ETHIOPIA FURTHER ANALYSIS

Unmet Need and Evaluation of Programme Options to Meet Unmet Need for Contraception in Ethiopia, 2000 and 2005

Further Analysis of the 2005 Ethiopia Demographic and Health Survey

This report presents findings from a further analysis study undertaken as part of the follow up to the 2000 and 2005 Ethiopia Demographic and Health Surveys (EDHS). Macro International Inc. provided technical assistance for the project. Funding was provided by the U.S. Agency for International Development (USAID) under the terms of Contract No. GPO-C-00-03-00002-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This report is part of the MEASURE DHS programme, which is designed to collect, analyse, and disseminate data on fertility, family planning, maternal and child health, nutrition, and HIV/AIDS.

Additional information about the 2005 EDHS may be obtained from the Central Statistical Agency (CSA), P.O. Box 1143, Addis Ababa, Ethiopia; Telephone: (251) 111 55 30 11/111 15 78 41, Fax: (251) 111 55 03 34, E-mail: csa@ethionet.et. Additional information about the DHS project may be obtained from Macro International Inc., 11785 Beltsville Drive, Calverton, MD 20705 USA; Telephone: 301-572-0200, Fax: 301-572-0999, E-mail: reports@macrointernational.com, Internet: www.measuredhs.com.

Recommended citation:

Bizuneh, Genene, Solomon Shiferaw, and Yilma Melkamu. 2008. Unmet Need and Evaluation of Programme Options to Meet Unmet Need for Contraception in Ethiopia, 2000-2005: Further Analysis of the 2000 and 2005 Ethiopia Demographic and Health Surveys. Calverton, Maryland, USA: Macro International Inc.

Unmet Need and Evaluation of Programme Options to Meet Unmet Need for Contraception in Ethiopia, 2000 and 2005

Further Analysis of the 2000 and 2005 Ethiopia Demographic and Health Surveys

Genene Bizuneh Solomon Shiferaw Yilma Melkamu

September 2008





Contents

Tables	and Figu	ıresv
1	Introdu	ction1
	1.1	Background
	1.2	Family Planning Programme – Initiatives and Progress in Service Provision2
	1.3	Unmet Need for Family Planning
2	Objecti	ves, Data Sources, and Methodology
	2.1	Study Objectives
	2.2	Data Sources and Analytical Approach
	2.3	Conceptual Framework
3	Results	and Discussion
	3.1	Trends in Unmet Need and Demand for Family Planning7
	3.2	Trends in Unmet Need by Sociodemographic Profile of Women
	3.3	Trends in Demand for Family Planning Services by Socioeconomic Differentials11
	3.4	Reasons for Nonuse among Women with Unmet Need
	3.5	Reasons for Not Intending to Use Contraceptive Methods in the Future
	3.6	Multivariate Analysis
4	Challer	nges, Opportunities, and Programme Options
	4.1	Challenges and Opportunities
	4.2	Contraceptive Commodity Security
	4.3	Programme Options
		4.3.1 Facility-based programmes
		4.3.2 Community-based programme
		4.3.3 Social marketing
5	Conclu	sion and Recommendations
Referer	nces	

Tables and Figures

Table 3.1	Percentage of currently married women who have an unmet need for family planning, by demographic characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005
Table 3.2	Percentage of currently married women who have an unmet need for family planning, by background characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005
Table 3.3	Percentage of currently married women with demand for family planning, by demographic characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005
Table 3.4	Percentage of currently married women with demand for family planning, by background characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005
Table 3.5	Percentage of women with unmet need for family planning by reason for not currently using a contraceptive method, Ethiopia 2000 and 2005
Table 3.6	Percent distribution of women by future intention to use family planning and reasons for not intending to use family planning, according to unmet need, Ethiopia 2000 and 2005
Table 3.7	Logistic regression: determinants of unmet need for spacing, unmet need for limiting, and total unmet need, 2005
Table 3.8	Logistic regression: determinants of unmet need for spacing, unmet need for limiting, and total unmet need, 2000
Figure 1.1	Characteristics of women with unmet need, met need, and no need for contraception4
Figure 2.1	Conceptual framework of unmet need for family planning7
Figure 3.1	Percentage of currently married women with unmet need for family planning, current use of contraception, demand for contraception, and demand satisfied, 2000 and 2005

1 Introduction

1.1 Background

Among sub-Saharan African countries, Ethiopia has a rapidly growing population. Currently, the population growth rate is 2.6 percent per annum (CSA, 1999). The population is expected to reach 80 million by 2009. The majority of the population resides in rural areas and is largely engaged in small-scale traditional farming that is highly dependent on rainfall. The population is young, with more than 40 percent below the age of 15, which signifies the potential for considerable growth. The other contributing factors to population growth are the high level of fertility (5.4 children per woman) and a low level of contraceptive use (14 percent) as reported in the 2005 Ethiopia Demographic and Health Survey (EDHS) (CSA and ORC Macro, 2006).

Rapid population growth can have negative consequences on the health care system, especially when the level of economic development of the country is low and when resources are scarce. In Ethiopia, the health care system is decentralized, with four tiers for health service delivery. Primary health care service is geared towards the provision of preventive, promotive, and basic curative services. The health service delivery is composed of a primary health care unit (PHCU) at the lowest level, comprising one health centre and five satellite health posts that are, supported by a district hospital, a zonal hospital, and a specialized hospital, at higher levels. A PHCU is expected to serve 25,000 people, and the district and zonal hospitals are each expected to serve 250,000 and 1,000,000 people, respectively. The health sector recently introduced an innovative health service delivery system through the implementation of the Health Service Extension Programme (HSEP) (MOH, 2005). HSEP is an innovative community-based approach directed at providing preventive, promotive, and some curative services at the household level (FMOH, 2006).

The Government of Ethiopia formulated a national health sector strategy covering the period 2006-2015. The national strategy is based primarily on the existing health policy, health sector development programme, and the health extension programme and envisions contributing to the national development programme (PASDEP) and achieving the Millennium Developmental Goals (MDGs). The strategy has identified six priority areas of intervention: the social and cultural determinants of women's reproductive health; fertility and family planning; maternal and newborn health; HIV/AIDS; reproductive health of young people; and reproductive organ cancers (FMOH, 2006).

The national reproductive health strategy sets specific targets for the provision of family planning services, where it has focused on addressing reduction of unwanted pregnancies and enabling individuals to achieve their desired family size. The intervention areas outlined in the strategy include creating demand for family planning and increasing access to and utilization of quality family planning services, as well as delegating service delivery to the lowest level possible without compromising safety or quality of care (FMOH, 2006). The main targets set to measure the progress towards this goal include reaching a contraceptive coverage rate of 60 percent by 2010 and ensuring awareness and increasing demand by 80 percent. Data from the 2005 EDHS show that contraceptive coverage in Ethiopia is very low. In 2000, only 8 percent of currently married women were using contraception; in 2005, this level had increased to 14 percent, but this is still far from programme targets. The need for contraception among currently married women is also high; 36 percent of currently married women in 2000 had an unmet need for contraception, and in 2005, 34 percent had such a need. As of 2005, only 31 percent of the family planning needs of currently married women had been met.

Addressing the huge unmet need observed in the past decade is one area of critical intervention identified in the health sector development programme as well as in the reproductive health strategy of the country. However, it is important to understand the reasons for such high and persistent unmet need so that viable programme options can be formulated that will guide

interventions at various levels. Therefore, an in-depth analysis of data from the 2000 and 2005 EDHS on unmet need and evaluation of programme options to meet unmet need for contraception will provide critical information that can be used to develop programmes and strategies towards meeting targets set in the government national development programme in general and in the health sector programme more specifically.

1.2 Family Planning Programme – Initiatives and Progress in Service Provision

The introduction of family planning service in Ethiopia was late compared with other African countries. Family planning programmes were first initiated by the Family Guidance Association of Ethiopia (FGAE), a local non-governmental organization (NGO), in the 1960s. The primary aim of FGAE was to provide family planning information, counselling, and services to the families who voluntarily expressed a need to space or limit births. The association opened the first family planning clinic in Addis Ababa in 1975. Today the association administers more than 18 clinics in different parts of the country.

The provision of family planning service through public health institutions was started in the 1980s. The service was initiated in selected clinics by integrating family planning with maternal and child health (MCH) services. Since then, family planning services have been provided in health institutions integrated with MCH services, and currently almost all hospitals and health centres have integrated family planning services (NOP, 1997).

A broad range of modern contraceptives is currently available to clients, including more than six brands of oral contraceptives alone, injectables, condoms, IUDs, sterilization, foaming tablets, and Norplant (MOH and WHO, 1999). Expansion of family planning services was a challenge in the country primarily due to poor and limited availability of a communication infrastructure. Again, FGAE was the first institution to introduce a new intervention approach, called community-based distribution (CBD), targeted towards expanding the service to a wider community through the involvement of community residents—who are not health professionals—in delivering contraceptive methods and services. CBD agents provide family planning information, distribute condoms and oral contraceptives, and make referrals for other clinical methods.

