	128(74)	173(100)		
Visited Health Facility					
Not Visited	190(36.4)	332(63.6)	522(100)		
Visited but not told FP	34(31.2)	75(68.8)	109(100)	11.829	.003***
Visited and told of FP	45(23)	151(77)	196(100)		

(**Note:** *Numbers in parentheses represent percentages*)

*(Note: - Significant at *** P. Value < 0.01, and **P. Value < 0.05)*

***Source**: Field Survey, 2009*

4.3. Reasons for Non Use of Family Planning Methods among Women with Unmet Need

In order to increase adoption and practice of modern contraceptive methods among currently married women of reproductive age group, identifying the possible reasons for non use is of great importance. It also very much useful to design appropriate intervention strategies to met the unmet need for contraception.

The 2005 Ethiopia Demographic and Health Survey report categorizes the various possible reasons of nonuse into four classes. These include fertility related reasons, opposition to use, lack of knowledge and method related reasons. A similar pattern is also used to indicate reasons for nonuse in this particular study.

Table 17 presents various factors identified by women for not currently using contraception. The most prominent reason reported by women with unmet need for not currently using a method is lack of knowledge. In this regard 19.7% and 16.4% of the respondents with unmet need do not know a place where to obtain method and ignorant of various methods of contraception respectively. Fertility related reasons especially breast feeding and Postpartum amenorrhea (15% and 14.2% respectively) are also cited by women as hindrances for not currently using contraception. Another 12.5% and 11.2% of women respectively reported husband's opposition and health concerns as reasons for their non use of contraception. In addition to these, fatalistic reasons (10.5%), religious prohibition (9.6%), fear of side effects (8.9%) and infrequent sex with husbands (8.2%) are among the important reasons for not currently using contraception among them.

Women with unmet need for spacing reported lack of knowledge of source of contraception (19.11%), lack of knowledge of methods (17.71%) and breast feeding (17.11%) as dominant reasons for their nonuse. On the other hand, 20.52 % of women with unmet need for limiting mentioned lack of knowledge of source, 14.82% mentioned health concerns, 14.69% mentioned lack of knowledge of methods, and 12.32% mentioned breast feeding as reasons for non use of contraception.

Table 17: Percentage of Women with Unmet Need for Family Planning by Reason for not Currently Using Contraceptive Method			
Reason for not using contraceptive method	**Unmet Need**		
	For Spacing	**For Limiting**	**Total**
Fertility Related Reason			
Not having Sex	4.99	7.76	6.1
Infrequent Sex	4.1	12.98	8.2
Menopausal/Hysterectomy	0	2.4	1.2
Sub fecund/Infecund	0.23	5.06	2.3
Postpartum amenorrheic	2.03	11.16	14.2
Breast feeding	17.11	12.32	15
Fatalistic	11.8	8.69	10.5
Opposition to Use			
Respondent Opposed	6.48	4.53	5.7
Husband Opposed	13.27	11.6	12.5
Others opposed	3.6	2.1	3
Religious prohibition	9.15	10.05	9.6
Lack of Knowledge			
Knows no method	17.71	14.69	16.4
Knows no Source	19.11	20.52	19.7
Method Related Reasons			
Health Concerns	8.42	14.82	11.2
Fear of side effects	6.64	12	8.9
Lack of access/too far	4.39	6.09	5.1
Cost to much	1.04	1.16	1.1
Inconvenient to use	4.23	5.64	4.7
Interference with body process	4.15	2.49	3.6
other	3.61	3.58	4.3
Total	143	126	269

***Source**: Field Survey, 2009*

4.4. Reason for Not Intending to Use Contraceptive Methods in the Future

In order to increase contraceptive prevalence rate, due attention should be given for those who are not currently using contraception. Even more attention is required for women who are in need of limiting or spacing child birth but not currently using any method of family planning methods. To put it another way, meeting the unmet need for contraception is mandatory to increase the use of family planning. As result, to meet the unmet need both reasons for not currently using and for not intending to use contraceptives in the future should be clearly identified.

In this study as well, women with unmet need were asked about their intension for future use and their reasons for not intending to use contraception in the future. Table 18, shows the result for such investigation among women with unmet need.

The data in table 18 indicates that among women with unmet need 68% of them want to use contraceptives in their future. However, the remaining 32% of the women do not intend to use contraception owing to various factors. On the other hand, 28.6% of women with unmet need for limiting and 35% of women with unmet need for spacing do not want to use contraceptives in the future. With regard to future non use, women with unmet need for spacing are more likely than women with unmet need for limiting (35% versus 28%) not to intend to use contraceptives in the future.

The same table presents breakdown of reasons for not intending to use contraception among women with unmet need. A larger part of women with unmet need do not intend to use contraception due to opposition to use (27.9%). Religious prohibition (17.4%) is the predominant reason in affecting future non use with in opposition to use. In addition to this, opposition from husbands (14%) and religious prohibition (25%) are reported as important reasons for not intending to use contraceptives in the future among women with spacing and limiting needs respectively.

Method related reasons are also important in affecting future intension to use contraceptives. Over all, 26.7% of all women with unmet cited method related reasons for not intending to use contraceptives in the future. In this regard, health concern is the most substantial (17.4%) in affecting their future use of contraceptives. Moreover, health concern is cited as an important factor among women with spacing and limiting needs (18% for spacing and 16.7% for limiting) in prohibiting them from using contraception in the future.

