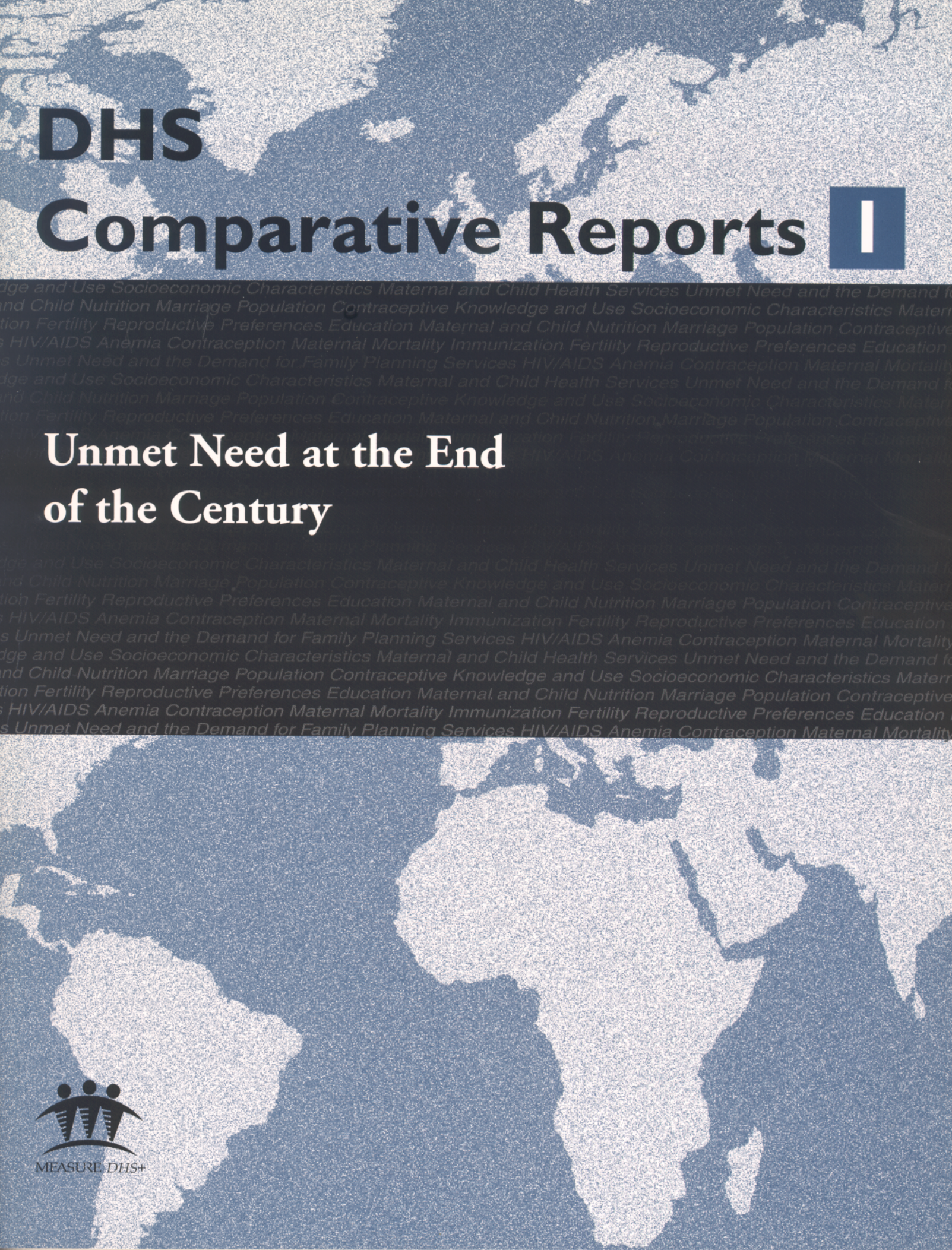
DHS Comparative Reports 1

Unmet Need at the End of the Century



MEASURE DHS+

MEASURE *DHS*+ assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Funded by the U.S. Agency for International Development (USAID), MEASURE *DHS*+ is implemented by ORC Macro in Calverton, Maryland.

The main objectives of the MEASURE *DHS*+ project are:

1) to provide decisionmakers in survey countries with information useful for informed policy choices,
2) to expand the international population and health database,
3) to advance survey methodology, and
4) to develop in participating countries the skills and resources necessary to conduct high-quality demographic and health surveys.

Information about the MEASURE *DHS*+ project or the status of MEASURE *DHS*+ surveys is available on the Internet at http://www.measuredhs.com or by contacting:

ORC Macro
11785 Beltsville Drive,
Suite 300
Calverton, MD 20705 USA
Telephone: 301-572-0200
Fax: 301-572-0999
E-mail: reports@macroint.com

DHS Comparative Reports No. 1

Unmet Need at the End of the Century

Charles F. Westoff

September 2001

ORC Macro
Calverton, Maryland USA

Recommended citation:

Westoff, Charles F. 2001. *Unmet Need at the End of the Century.* DHS Comparative Reports No. 1. Calverton, Maryland: ORC Macro.

Contents

Preface

One of the most significant contributions of the MEASURE *DHS*+ program is the creation of an internationally comparable body of data on the demographic and health characteristics of populations in developing countries. The *DHS Analytical Studies* series and the *DHS Comparative Reports* series examine these data, focusing on specific topics. The principal objectives of both series are: to provide information for policy formulation at the international level, and to examine individual country results in an international context. Whereas *Comparative Reports* are primarily descriptive, *Analytical Studies* take a more analytical approach.

The *Analytical Studies* series comprises in-depth, focused studies on a variety of substantive topics. The studies are based on a variable number of data sets, depending on the topic under study. A range of methodologies is used, including multivariate statistical techniques. The topics covered are selected by MEASURE *DHS*+ staff in conjunction with the MEASURE *DHS*+ Scientific Advisory Committee and USAID.

It is anticipated that the *Analytical Studies* will enhance the understanding of significant issues in the fields of international population and health for analysts and policymakers.

Martin Vaessen
Project Director

Acknowledgments

The author would like to thank Luis Ochoa for a review of the manuscript, Judi Miller of the Office of Population Research, Princeton University for Secretarial assistance, Yonas Beka and Albert Themme for programming help, and Sidney Moore for editing.

Executive Summary

This report is a review of the extent of unmet need for family planning in 55 developing countries. Estimates are based on data from Demographic and Health Surveys (DHS) carried out in the last decade of the twentieth century. In 33 of the countries, more than one survey has been conducted, which permits the assessment of recent trends in unmet need. Levels and trends of unmet need among never-married women are documented for 14 of the 22 sub-Saharan countries. The report also extends the analysis of unmet need by disaggregating it by whether contraception was used in the past and by whether there is an intention to use a method in the future.

The total demand for family planning (the sum of current contraceptive prevalence and unmet need) averages 70 percent in Asia, Latin America, and North Africa and 44 percent in sub-Saharan Africa. In the first three, unmet need includes about one-third of women in Cambodia, Nepal, Pakistan, and Yemen and reaches its highest level (40 percent) in Haiti. The lowest levels of unmet need (6 to 7 percent) are evident in Vietnam, Colombia, and Brazil. The overall demand for family planning outside sub-Saharan Africa is for limiting rather than for spacing of births. In contrast, the demand in sub-Saharan Africa is primarily for birth spacing. (Kenya and South Africa are exceptions.) Unmet need in general is highest in Senegal, Togo, Comoros, Rwanda, and Uganda.

An analysis of the reasons for nonuse among women classified with an unmet need for family planning indicates that perceived lack of exposure to the risk of pregnancy is the principal explanation, followed by method-related problems and opposition to the practice of contraception.

Declines in unmet need are clearly evident in 23 of the 33 countries that had more than one DHS survey. In sub-Saharan Africa, the declines are found among women with some education, but in other regions, declines are also found among women with no formal education. Despite the declines, unmet need for family planning remains at significant levels for most of the countries included in this review and thus continues to be important for population and reproductive health policy.

1 Introduction

The main rationale for the study of unmet need is to estimate the potential unsatisfied demand for family planning (Casterline and Sinding, 2000). The measurement of unmet need has undergone various modifications although the fundamental concept has remained unchanged (Westoff and Ochoa, 1991; United Nations, 2000). In its basic form, the objective is to identify women who are currently exposed to the risk of unintended pregnancy but who are not using any method of contraception. In theory, these women either do not want any more births or want to postpone the next birth at least two more years—classified respectively as having an unmet need for limiting or an unmet need for spacing. Many expansions of this basic concept have been suggested over the years, for example, to take into account only modern method use, to include various health dimensions, and to include unmarried women, as well as various other refinements (Dixon-Mueller and Germain, 1992). The original measure of unmet need is used here partly for consistency and comparability with earlier work but also because the measure has held up well. We have continued the emphasis on currently married women but have also included estimates of unmet need for never-married women in sub-Saharan Africa. These estimates are based on an algorithm developed in the last DHS comparative report on unmet need (Westoff and Bankole, 1995).

2 Objectives

The objectives of this report on unmet need are threefold:

- To present a comparative picture of current unmet need and the demand for family planning in the developing world at the end of the century
- To evaluate recent trends in unmet need in countries that have conducted more than one DHS survey
- To extend the comparative analysis of unmet need to include the dimensions of past use of contraception and intention to use a method in the future.

The surveys included in this review are primarily those conducted after completion of the first phase of the Demographic and Health Surveys program (DHS-I). This is partly because the standard measure of unmet need was not developed until the second phase of the DHS program (DHS-II) in the early 1990s but also because the focus is on the most recent data on unmet need. In the section on trends, we have incorporated some estimates from DHS-I for countries that later conducted another DHS survey.

3 Current Levels of Unmet Need

Estimates of unmet need and current use of contraception (contraceptive prevalence) are shown in Table 3.1 for 55 countries that conducted DHS surveys in the 1990s, mostly in the last half of the decade. For each country, the two measures are shown both for spacing and for limiting. The total demand for family planning (Figure 3.1), defined as the sum of unmet need and contraceptive prevalence, is shown for both spacing and limiting components in Table 3.1. The ratio of prevalence to demand is the percentage of demand satisfied.

Asia

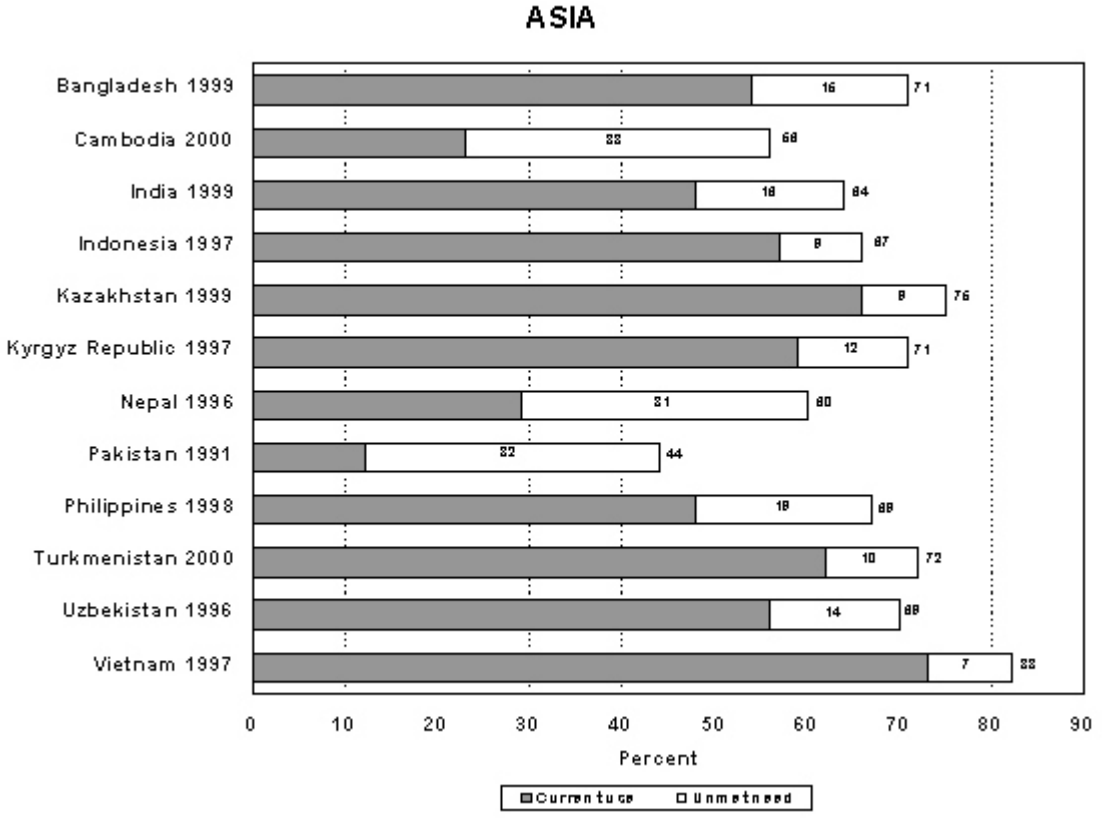
Unmet need in the 12 Asian countries ranges from a low of 6.9 percent in Vietnam to a high of 31.4 percent in Nepal, 31.8 percent in Pakistan, and 32.6 percent in Cambodia. It is important to understand that contraceptive prevalence is rising rapidly in most of the countries of the developing world and that for Pakistan in particular, the estimates are nearly ten years old. A more recent survey in Pakistan conducted in 1994-1995 (Population Council, Ministry of Population Welfare, and United Nations Population Fund, 1998) showed an increase in contraceptive prevalence to 18.2 percent from the 11.8 percent estimated in

Table 3.1 Demand for family planning and its components for currently married women in 55 developing countries, based on the most recent DHS survey in each country, 1990-2000