A number of international and local NGOs, such as Marie Stopes International–Ethiopia (MSIE), the German Development Agency (GTZ), the Ethiopian Evangelical Church Mekane Yesus–Southern Central Synod (EECMY–SCS), and Ethiopian Aid, have been involved in the provision of family planning programmes. A social marketing programme of contraceptive methods was also introduced in Ethiopia in 1990 by DKT (*Das Kaufmännische Talent*). DKT's social marketing strategies use commercial marketing techniques to make primary health care products accessible and affordable.

Many agencies are providing technical and financial support to family planning programmes in Ethiopia. The United Nations Population Fund (UNFPA) and the U.S. Agency for International Development (USAID) are, and will continue to be, the major donors of contraceptive methods in Ethiopia.

1.3 Unmet Need for Family Planning

More than 100 million women in less developed countries, or about 17 percent of all married women, would prefer to avoid a pregnancy but are not using any form of family planning (Ross and Winfrey, 2002). These women are considered to have an "unmet need" for family planning. The countries with the highest percentage of women with unmet need are in sub-Saharan Africa: Rwanda (37 percent), Malawi (36 percent), Kenya (36 percent), and Ethiopia (34 percent).

Unmet need refers to the gap between women's reproductive intentions and their contraceptive behaviour (CCP, 1996). Unmet need poses a challenge to family planning programmes: how can

programmes reach women whose reproductive attitudes resemble those of contraceptive users but who, for some reason or combination of reasons, are not using contraception.

Unmet need for contraception can lead to unintended pregnancies, which pose risks for women, their families, and society. In less developed countries, about one-fourth of pregnancies are unintended—that is, either unwanted or mistimed (wanted later) (Haub and Herstad, 2002). One particularly harmful consequence of unintended pregnancies is unsafe abortion: an estimated 18 million unsafe abortions take place each year in less developed regions, contributing to high rates of maternal death and morbidity in these regions (Murray and Lopez, 1998). In addition, unwanted births pose risks for children's health and wellbeing and contribute to rapid population growth in resource-strapped countries.

According to a recent analysis of unmet need in several developing regions, about 24 percent of married women in sub-Saharan Africa have an unmet need for contraception (Sedgh et al., 2007). The unmet need in Sub-Saharan Africa is predominantly for spacing (delaying) births rather than for limiting births. This is in contrast to other regions, where there is greater unmet need for limiting births. In the past decade, the level of unmet need has declined least of all in sub-Saharan Africa compared with other regions.

Data from the two Ethiopia DHS surveys confirm that the most common reasons given by married women for not using contraception are associated with access to supplies and services. Concerns about side effects, health effects, and inconvenience of methods were by far the most prominent. Method-related concerns are also common reasons for discontinuation of use among women with unmet need who had used family planning in the past.

Cognizant of the magnitude of the problem, the 62nd General Assembly of the United Nations adopted a new MDG Framework in October 2007. The new Framework became a reality when the General Assembly adopted four additional targets and related indicators and other indicator improvements as set forth in the report of the Secretary General on the work of the Organization (UNDP, 2007). The addition of the new targets in the MDGs is a crucial achievement for the International Conference on Population and Development (ICPD) agenda because at least one of them: "Achieve, by 2015, universal access to reproductive health" (Goal 5) recognizes the importance of reproductive health and rights for poverty reduction and human development. Contraceptive prevalence rate and unmet need have also been added as indicators to measure progress towards achieving the development goals.

With the inception in 1984 of the Demographic and Health Surveys—a series of nationallyrepresentative, standardized surveys that collect information on a range of family planning, fertility, and reproductive health indicators-these surveys have become a standard practice. In the past 20 years, DHS surveys have been conducted in more than 70 developing countries. Although many of the proposed refinements to the measure of unmet need have not been refuted on conceptual grounds, the measure developed by Westoff (1988) has been used in publications and analyses with few changes since that time and is considered the *standard measure* of the level of unmet need for contraception by many demographers. According to this measure, a woman has an unmet need if she (1) is in a marital or consensual union, (2) is fecund (i.e., not pregnant, amenorrhoeic, or otherwise infecund, according to her own report); (3) does not want to have a child or wants to postpone her next pregnancy for at least two years, and (4) is not using any contraceptive method, either modern or traditional. In addition, pregnant or amenorrhoeic women in union are considered to have an unmet need if they report that their current or most recent pregnancy was unplanned. Excluded from this definition are married, noncontracepting women who are infecund, have not been sexually active in the past month, or are unsure of their pregnancy intentions, and who do not intend to practice contraception and wanted no more children.

Although the measure of unmet need among unmarried women has not been in place for as long or used as frequently as that for married women, the measure of unmet need includes unmarried women who meet all of the criteria listed above except the first, and who have had sexual intercourse in the past month. Figure 1.1 shows the algorithm used in defining unmet need.



Figure 1.1 Characteristics of women with unmet need, met need, and no need for contraception

On a broader scale, increased access to family planning can improve women's education and employment opportunities and their participation in the social and political arenas. Couples with the means to control their fertility are usually able to invest more resources in each child, which ultimately raises the standard of health, education, and wealth in a population. There is consensus that investments in family planning advance general social and economic growth and development through these and other channels (Sedgh et al., 2007).

Policymakers in all sectors should be greatly concerned about the consequences of failing to meet unmet need. Closely spaced and ill-timed pregnancies and births contribute to high infant and maternal mortality rates. Unintended fertility locks girls and women into a cycle of early childbearing and poverty, and governments' failure to address family planning needs ignores individual rights. Addressing unmet need for family planning provides an opportunity for policymakers in all sectors to respond to the expressed fertility preferences of their populations while simultaneously improving health, slowing the rate of population growth, and contributing to the achievement of national goals.

2 Objectives, Data Sources, and Methodology

2.1 Study Objectives

This paper examines two major aspects of unmet need:

- the first part of the paper attempts to analyze and synthesize the levels and trends of unmet need in Ethiopia, and
- the second part of the paper, based on the above findings, will evaluate available programme options and propose intervention strategies to alleviate the burden of unmet need in Ethiopia.

Therefore, the main objectives of the analyses are to review and update the 2000 EDHS findings on the attitudes towards family planning and reasons for nonuse among women with unmet need with findings from the 2005 EDHS, review the programme options in place over the five years between the two surveys, and discuss how effective they have or have not been in meeting women's unmet need for family planning. This paper also includes suggestions on how future programmes could address women's unmet need in Ethiopia.

2.2 Data Sources and Analytical Approach

The paper uses data collected from the two Ethiopia DHS surveys (2000 EDHS and 2005 EDHS). The 2000 EDHS survey covered a nationally representative sample of 15,367 women age 15-49 and 2,607 men age 15-59, and the 2005 EDHS covered 14,070 women age 15-49 and 6,033 men age 15-59.

The 2000 and 2005 EDHS surveys followed similar sampling methodology, using the same sample selection and weighting procedures. In both surveys, the samples were weighted to create nationally-representative estimates of indicators. Thus, the descriptive tables for both surveys are based on weighted numbers. However, because multivariate analyses are run to clarify the relationship between and/or among individual responses to questions and how they relate to an overall measure, it is based on unweighted data because it preserves the one respondent/one response relationship. For further details about the design of the surveys, refer to the 2000 and 2005 EDHS final reports (CSA and ORC Macro, 2001 and CSA and ORC Macro, 2006, respectively).

The analyses are restricted to fecund nonusers of contraception who express a desire to space or limit the number of children they want (those with an unmet need) and those who have a met need, that is, those who are currently using contraception. These women total 4,291 for 2000 and 4,402 for 2005 when weighted. Excluded from these analyses are women who want another child within two years and infecund and menopausal women. The report includes bivariate analyses based on the 2005 data and utilizes the results of the bivariate analyses done using the 2000 data for comparison. The bivariate analyses provide a preliminary look at the characteristics of women with unmet need. These analyses examine why women in some categories have a greater unmet need than in others, and the extent to which their unmet demand is satisfied. To get a clearer picture of some of the factors that determine unmet need, the multivariate analyses examine the importance of each variable when the influences of other variables are controlled. The total number of relevant cases in the multivariate analyses is 2,384 for 2005 and 3,885 for 2000.

In the preparation of this report, the findings of the two analytical reports, "Attitudes towards Family Planning and Reasons for Nonuse among Women with Unmet Need for Family Planning in Ethiopia" (Korra, 2002) and "Evaluation of Programme Options to Meet Unmet Need for Family Planning in Ethiopia" (Ahmed and Mengistu, ORC Macro, 2002) that were done based on the 2000 EDHS were updated using the 2005 EDHS and served as a basis in synthesizing this report.

Based on the findings presented in the 2000 studies and updates from the 2005 EDHS, this paper attempts to analyze attitudinal and service provision issues that might spur programme options towards addressing the challenge in reducing the huge unmet need prevailing in the country. The study also reviewed changes and progress made on relevant policies and programmes and new initiatives introduced in the past few years.

The analysis of trends in evaluating programme options is based on descriptive tabulations that explicitly show the level of unmet and met needs for key variables from the 2000 and 2005 EDHS. Trends between the two surveys will be presented to demonstrate the change in the magnitude of total demand for contraception in Ethiopia and inform decisionmakers to target approaches that could help in responding to the demand. The paper will review relevant policies, programme approaches, and targets that are set by the government of Ethiopia to increase coverage of contraceptives in Ethiopia. Several measures were taken by the government after the findings of the 2000 EDHS were released to enhance health services in the country. Measures that influence the unmet need include the launching of the health extension programme and the development of the national reproductive health strategy, which has specific targets related to family planning.