Fertility related reasons are also not weak in determining women's future intension to use contraceptives. Overall, 21% of women with unmet need reported fertility related reasons for not intending to use contraceptives. Among fertility related reasons infrequent sex (10.5%) is

dominant in hindering women from using contraception in the future. Moreover, among women with spacing needs the single most important factor that prohibits women from using contraception contraceptives is the desire for more children (16%). Conversely, women with limiting needs cited infrequent sex (25%) as major reasons for not intending to use contraception in the future.

Table 18 further indicates that 8.1% of women with unmet need reported lack of knowledge for not intending to use family planning methods in the future.

Table 18: Percentage of Women by Future Intension to Use Family Planning and Reason for not Intending to Use Family Planning According to Unmet Need

Intension/Reason for non use	Unmet Need		
	For Spacing	For Limiting	Total
Future Intension			
Intend to use	93 (65)	90 (71.4)	183 (68)
Do no intend to use	50 (35)	36 (28.6)	86 (32)
Total	100	100	100
Number	**143**	**126**	**269**
Fertility Related Reason			
Infrequent Sex	0	25	10.5
Sub fecund/Infecund	0	2.8	1.2
Wants more children	16	0	9.3
Opposition to Use			
Respondent Opposed	14	2.8	3.5
Husband Opposed	12	0	7
Religious prohibition	12	25	17.4
Lack of Knowledge			
Knows no method	6	5.6	5.8
Knows no Source	2	2.8	2.3
Method Related Reasons			
Health Concerns	18	16.7	17.4
Fear of side effects	4	2.8	3.5
Lack of access/too far	2	0	1.2
Inconvenient to use	4	0	2.3
Interference with body process	2	2.8	2.3
Other	10	11.1	10.5
Do not know	8	2.8	5.8
Total Number	**50**	**36**	**86**

*(**Note**: Numbers in parentheses represent percentages)*

***Source**: Field Survey, 2009*

4.5. Preferred Future Method among Women with Unmet Need

Table 19 indicates the fact that greater proportion of women (68%) with unmet need have an intention of using contraceptives in their future. During the survey these women were asked about their future preferred method. Surprisingly, more than half of them (54.1%) reported that they prefer injectables to other methods of family planning. On the other hand, 29% of women with unmet need prefer to use oral contraceptives (Pills) as their preferred future method. As such, it is possible to say that injectables and oral contraceptives are the first and second most popular preferred future methods among women with unmet need.

There could be various reasons for the injectables to be most popular preferred future method among women with unmet need. One possible reason could be the convenience of the method in using it. Once women are injected the method there may be no need of visiting the health facility for some extended time unless there are complications associated with it. On the other hand women can use injectables secretly if opposition from their husbands is too strong in prohibiting them from using family planning.

Table 19: Percentage of Women with Unmet Need by Future Intension to Use Family Planning and Their Preferred Future Method

Future Intension	Frequency	Percent
Intend to use	183	68
Does not intend to use	86	32
Type of a Method		
Pill	53	29
Injections	99	54.1
Female Sterilization	3	1.6
Periodic Abstinence	6	3.3
IUD	3	1.6
Condom	5	2.7
Implants	2	1.1
Don't know	12	6.6
Total	**183**	100

***Source**: Field Survey, 2009*

4.6. Multivariate Analysis

In the previous sections bivariate analysis was done in order to investigate the effects of each explanatory variable on the dependant one (unmet need for contraception). Accordingly, chi-square test is applied to see if there is significant association between each predictor and outcome variable. However, such an analysis does not control for confounding effect (i.e. the effect of other predictor variables is not kept constant). It also does not tell us how strong the association is. As such the use of better method of analysis is of great significance.

As a result, using the dichotomous relationship between unmet need and various predictor variables, binary logistic regression is applied for multivariate analysis since it controls for confounding effect. It is also important to see the relative importance of various explanatory variables over unmet need.

In the logistic model the odds ratio is the exponent of regression coefficients (i.e. Exp (β)). The values of odds ratio are important to compare the likelihood of an event occurring or not occurring. This value is always one for the reference category and it can take any value between zero and infinity for other categories. If its value is greater than one, it indicates higher probability of an event to occur than the comparison group and the reverse is also true. On the other hand, the sign of β value tells us the direction of relationship between the predictor and outcome variable. Moreover, significant difference exists at 95% confidence interval (where P. value is < 0.05).

Model goodness of fit test is performed using the Hosmer and Lemeshow's goodness of fit test and it is found to be 73.5%. Moreover, collinearity diagnostic test is made using tolerance and VIF before fitting the logistic regression model. Accordingly, based on the collinearity diagnostic test children ever born is excluded from the multivariate analysis since it is found to have multi-collinearity effect (i.e. VIF>4 and tolerance < 0.2)

4.6.1. Results of Multivariate Analysis in the Logistic Regression Model

Table 20 presents results of the multivariate (binary logistic regression) analysis. The model depicts that only six variables are determinants of unmet need for contraception. These include number of living children, discussion with health extension workers, health facility visit, spousal communication, age and ethnicity. The strength and direction of association between explanatory variables and outcome variable as well as the possible explanation of the correlates of unmet need is presented in the paragraphs that follow.

Number of Living Children and Unmet Need

The number of living children a woman has is strongly and directly related to unmet need for contraception. This is clearly indicated in Table 20. In this study the number of living children that woman has is categorized in to three classes. For the purpose of analysis, the first category is set as reference based on which other groups are compared.