Country	Survey date	Unmet need			Current use of contraception			Demand for family planning[1]			Percentage of total demand satisfied
		Total	Spacing	Limiting	Total	Spacing	Limiting	Total	Spacing	Limiting	
ASIA											
Bangladesh	1999-2000	15.3	8.0	7.3	53.8	15.6	38.1	70.8	24.7	46.1	78.3
Cambodia	2000	32.6	17.4	15.2	23.8	9.4	14.4	56.4	26.8	29.6	42.2
India	1998-1999	15.8	8.3	7.5	48.2	3.5	44.7	64.0	11.8	52.2	75.3
Indonesia	1997	9.2	4.2	4.9	57.4	25.2	32.2	67.4	30.0	37.4	86.4
Kazakhstan	1999	8.7	3.6	5.1	66.1	23.0	43.0	75.2	26.9	48.3	88.5
Kyrgyz Republic	1997	11.6	4.5	7.2	59.5	26.3	33.3	71.2	30.7	40.5	83.6
Nepal	1996	31.4	14.3	17.1	28.5	2.6	25.9	59.9	16.9	43.0	47.6
Pakistan	1990-1991	31.8	16.3	15.4	11.8	2.1	9.8	43.6	18.4	25.2	27.2
Philippines	1998	18.8	8.2	10.6	47.8	13.1	34.7	69.5	23.6	45.9	73.0
Turkmenistan	2000	10.1	5.2	4.9	61.8	22.0	39.8	72.2	27.5	44.7	86.0
Uzbekistan	1996	13.7	6.6	7.0	55.6	20.2	35.4	69.3	26.8	42.4	80.3
Vietnam	1997	6.9	3.5	3.5	75.3	14.8	60.5	83.0	18.6	64.4	91.6
NEAR EAST/NORTH AFRICA											
Armenia	2000	11.3	2.1	9.3	60.5	11.8	48.7	73.1	14.6	58.5	84.5
Egypt	2000	11.2	3.6	7.6	56.1	11.4	44.7	68.2	15.4	52.9	83.6
Jordan	1997	14.2	7.4	6.8	52.6	18.2	34.3	71.3	28.9	42.3	80.1
Morocco	1995	16.1	6.3	9.8	50.3	17.2	33.1	69.4	25.1	44.3	76.8
Turkey	1998	10.1	3.8	6.3	63.9	14.3	49.6	75.6	19.0	56.6	86.6
Yemen	1997	38.6	17.2	21.4	20.8	7.2	13.6	59.4	24.4	35.0	35.0
LATIN AMERICA/CARIBBEAN											
Bolivia	1998	26.1	6.8	19.3	48.3	13.3	35.0	74.4	20.1	54.3	65.0
Brazil	1996	7.3	2.6	4.7	76.7	14.0	62.8	85.8	17.6	68.3	91.5
Colombia	2000	6.2	2.7	3.5	76.9	18.4	58.6	86.3	22.9	63.3	92.8
Dominican Rep.	1999	11.8	7.4	4.4	69.5	17.7	51.7	82.6	26.3	56.3	85.7
Guatemala	1998-1999	23.1	11.8	11.3	38.2	8.5	29.7	62.2	21.0	41.2	62.9
Haiti	2000	39.8	16.0	23.8	28.1	9.8	18.3	67.8	25.7	42.1	41.4
Nicaragua	1997-1998	14.7	6.3	8.4	60.3	15.9	44.4	76.4	23.2	53.2	80.7
Paraguay	1990-1991	15.0	8.8	6.2	48.4	23.6	24.8	66.3	35.0	31.3	77.4
Peru	2000	10.2	3.6	6.7	68.9	20.3	48.5	82.5	25.7	56.8	87.6
WEST AFRICA											
Benin	1996	25.7	17.2	8.6	16.4	11.3	5.1	42.1	28.5	13.7	38.9
Burkina Faso	1998-1999	25.8	19.0	6.8	11.9	9.0	2.8	37.7	28.0	9.7	31.5
Cameroon	1998	19.7	13.3	6.4	19.3	12.1	7.3	39.1	25.4	13.7	49.5
Central African Rep.	1994-1995	16.2	11.6	4.6	14.8	11.9	2.9	31.0	23.5	7.5	47.7
Côte d'Ivoire	1998-1999	27.7	20.0	7.6	15.0	10.0	5.0	42.7	30.1	12.6	35.2
Gabon	2000	28.0	19.9	8.0	32.7	24.0	8.7	60.7	43.9	16.8	53.9
Ghana	1998	23.0	11.2	11.8	22.0	12.3	9.7	45.0	23.5	21.5	48.8
Guinea	1999	24.2	16.0	8.2	6.2	3.6	2.6	30.4	19.6	10.8	20.5
Mali	1995-1996	25.7	20.1	5.7	6.7	4.3	2.5	32.5	24.3	8.1	20.7
Niger	1998	16.6	14.0	2.7	8.2	6.9	1.3	24.9	20.9	4.0	33.0
Nigeria	1999	17.5	12.9	4.6	15.3	9.1	6.2	32.8	22.0	10.8	46.7
Senegal	1997	34.8	25.5	9.4	12.9	8.0	4.9	47.8	33.5	14.3	27.1
Tchad	1996-1997	9.7	6.6	3.1	4.1	3.1	1.0	13.8	9.7	4.1	30.0
Togo	1998	32.3	21.4	10.9	23.5	14.6	8.9	55.8	36.0	19.8	42.1
EAST AND SOUTHERN AFRICA											
Comoros	1996	34.6	21.8	12.9	21.0	11.8	9.2	55.6	33.6	22.0	37.7
Eritrea	1995	27.5	21.4	6.1	8.0	5.7	2.2	35.4	27.1	8.3	22.4
Ethiopia	2000	23.1	14.1	9.0	5.9	2.8	3.1	29.0	16.9	12.1	20.4
Kenya	1998	23.9	14.0	9.9	39.0	13.4	25.6	64.8	28.9	35.9	63.2
Madagascar	1997	25.6	14.1	11.4	19.4	7.9	11.6	45.0	22.0	23.0	43.2
Malawi	2000	29.7	17.2	12.5	30.6	12.7	17.9	60.3	29.9	30.4	50.8
Mozambique	1997	6.7	5.3	1.5	7.3	4.4	2.8	14.0	9.7	4.3	51.9
Namibia	1992	21.9	14.9	6.9	28.9	11.2	17.7	50.7	26.1	24.6	56.9
Rwanda	2000	35.6	24.0	11.6	13.2	7.3	5.9	48.8	31.3	17.5	27.1
South Africa	1998	15.0	4.7	10.3	56.3	14.4	41.8	71.2	19.1	52.1	79.0
Tanzania	1999	21.8	13.8	8.0	25.4	15.1	10.3	47.2	28.9	18.3	53.7
Uganda	2000	34.6	20.7	13.9	22.8	11.2	11.6	57.3	31.9	25.5	39.7
Zambia	1996-1997	26.5	18.7	7.8	25.9	15.8	10.0	52.4	34.5	17.9	49.4
Zimbabwe	1999	12.9	7.3	5.6	53.5	29.4	24.1	68.2	38.0	30.2	81.0

[1] "Total demand" includes pregnant or amenorrheic women who became pregnant while using a method. In most of the sub-Saharan countries, this information was not collected.

Figure 3.1 Demand for family planning in 55 developing countries, Demographic and Health Surveys, 1991-2000



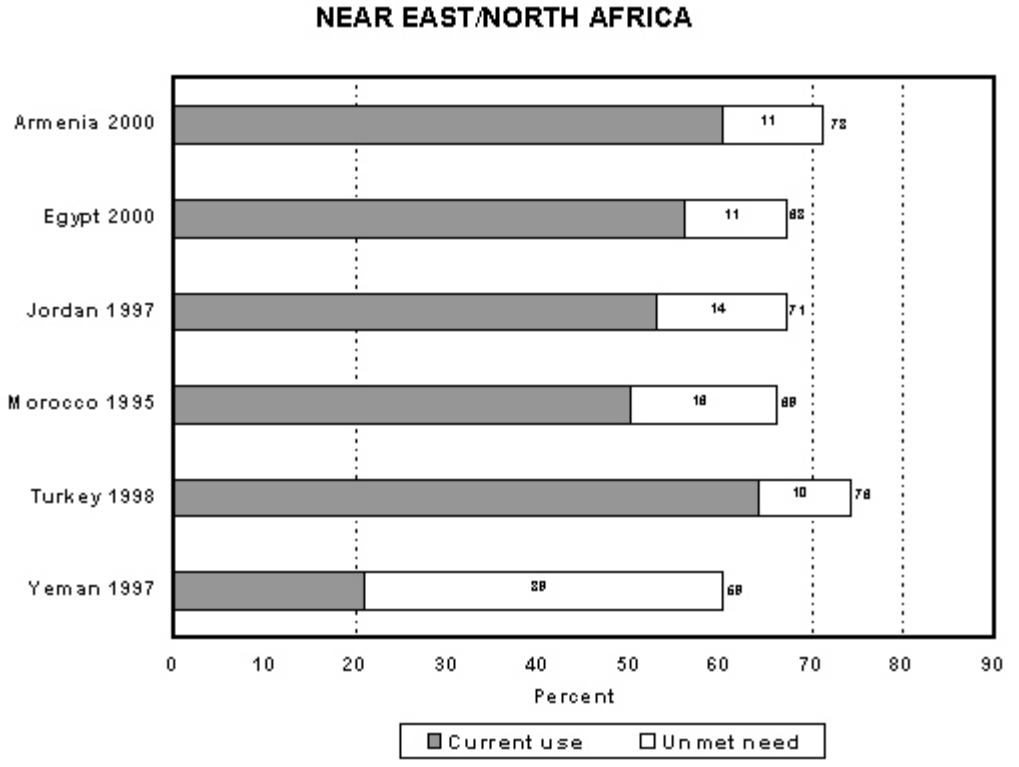
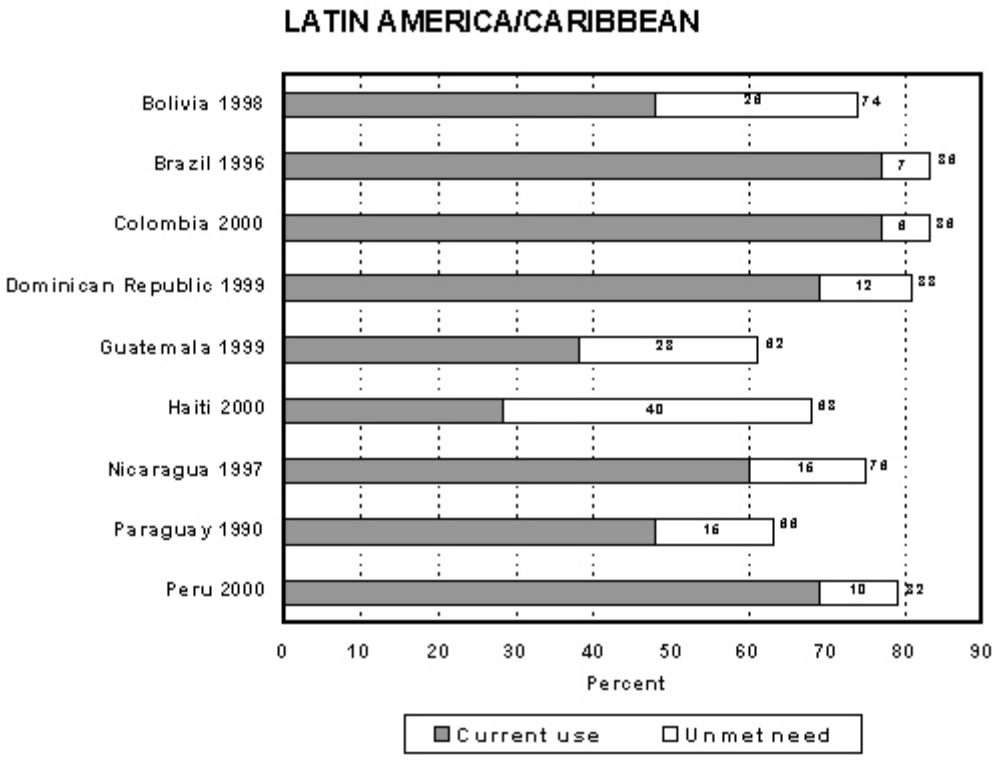


Figure 3.1—*Continued*



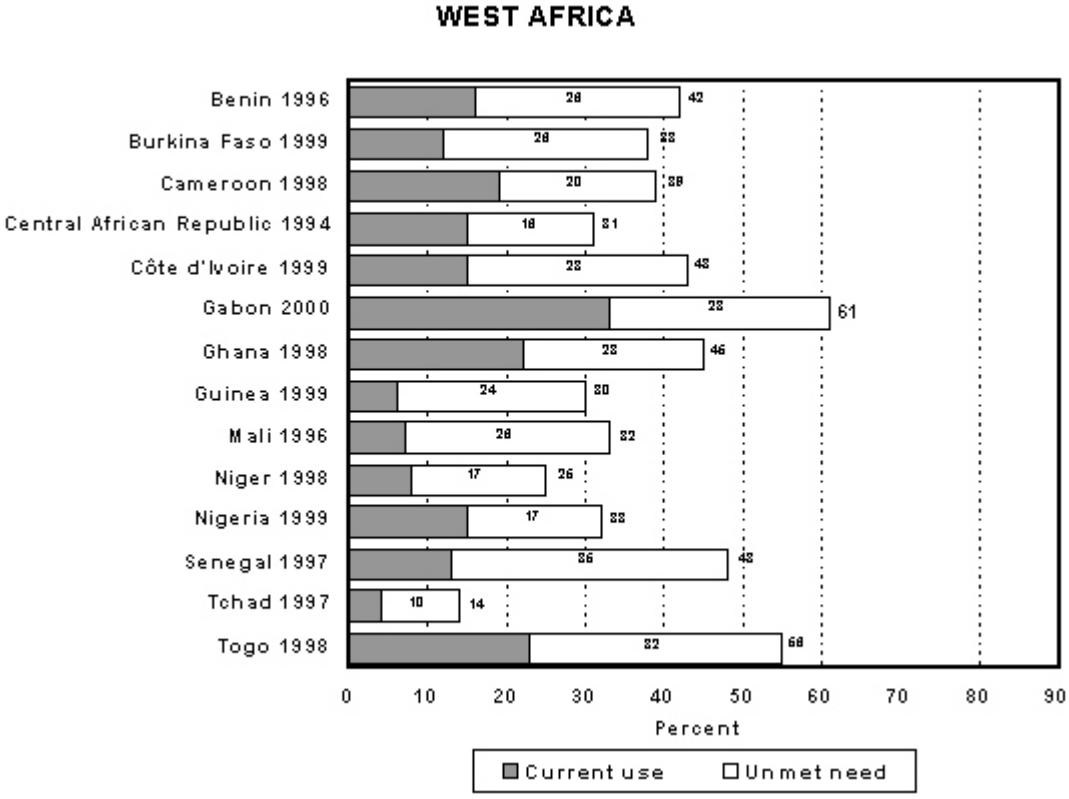
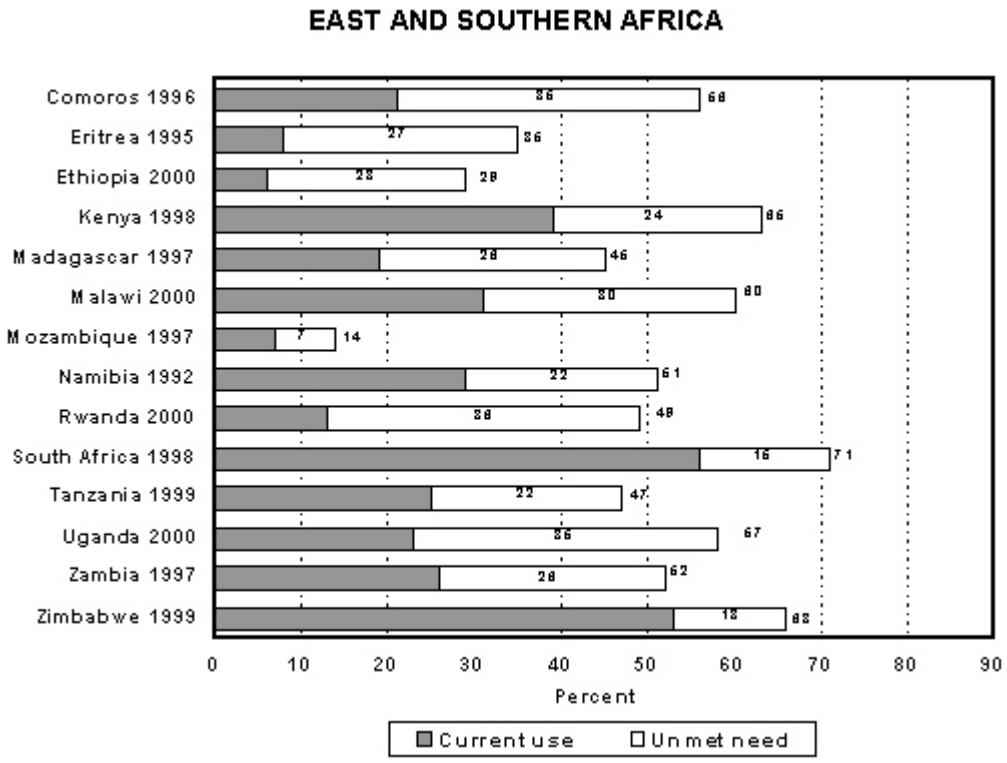


Figure 3.1—*Continued*



1990-1991. It is undoubtedly higher now. Although there may be some differences in measurement in the two surveys, unmet need in Pakistan also increased (to 36.7 percent), which might be expected if the increase in demand for fertility regulation exceeded the availability of acceptable contraception. The percentage of demand satisfied estimated from the Pakistan DHS survey was only 27 percent. The highest level was in Colombia at 93 percent, which was paralleled only by Vietnam and Brazil among the countries included in this review.

There is a striking similarity between India and Bangladesh in these measures. Both countries show the same level of unmet need and close to the same level of contraceptive prevalence with the result that both have a similar proportion of total demand satisfied. The one difference is that India with its heavy reliance on sterilization (36 percent compared with 9 percent in Bangladesh) shows more contraceptive use for limiting purposes. The central Asian countries, also show similar overall rates; the total demand for family planning in these countries ranges from 69 to 75 percent. Contraceptive use and the demand for limiting exceed the demand for spacing in all of the Asian countries although unmet need for spacing is about the same magnitude as that for limiting.

Near East and North Africa

There are six countries in this geographic grouping in which DHS surveys have been completed (Table 3.1). Yemen, with 38.6 percent in the total unmet need category, is a conspicuous outlier. Contraceptive prevalence in Yemen is 20.8 percent, and the total demand satisfied is only 35 percent. At the opposite extreme is Turkey, which is partly in Europe, with an unmet need of 10.1 percent and with 86.6 percent of its total demand for family planning satisfied. According to the latest survey in Egypt in 2000 and a new survey in Armenia, unmet need in those countries is now at a level similar to Turkey. Unmet need and contraceptive prevalence are similar in Morocco and in Jordan. In all six countries, the demand for limiting births is significantly higher than the demand for spacing.