2.3 Conceptual Framework

Figure 2.1 lays the conceptual framework for this study. Two groups of variables are used to examine factors influencing unmet need for family planning. The independent variables, which influence the unmet need for family planning of the study population, are subdivided into three sets. The first two are the underlying factors that are indexed by some important demographic and socioeconomic variables. The third group of independent variables is the proximate determinants that are indexed by various indicators of women's knowledge, attitudes, and perceptions.

For this particular study, the outcome variable is unmet need for family planning. The variable is treated as a dichotomous variable consisting of unmet need and met need. Demographic and socioeconomic factors are assumed to be the underlying determinants of the unmet need for family planning. That is, the effect of the underlying factors is expected to reach the ultimate dependent variable, unmet/met need, through the assumed proximate variables, namely, knowledge, attitudes, and perceptions concerning family planning.

The demographic and socioeconomic variables will be used to describe the level of unmet need and allow comparisons of women with met need. Comparisons will also be made between the results of the 2000 and 2005 EDHS to show changes in unmet need in these variables.

Determinants of unmet need will be examined using multivariate analysis. Outcome variables for the multivariate model will be total unmet need, unmet need for spacing, and unmet need for limiting the number of children. The conceptual framework developed in the 2000 study was used here and updated to include some variables. The categories of variables used in the multivariate analysis of the 2000 data and that would be considered for the multivariate analyses of the 2005 data are presented below.

Figure 2.1 Conceptual framework of unmet need for family planning

Independent Variables



3 Results and Discussion

3.1 Trends in Unmet Need and Demand for Family Planning

Figure 3.1 presents changes between 2000 and 2005 in unmet need, current use, demand for family planning, and demand satisfied among currently married women in Ethiopia. Unmet need has declined only slightly, from 36 percent in 2000 to 34 percent in 2005. Interestingly, there was almost no change in the levels of unmet need for limiting and a relatively small decline in unmet need for spacing in the five years between 2000 and 2005. In contrast, the proportion of currently married women who use contraceptive methods nearly doubled, from 8 percent in 2000 to 15 percent in 2005. This increase was more pronounced for limiting than spacing methods.

The demand for family planning encompasses two components: current use and unmet need among women who would like to regulate their fertility. Total demand showed a modest increase from 44 percent in 2000 to 49 percent in 2005. The increase was mainly due to the rise in demand for limiting need (from 18 percent to 22 percent). The impact of the increase in current use is reflected on the total demand satisfied, an increase by 13 percentage points in the five-year period.

Figure 3.1 Percentage of currently married women with unmet need for family planning, current use of contraception, demand for contraception, and demand satisfied, 2000 and 2005



3.2 Trends in Unmet Need by Sociodemographic Profile of Women

Table 3.1 shows trends between 2000 and 2005 in the percentage distribution of currently married women with unmet need for contraception according to select demographic variables. In general, unmet need was uniformly lower among all age groups in 2005 compared with 2000. In agreement with the 2000 EDHS, the unmet need in 2005 is highest among the youngest age group (15-19 years). It is interesting to note that unmet need for limiting in 2005 generally increases with age (from 17 percent among women age 15-19 to 47 percent in the age group 35 and older), but the exact opposite is observed for spacing (a decline from 64 percent among women age 15-19 to 22 percent among those age 35 and older).

		EDHS	\$ 2005			EDH	S 2000	
			Total	Number			Total	Number
Demographic			unmet	(unmet and			unmet	(unmet and
characteristic	Spacing	Limiting	need	met need)	Spacing	Limiting	need	met need)
Age								
15-19	63.8	17.3	81.1	335	80.8	10.4	91.2	382
20-24	56.4	11.0	67.4	804	69.9	13.6	83.5	818
25-29	48.0	20.0	68.0	1,088	60.7	18.7	79.4	960
30-34	41.6	29.8	71.4	780	44.2	37.0	81.2	751
35+	21.8	46.8	68.6	1,395	24.6	54.8	79.5	1,381
Number of unions								
One	43.8	26.5	70.2	3,423	52.7	28.1	80.8	3,024
More than one	32.7	35.1	67.8	979	42.8	40.6	83.4	1,264
Age at first marriage								
<15 years	38.5	32.3	70.7	1,540	44.1	39.6	83.7	1,292
15-17 years	41.5	28.1	69.6	1,535	49.9	31.9	81.8	1,761
18-24 years	45.2	24.0	69.2	1,214	56.5	23.9	80.4	1,175
25+ years	35.5	26.7	62.3	112	37.5	17.5	55.0	63
Number of living children								
0	58.0	14.4	72.4	254	70.1	14.2	84.3	304
1-2	51.6	12.6	64.1	1,223	68.1	14.2	82.2	1,317
3-4	46.4	24.0	70.4	1,324	51.3	28.8	80.1	1,212
5+	26.2	46.3	72.9	1,601	27.7	53.9	81.7	1,459
ldeal number of children								
0	33.2	44.8	78.0	459	31.5	45.4	76.9	129
1-2	33.2	25.1	58.2	293	32.8	43.0	75.8	258
3-4	34.6	24.4	59.0	1,479	42.7	33.7	76.4	1,479
5+	48.7	28.1	76.7	2,171	58.1	25.9	84.0	1,786
Non-numeric				*				,
response	-	-	-	-	53.9	36.2	90.1	630
Total	41.3	28.4	69.7	4,402	49.8	31.8	81.6	4,291

Table 3.1 Percentage of currently married women who have an unmet need for family planning, by demographic characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005

There is wide variation by number of living children. Consistent with results from the 2000 EDHS, in 2005 unmet need for spacing generally decreased with the number of living children that women had, and unmet need for limiting was highest among women with five of more living children. In agreement with 2000 EDHS, in 2005 unmet need for spacing increased with the ideal number of children, and the unmet need for limiting decreased as ideal number of children rose. Unmet need declined between 2000 and 2005 for all categories of women by age at first marriage, except among women who first married at age 25 or older.

onal dotonolios, docoraling to opdoin	EDHS 2005			EDHS 2000				
Background characteristic	Spacing	Limiting	Total unmet	Number (met and unmet)	Spacing	Limiting	Total unmet need	Number (met and unmet)
Residence Urban Rural	12.2 46.0	14.5 30.6	26.7 76.6	611 3791	22.7 55.2	18.5 34.5	41.2 89.7	722 3,569
Migration status Non-migrant Rural-urban Rural-rural Urban-urban Urban-rural Visitor	42.6 44.1 47.1 9.4 13.6 29.7	29.6 18.3 30.9 17.0 14.1 18.5	72.2 62.4 78.0 26.4 27.7 48.2	2,288 107 1,538 210 184 28	54.3 25.4 52.6 18.9 49.0 44.8	32.6 22.2 37.5 18.0 25.6 30.5	86.9 47.6 90.1 36.9 74.6 75.2	2,542 250 945 253 165 113
Education No education Primary Secondary and higher	44.3 42.5 14.7	33.3 18.8 9.6	77.6 61.3 24.4	3,158 847 397	52.7 48.3 27.4	35.8 23.4 12.0	88.5 71.7 39.4	3,243 674 374
Religion Orthodox Catholic Protestant Moslem Traditional Other	33.8 50.8 48.1 48.1	27.6 25.4 26.2 31.2	61.4 76.3 74.3 79.3	2,107 65 869 1,361	43.1 (63.8) 59.6 55.9 62.7	36.3 (19.8) 25.6 27.2 25.3	79.4 (83.6) 85.2 83.1 88.0	2,366 34 660 1,101 121
Ethnicity Amhara Oromo Sidamo Tigraway Other	28.5 46.5 46.2 38.2 49.6	28.6 30.3 28.3 16.7 26.2	57.0 76.8 74.5 55.0 75.8	1,374 1,619 219 233 938	38.6 55.5 66.7 47.9 57.7	38.2 30.1 23.7 23.5 27.1	76.8 85.6 90.3 71.3 84.9	1,586 1,432 204 258 812
Employment status Not working Worked in the past year Currently working	43.4 40.9 34.8	29.8 24.4 26.5	73.2 65.3 61.3	2,703 257 1,238	52.8 51.4 47.9	29.4 32.7 32.9	82.2 84.1 80.8	1,474 310 2,502
Wife versus husband's education Same Wife less than husband Wife more than husband Either wife or husband education not known	42.2 41.1 34.3 35.1	31.1 25.0 18.1 36.6	73.2 66.2 52.4 71.7	2,706 1,400 274 22	48.0 55.4 40.1	36.0 22.6 31.1	83.9 78.1 71.3	2,813 1,213 243
Exposure to family planning in media Exposure to radio, TV, newspaper No exposure	13.2 42.4	11.2 29.2	24.4 71.5	168 4,234	34.8 53.3	21.6 34.2	56.5 87.5	824 3,467
Visited by FP worker in the past month No Yes	41.9 35.9	28.6 26.2	70.5 62.1	3,988 412	50.2 33.7	31.8 31.1	82.0 64.8	4,175 117
Visited a health facility Did not visit Visited and discussed family planning Visited but did not discuss family planning	44.5 23.7 37.5	31.5 19.4 21.3	76.1 43.1 58.8	2,894 561 1,071	52.7 34.5 52.9	35.8 26.0 28.6	88.5 60.5 81.5	2,165 706 1,421
Total	41.3	28.4	69.7	4,402	49.8	31.8	81.6	4,291

Table 3.2 Percentage of currently married women who have an unmet need for family planning, by background characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005

Between 2000 and 2005, unmet need declined by 11 and 16 percentage points, respectively, for women who had married once and those married more than once. In 2005, unmet need for spacing was higher among women who had been married only once compared with unmet need for limiting, which was higher among those who had been involved in more than one union.