Accordingly, it is found that number of living children made statistically significant contribution (at P. value <0.05) in determining unmet need for contraception. Overall, women who have at least one living child are more likely to have unmet need than women with no living children. More specifically, women who have four or more living children are almost six times higher (Exp (β) = 5.731) to have unmet need than women with zero number of living children (reference category). In addition to this women with one to three number of living children are almost twice more (Exp (β) = 1.589) likely to have unmet need for contraception than the reference category. It is also important to note that this finding is conformal with the bivariate analysis as well (i.e. as the number of living children increase unmet need also increases). Moreover, the fourth stated hypothesis of the study (i.e. ***Women with less number of living children have lesser unmet need than women with larger number of living children***) proved to be valid.

Spousal Communication and Unmet Need

During data collection women were asked whether they discussed family planning with their husbands in the last 12 months or not. Accordingly, they were categorized into two; those who never discussed and those who discussed at least once. Surprisingly, discussing family planning with husbands emerges as one of the determining factors of unmet need for contraception among women. Table 20 could be taken as tangible evidence that shows spousal communication is more strongly and negatively affects unmet need for contraception. Women who have discussed family planning at least once with their husbands are 74% (Exp (β) = 0.262) less likely to have unmet need for contraception than the reference category (women who never discussed). This indicates that the third hypothesis of the study (i.e. ***Frequent spousal communication about family planning tends to decrease the level of unmet need***) is also proved to be valid.

Health Facility Visit and Unmet Need

Woman's visit of a health facility either for her own or for other members of family health care exerts a positive influence in meeting the unmet need. Table 20 presents the fact that women's

visit of a health facility is strongly and negatively associated with unmet need for contraception. In this regard all categories with in health facility made statistically significant contribution in determining unmet need for contraception. Generally women who have at least one visit to health facility to seek health care are less likely to have unmet need. More specifically , women who visit a health facility but not told of family planning and women who visited health facility and told of family planning are less likely (37% i.e. Exp (β) = 0.633 and 53% i.e. Exp (β) = 0.470 respectively) to have unmet need for contraception.

Once again the results of the multivariate analysis are in line with the bivariate analysis and the first hypothesis (i.e. ***Utilization of maternal and child health (MCH) services decrease the likelihood of unmet need for contraception among women***) is also proved to be valid. In addition to this the results of both bivariate and multivariate analysis indicate that even though women's visit of health facility is crucial in meeting the unmet need, the effect become more strong when women are told about family planning by workers in the health facility.

Discussion with Health Extension Workers and Unmet Need

Bringing family planning services to door step through health extension workers is of great significance in eliminating unmet need for family planning. To investigate the influence of discussion with health extension workers on unmet need, women were asked whether they discussed family planning in last 12 months with health extension workers or not. Accordingly, they were categorized in to two, women who never discussed and women who discussed at least once. For the purpose of analysis the first group is taken as reference category.

Table 20 depicts that women's discussion with health extension workers has a positive influence in reducing unmet need. The odds ratio (Exp (β) = 0.478) for women who discussed at least once tells us that they are almost 52% less likely to have unmet need for contraception than the reference category.

Age of Woman and Unmet Need

Table 20 indicates that age of women is also important in affecting women's demand for family planning. However, not all categories of age made statistically significant contribution in explaining unmet need among women of different age groups. Women aged 20-24 years are 84% (Exp (β) = 0.136) and women aged 30-34 years are 48% (Exp (β) = 0.519) less likely to have unmet need for contraception than the reference category.

Ethnicity and Unmet Need

In terms of ethnicity the Oromos are five times (Exp (β) = 0.5.291) more likely to have unmet need than the Amharas (reference category). However, other ethnic groups do not made statistically significant contribution in determining unmet need for contraception. One possible reason for the likelihood of high unmet need for the Oromo's may be place of residence. In the study site the Oromo ethnic groups dominantly reside in rural areas. As it is evidenced elsewhere rural areas may not give women better access to family planning services. In addition to this rural women are more likely to be uneducated than their urban counterparts. These and other factors may contribute for the occurrence of high unmet need among the Oromo women who are predominantly rural residents.

Table 20: Binary Logistic Regression Coefficients for the Relationship between Unmet Need and Different Factors among Married Women of Reproductive age, Goba Woreda, 2009

Variables	B	St. Error	Sig.	Exp(B)
Place of Residence				
Urban (RC)				
Rural	.120	.259	.642	1.128
Ethnicity				
Amhara (RC)				
Oromo	1.666	.401	.000***	5.291
Others	.034	.308	.911	1.035
Religion				
Christians (RC)				
Moslems	-.818	.543	.132	.441
Others	-.783	.542	.149	.457
Women Education				
Illiterates (RC)				
Literates	.321	.244	.190	1.378
Partner's Education				
Illiterates (RC)				
Literates	.088	.215	.682	1.092
Age of Women				
15-19 (RC)				
20-24	-1.997	.441	.000***	.136
25-29	-.534	.329	.104	.586
30-34	-.655	.271	.016**	.519
35+	-.361	.267	.177	.697
Number of Living Children				
0 (RC)				
1-3	.463	.224	.039**	1.589
4+	1.746	.438	.000***	5.731
Number of Dead Children				
0 (RC)				
1	.297	.262	.257	1.346
2+	.257	.282	.363	1.293
Knowledge of Family Planning				
Knows no method (RC)				
Utmost three	-.362	.333	.277	.696
At least four	.032	.211	.880	1.032
Discussion with Health Extension Workers				
Never Discussed (RC)				
Discussed at least once	-.737	.231	.001***	.478
Health Facility Visit				
Never Visited (RC)				
Visited but not told of FP	-.457	.227	.044**	.633
Visited and told of FP	-.755	.306	.013**	.470
Husband Approval of Family Planning				
Disapprove (RC)				
Approve	-.068	.285	.811	.934
Do not know	.317	.325	.331	1.373
Spousal Communication				
Never discussed (RC)				
Discussed at least once	-1.34	.221	.000***	0.262