Latin America and the Caribbean

In the year 2000, Haiti showed the highest level of unmet need among all 55 countries in this review—just below 40 percent. Only 41 percent of total demand for family planning in Haiti was satisfied. Although less extreme, Bolivia and Guatemala also show high levels of unmet need—26.1 and 23.1 percent, respectively, with slightly less than two-thirds of their total demand satisfied. The Dominican Republic and Peru have similar percentages in the various categories. Brazil and Colombia are the furthest along in the fertility transition and show the lowest unmet need and the highest proportion of demand satisfied in the group. Contraceptive prevalence is comparatively low in Paraguay, but it should be remembered that the survey in that country was conducted in 1990, and there have undoubtedly been changes. As in the other regions described above, contraceptive use for limiting births consistently exceeds use for birth spacing. This pattern is not consistent for unmet need, however.

Sub-Saharan Africa

There are 28 countries in this region, equally divided between West Africa and southern and East Africa, that completed at least one DHS survey in the 1990s. The two regions are very different in terms of contraceptive prevalence and overall demand for family planning. In West Africa, only 3 countries—Gabon, Ghana, and Togo—show contraceptive prevalence over 20 percent, while in southern and East Africa 9 of 14 countries exceed this level. In West Africa, only Gabon and Togo have a total demand exceeding 50 percent, with Senegal close to this level; in southern and East Africa, 8 countries fall in this category. The percentage of demand satisfied ranges from a low of about 20 percent in Guinea and Mali to a high of about 80 percent in South Africa and Zimbabwe.

Unmet need is highest, reaching approximately one-third of all married women, in five countries: Senegal, Togo, Comoros, Rwanda, and Uganda. The lowest levels are seen in Mozambique and Tchad, countries in which the trend toward lower fertility has lagged behind the other countries and where the total demand for family planning is only 14 percent. Low levels of unmet need are also evident in countries that have effectively satisfied the demand for family planning, such as Zimbabwe and South Africa.

Unlike the other regions, interest in family planning in sub-Saharan Africa is focused on spacing rather than limiting births. The total demand for spacing is greater than the demand for limiting in all but a few of the countries. The major exceptions are South Africa, where 73 percent of demand is for limiting, and Kenya, where the demand for limiting is 55 percent. Excluding these two countries, the average demand for spacing comprises close to two-thirds of the total demand for family planning. Why is spacing the dominant emphasis in sub-Saharan Africa in contrast to the rest of the developing world? Perhaps the more fruitful way to pose this question is to ask why there is comparatively less interest in limiting births in sub-Saharan Africa. From this perspective, the explanation can be found in why the small-family norm has not yet emerged in most of these countries. It is the familiar litany of differences in development, in education, in the status of women, and in exposure to the mass media. In sub-Saharan Africa, however, concern about maternal and child health makes women more receptive to the idea of using contraception to increase the length of birth intervals. Organized family planning programs have been more successful in appealing to this concern than to concerns for economic self-interest that underly the appeals of family planning programs in other regions.

The positive health effects of prolonging birth intervals have been documented in other studies (Bicego and Ahmad, 1996; Hobcraft, McDonald and Rutstein, 1985; Rafalimanana and Westoff, 2001). The implications for rates of fertility are less certain (Greene, 1998). It is clear that the use of contraception to limit family size is the main avenue to fertility decline.

4 Trends in Unmet Need

A considerable number of countries in the DHS program have conducted more than one survey. These data can be used for the analysis of trends in the proportion of women with an unmet need for family planning. In this review, we include estimates from DHS-I despite some minor differences in the evolving measure of unmet need. The trends are shown in Figure 4.1 with a separation by spacing and limiting need. The overall trend is clearly a reduction in unmet need. When one considers the short intervals between surveys, some of the reductions are impressive—from 16 to 9 percent in Kazakhstan in less than 5 years, from 25 to 11 percent in Egypt in 11 years, and from 22 to 14 percent in Jordan in 7 years. In Bolivia, the decline over 9 years was from 36 to 26 percent; in 14 years in Peru, unmet need dropped from 28 to 10 percent. In sub-Saharan Africa, the greatest declines were in Ghana, with a decline from 35 to 23 percent in 10 years (all of the decline was in the need for spacing component);[1] in Kenya, with a decline from 38 to 24 percent in 10 years; and in Zimbabwe, with a drop from 22 to 9 percent in 10 years. The trend in most of the remaining countries is in the same direction although less dramatic. In Guinea, Mali, Senegal, and Uganda, however, there is no indication yet of a reduction in unmet need, and in several other sub-Saharan African countries, only slight reductions are evident so far. In most of the countries with declines in unmet need, the trend is seen for both the limiting and the spacing components. It is important to recognize that the evidence for these declines in sub-Saharan Africa is only from the last decade. In an earlier study of such trends that also included estimates of unmet need (for limiting births) from the 1980s with a few surveys included from the 1970s based on World Fertility Survey data, sharp increases in unmet need were observed in contrast to other regions of the world. The observation then was that "unmet need is a moving target rising in the early stages of the fertility transition as interest in family limitation grows and declining in the later stages when family planning is adopted" (Westoff and Bankole, 2000). However, even though the proportion of women with an unmet need for family planning is diminishing, the continuing population increase can significantly offset the relative decline.

4.1 Trends in Unmet Need by Level of Education

It is important to determine whether the general decline in unmet need is uniform across educational categories (Figure 4.2). Since the adoption of family planning has typically been led by the more educated population, it is particularly important to monitor trends in the less educated segments.

[1] In a special report on unmet need in Ghana (Govindasamy and Boadi, 2000), a more liberal definition was used that increased the unmet need for spacing from 11 to 22 percent. This difference increased the estimated total unmet need from 23 to 33 percent and led to the conclusion that unmet need in Ghana was really unchanged over the decade. It is clear that the unmet need for limiting has not declined; the difference relates only to the unmet need for spacing.

Figure 4.1 Trends in unmet need for family planning among currently married women, Demographic and Health Surveys, 1986-2000