The variation in unmet need by religion is more striking in 2005 than in 2000, primarily because of the much lower unmet need among Orthodox Christians in 2005 than in 2000 (see Table 3.2). As is the case for many other sociodemographic variables, unmet need showed a uniform decline among all ethnic groups. Oromo women and those who belong to other ethnic groups reported relatively higher unmet need for contraception (77 percent and 76 percent, respectively) than Tigraways and Amharas (55 percent and 57 percent, respectively).

As was evident in 2000, there was a huge disparity in unmet need between urban and rural areas (27 percent and 77 percent, respectively) in 2005 (Table 3.2). The urban-rural difference was more pronounced for spacing needs (12 percent versus 46 percent) than limiting needs (15 percent versus 31 percent). Unmet need for spacing and limiting declined in both urban and rural areas in the five years. Nonmigrants had higher unmet need than migrants in both surveys except for rural-rural migrants, which had the highest levels of unmet need over time. A huge decline in total unmet need was observed among women who moved from urban to rural areas (from 75 percent in 2000 to 28 percent in 2005). Unmet need among visitors was also lower in 2005 than in 2000 (48 percent versus 75 percent).

It is important to note that the general decline in unmet need between the two surveys is uniform across education categories (Table 3.2). In both surveys, women with no education primary education have showed a higher need for family planning (for both limiting and spacing) compared with women with secondary or higher level of education. As expected, women who were more educated than their husbands had the lowest unmet need for contraception, and women less or equally educated (as their husbands) had higher unmet needs.

Unmet need was higher among those not working compared with those currently working in both 2005 and 2000 (73 percent versus 61 percent, respectively, in 2005, and 82 percent versus 81 percent, respectively, in 2000). In general, in both surveys, the proportion of women with spacing needs was higher than the proportion with limiting needs across all employment categories (Table 3.2).

It is clear that awareness-raising programmes through various types of media have the advantage of reaching a larger segment of the society. The 2005 EDHS revealed that unmet need was substantially higher among women with no media exposure compared with those who have been exposed to TV, radio, and newspapers (72 percent versus 24 percent), consistent with the findings from the 2000 EDHS. Between 2000 and 2005 there was a greater reduction in unmet need among women with media exposure (from 57 percent to 24 percent) compared with those women with no media exposure (from 88 percent to 72 percent).

In 2005, women who were visited by a family planning worker had lower unmet need compared with those who did not come into contact with a family planning worker (62 percent versus 71 percent). Unmet need was also higher among women who did not visit a health facility compared with those who did, in both the 2005 and 2000 surveys.

3.3 Trends in Demand for Family Planning Services by Socioeconomic Differentials

Demand for spacing declined in all age groups between 2000 and 2005, but demand for limiting increased in all age groups, except for the age group 30-34 where there was no difference (Table 3.3). Women who were married before age 18 had a lower demand for spacing compared with those who were first married after age 18, and the demand for spacing was higher among those who married early (less than 18 years). The demand for limiting among women who were married only once increased during the five-year period (from 38 percent to 42 percent), but the demand for

spacing declined from 63 percent to 58 percent over the same period. The same trend was observed for women who were involved in more than one union. Demand for limiting was higher among women who were involved in more than one union, but the opposite was observed for demand for spacing in both rounds of surveys. In general, demand for spacing increased with the rise in the ideal number of children between 2000 and 2005, and demand for limiting declined during the same period.

		EDHS	2005			EDHS	2000	
	Demand	Demand			Demand	Demand		
Demographic	for	for			for	for		
characteristic	spacing	limiting	Total	Number	spacing	limiting	Total	Number
Age								
15-19	78.9	21.1	100.0	335	88.2	11.8	100.0	382
20-24	81.2	18.8	100.0	804	83.5	16.5	100.0	818
25-29	66.7	33.3	100.0	1,088	72.9	27.1	100.0	960
30-34	53.4	46.6	100.0	780	53.5	46.5	100.0	751
35+	26.5	73.5	100.0	1,395	27.5	72.5	100.0	1,381
Number of unions								
One	58.2	41.8	100.0	3,423	62.5	37.5	100.0	3,024
More than one	44.7	55.3	100.0	979	48.2	51.8	100.0	1,264
Age at first marriage								
<15 years	49.6	50.4	100.0	1,540	49.3	50.7	100.0	1,292
15-17 years	54.3	45.7	100.0	1,535	57.9	42.1	100.0	1,761
18-24 years	63.2	36.8	100.0	1,214	68.2	31.8	100.0	1,175
25+ years	56.4	43.6	100.0	112	67.7	32.3	100.0	63
Number of living children								
0	81.5	18.5	100.0	254	85.5	14.5	100.0	304
1-2	78.2	21.8	100.0	1,223	80.9	19.1	100.0	1,317
3-4	58.5	41.5	100.0	1,324	60.7	39.3	100.0	1,212
5+	30.6	69.4	100.0	1,601	30.2	69.8	100.0	1,459
Ideal number of children								
0	39.7	60.3	100.0	459	35.4	64.6	100.0	129
1-2	55.9	44.1	100.0	293	46.4	53.6	100.0	258
3-4	55.4	44.6	100.0	1,479	53.3	46.7	100.0	1,479
5+	58.2	41.8	100.0	2,171	66.0	34.0	100.0	1,786
Non-numeric								
response	-	-	-	-	57.9	42.1	100.0	630
Total	55.2	44.8	100.0	4,402	58.3	41.7	100.0	4,291

Table 3.3 Percentage of currently married women with demand for family planning, by demographic characteristics, according to spacing and limiting needs, Ethiopia 2000 and 2005

It is worth noting that the demand for limiting showed a slight increase in both urban and rural areas (from 49 to 51 percent and from 40 to 44 percent, respectively), but the demand for spacing decreased in both areas between 2000 and 2005 (Table 3.4). Demand for spacing was lower in urban than rural areas, but the reverse was true in the demand for limiting in both 2000 and 2005. Demand for limiting was highest among women who moved between urban areas (urban-urban migration) in both rounds of surveys, and was slightly higher in 2005 than 2000 (56 percent versus 50 percent). On the other hand, demand for spacing was highest among women moving from rural to urban areas (65 percent) in 2005, and was highest among women who moved from urban to rural areas (63 percent) in 2000.

to spacing and limiting needs, Ethiopia 2	2000 and 2	2005	_	71 - 3	,, .,		,	J
	Descent of	EDHS	S 2005		Demand	EDHS	2000	
Background	for	for			for	for	Total	
characteristic	spacing	limiting	Total	Number	spacing	limiting	demand	Number
Residence		-				-		
Urban	48.9	51.1	100.0	611	51.5	48.5	100.0	722
Rural	56.2	43.9	100.0	3,791	59.7	40.3	100.0	3,569
Migration status								
Non-migrant	55.9	44.1	100.0	2,288	60.1	39.9	100.0	2,542
Rural-urban	64.7	35.3	100.0	107	51.1	48.9	100.0	250
Rurai-rurai	55.5 13.8	44.5 56.2	100.0	1,538	56.3 40.0	43.7	100.0	945 253
Urban-rural	47.9	52.1	100.0	184	63.4	36.6	100.0	165
Visitor	72.4	27.6	100.0	28	59.8	40.2	100.0	113
Education								
No education	52.9	47.1	100.0	3.158	56.7	43.3	100.0	3.243
Primary	60.8	39.2	100.0	847	63.8	36.2	100.0	674
Secondary and higher	61.3	38.7	100.0	397	62.2	37.8	100.0	374
Religion								
Orthodox	51.4	48.6	100.0	2,107	52.5	47.5	100.0	2,366
Catholic	-	- 40 E	-	-	(73.4)	(26.6)	(100.0)	34
Moslem	59.5	40.5	100.0	869	63.6	36.4	100.0	1.101
Traditional	-	-	-	-	66.2	33.8	100.0	121
Other	59.4	40.6	100.0	1,361	-	-	-	-
Ethnicity					48.4	51.6	100.0	1.586
Amhara	47.9	52.1	100.0	1,374	61.3	38.7	100.0	1,432
Oromo	55.6	44.4	100.0	1,619	69.8	30.2	100.0	204
Sidamo	58.0 62.5	42.0 37.5	100.0	219	67.3	35.4 32.7	100.0	258 812
Other	61.6	38.4	100.0	938	07.5	52.7	100.0	012
Employment status								
Not working	55.3	44.7	100.0	2.703	62.3	37.7	100.0	1.474
Worked in the past year	57.1	42.9	100.0	257	58.6	41.4	100.0	310
Currently working	53.0	47.0	100.0	1,238	56.0	44.0	100.0	2,502
Wife versus husband's								
education								
Same	54.2	45.8	100.0	2,706	55.0	45.0	100.0	2,813
Wife more than husband	50.5 60.3	43.7 39.7	100.0	274	54 A	33.7 45.6	100.0	243
Either wife or husband education	00.0	00.1	100.0	214	04.4	40.0	100.0	240
not known	40.1	59.9	100.0	22	-	-	-	-
Exposure to family planning								
Exposure to radio, TV, newspaper	59.8	40.2	100.0	168	55.3	44.7	100.0	824
No exposure	55.0	45.0	100.0	4,234	59.0	41.0	100.0	3,467
Visited by FP worker in the past								
month								
No	55.7	44.3	100.0	3,988	58.4	41.6	100.0	4,175
Tes	0.00	49.4	100.0	412	53.4	40.0	100.0	117
Visited a health facility			105 -	a a - ·			105 -	a
Did not visit	55.8	44.2	100.0	2,894	58.0	42.0	100.0	2,165
Visited but did not discuss family	49.0	50.4	100.0	100	52.2	41.0	100.0	100
planning	57.4	42.6	100.0	1,071	61.7	38.3	100.0	1,421
Total	55.2	44.8	100.0	4 402	58.3	41.7	100.0	4,291
	00.L			., .02	00.0			.,_0.