(Note: Significant at *** P. Value < 0.01, and ** P. Value < 0.05, RC is the Reference Category)

Source: *Field Survey, 2009.*

4.7. Discussion of the Results

This study shows that the level of unmet need in Goba Woreda is 32.5% among currently married women of reproductive age with nearly one in five women having unmet need for spacing (17.3%). When total unmet need is decomposed in to spacing and limiting needs, the former (17.3%) is slightly higher than the later (15.2%). The level of total unmet need for contraception in Goba Woreda (32.5%) is very slightly lower than the national average (i.e. Ethiopia) which stands at 34% (CSA and ORC Macro, 2006). Contrary to this, unmet need for contraception in study area (32.5%) is much higher than the level of unmet need for the whole Sub Saharan Africa which is at 24% (Sedgh et.al, 2007).

In this study it is found that the number of living children that woman has is a strong and statistically significant determinant of unmet need for contraception. Accordingly, woman with more number of living children have higher unmet need for contraception than women with fewer number of living children. This finding is strongly consistent with previous studies. For instance, Antenane (2002) found strong and direct relationship between number of living children and unmet need. Moreover, other researchers like Sahlu (2007), Omwago and Khasakhala (2006) found out a similar result in their analysis of unmet need for contraception. Furthermore, a study conducted in Amhara region by Nega (2008) confirmed that there is a tendency of increasing unmet need with increasing number of living children as well. In addition, the FGD conducted in Sinja rural kebele of Goba Woreda reflects the same truth. One old female discussant said that, *"My husband is a priest and he has strong desire to fulfill the will of God (i.e. be fruitful and multiply). For him children are gifts of God. As a result he has a negative attitude towards the use of modern contraceptive methods, and he never allows me to use these methods. Because of this situation we have got four female and three male children. But now I personally get bored of suffering and pain from frequent pregnancy and child birth. Moreover, we become unable to provide our children with all things they require. Therefore, I am planning to use contraceptive methods without the consent of my husband".* Another female discussant from East Goba (urban) that is in the middle of her reproductive life (age 27) strengthens the fact that unmet need increases with increasing number of Children. The discussant said that *"I am a house wife and my husband is government employee. We have stayed in marriage for about 7 years. During this time we have had a total of three children. According to me, I and my husband should refrain from adding another child. These days the cost of rearing children is getting high. Consequently, our monthly income cannot cover our short term and long term needs".*

Health facility visit is also one of the determining factors of unmet need. In this regard the finding of this study confirms that woman's visit of a health facility is strongly and negatively associated with her unmet need for contraception. The level of unmet for contraception decreases with woman's visit of a healthy facility either for her own or for her child's health care. Results of the current study agree with findings reported in studies done on unmet need for contraception. Antenane (2002) , for instance , reported that women who visited a health facility and told of family planning by health workers are almost 53% less likely to have unmet need than women who never visited a health facility. In this regard, the interview made with nurse working in family planning section of Goba Tahessas 11 hospital also reflects the same idea. The nurse said that, *"incorporating family planning in to maternal and child health (MCH) is very much important to reduce the level of non use of contraception. As far as I know I have seen many women using contraceptives after they attended maternal and child health ''.* According to my respondent (the nurse) , once women visited a health facility and told of family planning, they become more likely to be users.

This study reveals that discussion of family planning with husbands is negatively correlated with unmet need for contraception. It is found that women who discussed family planning with their husbands at least one in the last 12 months have lesser unmet need than women who never discussed the issue. Once again the finding of this study is consistent with works of other researchers. For instance, Antenane (2002) reported that women who have frequent discussion about family planning with husbands were 55% less likely to have unmet need for family planning than women who never discussed family planning with their husbands. Moreover, the Zambian ministry of health (1995) reported that women who discussed family planning with their husbands are more likely to be users than their counterparts. Beside, studies conducted in Amhara Region by Nega (2008) and Mekides (2003) reflected a similar result with regard to impact of spousal communication on unmet need. Furthermore, result of the FGD Conducted in Sinja rural kebele of Goba Woreda more or less supports results of the quantitative data. According to one female discussant (age 26), discussion with her husband helped her to use contraceptives. In her own words said that, "I *and my husband have a culture of open discussion on matters of family planning. We frequently discuss on the number of children to be born and when to use contraceptives as well. Currently we have a total of four children including the baby that I am breast feeding. We now attained the number of children that we desire. Accordingly, both of us decided to stop child birth from this time on wards".* Conversely, a young female discussant (age 23) who participated in the same FGD said that," *I*

asked my husband to use contraception after I heard the possibility of postponing unwanted pregnancy and child birth from my colleagues at funeral ceremony. However, my husband denied me to do so for he heard the story of a woman who became barren after she had used some form contraceptives. Thus, even if I do have the interest to take contraceptives I could not convince my husband. As you have seen in your naked eyes I am pregnant, and I will give birth to a child whom I do not want to bring it to this world".