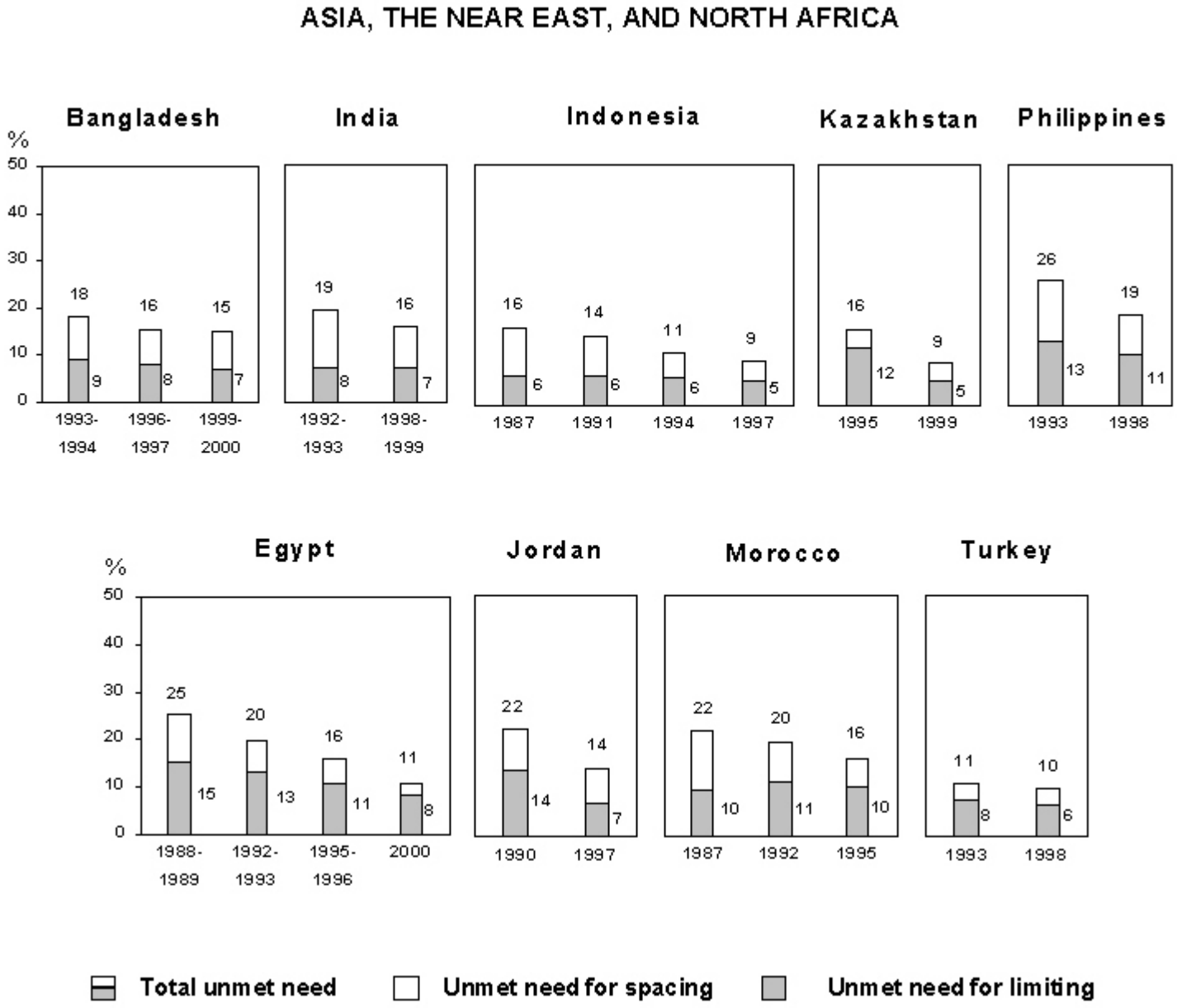


Figure 4.1—*Continued*

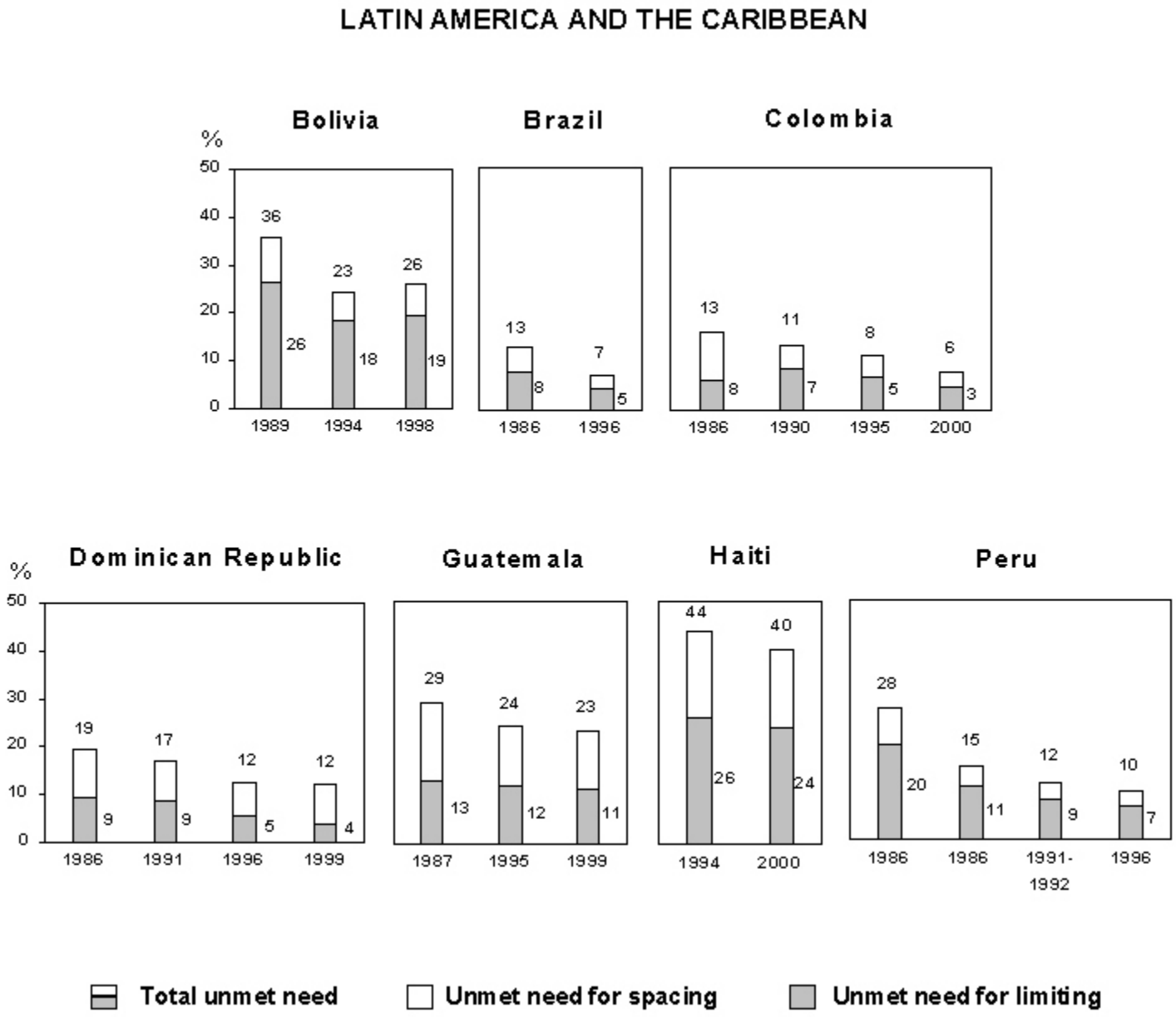


Figure 4.1—*Continued*

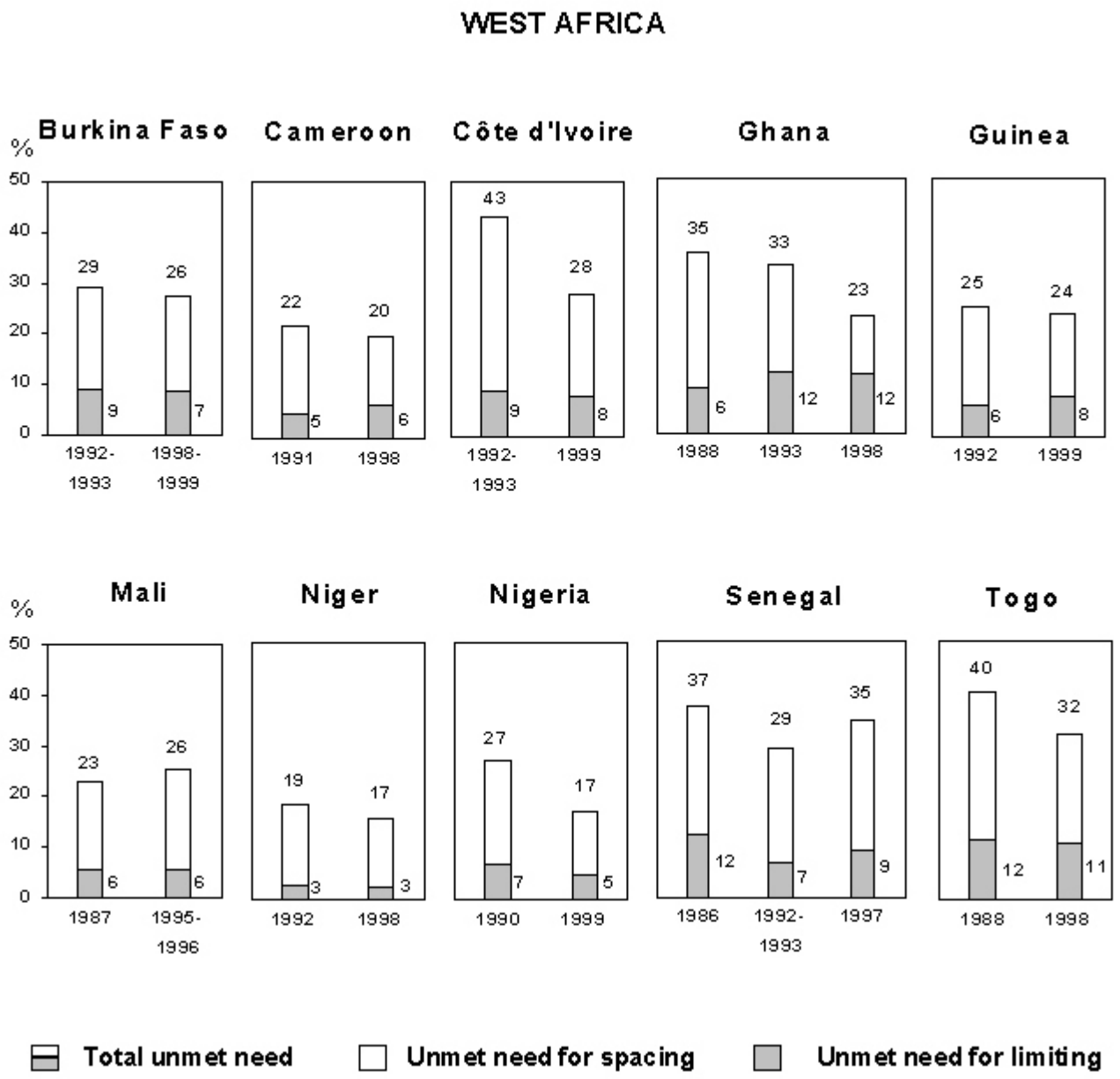


Figure 4.1—*Continued*

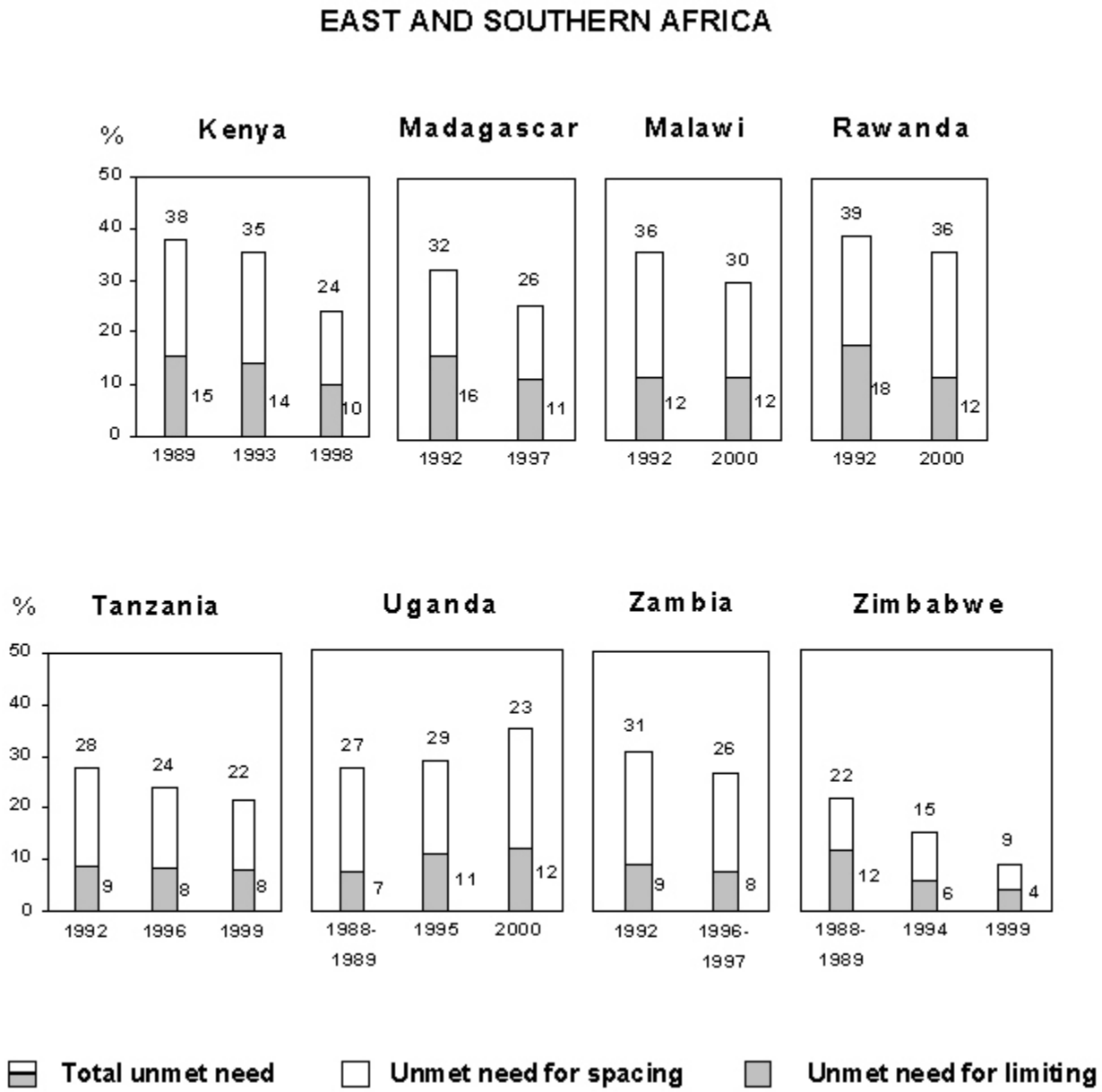


Figure 4.2 Trends in unmet need for family planning (percent) among currently married women by level of education, Demographic and Health Surveys, 1986-2000