Table 3.4 Percentage of currently married women with demand for family planning, by background characteristics, according

Demand for spacing declined particularly among women with no education (from 57 percent to 53 percent), but the demand for limiting increased among these women between 2000 and 2005, although the difference in both spacing and limiting was marginal for those with secondary or higher education (Table 3.4). Demand for limiting showed a small increase, particularly among women who were not working at the time of the two surveys. There was little change in demand for limiting among women who worked in the past year.

Demand for spacing among women with media exposure was higher in 2005 than in 2000 (60 percent versus 55 percent), but there was a slight decline in the demand for limiting among women exposed to family planning in the media over the same period (45 percent versus 40 percent) (Table 3.6). Demand for limiting among women who came in contact with a family planning worker was higher in 2005 than in 2000 (49 percent versus 47 percent), but demand for spacing dropped from 53 percent to 51 percent among the same group of women in the five-year period.

3.4 Reasons for Nonuse among Women with Unmet Need

Identifying the major reasons for nonuse of contraceptives is important in designing and implementing appropriate family planning intervention strategies. There could be numerous reasons that prohibit women from using contraceptives. In the two EDHS surveys, reasons for nonuse were categorized into fertility-related reasons, method-related reasons, opposition to use, and lack of knowledge. Among fertility-related reasons, postpartum amenorrhoea (17 percent) was the most important reason for nonuse in 2005, followed by fatalism (8 percent) and breastfeeding (7 percent), which were also important reasons in 2000 (Table 3.5).

Women with unmet need have also mentioned lack of knowledge of either the source or method as another important reason for not using contraceptive methods in both 2005 and 2000. In 2005, 12 percent of women stated health concerns and 7 percent mentioned fear of side effects as deterrents to use. In most cases the major factors deterring women from using a method declined between 2000 and 2005; breastfeeding declined by 14 percentage points, lack of knowledge of a source by 7 percentage points, and fatalism by 4 percentage points (Table 3.5).

Reasons for not using	E	DHS 2005	EDHS 2000			
contraceptive method	Spacing	Limiting	Total	Spacing	Limiting	Total
Fertility-related reasons						
Not having sex	1.5	4.7	3.7	1.8	2.8	2.2
Infrequent sex	2.8	3.8	2.8	0.6	1.9	1.2
Menopausal/hysterectomy	0.0	0.6	4.6	0.0	0.2	0.1
Subfecund/infecund	0.6	0.3	2.8	0.1	2.2	1.0
Postpartum amenorrhoea	14.3	11.6	16.5	2.8	15.4	19.6
Breastfeeding	8.2	4.8	6.9	24.3	17.5	21.3
Fatalistic	9.2	9.2	8.1	13.8	10.1	12.2
Opposition to use						
Respondent opposed	2.1	2.0	2.5	5.0	3.5	4.4
Husband opposed	8.8	5.4	5.6	10.3	9.0	9.7
Others opposed				1.2	0.7	1.0
Religious prohibition	6.0	5.4	6.4	4.1	4.5	4.3
Lack of knowledge						
Knows no method	11.3	9.6	11.7	13.5	11.2	12.5
Knows no source	11.9	8.7	9.8	16.2	17.4	16.7
Method-related reasons						
Health concerns	11.9	18.5	12.3	10.0	17.6	13.3
Fear of side effects	6.8	8.3	6.5	4.7	8.5	6.3
Lack of access/too far	2.9	2.9	2.1	3.1	4.3	3.6
Costs too much	1.3	2.7	1.2	1.6	1.8	1.7
Inconvenient to use	0.9	1.5	0.7	0.9	1.2	1.0
Interference with body processes	0.8	1.1	0.8	1.5	0.9	1.3
Other	14.7	17.0	14.1	2.1	3.0	2.5
Don't know	3.7	2.8	2.8	-	-	-
Number of women	1,614	1,327	2,941	1,358	1,037	2,395

Table 3.5 Percentage of women with unmet need for family planning by reason for not currently using a contraceptive method, Ethiopia 2000 and 2005

Please note that denominators for Tables 3.5 and 3.6 do not match previous tables because all women were not asked reasons for not using contraceptive methods.

3.5 Reasons for Not Intending to Use Contraceptive Methods in the Future

In order to meet the family planning needs of women, it is important to recognize reasons given by women for not intending to use family planning in the future. Hence, analyzing respondents' future intention to use family planning and identifying reasons for not intending to use in the future have important implications for programmes. The top portion of Table 3.6 shows future intention to use a family planning method by women's status, and the bottom portion shows reasons for not intending to use a contraceptive method in the future for 2000 and 2005.

In 2005, two in three women with unmet need for spacing reported wanting to use contraceptives in the future, and three in ten reported not intending to use contraceptives in the future. Between 2000 and 2005, there was a slight increase in the proportion of women who intended to use a method in the future (from 68 percent to 69 percent) and a marginal decline among those who did not intend to use a method in the future (from 31 percent to 28 percent).

The lower portion of Table 3.6 shows reasons for nonuse among women who do not intend to use a method in the future and who are unsure about use in the future. In 2005, a substantial proportion of women with unmet need did not intend to use contraceptives because of opposition to use (30 percent) mainly because of religious prohibitions (16 percent). The second most important reason for nonuse was method-related reasons (24 percent) and primarily due to health concerns (16 percent). As was observed in 2000, women with an unmet need for limiting were more likely than those with an unmet need for spacing (32 percent versus 19 percent) to cite method-related reasons in 2005.

A dramatic decline was observed among women who cited fertility-related reasons (from 28 percent in 2000 to 14 percent in 2005) as the major reason for not intending to use a method in the future. This is mainly due to a large decline in the percentage of women who want more children (i.e., this change is due to changes in fertility preferences). On the other hand, opposition to use, lack of knowledge, and method-related reasons did not show significant changes between 2000 and 2005.

	E	DHS 2005		EDHS 2000		
Intention/reasons for nonuse	Spacing	Limiting	Total	Spacing	Limiting	Total
Future intention						
Intend to use	66.1	72.1	68.5	64.5	72.5	67.6
Do not intend to use	30.6	24.5	28.2	33.5	26.8	30.8
Unsure about use	3.3	3.4	3.3	2.0	0.7	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,822	1,248	3,063	1,946	1,244	3,190
Reason for not intending to use						
Fertility-related reason	15.9	11.0	14.1	36.0	13.2	28.4
Infrequent sex/no sex	2.7	7.5	4.5	0.7	4.1	1.8
Menopausal/hysterectomy	0.0	0.6	0.2	0.0	1.2	0.4
Subfecund/infecund	0.3	1.8	0.8	0.0	6.7	2.2
Wants more children	12.9	1.0	8.6	35.3	1.2	24.0
Opposition to use	31.1	29.0	30.3	27.0	28.1	27.2
Respondent opposed	6.1	5.3	5.8	8.6	8.2	8.4
Husband opposed	10.1	5.7	8.5	7.1	5.0	6.4
Others opposed	0.0	0.5	0.2			
Religious prohibition	15.0	17.5	15.9	11.3	14.9	12.5
Lack of knowledge	14.2	16.4	15.0	14.8	16.7	15.3
Knows no method	11.4	13.1	12.0	11.2	14.9	12.4
Knows no source	2.7	3.2	2.9	3.6	1.8	3.0
Method-related reason	19.1	32.2	23.8	18.0	35.2	23.6
Health concerns	11.1	23.9	15.7	11.3	24.3	15.5
Fear of side effects	6.1	6.3	6.1	4.8	8.5	6.0
Lack of access	0.5	0.0	0.3	0.3	0.3	0.3
Cost too much	0.5	0.0	0.3	0.0	0.9	0.3
Inconvenient to use	0.0	0.2	0.1	0.4	0.0	0.3
Interference with body	0.4	0.6	0.5	1.2	1.2	1.2
Method not available	0.4	1.3	0.8			
Other	12.3	7.6	10.6	2.6	2.9	2.7
Don't know	7.4	3.8	6.1	1.6	4.1	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	611	349	959	689	342	1,031

Table 3.6 Percent distribution of women by future intention to use family planning and reasons for not intending to use family planning, according to unmet need, Ethiopia 2000 and 2005

3.6 Multivariate Analysis

Multiple multinomial logistic regression analyses were carried out to identify independent predictors of total unmet need, as well as unmet need for spacing and unmet need for limiting separately. A total of 14 covariates were included in the model: age, age at first marriage, number of children, ideal number of children, residence, ethnicity, educational differences between husband and wife, migration status, women's education, exposure to media, visit by health workers, health facility visit, household wealth, and knowledge of any method.