The study also indicates that bringing family planning services to door step has a paramount importance in meeting the unmet need. It is found that women who discussed family planning with health extension workers have lesser unmet need than women with no contact with health extension workers. The outcome is again consistent with previous research in Ethiopia conducted by Antennae (2002). Studies conducted in Amhara region by Nega (2008) and Mekides (2003) also come up with similar result. Furthermore, a study that was undertaken in rural Mali by Karen and others (1998) supports the current outcome. According to these writers CBD approach to family planning has a decisive role in raising the knowledge and practice of contraceptives among women. In addition, the FGD conducted in Sinja farmer's association supports the result of the quantitative research. A female discussant who is aged 39 years said that, "I *got married when I was sixteen. I did get* formal *education and my exposure to media was too little. Before I had met the health extension workers I thought that giving birth to a child year after year is a duty of a house wife. Then I did not think of the entire burdens that come along with the increment of family size. As a result, I did not welcome the idea of the health extension workers. When they told me the different methods of contraceptives I took them as satanic messengers who tried to bring God's curse up on me. However, thanks to their endless effort now I come to know how important their education is. You see I have not given birth since I met them. My personal health is also improved from time to time. Oh! God...I really thank them. You know they are my saviors".*

Age of women appears to be one of the variables affecting women's demand for family planning in this study even though it lacks consistency for different age groups. In general terms unmet need tends to decrease with increasing age of women except at the age group 20-24 years. This finding is also some what in line with the one undertaken in Ethiopia by Antenane (2002). Similarly, in a study done to assess the prevalence and determinants of unmet need for family planning in district of Eastern Region of Nepal found out inverse relationship between age and unmet need for contraception (Bhandari et.al, 2006). Furthermore, a study on unmet

need from Uttar Pradesh, India found out that large concentration of women with unmet need in the lower reproductive age group (Radha et.al, 1996). The current study along with other studies confirmed that unmet need is higher in a more fertile age group of women.

Lastly, unmet need was found to vary among different ethnic groups. In this study women who belong to the Oromo ethnic group have higher unmet need than others. This is also consistent with prior study conducted in Ethiopia by Antenane (2002). In his study, Antenane (2002) found out that Oromo women are 1.5 times more likely to have unmet need than Amhara Women.

Chapter Five

5. Conclusions and Recommendations

5.1. Conclusions

The writer investigated the extent of unmet need among currently married women of reproductive age in Goba Woreda. Moreover, an attempt was made to identify socioeconomic, demographic and family planning factors affecting unmet need for contraception. As part of the study, an investigation on reasons for current non use and future non use of contraceptives was made among women who reported that they have unmet need at the time of data collection. Accordingly, it is found that the level of unmet for contraception (32.5%) was close to the national average (34%). On the other hand contraceptive prevalence rate was 30.3% which is two times higher than the national average which was 15% during the year 2005 (CSA and ORC Macro, 2006).

The present study confirmed the validity of most the hypotheses that were forwarded at beginning of the research. However, the last two hypotheses are not in line with the findings of the study. Overall the study proves the following major ideas with regard to unmet need.

In the study, it is found that spousal communication has a strong and negative relationship with unmet need. As such, frequent spousal communication about family planning has a positive influence in meeting the unmet need for contraception. In this regard free discussion between husbands and wives about the total number of children to be born, what type of contraceptive to use and when to use contraception has an important role in eliminating unmet need for contraception.

Women's visit of health facility either for her own or for her children's health care is also affects unmet need negatively. Women who visited health facility and told of family planning experienced least unmet need than women who never visited health facility and women who visited health facility but not told of family planning respectively. In this regard integrating family planning in to maternal and child health has a paramount importance in the effort eliminating unmet need.

In this study it also appears that bringing family planning services to door step helps women to satisfy their demand for family planning. As such, another conclusion that can be reached is that giving outreach service of family planning through health extension workers tends to decrease unmet need for contraception. This may be due to the fact that women get accurate information related to each method of family planning which can make them free from fear of side effects. Moreover, women may have a better opportunity in understanding method choice which most suits them.

The numbers of living children that a woman has and unmet need for contraception have a strong positive association. This is to mean that, as the number of living children that a woman has increases the level of unmet need also increases. From the finding it can be said that frequent child birth and risks associated with them may motivate women to think either to space between or stop child birth at all.

In the logistic regression model it also appears that ethnicity is one of the factors which contribute to variation in the level of unmet need for contraception among respondents in the study area. Findings of this study once again confirmed that Oromo women have more unmet need than Amhara and other women belong to different ethnic group. This finding could be due to the influence of place of residence. In the study area, the rural part is predominantly (82.9%) occupied by Oromos. As it is evidenced elsewhere rural life may not give better opportunity to various factors which indirectly can affect demand for family planning.

Generally, it is observed that unmet need is high among women with large number of living children, never discussed family planning with husband's and HEWs, and never visited health facility. As a result effort of eliminating unmet need for contraception should focus on such group of women as prime program intervention.

5.2. Recommendations

Based on the findings of the study, the following recommendations are forwarded.

- Bringing family planning services to door step through the CBD approach is found to have a positive influence in the effort of raising contraceptive prevalence and meeting unmet need. As a result, addressing family planning services house to house by health extension workers should be expanded to areas where the service is unavailable or inadequate. In this regard, MOH, NGOs and stakeholders working in the field of RH should make due effort to do so.

- Discussion between partners on matters of family planning tends to decrease unmet need for contraception. This finding reflects the importance of involvement of males in eliminating unmet need. Thus, family planning programmes should have an active section which primarily focuses on raising knowledge of contraceptives and their benefits among men. Moreover, males should be encouraged through IEC program to have open discussion with their wives on matters of family planning.

- Mothers who visited a health facility to seek health either for themselves or their children and told of family planning by health workers showed smaller unmet need than women who never visited a health facility. Consequently, if unmet need is to be eliminated, due attention should be given by MOH and health bureau of the Woreda in integrating family planning with maternal and child health.