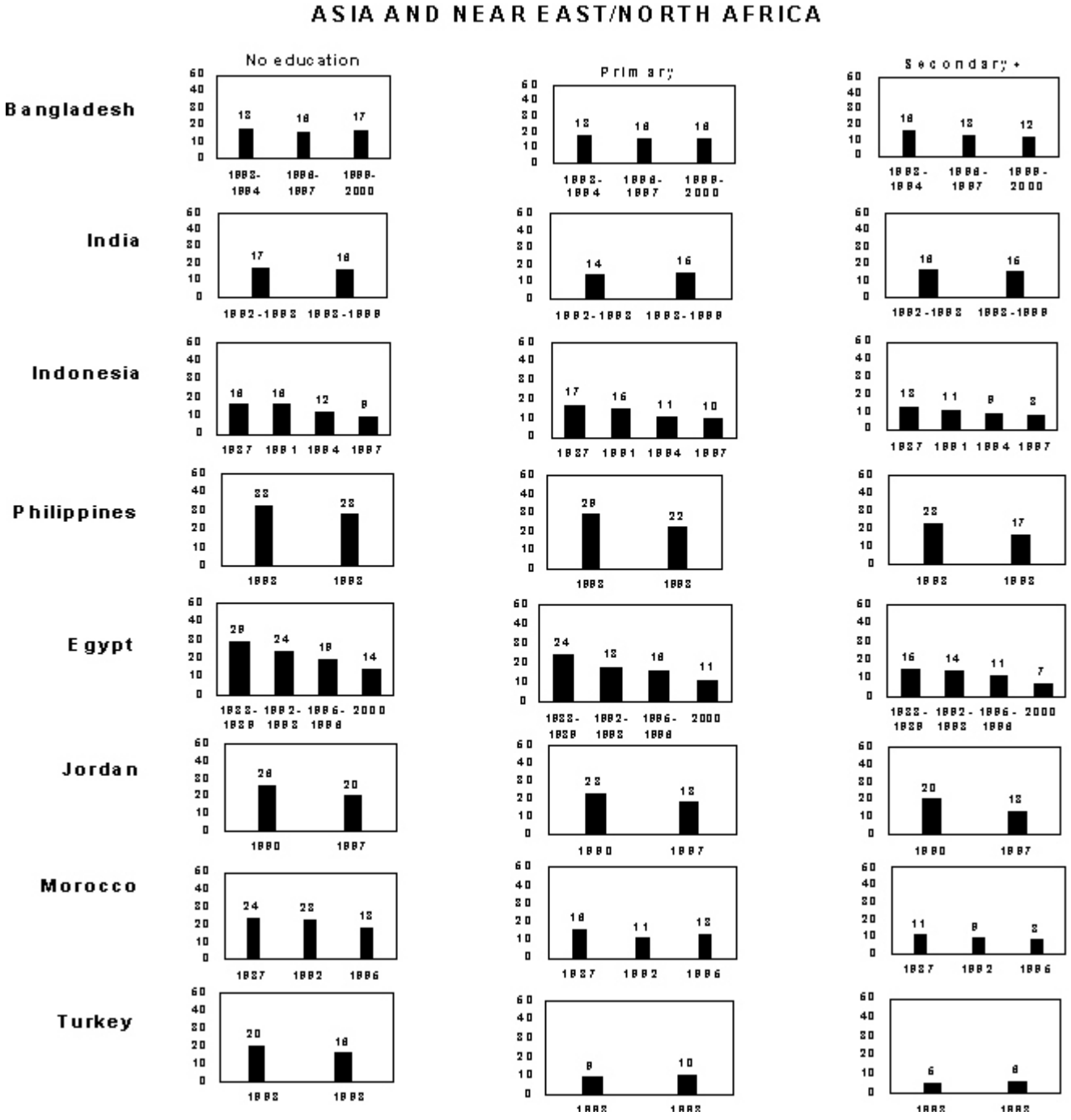


Figure 4.2—*Continued*

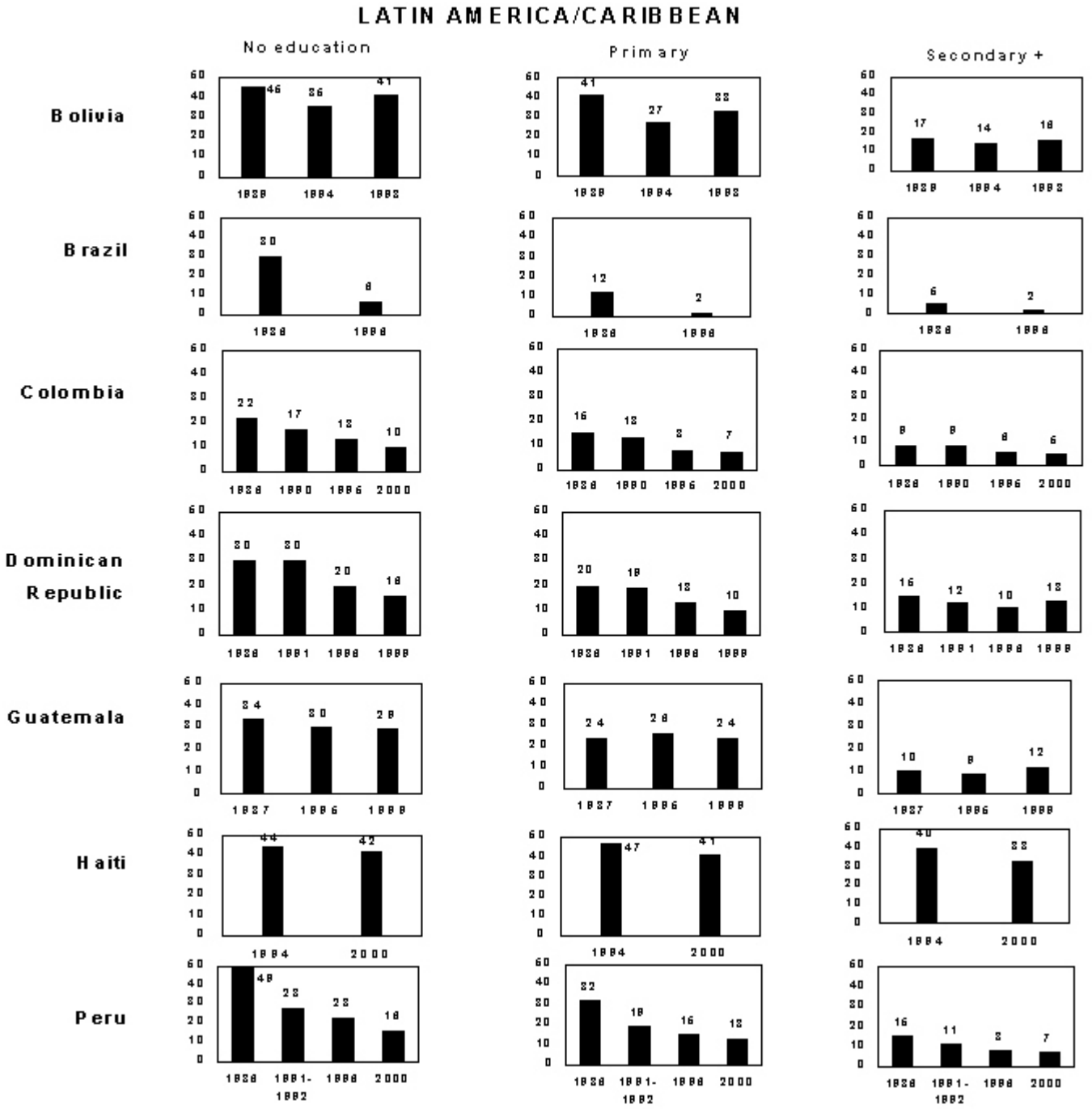


Figure 4.2—*Continued*

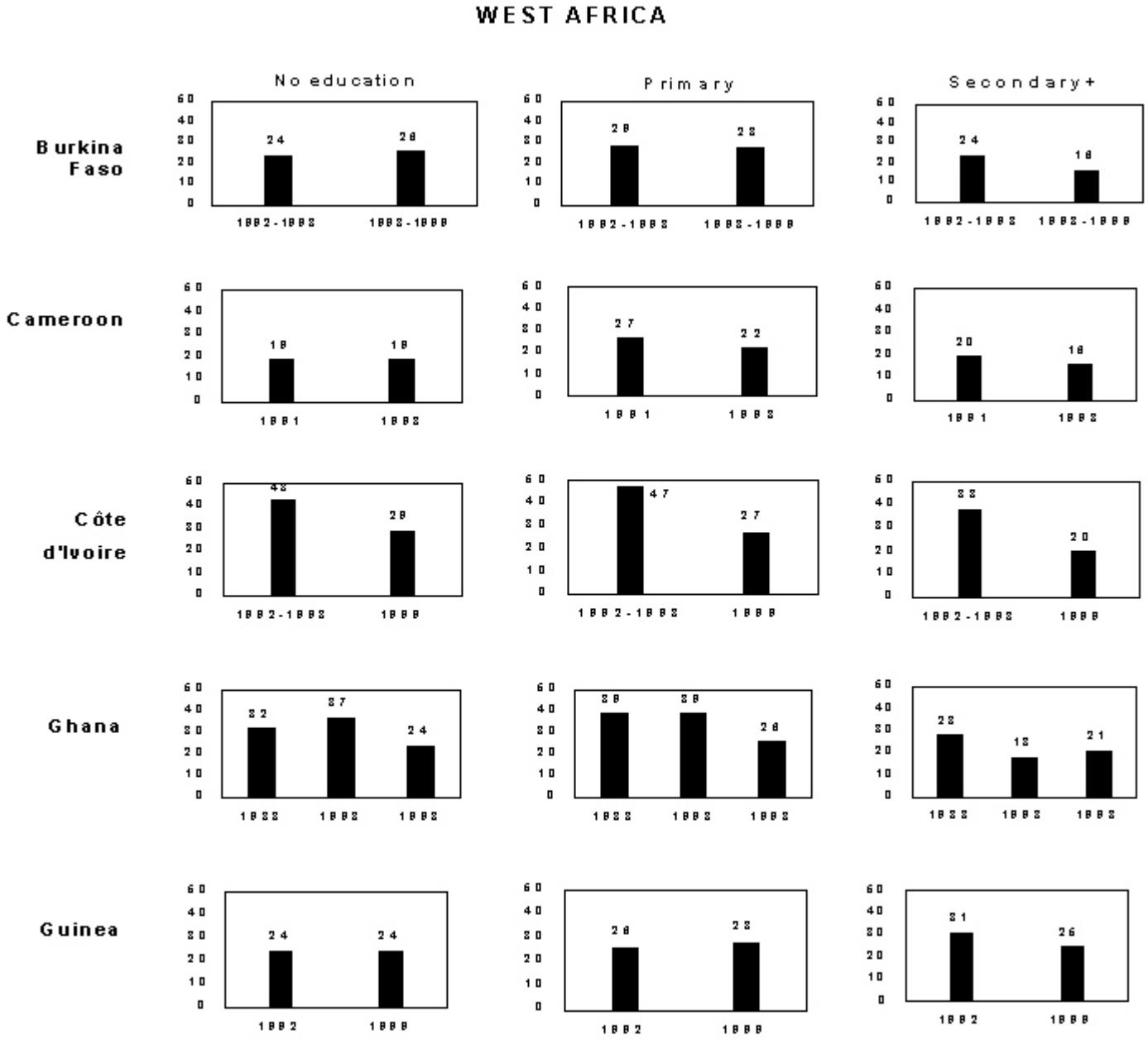


Figure 4.2—*Continued*

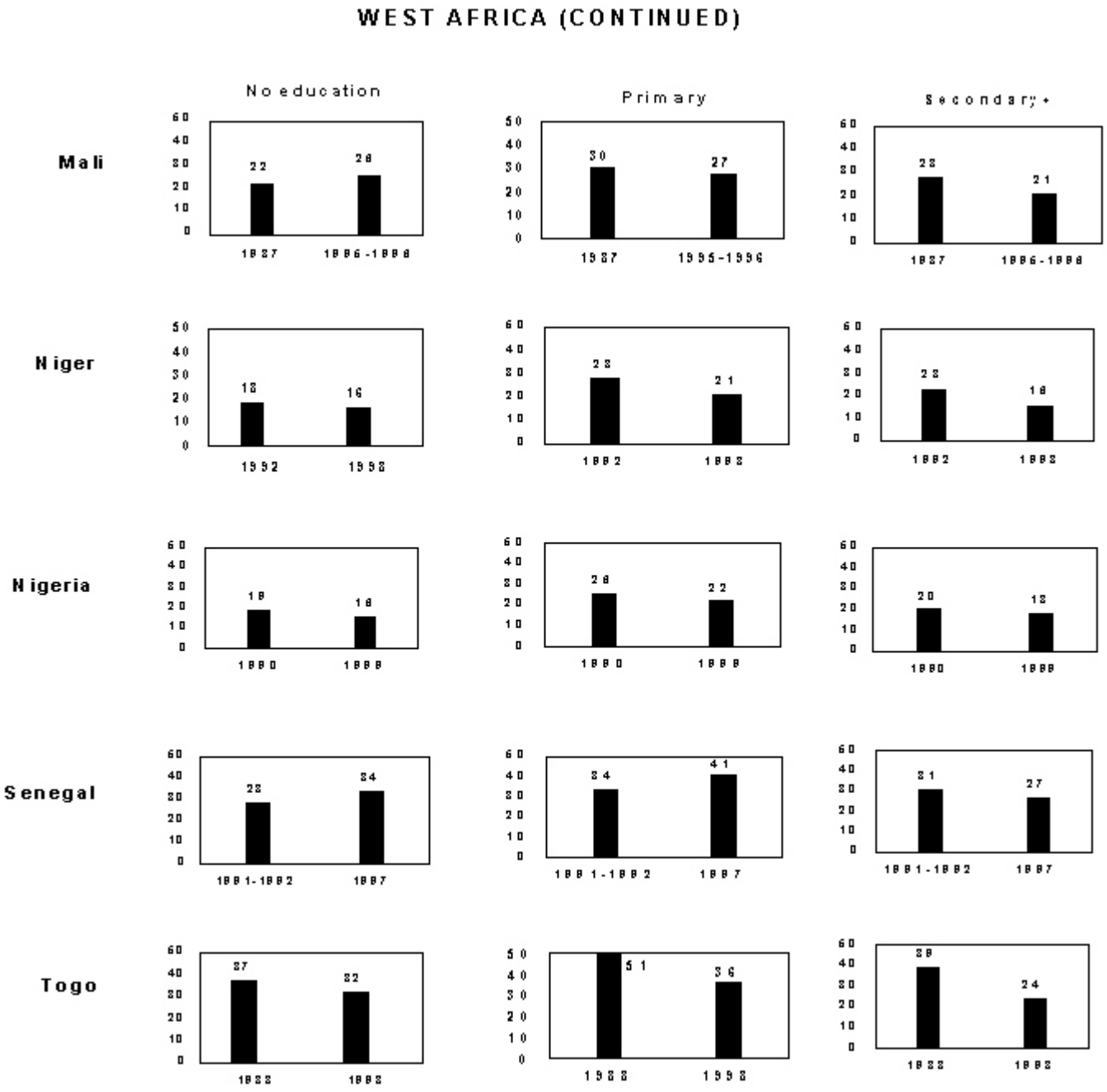
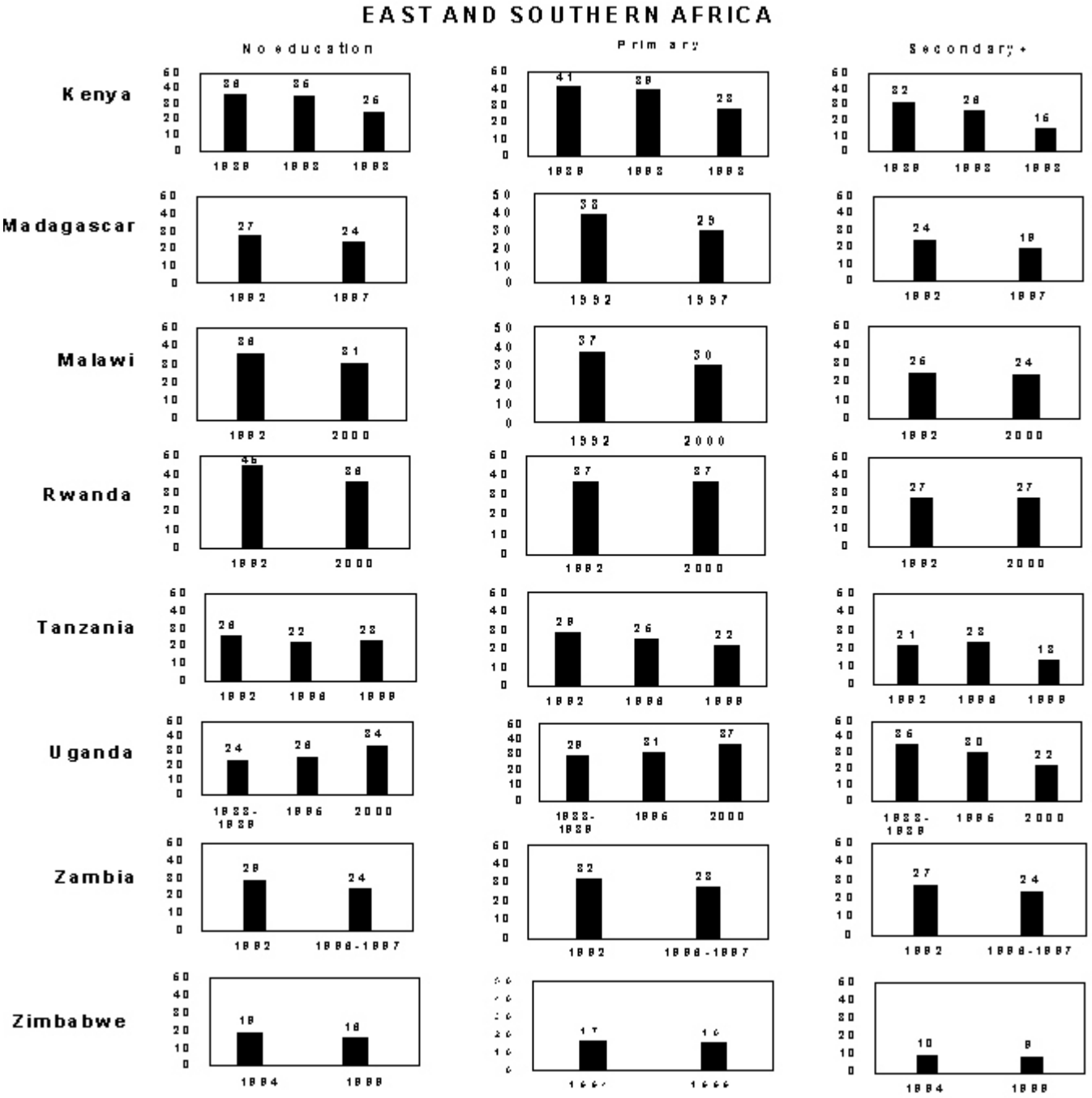


Figure 4.2—*Continued*



In the Asia and Near East/North Africa region, with the exception of Bangladesh and India, where there has been little recent change (the interval between surveys in Bangladesh is only three years), and Turkey, which had already reached a low level of unmet need in populations with some education, the downward trend is evident in all three educational categories. Although unmet need remains highest among women with no formal education and lowest among those with secondary and higher education, there are strong indications that this educational differential will disappear in the foreseeable future.

The general picture is the same in the Latin America/Caribbean region. The most dramatic declines in unmet need are in Brazil, where among women with no education, the level of unmet need dropped from 30 to 6 percent between 1986 and 1996. In 1996, unmet need among Brazilian women with primary or secondary and higher education was only 2 percent. Given that less than 7 percent of Brazilian women reported no education in 1996, the overall amount of unmet need in that country must be approaching zero. Among other countries in the region, the educational differential in unmet need still persists. In Peru, unmet need between 1986 and 1996 was cut in half at all three educational levels. In Colombia, unmet need among women with no education declined from 22 percent in 1986 to 10 percent in 2000. The proportions have also been cut in half in the other two educational groupings. In contrast, unmet need among women with less than a secondary education remains at a very high level in Bolivia, Guatemala, and Haiti. In Haiti, unmet need is high (33 percent) even among women with more than a primary education, although it has declined from 40 percent in 1994.

With several exceptions, the decline of unmet need in sub-Saharan Africa has occurred mainly among the minority of women with some formal schooling. Côte d'Ivoire, Ghana, Togo, Kenya, Rwanda, Zambia, and Zimbabwe are the main exceptions where declines in unmet need are also evident in the uneducated segment of the population. In general, the strong educational differential apparent in Asia and Latin America has not yet emerged in most of the sub-Saharan countries included here.

5 Unmet Need among Past Users and Future Users

Not all unmet need is the same. There is the important distinction between unmet need for spacing and unmet need for limiting births. The latter is clearly more serious both for the woman who is exposed to the risk of an unwanted birth and for the level of fertility itself. In addition to the spacing/limiting dimension, nonusers in need of family planning can also be distinguished by their past experience with contraception and by their intention to use a contraceptive method in the future. A study based on women interviewed in the Morocco DHS survey in 1992 and reinterviewed in 1995 demonstrates that information on these two indicators is highly predictive of subsequent family planning behavior (Curtis and Westoff, 1996). Of Moroccan women with an unmet need in 1992 who had never used a method and who did not intend to use one in the future, 22 percent reported using a method in the following three years. At the opposite extreme, 77 percent of those who had used a method and who intended to resume use actually became users in the intervening three years. In the two intermediate categories, 56 percent of never-users who intended to use became users, as did 62 percent of past users who did not intend to use.

5.1 Never-Users Who Do Not Intend to Use

Of these four possible combinations of past use and intention to use, the most challenging segment of unmet need is for the group of women who have never used contraception and who report that they have no intention to use it in the future. If the Moroccan experience is at all representative of the rest of the world, some of these women—about one-quarter—will change their mind and become users, but the category is clearly the most difficult from a program point of view. There are dramatic variations across countries[2] in

[2] Not all of the countries or all of the most recent surveys in Table 3.1 are represented in this analysis because of data access problems at the time this work was completed.

the proportion of women with this kind of unmet need (column one Table 5.1). The countries with the highest proportions of unmet need of this type, about 50 percent or greater, include India, Pakistan, Egypt, Yemen, Guatemala, Eritrea, Mozambique, Niger, and Tchad. The countries with the lowest proportions, under 10 percent, are Kazakhstan, the Kyrgyz Republic, Morocco, Brazil, and Colombia. For the most part (Egypt and Morocco are exceptions), the same patterns are evident for the composition of unmet need for limiting as for total unmet need (not shown). In general, countries with large concentrations of unmet need from never-users who do not intend to use are those with the highest overall levels of unmet need and those that rank among the least developed nations. The average proportion in this subcategory of unmet need is 31 percent for the sub-Saharan countries, 22 percent for the Latin American countries, and 30 percent for the Asian countries and other regions.

These women with an unmet need who have never used contraception and do not intend to use any method not only potentially require contraceptive information and supplies but also pose a difficult motivational challenge for program planners. How do these women differ from women in the other categories of unmet need? What are their principal reasons for not intending to use a method despite their exposure to the risk of an unintended pregnancy?

Women in this subcategory of unmet need are most likely to live in rural areas and are clearly the least educated of the four categories. They have the highest ideal number of children and the lowest proportion of women reporting their last birth as unwanted. They are also the least likely to have been exposed to family planning messages on radio or television.

For all women classified in the unmet need category who reported that they did not intend to use a method in the future, the main reason for this attitude was probed in the interview. For the women in sub-Saharan Africa who had never used a method in the past, the principal reason for not intending future use was opposition to the use of contraception, which includes religious reasons for some and husband's opposition for others as well as the woman's own feelings. For 25 countries in this region, various forms of opposition to use collectively averaged 30 percent of the reasons for not intending to use. The other major reasons were wanting more children (an average of 26 percent) and lack of knowledge of methods or where to obtain them (an average of 18 percent). There is enormous variation across countries in which reasons are cited; for example, lack of knowledge ranges from less than 1 percent in Comoros to nearly 40 percent in Tchad. Other countries with high proportions reporting ignorance of methods or sources are Burkina Faso, Cameroon, Madagascar, Eritrea, and Uganda (Ethiopia would probably fall in this category, but the data were not yet available). Similarly, opposition to the idea of contraception ranges from 5 percent in Malawi to 57 percent in Zimbabwe among women in this subcategory of unmet need. Other reasons for not intending future use were much lower. Fear of side effects appeared in a few countries—Haiti with the highest (35 percent) with Comoros, Ghana, and Kenya recording about 20 percent—but considerations of cost, convenience, or health were negligible in sub-Saharan Africa. Lack of exposure to risk (infrequent sex or problems of infecundity) accounted for an average of 7 percent of the responses.

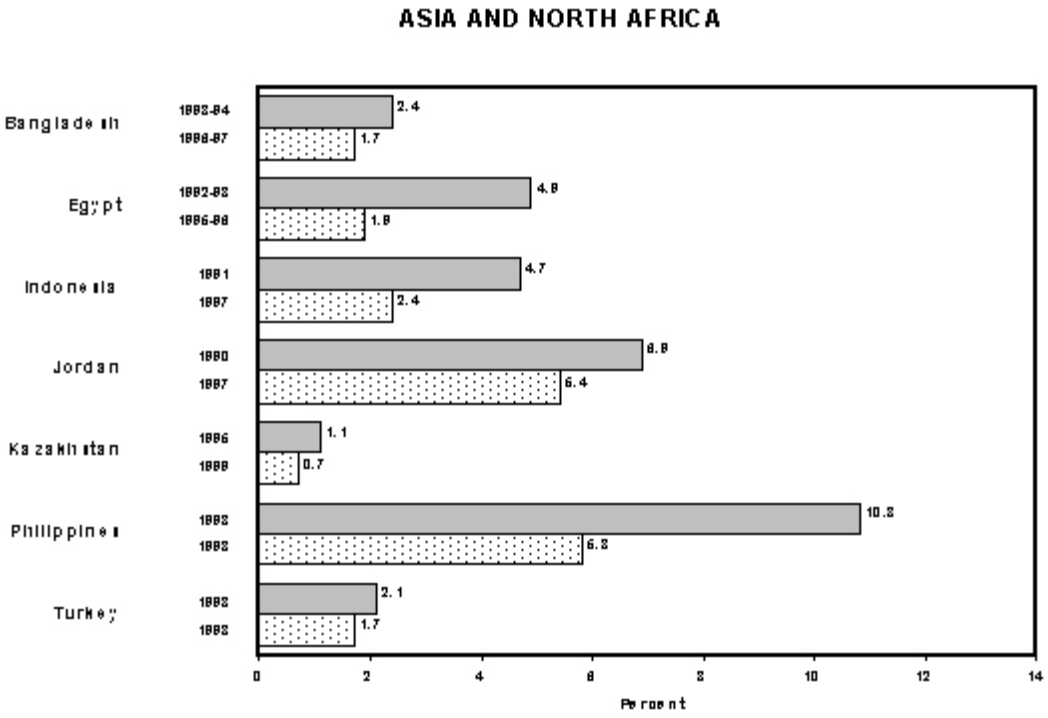
In the other region, various forms of opposition to contraceptive use are the principal reason for not intending to use among women with unmet need who have never used a method. In most countries except Bolivia, Guatemala, and Peru, ignorance of contraception is a minor reason for not using family planning, and as in Africa, cost and convenience seem not to be important explanations for intended nonuse. In India, wanting more children dominates, including specific references to having a son. Fear of side effects appears in a few countries as a moderately important reason.

Regardless of the reasons for not intending to use a method, the evidence indicates that the percentage of women in this category is declining over time. Figure 5.1 shows that the proportion of currently married women who are classified in the unmet need category *and* who have never used contraception *and* who do not intend to use a method in the future is declining in all but two of the 22 countries in which this trend is reviewed (Bolivia and Burkina Faso).