The analysis was restricted to a total of 2,384 women who had either unmet need or met need for spacing (1,431) or unmet or met need for limiting (953) and had no missing values for the observed covariates (Tables 3.7 and 3.8).

As observed with findings from the 2000 survey, the women in the youngest age groups were significantly more likely to have an unmet need in 2005. For instance, women between 15 and years old were three times more likely to have an unmet need compared with women age 35 and above. A separate regression model run to identify factors related to the unmet need for spacing and limiting also showed a comparable trend in the two surveys. Younger women were generally more likely to have an unmet need for spacing, and older women were more likely to have unmet need for limiting. For example, young women (15–19) were five times more likely to have unmet for spacing compared with older women (35+).

Explanatory	need for	need for	i otal unmet
variables	spacing	limiting	need
Age			
15-19	5.050***	0.198***	3.398**
20-24	5.658***	0.177***	2.054**
25-29	4.268***	0.234***	1.494**
30-34	2.783***	0.359***	1.405**
35+ ^K			
Age at first marriage	0.00.4**	0 607**	0 505**
<15 45 47 vegere	0.384	2.607**	0.535
19-17 years	ns	ns	0.529
25+ ^R	115	115	115
Number of living children			
0	4.311***	0.232***	0.640
1-2	3.390***	0.295***	0.570**
3-4 5+ ^R	1.888	0.530	0.880
deal number of children			
0	0.370***	2.704***	1.079
1-2	0.209***	4.788***	0.761
3-4	0.469***	2.134***	0.691**
5+ ^R			
Current residence			
Urban	ns	ns	0.510**
Rural			
Ethnicity	0 70 4**	4 404**	0 574++
Amhara	0.704**	1.421**	0.571**
Sidama	ns	ns	ns
Tigraway	ns	ns nc	0 //1**
Others ^R	115	115	0.441
Husband versus wife education			
Same	ns	ns	ns
Husband >wife	ns	ns	ns
Wife >Husband	ns	ns	ns
Husband or wife education is not known ^R			
Migration status			
Nonmigrant	ns	ns	ns
Rural-urban migrant	ns	ns	ns
Rural-rural migrant	ns	ns	ns
Urban-urban migrant	ns	ns	ns
Visitor ^R	ns	ns	ns
Education			
No education	ns	ns	2.311**
Primary	ns	ns	1.671**
Secondary or above ^R			
Exposure to media			
Yes	ns	ns	ns
NU /isited by fieldworker and discussed CD			
Yes	ne	ne	ne
No ^R	115	110	113
Health facility visit			
Not visited	ns	ns	1.383**
Visited and told FP	ns	ns	0.522**
Visited but not told FP ^R			
Wealth quintile			
Lowest	ns	ns	4.322**
Second	ns	ns	3.084**
Middle	ns	ns	1.931**
Fourth High pot ^R	ns	ns	1.604**
Knows no mothed	20	20	
Knows no method ^R	ns	ns	ns
	4 404	050	0.004
NUMBER OF CASES	1,431	953	2,384

Table 3.7 Logistic regression: determinants of unmet need for spacing, unmet need for limiting, and total upmet need 2005

In contrast, young women (15-19) were 80 percent less likely to have unmet need for limiting compared with women more than 35 years of age. Women married (for the first time) at a young age (15-17) were significantly less likely to have unmet need. However, age at marriage was not a significant determinant when the analysis was done separately for spacing and limiting except for those who married at age less than 15 years. Age at first marriage was found to be insignificant in predicting overall unmet need in 2000.

The analysis also showed that the number of living children that women have is a significant predictor of unmet need. Consistent with findings from the 2000 survey, women who had no children were significantly less likely (40 percent) to have total unmet need for family planning. Similarly, women with no children were significantly less likely to have unmet need for limiting. On the other hand, unmet need for spacing was found to be significantly higher (four fold) among women with no children compared with those having five or more children.

Consistent with findings from EDHS 2000, total unmet need was inversely related to the ideal number of children. For example, women whose ideal number of children was between three and four were 30 percent less likely to have unmet need compared with those whose ideal number was five children or more. The trend for unmet need for spacing follows a similar pattern with the total unmet need. This is, however, in contrast to unmet need for limiting, which was significantly higher among women whose ideal number of children was five and over.

Findings from both surveys indicate that urban residents were significantly less likely to have total unmet need compared with rural women. Nevertheless, the marked urban-rural difference disappeared when the analysis was done for spacing and limiting separately. It is worth noting that data from the 2000 survey did not show residence as a significant predictor of unmet need for limiting, which is contrary to expectations.

In both surveys, the Amharas and Tigraways were less likely to have unmet need compared with other ethnicities. Ethnicity was not a significant factor in explaining unmet need for spacing and limiting in 2005 except that Amharas were less likely to have an unmet need for spacing and more likely to have an unmet need for limiting. However, the data from the 2000 survey showed that Amharas were significantly less likely to have unmet need for spacing and liming compared with Sidamo and Tigraways.

As in the 2000 data, the 2005 EDHS indicated that the educational difference between husband and wife was not a significant determinant of unmet need for family planning services. According to the 2005 EDHS data, migration status was not a significant predictor of unmet need, which was true for both spacing and limiting. Data from the 2000 survey showed nonmigrants to be more likely to have an unmet need than migrants, but the difference was less pronounced when it was disaggregated for spacing and limiting.

Women's education was a significant predictor of unmet need for family planning in both surveys. Women with no education and primary education were significantly more likely (twice and 1.5 times, respectively) to have unmet need compared with those with secondary and higher education. This difference was not significant, however, for spacing and limiting.

Surprisingly, media exposure was not an important factor in explaining the total unmet need in both the 2000 and 2005 surveys (it was significant in determining unmet need for spacing in the earlier study). Visit by health workers and discussion of family planning was not found to have an impact on unmet need for family planning in 2005. This is in contrast to the 2000 EDHS, which showed that women who discussed family planning issues with health workers appeared to have significantly lower unmet need for family planning. Table 3.8 Logistic regression: determinants of unmet need for spacing, unmet need for limiting, and total unmet need, 2000

Explanatory variables	Unmet need for spacing	Unmet need for limiting	Total unmet need
Age 15-19 ^R 20-24 25-29 30-34 35+	0.487*** 0.366*** 0.248*** 0.091***	ns 1.678** 2.530*** 4.743***	0.527** 0.415*** 0.410** 0.330***
Age at first marriage <15 years [®] 15-17 years 18-24 years 25+ years	ns 1.544*** ns	ns 0.756** ns	ns ns ns
Number of living children 0 ^R 1-2 3-4 5+	ns ns 0.459**	ns 2.130** 3.852***	1.664** 1.860** 1.907**
Ideal number of children 0 ^R 1-2 3-4 5-4 Non-numeric response	ns 2.029** 4.442*** 3.255***	ns 0.544** 0.261*** 0.365***	ns ns ns ns
Current residence Urban ^R Rural	2.982***	ns	4.386***
Ethnicity Amhara ^R Oromo Sidamo Tigraway Others	1.512*** 2.504** 2.011*** 1.346**	ns 0.532** 0.572*** ns	1.418** ns ns 1.351**
Husband versus wife education Same Husband >wife Wife >husband	ns ns	0.816** ns	ns ns
Migration status Nonmigrant ^R Rural-urban migrant Rural-rural migrant Urban-urban migrant Urban-rural migrant Visitor	ns ns ns 0.635** 0.615**	ns ns ns ns ns	0.673** 0.671** 0.658** 0.470** ns
Education No education ^R Primary Secondary or above	0.667** ns	ns 0.348***	0.513*** 0.387***
Exposure to media No ^R Yes	0.795**	ns	ns
Visited by fieldworker and discussed FP No Yes	ns	0.606**	0.611**
Health facility visit Not visited ^R Visited and told FP Visited but not told FP	0.723** ns	0.725** ns	0.467*** ns
Discussion of FP with partner Never ^R Once or twice More often Woman's approval of FP	0.772** 0.660**	0.719** 0.691**	0.446*** 0.429***
Approves Don't know Partner's approval of FP Disapproves Approves	0.539*** ns 0.702**	ns ns	0.255*** 0.367** 0.620**
Don't know	ns	ns	ns
Log of likelihood function	3,836.45	3,816.78	3,885 2,876.33

** p<0.05 *** p<0.001 R = Residence category; FP = Family planning; ns = Not significant Source: Korra, 2002: Table 8, page 18

In both surveys, women who visited a health facility and discussed family planning were significantly less likely to have unmet need compared with those who visited but did not discuss family planning. This difference, however, was not significant for unmet need for spacing and limiting in the 2005 survey.

Wealth is often an important factor in explaining differences in service access and utilization of key public health interventions. Women in the poorest quintile were significantly more likely to have unmet need compared with those who were in the richest quintile. Because wealth index has not been included in the regression model in the 2000 survey, no comparison between 2000 and 2005 can be made.