- Unmet need is also found to be high among women who have large number of children. Moreover, women in their lower ages of reproductive life (especially 15-19 and 25-29 years) tend to exhibit higher unmet need than women who are in the upper ages of reproductive life. As a result family planning programmes and RH strategies should give due to attention on such groups of women to address their demand apart from dealing with other groups of women.

- Different reasons like fear of side effects, health concerns, religious prohibition, husband's disapproval and lack of knowledge of contraceptives and where to obtain them and etc were mentioned as major factors for not currently using contraception and future nonuse among women with unmet need. Thus, attention should be given in family planning programmes to deal with social issues in order to raise CPR. Moreover, endless effort should be made by concerned bodies (MOH, NGOs and others in the field of RH) to solve problems of women who have doubts on contraceptive methods with regard to side effects and health concerns.

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Annex I

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Structured questionnaire to collect information on women with unmet need for contraception and their reasons for not using a method in Bale Zone, Goba Woreda.

1. Questionnaire No _____
2. Field Worker's Code_____
3. Village /Kebele_____
4. Date of Interview_____/_____/_____

Informed Consent and Confidentiality

Dear Respondents,

Good Morning/Afternoon,

The main objective of this study is to investigate the different socio-economic, demographic and family planning programme related factors of unmet need for contraception and reasons for not using a method among currently married women of reproductive age.

So that the results of the study will be used for better understanding of those determining factors of unmet need for contraception and for appropriate planning of interventions. Therefore your genuine participation by responding patiently to the questions is highly appreciated .Furthermore; whatever information you provide will be kept strictly confidential and will not be shown to other persons. You do have also the right to skip questions which are not comfortable for you and you can stop the interview process at any time you like.

This survey will approximately take about 30 minutes.

I thank you.

Are you willing to participate in completing the questionnaire?
1.Yes **2.No**

Statement of Agreement

I, the undersigned person, have fully understood the above statements, the aims, and objectives of the survey and willing to participate.

Date___/___/___. Signature_____

5. Result
   i. Completed
   ii. Respondent not available
   iii. Refused
   iv. Partially completed
6. Checked by Supervisor:
   Name_____
   Signature_____
   Date_____

Part one: Demographic and Socio-economic Characteristics of the Respondents.

No	Questions	Coding Categories	Skip to
101	How old are you at your last birth day?	Age in completed years	
102	What is your current place of residence?	Urban.....1 Rural..... ...2	
103	What is your religion?	Orthodox.....1 Islam.....2 Protestant.....3 Catholic.....4 Traditional.....5 Others_____ 6 Specify	
104	What is your Ethnicity?	Oromo.....1 Amhara.....2 Tigre.....3 Sidama.....4 Guraghe.....5 Others_____6 Specify	
105	Can You read and Write?	Yes.....1 No.....2	→ Skip to Q.108
106	Have you ever attended School?	Yes.....1 No.....2	→ Skip to Q.108
107	What is the highest grade completed?	Grade..... Tech./Voc.Certeficate.....13 University/College Diploma.....14 University/College degree.....15	
108	Do you have any job?	Yes.....1 No.....2	→ Skip to Q.111
109	What type of occupation you are Currently engaged in?	Government employee.....1 Agricultural activities.....2 Non agricultural activities.....3	
110	What is your monthly income?	Amount in Birr..... I do not know exactly.....2	
111	Do you have radio or TV or both in your house?	Radio only.....1 TV only.....2 Both radio & TV.....3 Not at all.....4	→ Skip to Q.114
112	Do you listen to radio almost every day, at least once a week, less than once a week or not at all? **(Check Q.111)**	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
113	Do you watch TV almost every day, at least once a week, less than once a week or not at all? **(Check Q.111)**	Almost every day.....1 At least once a week.....2 Less than once a week..... 3 Not at all.....4	
114	Do you have access to news papers?	Yes .....1 No.....2	→ Skip to Q.116
115	Do you read newspapers almost every day, at least once a week, less than once a week or not at all?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
116	Has your husband ever attend School?	Yes .....1 No.....2	→ Skip to Q.201
117	What is the highest grade he completed?	Grade..... Tech./Voc.Certeficate.....13 University/College Diploma.....14 University/College degree.....15	

Part Two: Reproductive History

No	Questions	Coding Categories	Skip to
201	At what age did you first got married?	Age in completed years.....	
202	Have you ever given birth?	Yes.....1 No.....2	 Skip to Q.209
203	How old were you when you first child was born?	Age in completed years.....	
204	Do you have any sons or daughters to whom you have given birth who are now living with you?	Yes.....1 No.....2	 Skip to Q.206
205	How many sons live with you? And how many daughters live with you?	Sons at home..... Daughters at home..... **Total**.....	
206	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	Yes.....1 No.....2	 Skip to Q.208
207	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you?	Sons elsewhere..... Daughters elsewhere..... **Total**.....	
208	How many living children do you have? **(Check Q.205 and Q.207)**	Sons..... Daughters..... **Total**.....	
209	Have you ever given birth to a boy or girl who was born alive but later died?	Yes.....1 No.....2	 Skip to Q.211
210	How many boys have died? And how many girls have died?	Boys dead..... Girls dead..... **Total**.....	
211	How many children have you ever given birth? **(Children alive + Children dead) Check Q.208 and Q.210**	Enter number.....	
212	If you could go back to the time you did not have children and could choose of children to have in your whole life, how many could that be? **(Check Q.208 and ask if there are living children)**	None..... Enter Number..... If, other specify.....98	Skip to Q.215 Skip to Q.215
213	If you could choose exactly the number of children to have in your whole life, how many would that be? ***(Check Q.208 and ask if there are no living children)***	None..... Enter Number.....1 If, other specify 98	Skip to Q.215 Skip to Q.215
214	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	***Enter number*** Boys..... Girls..... Either..... If other, Specify_____	
215	Are you pregnant now?	Yes.....1 No.....2 Not sure.....3	 Skip to Q.221 Skip to Q.221
216	At the time you become pregnant , did you want to become pregnant then, wait until later or not want to have any more children at all?	Wanted then.....1 Wanted later.....2 Not wanted at all.....3	
217	How much longer you have waited between the previous birth and present pregnancy? **(Check Q.202 and skip to Q.218 if the answer is No)**	Months.....	
218	Is the pregnancy wanted now, wanted later or not Wanted at all?	Wanted now.....1 Wanted later.....2 Not Wanted at all.....3	
219	After the child you are expecting now ,would you like to have another child or not to have another?	Have a child.....1 Have no more children.....2 Not yet decided.....3	 Skip to Q.221 Skip to Q.221
220	How long would you like to wait before the birth of another child?	≤ 2 Years.....1 ≥ 2 Years.....2 Not yet decided.....3	
Ask the following if the woman is not pregnant or unsure (Check Q. 215)			