Table 5.1 Past use and intention to use a contraceptive method, among currently married women with an unmet need for family planning, Demographic and Health Surveys, 1990-1999

		Women with unmet need for family planning				
		Never used		Used in the past		
Country	Survey date	Does not intend to use	Intends to use	Does not intend to use	Intends to use	Total
ASIA						
Bangladesh	1996-1997	10.8	31.2	8.0	50.0	100.0
India	1992-1993	53.7	29.9	7.8	8.5	100.0
Indonesia	1997	26.7	16.7	26.4	30.2	100.0
Kazakhstan	1999	8.5	12.4	26.6	52.4	100.0
Kyrgyz Rep.	1997	2.3	21.5	29.2	47.0	100.0
Nepal	1996	19.8	58.2	4.7	17.3	100.0
Pakistan	1990-1991	65.3	16.8	8.7	9.1	100.0
Philippines	1998	31.1	22.5	16.6	29.8	100.0
Uzbekistan	1996	34.9	22.8	20.9	21.4	100.0
NEAR EAST/NORTH AFRICA						
Egypt	1995-1996	49.7	39.1	4.7	6.5	100.0
Jordan	1997	10.9	25.6	14.4	49.1	100.0
Morocco	1992	3.0	20.9	14.8	34.3	100.0
Turkey	1998	16.4	25.1	17.7	40.8	100.0
Yemen	1997	53.3	16.0	14.9	15.7	100.0
LATIN AMERICA/CARIBBEAN						
Bolivia	1998	33.2	27.0	9.8	30.1	100.0
Brazil	1996	8.1	16.6	15.8	59.6	100.0
Colombia	1995	6.8	21.9	9.5	61.8	100.0
Dominican Rep.	1996	10.8	23.2	12.6	53.4	100.0
Guatemala	1999	48.2	29.1	5.3	17.4	100.0
Haiti	1994-1995	17.5	35.6	15.1	31.8	100.0
Nicaragua	1997-1998	17.1	30.1	10.1	42.7	100.0
Paraguay	1990	38.3	22.4	13.2	26.2	100.0
Peru	1996	19.7	32.1	10.1	38.1	100.0
SUB-SAHARAN AFRICA						
Benin	1996	25.1	35.9	10.0	29.0	100.0
Burkina Faso	1998-1999	33.2	47.9	4.0	15.0	100.0
Cameroon	1998	33.0	21.0	10.9	35.1	100.0
Central African Rep.	1994-1995	14.9	41.9	8.2	35.0	100.0
Comoros	1996	30.4	30.0	11.3	28.3	100.0
Côte d'Ivoire	1994	32.0	35.5	7.3	25.2	100.0
Eritrea	1995	49.7	39.1	4.7	6.5	100.0
Ghana	1998	27.2	27.1	14.8	30.8	100.0
Guinea	1999	35.4	50.9	2.7	11.0	100.0
Kenya	1998	14.7	41.8	6.8	36.7	100.0
Madagascar	1997	29.0	51.3	6.6	13.1	100.0
Malawi	1992	19.1	40.1	9.4	31.4	100.0
Mali	1995-1996	35.6	46.8	3.6	14.1	100.0
Mozambique	1997	49.6	34.4	4.8	11.2	100.0
Namibia	1992	37.0	18.7	16.5	27.8	100.0
Niger	1998	47.8	29.0	7.9	15.4	100.0
Nigeria	1999	52.4	21.0	11.1	15.5	100.0
Rwanda	1992	17.2	49.2	5.1	28.6	100.0
Senegal	1997	40.4	38.6	4.7	16.2	100.0
Tanzania	1996	27.2	42.8	6.9	23.1	100.0
Tchad	1996-1997	62.1	29.4	4.3	4.2	100.0
Togo	1998	13.7	23.1	17.7	45.5	100.0
Uganda	1995	18.6	49.8	5.8	25.8	100.0
Zambia	1996-1997	9.5	33.8	9.3	47.4	100.0
Zimbabwe	1999	12.0	13.9	14.0	60.1	100.0

Figure 5.1 Trends in the percentage of currently married women with unmet need for family planning who have never used and who do not intend to use a contraceptive method, Demographic and Health Surveys, 1990-2000



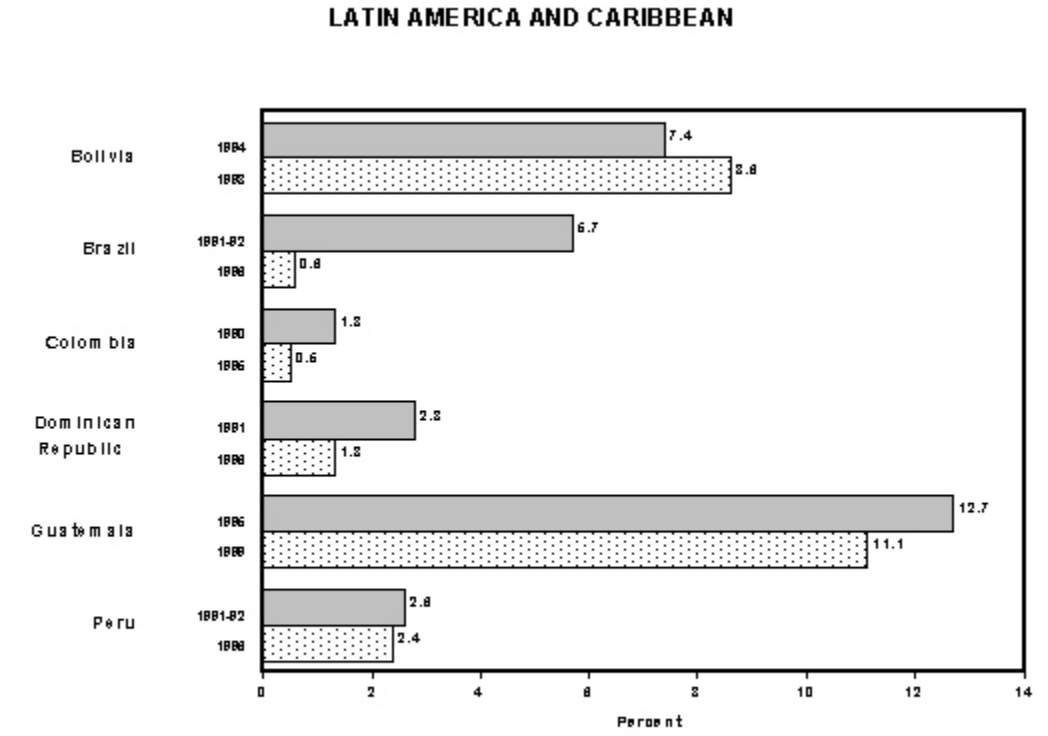
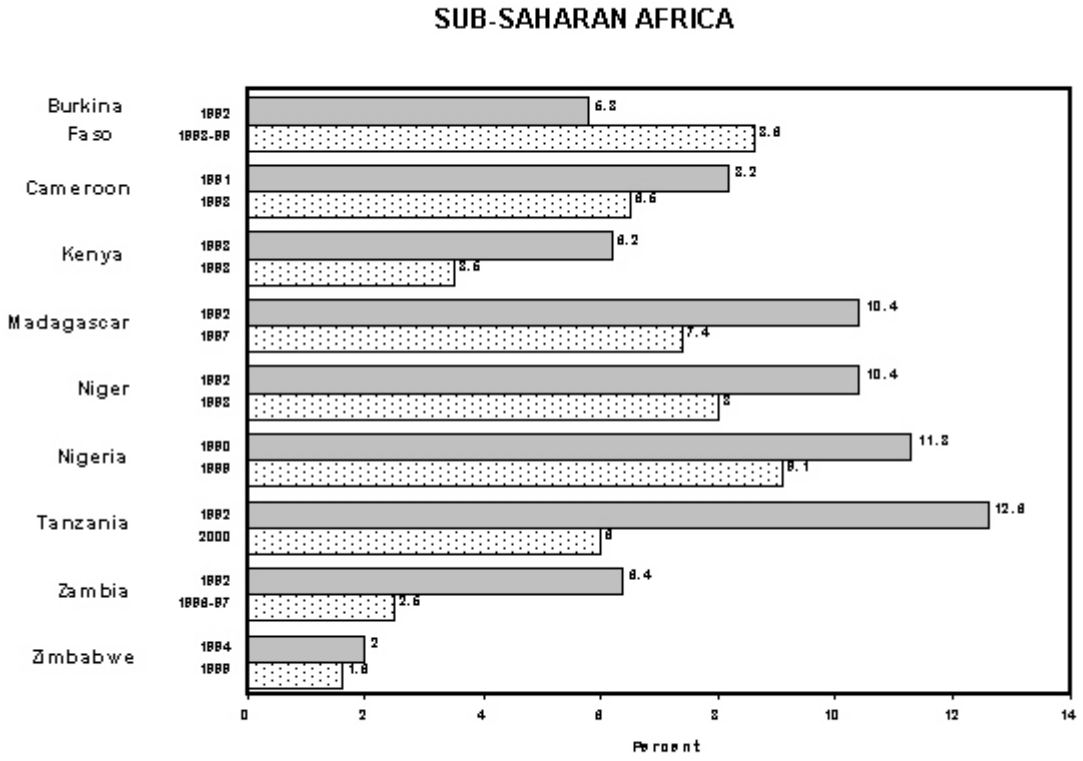


Figure 5.1—*Continued*



5.2 Past Users Who Intend to Resume Use

If women in need of family planning who have never used a contraceptive method and who do not intend to use a method are the most difficult group to serve, those who have used contraception in the past and who intend to resume use are presumably the easiest to serve. Some of these women are (unintentionally) pregnant or amenorrheic after such a pregnancy (about 40 percent for example in the 1998 Kenya DHS survey); others may simply not have resumed use after discontinuation of use for some reason or another, primarily because of health concerns or side effects of the method. Perhaps half of the women in this subcategory of unmet need are not actually at risk of pregnancy at any given time, but the other half appears to be taking that chance. The average proportion of women in this category is large, especially outside sub-Saharan Africa. In the Latin American and Caribbean cluster, the average is 40 percent; in Asia, the Near East, and North Africa, the average is 29 percent. In sub-Saharan Africa, on the other hand, it is lower (25 percent), probably because the proportions of women who never used a method dominates the composition of unmet need.

The women in this category of unmet need are the most educated and, like other past users, tend to live in cities. These women are most likely to have watched television (also shared with other past users) and to have been exposed to media messages about family planning. They show the highest proportion currently pregnant but have the lowest ideal number of children. About half of all women in need who intend to use a method in the future are either pregnant or amenorrheic. The reason that they are classified in need, of course, is that they became unintentionally pregnant and show the highest proportions with an unwanted last birth.

5.3 Never-Users Who Intend to Use

Although past users who intend to resume use are presumably the most likely to leave the unmet need category, women who report that they intend to use but have never had any experience with contraception are an important group. These are women who appear to already be motivated, and whose primary need is family planning services. There are, however, a variety of more complex obstacles to contraceptive use. In the 1998 Kenya survey, the reasons for not using a method in this subcategory of unmet need include several other considerations. A quarter of these women cite opposition to the idea particularly from their husband; another quarter say they are not using because of health concerns or side effects. Nearly 20 percent are not exposed to the risk of pregnancy mainly because of low fecundability, and another 15 percent say that they are not using a method because they want more children (a response that raises some doubt about their inclusion in the unmet need category). The importance of these various reasons may be different in other countries, but the Kenya illustration suggests that the key to changing the status of this particular subgroup of women goes beyond simply providing contraceptive supplies and services.

The average proportion of these women is greatest in sub-Saharan Africa (32 percent), again because of the preponderance of never-users in that region. In the other countries, the average is 26 percent. Higher than average proportions of these women are either pregnant or amenorrheic. Otherwise, they do not show any characteristics that are consistently different from those of other women with unmet need.

5.4 Past Users Who Do Not Intend to Use

This remaining subcategory of unmet need is the smallest of the four, averaging 11 percent in the Latin American/Caribbean region, only 8 percent in sub-Saharan Africa, and 15 percent in the other countries. These are women who have discontinued use and report that they do not intend to use again.

Women in this group are clearly the oldest of any group. In all but one country, their average age (35.6 years) is the highest with a mean difference of no less than 6 years, compared with the average for all women with unmet need (29.6 years). This suggests lower exposure to the risk of pregnancy. This group has the highest proportion of women who say that they want no more children, an attitude clearly related to their older age. When queried about their reasons for not intending to use a method in the future, the primary responses were lack of exposure to the risk of pregnancy (either because of infecundity or lack of sexual activity), health concerns, and concern about side effects. The last two reasons are especially prominent in Haiti, accounting for two-thirds of the women.

6 Unmet Need among Never-Married Women

Unmet need is typically estimated for currently married women (as in this report). However, the exclusion of unmarried women from such estimates has frequently been criticised. In response, Westoff and Bankole (1995) developed an algorithm for this purpose. It is used here with slight modification. The main focus is the population of never-married women, particularly the subset of teenagers (women age 15-19). The challenge is the validity of responses to questions on sexual activity, a variable that is normally taken for granted in estimates for married women. As in the 1995 analysis, the estimates are confined to women in sub-Saharan Africa[3] because the questions on sexual activity are not included in many countries in the other regions. Also, in other countries, the reports on frequency of sexual intercourse—in particular the proportion of teenagers who reveal to the interviewer that they have had sex—are implausibly low. This seems not to be the situation in the sub-Saharan countries.

[3] Some sub-Saharan countries are excluded because the data were not available.

6.1 Exposure, Contraceptive Use, and Attitude toward Pregnancy

The proportion of never-married women who are currently using a contraceptive method is shown for 22 sub-Saharan countries (Table 6.1 for women age 15-49 and Table 6.2 for teenagers) along with exposure to the risk of pregnancy and the planning status of a current or recent pregnancy. The data point to considerable variation in the level of contraceptive use and exposure to risk, and they form the basis for the later estimates of unmet need. The estimates do not simply represent the sum of percentages exposed and not using and reporting unintended pregnancies since it is unreasonable to assume that *all* exposed never-married women want to avoid pregnancy. Again, following the earlier algorithm, the procedure takes into account the woman's own reaction to how she would feel if she were to become pregnant in the next few weeks. The question posed for nonpregnant women who have ever had sex is "If you became pregnant in the next few weeks, would you be happy, unhappy, or would it not matter very much?" In estimating unmet need, only the proportion of women who reported that they would be unhappy is used (Table 6.3). This estimate averaged 74 percent for never-married women age 15-49 and 79 percent for never-married women age 15-19. As would be expected, these percentages are significantly lower for married women: 57 percent for teenagers and 53 percent for all married women. Thus, approximately a quarter of the never-married women, on average, do not appear averse to the possibility of premarital fertility.

The intercountry variation in this reaction is considerable with high indications of avoidance in Comoros, Ghana, Guinea, Mali, Uganda, and Zimbabwe. At the opposite extreme are the Central African Republic, Tchad, Cameroon, Mozambique, and Madagascar. It is difficult to explain these reactions. In some instances, it may simply reflect the positive attitude most African women have about babies and the traditional role of mother; in others, it may suggest a link between fertility and eligibility for marriage. Whatever the explanation, the presumption that never-married women who have sex are anxious to avoid pregnancy is not necessarily true.

The proportion of never-married women who are currently pregnant or amenorrheic after a recent pregnancy are fairly high in some of these countries, exceeding 10 percent in the Central African Republic, Côte d'Ivoire, Madagascar, and Mozambique, which also show the highest rates among teenagers. The countries with the highest contraceptive prevalence are Cameroon, Côte d'Ivoire, and Togo. The familiar higher prevalence in cities compared with that in rural areas is evident in all of the countries (Table 6.4), as is the strong positive association with level of education. Exposure to radio and television also correlates positively with contraceptive prevalence in all of these countries.

6.2 Unmet Need

Estimates of unmet need for each sub-Saharan country are presented in Table 6.5 for never-married women 15-49 and never-married women 15-19. Figure 6.1 shows unmet need among never-married teenagers (women 15-19). The basic measure reflects both the extent of contraceptive use as well as the proportion of women who have had sex. These estimates are also adjusted downward by the proportion reporting that they would be happy or that it would not matter if they became pregnant in the next few weeks. Two measures are presented:

- **Measure 1** includes only nonusers who have had sex in the past month;
- **Measure 2** includes these plus nonusers who reported that their last sex was more than one month ago.

The countries with the highest levels of unmet need among never-married women age 15-49 by both measures of sexual activity are Côte d'Ivoire, Mali, Mozambique, Tanzania, Togo, and Zambia. The same countries show the greatest unmet need among teenagers. The lowest levels of unmet need among never-married women are in Comoros, Niger, Senegal, and Tchad. These four countries are below 10 percent for both measures and for teenagers as well as for all never-married women, primarily because of low rates of sexual activity.