4 Challenges, Opportunities, and Programme Options

4.1 Challenges and Opportunities

Ethiopia has a favourable policy towards family planning. The Ethiopian Population Policy initiated in 1993 has addressed a wide range of issues that influence high fertility and rapid population growth. Among the objectives of the policy were: reducing the total fertility rate from 7.7 to 4.0 children per woman and increasing the contraceptive prevalence rate to 44 percent by 2015. The policy calls for the involvement of different sectors in population issues and the diversification of family planning services through the involvement of NGOs and the private sector and by expanding community-based programmes (OPM, 1993). Ethiopia's Health Policy also promotes preventive health care, including family planning. Ethiopia's health delivery system is decentralized and decisions are shared among the MOH, the regional health bureaus, and the woreda health offices. The woreda health offices focus primarily on implementation issues, and the Federal and regional offices focus on policy issues and technical assistance.

Health facilities have dramatically increased in the last decade, and the potential health services coverage has now reached close to 90 percent (FMOH, 2007). To orient efforts towards achieving the MDGs, in 2006 the MOH developed national programme targets related to reproductive health. The MOH targets are for a CPR of 60 percent by the year 2010 and 80 percent in demand satisfied for family planning. The MOH also plans to reduce maternal mortality to 350/100,000 live births by 2015 (FMOH, 2006).

The report shows that unmet need for family planning is still very high. Those with higher unmet need include women who reside in rural areas, uneducated women, women from poorer households, and younger women. Women who are exposed to media messages, those who were visited by family planning workers, and those who reported visiting a health facility have lower unmet need. Unmet need for limiting increases with the number of living children and age of the mother. There is a huge disparity by place of residence and level of education. Women who reside in the rural areas, are in the poorest wealth quintile, and are less educated have higher unmet need.

Women who reported "not intending" to use cited reasons that include fertility-related reasons, opposition to use, lack of knowledge, and method-related reasons. Among the reasons given, opposition to use and method-related reasons were the leading reasons. Religious prohibition and partner opposition also played a major role.

For a family planning programme to be successful and adequately satisfy demand, there should be a favourable policy environment, commitment at different levels of administration, and convenient and quality service delivery setups. The following sections will explore the existing policy environment, opportunities, and programme options that will enable Ethiopia to meet the unmet need.

4.2 Contraceptive Commodity Security

Reports have indicated repeated shortages of most of the contraceptives that are popular among users in the country. Contraceptive stock outs have been reported especially for the widely used combined oral contraceptives and 3-month injectable. The stock outs have caused discontinuation of services and forced method switching by clients. Key challenges include an inefficient contraceptive logistics system and lack of proper forecasting and resource gap analysis, which is now improving as a result of efforts by the government at different levels and the USAID/DELIVER project (Alemneh, 2007; CORHA, 2005; PSRC, 2006). Given the current level of unmet need and the very high demand for family planning services, satisfying the demand and providing the right method mix are important precursors to a successful family planning programme. The rapidly expanding service outlets should be able to maintain a continuous supply of contraceptives. At present, contraceptive supply is heavily dependent on donors (UNFPA, USAID, and the German Funding Agency for International Development-KfW), and the level of supply fluctuates based on the interest and capacity of the donors. The government has started sharing the responsibility by allocating funds to purchase contraceptive commodities. This initiative has to be strengthened to ensure a steady supply of commodities.

4.3 Programme Options

4.3.1 Facility-based programmes

In Ethiopia family planning programmes are now delivered at health facilities, and community and social marketing outlets. According to the 2000 and 2005 EDHS the main (close to 80 percent) source of modern contraceptive methods is the public health sector. Health centres and facilities that are below health centres are the main outlets for modern contraceptives.

The public health sector has expanded rapidly; currently, close to 87 percent of Ethiopians live in an area where they can physically access a health post or a health centre (FMOH, 2007). In addition to the public health sector the private not-for-profit and private for-profit sectors are also playing a significant role in providing family planning services. The for-profit sector has grown in the last five years from supplying contraceptives to 2 percent of users in 2000 to supplying close to 6 percent of users in 2005. Overall, the contribution of the for-profit sector in health services has grown significantly and the sector now serves close to 10 percent of total users in the country. At present, there are 1,756 different categories of private for-profit clinics throughout the country (FMOH, 2005, 2007).

Contraceptive services that should be provided at the health centre level, the main source of modern contraception, include the short- and long-acting methods of contraception such as IUDs and implants. The number of health centres is dramatically increasing in the country and has now reached a total of 690 in 2006/7 from just 412 in 2001/2. The expanding service delivery outlets are an important opportunity to expand family planning services in the country and improve the skewed method mix (FMOH, 2007). Health posts have also expanded and have now reached 9,914 from 1,311 in 2001/2. Health post staff are trained to provide condoms, all types of oral contraceptives, and injectables.

The urgent need for improvement of the contraceptive method mix is evident in the two DHS surveys and other reports in the country. In 2005, close to 14 percent of women with unmet need had an unmet need for limiting, and of the 15 percent of women with met need, 8 percent are using methods for limiting. Similarly, in 2000, close to 14 percent of women with unmet need had a need for limiting and more women with met need were using contraceptives for limiting than spacing the number of children. These findings show that women are looking for long-term protection and this provides a huge potential to increase access to long lasting contraceptives. However, the vast majority of methods that are currently provided do not provide protection for more than three months at a time (CSA and ORC Macro, 2001, 2006; FMOH 2007).

4.3.2 Community-based programme

There are various community-based health care workers in Ethiopia. Some of them are managed directly by the government, but others operate through local NGOs in the country. Community health workers who work in the area of reproductive health/family planning include the health service extension workers (HEWs) (who are expected to spend 75 percent of their time in the community and the remaining time at health posts), community-based reproductive health agents (CBRHA), community health promoters, and traditional birth attendants (MOH, 2005).

a) CBRHAs

The CBRHAs are one of the largest groups of community volunteers that focus mainly on family planning. They receive broader training that enables them to educate the community on sexually transmitted infections including HIV/AIDS, maternal and child health services, eliminating harmful practices, postabortion care, and other relevant issues. They counsel families in the area of family planning and provide condoms and different types of contraceptive pills and provide referrals for other methods such as injectables and implants. In addition to condoms and pills, the CBRHAs recently received training in the lactational amenorrhoea and standard days methods of contraception. These two new methods are being introduced through community-based programmes by Pathfinder International and its partners. The CBRHAs serve mainly through house-to-house visits but there are few who operate as depot holders. The CBRHAs are both females and males who can read and write and they are selected by the community and receive two weeks of training. It is believed that the CBRHAs will be a major support for the HEWs in terms of expanding access to contraceptives such as pills and injectables. Moreover, they can play a key role in reaching men and provide counselling and referral for long-term and permanent contraceptive methods. According to the MOH, currently there are more than 12,800 CBRHAs deployed by the government and NGOs through out the country (MOH, 2003; MOH, 2005). In addition to the CBRHAs there are thousands of community health promoters (CHPs) who have received two days of training in health promotion. Like the CBRHAs, the CHPs are also drawn from the local community and include both male and female volunteers. The CHPs can play a significant role in mobilizing the community and assisting the CBRHAs and HEWs (ESHE, 2005).

b) Health Service Extension Programme

The health service extension programme (HSEP) was developed as a main component of the Health Sector Development Programme II (HSDP II). The programme is intended to reach the rural community and focus on improving access to quality preventive primary health care at the household level. The main backbone of the programme is a cadre of health extensions workers. The HEWs are all female, are selected from their respective localities, and receive one year theoretical and practical training. Unlike the CBRHAs and other volunteer community health workers in the country, the HEWs are permanent government employees. The government is planning to deploy more than 30,000 HEWs of which about 20,000 have already started providing services. One of their major activities is family health, which includes maternal and child health, adolescent sexual and reproductive health, family planning, and immunizations (MOH, 2005; Columbia University, 2006).

The HSEP is opening up a new opportunity to accelerate the coverage of primary health care, including family planning. Due to the initiation of this programme, Ethiopian women have started to receive the injectables at their home for the first time. The HSEP will also complement the CBRH programme because the HEWs also focus on community education and provision of condoms and contraceptive pills. The HSEP will be a key bridge between the community and health-facility-based efforts. The HEWs and the CBRHAs can now more efficiently serve clients who need short-term contraception and refer those who need long acting methods to health centres and hospitals. The fact that the HEWs can now provide injectables is a relief for health centres and higher level health facilities, because most of the provider's time at health centres and hospitals used to be spent on providing injectables. Now the health centres and hospitals should be able to focus on providing long

acting and permanent methods (MOH, 2005). Implants have improved greatly and the old six-rod Norplant[®] is no longer provided in Ethiopia. At present the new single-rod implant, Implanon[®], is being introduced. Unlike Norplant, inserting and removing Implanon is easier and does not require intensive training. The role of HEWs in providing Implanon at the health post level should be seriously considered.