221	How much longer have you waited since last birth? **(Check Q.202 and skip to Q.222 if the answer is No)**	Months.....	
222	Would you like to have another child, or would you prefer not to have any more children?	Have a child.....1 Have no more children.....2 Not yet decided.....3	Skip to Q.224 Skip to Q.224
223	How long would you like to wait before the birth of another?	≤ 2 Years.....1 ≥ 2 Years.....2 Not yet decided.....3	
224	Have you ever had a pregnancy that was aborted (induced)	Yes.....1 No..... 2	Skip to Q.301
225	How many times did you perform it?	Enter number.....	
226	Through what way the induced abortion was ended up?	Medical personnel.....1 Traditional Method.....2 Other_____.3 Specify	

Part Three: Knowledge about Contraception

No	Questions	Coding Categories	Skip to
301	Have you ever heard of family planning methods that Women or men can use to avoid pregnancy?	Yes.....1 No.....2	Skip to Q.307
302	Which of the following methods do you know about? **(Multiple response is possible)**		Yes / No
		Pill.....1	1 2
		IUD.....2	1 2
		Injectables.....3	1 2
		Implant/Norplant.....4	1 2
		Condom.....5	1 2
		Female sterilization.....6	1 2
		Male sterilization.....7	1 2
		Natural methods.....8	1 2
		Others_____.9 Specify	1 2
303	What is your source of information about family planning? **(Multiple response is possible)**		Yes / No
		Health extension workers.....1	1 2
		Radio.....2	1 2
		TV.....3	1 2
		News papers.....4	1 2
		Community event.....5	1 2
		Pamphlet.....6	1 2
304	Do you know the place where modern contraceptives Methods could be obtained?	Yes.....1 No.....2	Skip to Q.306
305	If you know where the methods are obtained ,where is the main place that you or others are able to get modern contraceptives?	Hospital.....1 Health center.....2 Health post.....3 Shop.....4 Pharmacy or drug vendor.....5 Others_____6 Specify	

306	Which advantage of contraceptives method do you know? **(Multiple response is possible)**		Yes	No	
		Avoid unwanted pregnancy.....1	1	2	
		Regulation of period.....2	1	2	
		To limit family size.....3	1	2	
		To prevent STI.....4	1	2	
		Others _____.5 Specify	1	2	
307	Do you approve or disapprove females who contact With Health extension workers?	Approve.....1 Disapprove.....2			
308	Have you ever visited by health extension workers or community based health agents in the last 12 months?	Yes.....1 No.....2 → Skip to Q.312			
309	If they have contacted you, how many times did they Contact you?	Once.....1 Twice..... 2 More than twice.....3			
310	Have they told you about family planning?	Yes.....1 No.....2			
311	What is your husband's attitude towards the communication of you and the health extension workers?	Approve.....1 Disapprove.....2 Do not know.....3			
312	Have you ever discussed about family planning with woman of your neighbors?	Yes.....1 No.....2			
313	In the last 12 months have you visited a health facility for care for yourself or for your children?	Yes.....1 No.....2 → Skip to Q.401			
314	Did any staff member at the health facility speak to you about family planning methods?	Yes.....1 No.....2			

Part Four: Attitude towards Contraceptives Methods

No	Questions	Coding Categories	Skip to
401	Would you like to know more about contraceptive Methods?	Yes.....1 No.....2	
402	Do you approve or disapprove couples using method of family planning?	Approve.....1 Disapprove.....2	
403	Have you discussed about contraception with your partner in the last 12 months?	Yes.....1 No.....2 → Skip to Q.405	
404	If you discussed, how many times have you discussed?	Once.....1 Twice.....2 Three times.....3 More than three times.....4	
405	What is your husbands attitude towards contraceptive methods?	Approve.....1 Disapprove.....2 Do not know.....3	

406	Does your husband knows whether you are using or not using any contraceptives?	Yes.....1 No.....2 I am not sure.....3	