Table 6.1 Percent distribution of never-married women age 15-49 by exposure to the risk of pregnancy and the planning status of current or recent pregnancy, Demographic and Health Surveys, 1994-1999

Country	Survey date	Currently using method	Pregnant or amenorrheic		Not using contraception—Had sexual intercourse:		Never had sex	Total
			Intended	Unintended	In the past month	More than one month ago		
Benin	1996	18.7	1.7	0.8	6.3	18.4	54.1	100.0
Burkina Faso	1998-1999	12.1	0.6	1.2	6.7	7.7	71.8	100.0
Cameroon	1998	35.9	3.3	3.5	7.9	12.6	36.9	100.0
Central African Rep.	1994-1995	12.3	8.9	3.9	13.9	14.7	46.4	100.0
Comoros	1996	4.3	0.1	0.3	1.6	3.4	90.4	100.0
Côte d'Ivoire	1994	28.2	4.7	7.2	11.8	21.2	26.9	100.0
Eritrea	1995	0.5	0.3	0.4	0.0	1.6	97.2	100.0
Ghana	1998	11.2	0.1	1.8	7.5	22.1	57.2	100.0
Guinea	1999	12.5	1.4	2.0	7.6	12.6	64.0	100.0
Kenya	1998	12.9	1.6	4.3	6.2	22.6	52.3	100.0
Madagascar	1997	10.1	8.0	2.9	10.7	16.7	51.5	100.0
Mali	1995-1996	15.1	3.7	3.9	8.1	13.3	55.9	100.0
Mozambique	1997	6.3	5.1	4.6	17.3	21.7	44.9	100.0
Niger	1998	2.4	0.7	1.4	0.6	4.3	90.6	100.0
Nigeria	1999	9.7	0.4	0.7	3.3	8.9	76.9	100.0
Senegal	1997	4.1	0.9	3.0	1.3	6.8	83.9	100.0
Tanzania	1999	12.2	3.3	2.8	13.1	16.1	52.5	100.0
Tchad	1996-1997	2.7	1.9	1.0	5.7	4.6	84.2	100.0
Togo	1998	30.8	0.5	3.2	10.0	19.9	35.6	100.0
Uganda	1995	9.6	3.9	3.7	3.8	17.1	61.9	100.0
Zambia	1996-1997	7.7	2.0	5.4	9.5	29.2	46.3	100.0
Zimbabwe	1999	7.3	1.1	2.6	2.2	12.6	74.2	100.0

Table 6.2 Percent distribution of never-married women age 15-19 by exposure to the risk of pregnancy and the planning status or current or recent pregnancy, Demographic and Health Surveys, 1994-1999

Country	Survey date	Currently using method	Pregnant or amenorrheic		Not using contraception—Had sexual intercourse:		Never had sex	Total
			Intended	Unintended	In the past month	More than one month ago		
Benin	1996	11.6	0.9	0.8	6.3	14.1	66.3	100.0
Burkina Faso	1998-1999	8.0	0.4	0.9	6.5	6.0	78.1	100.0
Cameroon	1998	28.3	1.7	3.4	4.8	8.2	53.6	100.0
Central African Rep.	1994-1995	7.4	5.3	3.6	10.0	8.5	65.3	100.0
Comoros	1996	2.3	0.1	0.4	1.5	2.1	93.6	100.0
Côte d'Ivoire	1994	22.3	3.7	6.7	11.7	17.9	37.6	100.0
Eritrea	1995	0.0	0.0	0.2	0.0	0.4	99.4	100.0
Ghana	1998	7.0	0.2	1.2	5.3	12.5	73.9	100.0
Guinea	1999	6.9	1.2	1.4	6.4	10.6	73.5	100.0
Kenya	1998	5.7	1.1	3.7	5.7	16.1	67.6	100.0
Madagascar	1997	5.5	5.7	2.8	10.2	10.3	65.4	100.0
Mali	1995-1996	9.2	3.0	3.2	7.4	10.1	67.2	100.0
Mozambique	1997	2.6	1.9	5.0	17.3	15.6	57.6	100.0
Niger	1998	0.2	0.5	1.2	0.6	1.4	96.0	100.0
Nigeria	1999	7.5	0.6	1.3	4.0	9.0	77.6	100.0
Senegal	1997	1.4	0.8	2.6	0.7	3.0	91.5	100.0
Tanzania	1999	5.9	1.0	2.4	11.8	13.8	65.1	100.0
Tchad	1996-1997	1.7	1.4	0.8	4.6	3.7	87.8	100.0
Togo	1998	23.9	0.4	2.5	8.6	16.4	48.2	100.0
Uganda	1995	4.9	2.0	3.0	3.7	9.9	76.4	100.0
Zambia	1996-1997	4.2	1.4	4.6	8.8	23.8	57.2	100.0
Zimbabwe	1999	2.5	0.4	1.5	1.3	7.0	87.2	100.0

Table 6.3 Percentage of never-married and of currently married women 15-19 and 15-49 who say they would be unhappy if they became pregnant in the next few weeks, Demographic and Health Surveys, 1994-1999

Country	Survey date	Women 15-19		Women 15-49	
		Never-married	Currently married	Never-married	Currently married
Benin	1996	82	67	69	58
Burkina Faso	1998-1999	85	51	81	63
Cameroon	1998	67	48	56	38
Central African Rep.	1994-1995	58	38	52	36
Comoros	1996	96	76	97	49
Ghana	1998	94	75	86	66
Guinea	1999	95	54	91	57
Kenya	1998	80	47	75	44
Madagascar	1997	47	28	46	41
Mali	1995-1996	90	63	89	57
Mozambique	1997	63	52	59	45
Niger	1998	89	50	88	52
Tanzania	1999	79	46	73	47
Tchad	1996-1997	57	51	56	46
Togo	1998	80	65	70	59
Uganda	1995	93	80	91	77
Zambia	1996-1997	73	61	70	59
Zimbabwe	1999	91	79	87	69

Table 6.4 Percentage of never-married women currently using a contraceptive method, by residence, education, and exposure to mass media, Demographic and Health Surveys, 1992-1999

Country	Survey date	Residence		Level of education			Exposure to mass media		
		Urban	Rural	No education	Primary	Secondary	None	Radio or TV	Both
Benin	1996	23.8	11.3	6.6	22.1	37.5	u	u	u
Burkina Faso	1998-1999	22.1	6.8	6.1	12.8	31.6	5.8	14.6	39.0
Cameroon	1998	45.0	26.9	3.2	18.6	49.9	44.4	40.4	51.1
Central African Rep.	1994-1995	19.6	3.7	3.5	9.8	32.0	4.4	10.8	28.7
Comoros	1996	5.4	3.7	1.1	4.6	7.1	2.1	5.0	7.2
Côte d'Ivoire	1994	34.8	20.2	12.4	27.4	52.1	12.0	22.1	40.7
Eritrea	1995	0.7	0.3	0.8	0.3	0.5	0.5	0.7	0.3
Ghana	1998	14.0	8.8	5.5	5.7	13.5	5.5	9.7	14.8
Guinea	1999	17.7	5.0	5.8	8.8	30.9	3.2	15.6	22.4
Kenya	1998	20.2	10.2	18.1	10.9	16.1	10.1	13.0	16.5
Madagascar	1997	16.3	6.5	0.6	5.7	19.5	6.0	12.0	16.6
Malawi	1992	4.4	1.6	0.0	1.5	9.2	0.1	3.4 [1]	u
Mali	1995-1996	21.7	4.8	4.6	20.9	35.3	2.6	13.7	23.6
Mozambique	1997	12.4	2.1	1.1	5.0	21.8	2.2	7.0	16.1
Namibia	1992	35.9	8.3	11.4	13.2	26.4	7.2	15.8	35.7
Niger	1998	4.2	0.5	1.3	3.3	4.0	0.9	1.2	4.0
Nigeria	1999	11.0	9.1	1.4	3.3	16.2	5.3	18.4	15.1
Rwanda	1992	4.6	1.5	1.6	1.5	2.9	u	u	u
Senegal	1997	5.4	1.8	1.6	5.5	6.1	u	u	u
Tanzania	1996	15.6	5.2	1.0	7.9	18.7	4.6	10.7	18.7
Tchad	1996-1997	7.9	0.7	0.4	2.5	16.3	0.9	5.3	17.2
Togo	1998	37.5	22.5	12.6	24.5	50.8	19.1	34.4	46.5
Uganda	1995	16.4	7.3	0.9	6.4	18.7	6.0	13.0	17.5
Zambia	1996-1997	10.4	4.4	0.8	4.6	12.2	4.8	9.1	10.2
Zimbabwe	1999	10.3	4.9	*	5.5	7.7	5.3	7.4	7.8

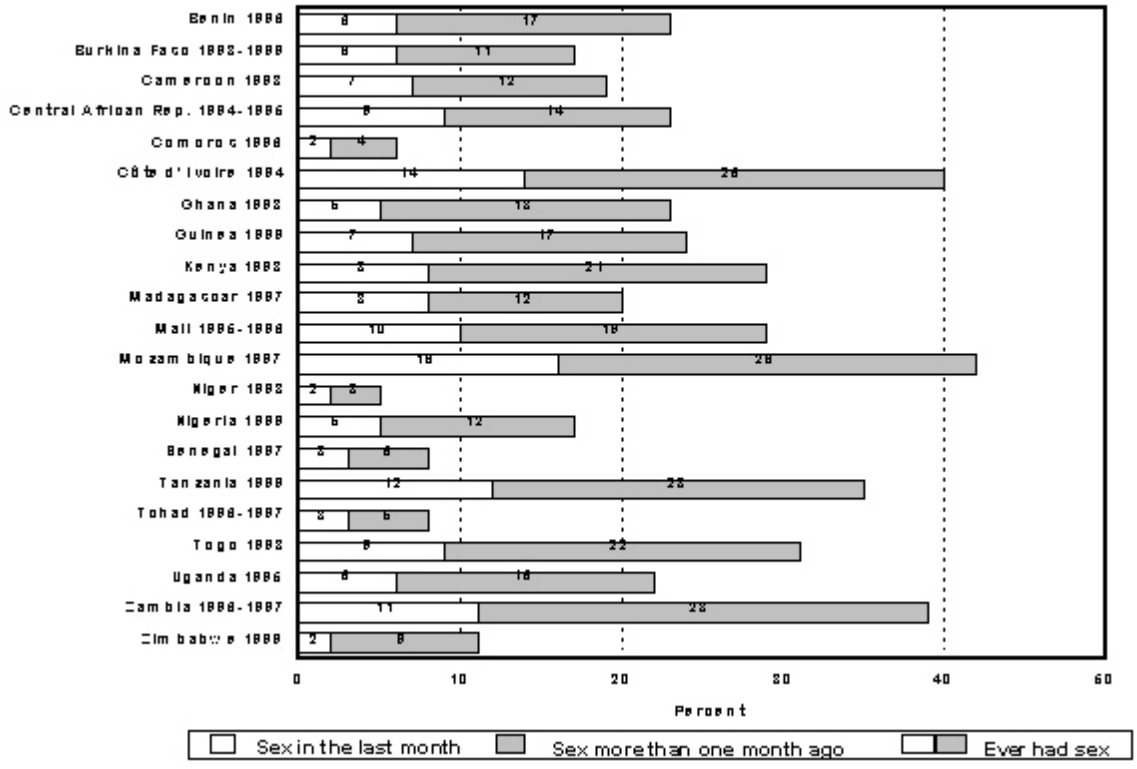
u = Unknown (not available)
* Too few cases to estimate a reliable rate
[1] Radio only

Table 6.5 Unmet need for contraception among never-married women age 15-49 and never-married women age 15-19, Demographic and Health Surveys, 1994-1999

Country	Survey date	Women 15-49		Women 15-19	
		Measure 1	Measure 2	Measure 1	Measure 2
Benin	1996	5.2	17.8	6.0	16.7
Burkina Faso	1998-1999	6.6	12.9	6.4	11.5
Cameroon	1998	7.9	15.0	6.6	12.1
Central African Rep.	1994-1995	11.1	18.8	9.4	14.3
Comoros	1996	1.8	5.1	1.8	3.8
Côte d'Ivoire[1]	1994	14.3	27.0	14.2	25.6
Ghana	1998	8.2	27.2	5.0	17.9
Guinea	1999	8.9	20.4	7.5	17.5
Kenya	1998	8.9	25.9	8.3	21.1
Madagascar	1997	7.8	15.5	7.6	12.4
Mali	1995-1996	11.1	22.9	9.9	18.9
Mozambique	1997	14.8	27.6	15.9	25.7
Niger	1998	1.9	5.7	1.7	3.0
Nigeria	1999	3.5	10.5	4.7	12.5
Senegal[1]	1997	4.0	9.2	3.1	5.4
Tanzania	1999	12.4	24.1	11.7	22.6
Tchad	1996-1997	4.2	6.8	3.4	5.5
Togo	1998	10.2	24.1	9.4	22.5
Uganda	1995	7.1	22.7	6.4	15.6
Zambia	1996-1997	12.0	32.5	11.0	28.4
Zimbabwe	1999	4.2	15.1	2.5	8.9

Note: Measure 1 is based on women who reported sex in the past month plus pregnant or amenorrheic women who reported that pregnancy as unintended. Measure 2 includes Measure 1 and adds women who reported sex more than one month before.
[1] Survey did not include the question on attitude toward the possibility of becoming pregnant. Estimates of the proportion that would be unhappy are determined from the proportion of pregnancies reported as unintended.

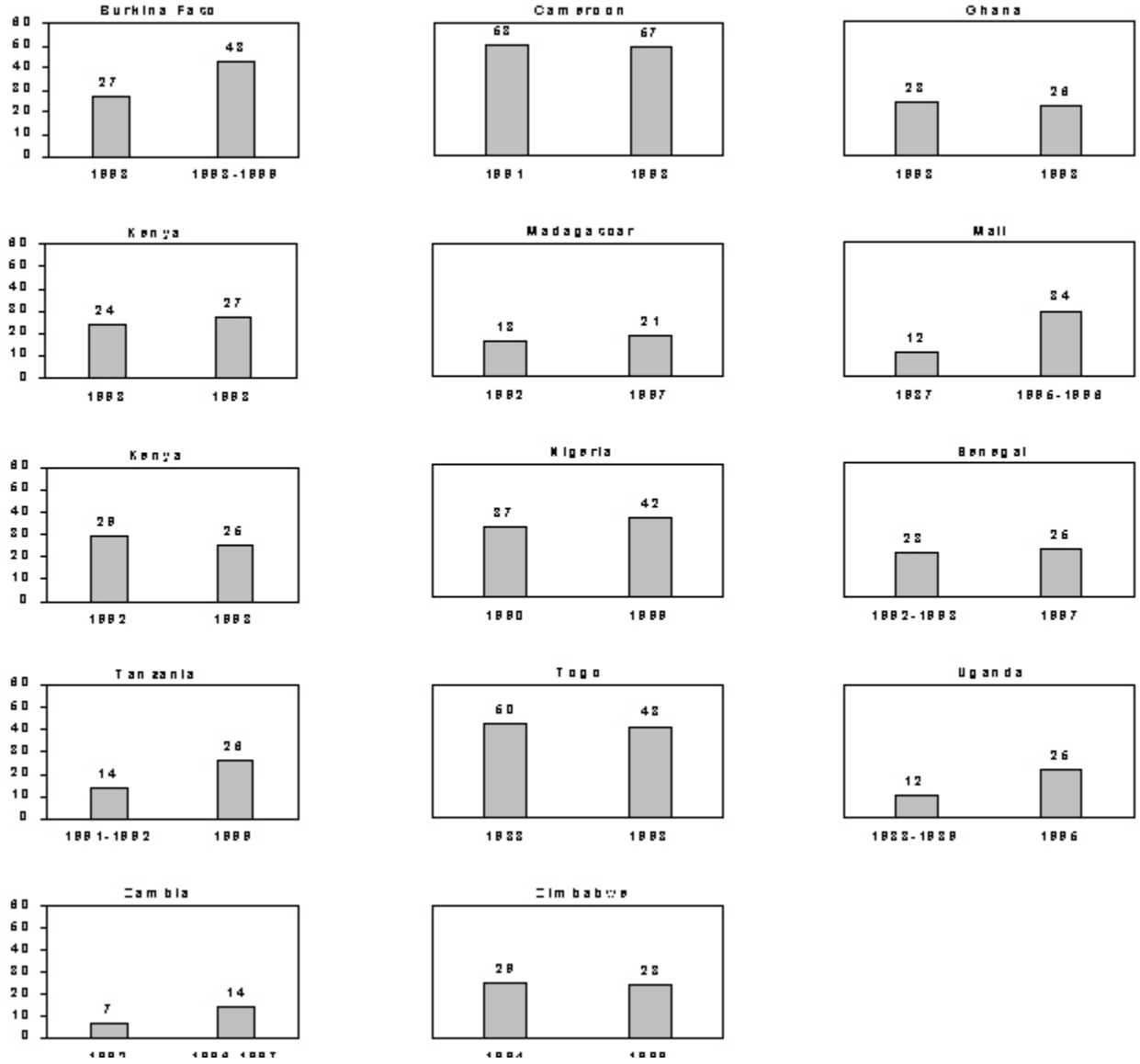
Figure 6.1 Unmet need among never-married teenagers (women age 15-19) in sub-Saharan Africa, by sexual activity, Demographic and Health Surveys, 1994-1999



7 Trends in Contraceptive Use among Never-Married Women

In about half of the 14 sub-Saharan countries that have had repeat surveys, the level of contraceptive use among sexually active never-married women has increased (Figure 7.1). Significant increases in short periods of time are evident in Burkina Faso, Mali (possibly exaggerated by differences in the definition of use), Tanzania, Uganda, and Zambia. The remaining nine countries show little change. It is important to remember that the estimates depend not only on the accuracy of the reports of contraceptive use but, perhaps more critically, on the accuracy of reports of sexual activity. There is probably less of a tendency for those using contraception to conceal sexual activity than there is for women not using a method; the net result may be that the level of contraceptive use may be overestimated.