4.3.3 Social marketing

It has been almost two decades since social marketing was introduced to Ethiopia by DKT. DKT is playing a very significant role in terms of ensuring access to and affordability of contraceptives and other essential health products throughout the country. It is greatly contributing to ensuring contraceptive community security. DKT utilizes aggressive marketing and promotional techniques and now reaches almost every corner of the country. In 2007 alone, DKT generated 1,466,852 couple years of protection (CYP) by selling almost 60 million condoms and 5.3 million oral contraceptives throughout Ethiopia. According to the MOH report in 2006/7, of the total CYPs generated through the country by MOH and NGOs, DKT accounted for 44 percent. The organization is diversifying the mix of contraceptive methods by introducing new pill and condom brands on a regular basis. Various retail outlets are used by DKT, which include public and private health facilities, pharmacies and drugstores, shops, marketplaces, and CBRHAs. DKT also has plans to start social marketing of IUD and voluntary surgical contraception (FMOH, 2007; Packard Foundation, 2001; DKT International, 2008).

5 Conclusion and Recommendations

This report has focused on updating the two further analysis papers published based on the 2000 EDHS on unmet need and programme options to address the problem of unmet need. The analysis shows that unmet need remained high, at 34 percent during the five-year period between the two surveys, as indicated by a decline of only 2 percent from the 2000 survey. On the other hand, contraceptive prevalence has improved substantially over the five years (from 8 percent to 15 percent).

The total demand for family planning averaged 31 percent in 2005, which shows some improvement compared with the 19 percent in 2000. It is noteworthy to mention that only one-quarter of the demand for spacing is satisfied, although it constitutes the larger portion of unmet demand. The demand for family planning is much higher among the youngest age groups and women living in rural areas.

In both rounds of the DHS surveys, the main reason for not using a method of contraception was lack of knowledge, postpartum amenorrhoea and method-related reasons such as health concerns and fear of side effects.

A crucial component of unmet need is the existence of significant proportions of women with unmet need who do not intend to use any method in the future, which poses a significant challenge to family planning programmes. The main reasons for not intending to use family planning are religion and male partner opposition.

To meet the existing demands of unmet need, programmes should work in harmony and target women with the highest level of unmet need. Facility-level activities should be strongly linked to community-level activities. Community-level family planning activities should be strengthened, especially in the rural areas because most of the women with unmet need—such as the uneducated, unemployed, and those with high fertility—are rural residents. The youngest group of women (age 15-19) have the highest unmet need, and this group is also the most affected by the consequences of unplanned/unwanted pregnancy and especially abortion.

To meet unmet need and achieve the targets set by the government, the following recommendations are made:

- a. **Improve the contraceptive method mix to better serve the limiting and spacing needs of women.** Because the three-month injectable is now provided at health posts and at the household level, the higher level facilities should focus on expanding access to long lasting and permanent contraceptive methods. Health facilities should be equipped to provide these methods and providers should be trained in both pre-service as well as post-service counselling. Newly recruited health professionals assigned to health centres and higher level health facilities should be trained to provide the long lasting and permanent contraceptive methods. Counselling and information provision to clients should be improved.
- b. **Strengthen community-based activities in rural areas.** Unmet need in rural areas is higher than in urban areas and the majority of Ethiopians reside in rural areas. Therefore, community-based activities in rural areas should be strengthened. The availability of HEWs has created a great opportunity to expand family planning services at the community level. A strong working relationship should be established between the HEWs and other community health workers such as the CBRHAs and CHPs. Community health workers should complement HEWs in providing door-to-door education and distributing short-acting methods such as condoms and pills. The community health workers can also play a key role in engaging men in family planning issues.
- c. Expand social marketing of contraceptives using community health workers such as CBRHAs. To expand the types of methods available at the health facility level, commodities that are supplied through social marketing programmes should be diversified and include long-acting methods such as implants and IUDs.
- d. **Improve government commitment and take aggressive measures to respond to the huge unmet need in the country.** Commitment can be in terms of moving family planning to one of the top of agenda at all administrative levels and putting in place a mechanism to measure the level of commitment and progress at all levels. The government should take the lead role in monitoring and coordinating activities of stakeholders.
- e. Expand information, education, and communication to particularly target women who have no intention to use a method due to misconceptions and misinformation. Women who report religious prohibitions should be given adequate counselling so that can explore other options that are more acceptable. The recently introduced standard days method could be an option for women reporting religious prohibition.
- f. Avoid undermining the role of the male partner in family planning and encourage programmes should try to promote male involvement. Male involvement can be enhanced by promoting couple counselling both at facility- and community-based programmes; couple counselling should be encouraged and male methods should be promoted. A clear guideline should be developed on how to promote couple counselling and enhance male involvement in family planning.
- g. Strengthen the ongoing effort to improve the logistics management system to ensure effective distribution and forecasting of demands. Improving logistics management is an important component in tracking users and nonusers and making methods available to those most in need.

References

Ahmed, J. and G. Mengistu. 2002. *Evaluation of Program Options to Meet Unmet Need for Family Planning in Ethiopia*. Calverton, Maryland: ORC Macro.

Alemneh, L. 2007. Assessment of family planning method mix and effects of contraceptive shortage: Bure woreda, west Gojjam Zone, Amhara region. Master's Thesis. Addis Ababa, Ethiopia: Addis Ababa University School of Public Health.

Center for Communication Programs (CCP). 1996. *Population Reports*. Vol. XXIV, No.1. Baltimore, Maryland: The Population Information Program.

Central Statistical Authority (CSA). 1999. *The 1994 population and housing census of Ethiopia – Results at the country level*. Analytical Report, Vol. II. Addis Ababa, Ethiopia: CSA.

Central Statistical Agency (CSA) and ORC Macro. 2001. *Ethiopia Demographic and Health Survey* 2000. Addis Ababa, Ethiopia and Calverton, Maryland: Central Statistical Agency and ORC Macro.

Central Statistical Agency (CSA) and ORC Macro. 2006. *Ethiopia Demographic and Health Survey*, 2005. Addis Ababa, Ethiopia and Calverton, Maryland: Central Statistical Agency and ORC Macro.

Columbia University. 2006. Assessment of working conditions of the first batch of health extension workers. Addis Ababa, Ethiopia: Center for National Health Development in Ethiopia, The Earth Institute at Columbia University.

Consortium of Reproductive Health Associations (CORHA). 2005. *Effect of contraceptive shortage and coping mechanisms in selected regions of Ethiopia*. Addis Ababa, Ethiopia: CORHA.

DKT International. 2008. *Ethiopia*. Available at http://www.dktinternational.org/index.php?section=28.

Essential Services for Health in Ethiopia (ESHE). 2005. Project annual report. Addis Ababa, Ethiopia: ESHE.

Federal Ministry of Health (FMOH). 2005. *Health sector strategic plan (HSDP-III) 2005/6-2009/10*. Addis Ababa, Ethiopia: Planning and Programming Department, FMOH.

Federal Ministry of Health (FMOH). 2006. *National reproductive health strategy*, 2006-2015. Addis Ababa, Ethiopia: FMOH.

Federal Ministry of Health (FMOH). 2007. Health and health related indicators, 2006/2007. Addis Ababa, Ethiopia: MOH Planning and Programming Department, Health Information Processing and Documentation Team.

Haub, C., and B. Herstad. 2002. *Family planning worldwide*. 2002 data sheet Washington, D.C.: Population Reference Bureau.

Korra, A. 2002. Attitudes toward family planning and reasons for nonuse among women with unmet need for family planning in Ethiopia. Calverton, Maryland: ORC Macro.

Ministry of Health (MOH). 2003. Assessment of community-based reproductive health service in Ethiopia, 2002-2003. Addis Ababa, Ethiopia: Ministry of Health, Family Health Department.

Ministry of Health (MOH). 2005. *Health service extension implementation guideline*. Addis Ababa, Ethiopia: MOH.

Ministry of Health (MOH) and World Health Organization (WHO). 1999. An assessment of reproductive health needs in Ethiopia. Expanding Options in Reproductive Health. Geneva, Switzerland: WHO.

Murray, C., and A. Lopez. 1998. Health dimensions of sex and reproduction. *Global Burden of Disease*. Vol. 3. Boston: Harvard University Press, p. 280.

National Office of Population (NOP). 1997. *National program for the implementation of the National Population Policy of Ethiopia*. Addis Ababa, Ethiopia: NOP.

Office of the Prime Minister (OPM). 1993. *National population policy of Ethiopia*. Addis Ababa, Ethiopia: Office of the Prime Minister.

Packard Foundation-Ethiopia. 2001. *Grantees' progress report: July December 31, 2001*. Addis Ababa, Ethiopia: Packard Foundation-Ethiopia.

Population Studies and Research Center (PSRC). 2006. *Contraceptive inventory and logistics system survey*. Addis Ababa, Ethiopia: Institute of Development Research, Addis Ababa University.

Ross, J.A., and W.L. Winfrey. 2002. Unmet need for contraception in the developing world and the former Soviet Union: An updated estimate. *International Family Planning Perspectives* 28(3): 138-143.

Sedgh, G., R. Hussain, A. Bankole, and S. Singh. 2007. *Women with an unmet need for contraception in developing countries and their reasons for not using a method*. Occasional Report, No. 37. New York, New York: Guttmacher Institute.

United Nations Development Programme (UNDP). 2007. MDGMonitor@https://www.mdgmonitor.org/goal5.cfm.newyork:undp

Westoff, C. 1988. The potential demand for family planning: A new measure of unmet need and estimates for five Latin American countries. *International Family Planning Perspectives* 14(2): 45-53.