Part Five: Practice of Modern Contraceptives

No	Questions	Coding Categories	Skip to
501	Have you ever used any modern contraceptives?	Yes.....1 No.....2 →	Skip to Q.510
502	How many living children did you have at the time you started to use the method, if any? **(Record '00' if none)**	Son..... Daughter..... Total.....	
503	Are you currently using modern contraceptive methods to delay or avoid pregnancy? **(Check Q.215 and skip to 508 if pregnant)**	Yes..... 1 No.....2 →	Skip to Q.510
504	Which method are you using now	Pill.....1 IUD.....2 Injectables.....3 Implant/Norplant.....4 Condom.....5 Female sterilization.....6 Male sterilization.....7 Natural methods.....8 Others_____ 9 Specify	
505	For what purpose are you using the methods?	Spacing.....1 Limiting.....2	
506	Where did you obtain the method that you are using now?	Hospital.....1 Health center.....2 Health post.....3 Shop.....4 Pharmacy or drug vendor.....5 Others_____6 Specify	
507	What is the availability of methods if you want to change other methods from the source you belong to?	Easily available.....1 Not easily available.....2 Do not know.....3	
508	How long would it take to reach the source of contraceptives?	Hours/Minutes.....1 I do not know.....2	
509	How costly the method is?	Cheap.....1 Reasonable.....2 Expensive.....3 Do not Know.....4	

510	Would you say that using contraception is mainly your decision or your husband's decision or did you both decide together?	Mainly respondent.....1 Mainly husband.....2 Joint decision.....3 Others_____4 Specify			
511	You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? **(Check Q.222, Q.223 and Q.503)** **(Multiple response is possible)**		Yes	No	
		Infrequent sex.....1	1	2	
		Sub fecund/infecund.....2	1	2	
		Breastfeeding.....3	1	2	
		Respondent opposed.....4	1	2	
		Husband/partner opposed.....5	1	2	
		Others opposed.....6	1	2	
		Religious prohibition.....7	1	2	
		Knows no method.....8	1	2	
		Knows no source.....9	1	2	
		Fear of side effects.....10	1	2	
		Health concerns.....11	1	2	
		Lack of access/too far.....12	1	2	
		Costs too much.....13	1	2	
		Inconvenient to use.....14	1	2	
		Method not available.....15	1	2	
		Other_____16 Specify	1	2	
512	You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? **(Check Q.222 and Q.503)** **(Multiple response is possible)**		Yes	No	
		Infrequent sex.....1	1	2	
		Sub fecund/infecund.....2	1	2	
		Breastfeeding.....3	1	2	
		Respondent opposed.....4	1	2	
		Husband/partner opposed.....5	1	2	
		Others opposed.....6	1	2	
		Religious prohibition.....7	1	2	
		Knows no method.....8	1	2	
		Knows no source.....9	1	2	
		Fear of side effects.....10	1	2	
		Health concerns.....11	1	2	
		Lack of access/too far.....12	1	2	
		Costs too much.....13	1	2	
		Inconvenient to use.....14	1	2	
		Method not available.....15	1	2	
		Other_____16 Specify	1	2	

513	Would you intend to use modern contraceptives?	Yes.....1 No.....2 → Skip to Q.515 Not yet decided.....3 → End			
514	Which Method Would you like to use?	Pills.....1 Implant/Norplant.....2 Injectable.....3 IUD.....4 Condom.....5 Male Sterilization.....6 Female Sterilization.....7 Natural Methods (Abstinence & withdrawal) ...8 Others_____9 Specify			
515	What are the reasons that made you not to use modern contraceptives methods to avoid the pregnancy from happening? **(Multiple response is possible)**		Yes	No	
		Infrequent sex.....1	1	2	
		Sub fecund/infecund.....2	1	2	
		Breastfeeding.....3	1	2	
		Respondent opposed.....4	1	2	
		Husband/partner opposed.....5	1	2	
		Others opposed.....6	1	2	
		Religious prohibition.....7	1	2	
		Knows no method.....8	1	2	
		Knows no source.....9	1	2	
		Fear of side effects.....10	1	2	
		Health concerns.....11	1	2	
		Lack of access/too far.....12	1	2	
		Costs too much.....13	1	2	
		Inconvenient to use.....14	1	2	
		Method not available.....15	1	2	
		Other_____16 Specify	1	2	

Annex II

Guideline Questions for the Focus Group Discussions

I. Guide for the Focus Group Discussion (Young Female Participants)

- Have you heard of what family planning is? If you do so, what was your source of information?
- Do you think that family planning is important to you? If so, in what way?
- Are you planning to use contraceptive methods? If so, how soon and why?
- Have you started using family planning methods? If yes, by when? And if no, what are the reasons behind?
- For what purpose you choose to use family planning methods?

II. Guide for Focus Group Discussion (Older Women participants)

- Have you ever used contraceptive method to regulate fertility? Yes or no?
- If yes,
  - When did you start using? Early age or later?
    - If at later age, why you did so?
  - Why you used to price it? Or what benefits were in your mind while you plan to use it?
- If no,
  - Why you fail to do so? (Enumerate factors).
- If you used contraceptive for the past years, what was your intention to use it?
- If you resist using family planning for past years, what were the reasons for doing so?
- Can you enumerate benefits you gained from using family planning methods? (If you already used)

III. Guide for Focus Group Discussion (Women not currently using a method)

- Have you heard of the term family planning method?
  - If yes, what is your source of information?
- Why you fail to use family planning? Enumerator factors.
- What is your general attitude towards contraceptive use? Give justification for your answer.
- Have you ever used contraceptive methods? If yes, why you stop to use it now?

IV. Focus Group Discussion Guide (For Women Currently Using Method)

- What was your source of information about family planning?
- What motivates you to use family planning methods?
- When do you start using? Early age or later age? If at later age, why? Enumerator factors.
- What was your intention while you first practice family planning methods? What about now?
- What was/is your service provider?
- Have you gained any benefit from using it? If yes, describe briefly.

Declaration

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

Sintayehu Teka _____ 25/06/09

Student Signature Date

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

Dr. C. Ramanujam _____ 25/06/09

Advisor Signature Date