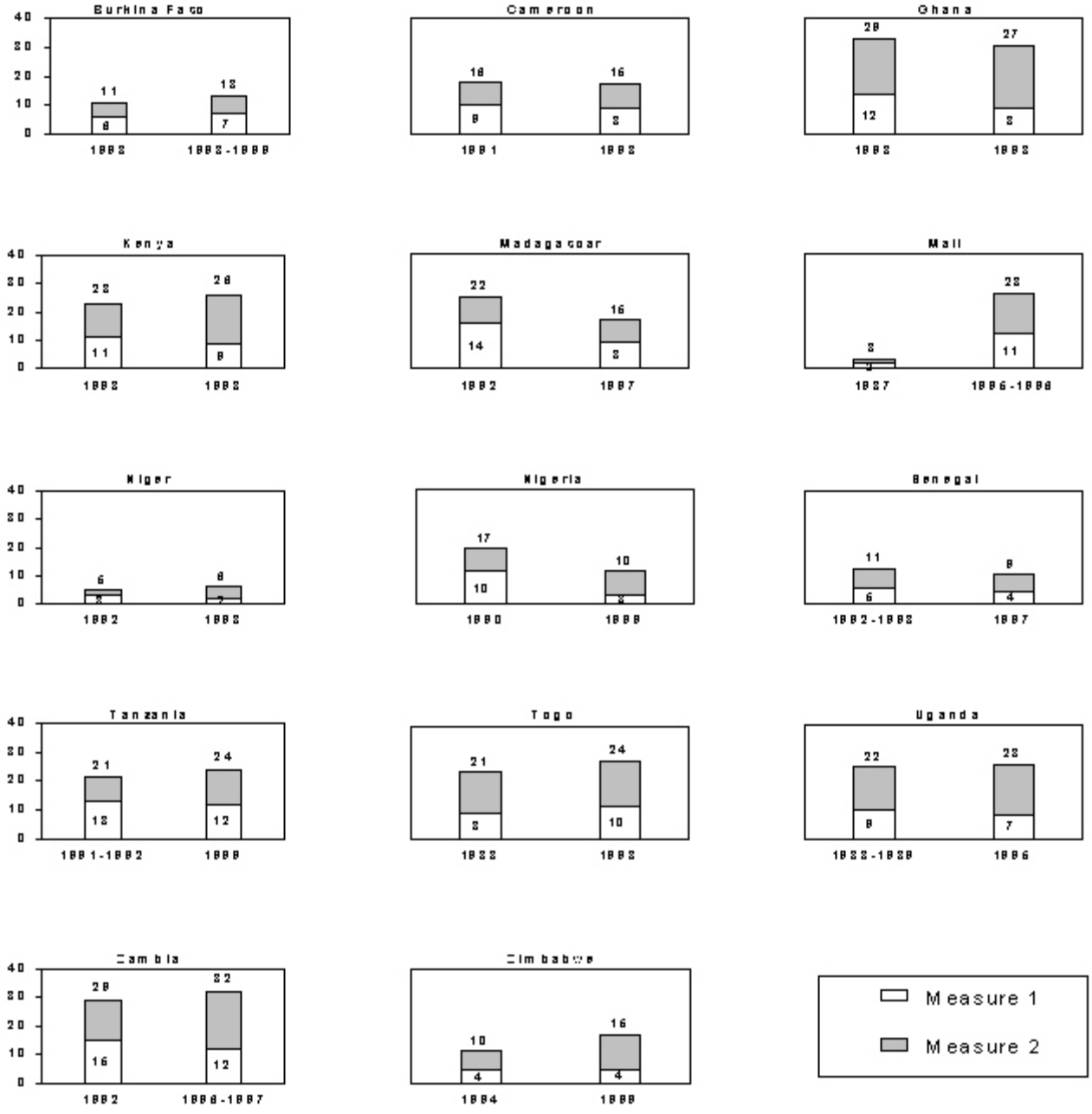
Figure 7.1 Trends in the proportion currently using contraception among never-married women age 15-49 who have ever had sex, sub-Saharan Africa, Demographic and Health Survey, 1987-1999



8 Trends in Unmet Need among Never-Married Women

Trends in unmet need for the sub-Saharan countries show a mixed pattern of change. However, if these estimates are reliable, unmet need has declined only in Madagascar and Nigeria. The main picture (Figure 8.1) is one of little change, although there are several countries that show some suggestion of increases in unmet need, a plausible change that might reflect increases in exposure to the risk of pregnancy prior to contraceptive use. Although it seems plausible to assume that such exposure is likely to increase over time, available evidence from sub-Saharan countries indicates trends toward later age at marriage and later age at sexual initiation.

Figure 8.1 Trends in unmet need for family planning (percent) among never-married women age 15-49, sub-Saharan Africa, Demographic and Health Surveys, 1987-1999



9 Reasons for Nonuse among Women with Unmet Need

In the most recent version of the DHS questionnaire, a question was added to probe directly into the reasons for nonuse among women who said that they wanted no more children or who wanted to delay the next birth at least two more years. The question was explicitly phrased to highlight the apparent inconsistency between intention and behavior. The relevant subset of women were asked, "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? Any other reason?" The same kind of question was asked of women who wanted to delay the next child. A total of 22 answer categories were precoded for the interviewer. The distribution of the responses in summary categories is shown for currently married women with an unmet need for family planning in Table 9.1. Women who were pregnant as well as those who were undecided about their reproductive intentions were not asked the question and are excluded in the denominators of those in need.

Table 9.1 Reasons currently married women with unmet need for family planning are not currently using contraception, Demographic and Health Survey, 1999-2000

Country	Survey date	Not exposed to pregnancy	Opposed to use of contraception	Lacks knowledge of method or source for method	Method-related problem	Other
ASIA						
Kazakhstan	1999	34	29	<1	30	20
Turkmenistan	2000	29	48	1	23	8
NEAR EAST/NORTH AFRICA						
Egypt	2000	45	11	<1	33	22
LATIN AMERICA/CARIBBEAN						
Colombia	2000	65	10	2	28	10
Haiti	2000	39	18	3	52	9
Peru	2000	54	17	7	38	8
SUB-SAHARAN AFRICA						
Ethiopia	2000	48	30	29	26	3
Gabon	2000	39	25	13	28	23
Malawi	2000	52	28	3	39	2
Rwanda	2000	43	17	15	27	9
Tanzania	1999	52	31	7	25	22
Uganda	2000	40	19	14	41	10
Zimbabwe	1999	42	22	<1	35	12

Note: The percentages for each country total more than 100 percent because some women gave more than one reason for nonuse.

The 22 reasons for nonuse have been grouped into 5 categories. The first covers different types of presumed nonexposure to the risk of pregnancy—not having sex or having infrequent sex, menopause, hysterectomy, women who reported that they could not get pregnant for physical reasons, those who said they were amenorrheic after a recent birth, and those who reported breastfeeding as the reason for nonuse (the distinction between amenorrhea and breastfeeding cannot be determined from these responses). The second category includes opposition to the use of contraception on various grounds including husband's attitudes, religious prohibitions, and other nonspecified reasons. Responses coded "fatalistic" are also included in this general category. Whether the respondent knows a method or a source from which to obtain a method is the third category. Method-related problems such as concerns about health or side effects, lack of access, cost,

and inconvenience are included in this fourth category. The last category (Other) includes reasons not assigned to the preceding categories as well as "don't know" responses and nonresponses. It should be recognized that these data are imprecise and subject to variability in interviewers' coding judgment; they are intended only to provide some rough insight into the apparent inconsistency between reproductive intentions and contraceptive behavior.

For most of the 13 countries included in Table 9.1, the most common reason offered for not using a method is a perceived lack of exposure to the risk of pregnancy. (It should be noted that in the operational definition of unmet need, only amenorrheic women whose pregnancy was unintentional were included. Those whose pregnancy had been intentional are not defined as in need and currently pregnant women, regardless of the planning status of the pregnancy, were not asked the reason for nonuse). Between one-third and two-thirds of the women in these countries reported nonexposure or little exposure as the reason they were not using a method despite their intention to delay or avoid pregnancy. Overall, an average of 45 percent fall in this category.

Opposition to use is a lesser but a still significant reason for nonuse. For reasons that are unclear, it is the major reason in Turkmenistan, with 48 percent of women in the category. In general, it is slightly more common in sub-Saharan Africa, where roughly 20 to 30 percent say they are opposed to use. Opposition attributed to the husband is frequently cited as the reason.

Lack of knowledge of methods or sources of supply is not an important reason for nonuse in these countries, except in Ethiopia where it was reported by 29 percent of women in need.

On the other hand, problems with methods mainly included concerns about side effects or health, and to a lesser extent, issues of cost and access are significant. An average of one-third of the women gave a method-related problem as the reason for nonuse. In Haiti and in Uganda, this category of reason was especially prominent and involved mostly concerns about side effects and health.

10 Conclusions

This report has several purposes. It is primarily devoted to summarizing recent levels of unmet need in the 55 countries that participated in the Demographic and Health Surveys during the last decade of the century and to describing trends in unmet need for 33 of those countries that conducted more than one survey.

In 19 of the 27 countries outside sub-Saharan Africa, the recently estimated level of unmet need for currently married women is 15 percent or lower, while only 6 of the 28 sub-Saharan countries show a level that low. The total demand for family planning, defined as the sum of unmet need and current use, averages 44 percent in the sub-Saharan countries in contrast to an average of 70 percent in the countries in Asia, the Near East, and North Africa, and Latin American and the Caribbean. The percentage of total demand satisfied is highest—exceeding 90 percent—in Vietnam, Brazil, and Colombia and lowest in Guinea, Mali, and Ethiopia at about 20 percent. With few exceptions, the demand for family planning in sub-Saharan Africa is primarily for spacing, which is in sharp contrast to countries in other regions where the limiting of births is the dominant practice.

The trend in unmet need is generally downward and is apparent even over the short intervals of time between surveys. Clear declines are evident in 23 of the 33 countries examined. These trends were also examined by educational groupings. In sub-Saharan Africa, the reductions in need are largely confined to women with some formal schooling; in the other regions, women with no education also participated in the downward trend.

Unmet need has been divided not only into the two familiar components of spacing and limiting but also by whether the woman has ever used a method in the past and by whether she intends to use one in the

future. These four categories have different kinds of unmet need. Women who have never used contraception and do not intend to use are the most challenging segment of unmet need; this subcategory is most prevalent in the least developed countries but is declining over time as a percentage of total unmet need. These women frequently cite various kinds of opposition to the idea of contraception on their part or their husband's part. At the opposite extreme are those women currently in need of contraception who have used a method in the past and who say that they intend to resume use in the future. This category is large outside sub-Saharan Africa and includes many women who were at low risk of pregnancy at the time of the survey because of a recent birth, but it also includes those at risk who have discontinued use for other reasons. Women in need who have never used contraception but who intend to use are most evident in sub-Saharan Africa and would presumably be a less complicated population to serve. The last category—women in need who have discontinued use and do not intend to resume use—is the smallest of the four subcategories and consists primarily of older women and women at low risk of unintended pregnancy.

In the most recent round of surveys, a question was included to determine the reasons for not using a contraceptive method among nonusers who want either to delay the next birth or to avoid further childbearing. The main reason was their perceived low level of exposure to the risk of pregnancy, with method-related problems and opposition to contraceptive use also important.

The concept of unmet need should not be restricted to married women, although this has generally been the case because of lack of data on the sexual activity of unmarried women. In some countries, unmarried women are not included in DHS surveys, while in others, the quality of the reporting is suspect. The most credible estimates for unmarried women appear to be for women in sub-Saharan Africa, and this report has attempted to measure unmet need for family planning among never-married women in 22 countries in sub-Saharan Africa. The tabulations were carried out for teenagers (women 15-19) and for women of reproductive age (15-49) and explicitly reduce the estimates of unmet need by taking into account that about one-quarter of the women at risk of pregnancy say that they would be happy if they were to become pregnant. The countries with the highest levels of unmet need among never-married women are Côte d'Ivoire, Mali, Mozambique, Tanzania, Togo, and Zambia. There has been little change in levels of unmet need in the 14 countries where trends are measurable.

References

Bicego, George, and Omar B. Ahmad. 1996. *Infant and child mortality.* DHS Comparative Studies No. 20. Calverton, Maryland: Macro International Inc.

Casterline, John B., and Steven W. Sinding. 2000. Unmet need for family planning and implications for population policy. *Population and Development Review* 26(4): 691-723.

Curtis, Sian L., and Charles F. Westoff. 1996. Intention to use contraceptives and subsequent contraceptive behavior in Morocco. *Studies in Family Planning* 27(5): 239-250.

Dixon-Mueller, Ruth, and Adrienne Germain. 1992. Stalking the elusive "unmet need" for family planning. *Studies in Family Planning* 23(5): 330-335.

Govindasamy, Pav, and Emmanuel Boadi. 2000. *A decade of unmet need for contraception in Ghana: Programmatic and policy implications.* Calverton, Maryland: Macro International Inc. and National Council Secretariat [Ghana].

Greene, Diana. 1998. Contraceptive use for birth spacing in sub-Saharan Africa. Princeton University Doctoral Dissertaion.

Hobcraft, John, John W. McDonald, and Shea O. Rutstein. 1985. Demographic determinants of infant and early child mortality: A comparative analysis. *Population Studies* 39(3): 363-385.

National Council for Population and Development (NCPD), Central Bureau of Statistics (CBS) (Office of the Vice President and Ministry of Planning and National Development) [Kenya], and Macro International Inc. (MI). 1999. *Kenya Demographic and Health Survey 1998.* Calverton, Maryland: NPDP, CBS, and MI.

Population Council, Ministry of Public Welfare [Pakistan], and United Nations Population Fund. 1998. *Pakistan Contraceptive Prevalence Study 1994-95: Final Report.*

Rafalimanana, Hantamalala, and Charles F. Westoff. 2001. *Gap between preferred and actual birth intervals in sub-Saharan Africa: Implications for fertility and child health.* DHS Analytical Studies No. 2. Calverton, Maryland: ORC Macro.

United Nations. 2000. *Levels and trends of contraceptive use as assessed in 1998.* New York: United Nations.

Westoff, Charles F. and Luis H. Ochoa. 1991. *Unmet need and the demand for family planning.* DHS Comparative Studies No. 5. Columbia, Maryland: Institute for Resource Development.

Westoff, Charles F., and Akinrinola Bankole. 1995. *Unmet need: 1990-1994.* DHS Comparative Studies No. 16. Calverton, Maryland: Macro International Inc.

Westoff, Charles F., and Akinrinola Bankole. 2000. Trends in the demand for family limitation in developing countries. *International Family Planning Perspectives* 26(2): 56-62.

DHS Comparative Reports Series

1 Westoff, Charles F. 2001. **Unmet Need at the End of the Century.**