Women with an Unmet Need for Contraception in Developing Countries and Their Reasons for Not Using a Method

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## **Executive Summary**

The concept of unmet need for contraception has been central to international family planning efforts for decades, and it is perhaps more relevant to programs now than ever. This report provides a review of the literature addressing the measurement of unmet need, the obstacles faced by women with unmet need and the potential impact of meeting unmet need. We also provide current estimates of the level of unmet need regionally and nationally, and among key population subgroups, and briefly review how the level of unmet need has changed over the past decade in the developing world. We present in-depth analyses at the regional and national levels and among key subgroups within countries of the reasons why women who do not wish to become pregnant do not use contraceptives.

International family planning, which took shape as a movement more than 50 years ago, was motivated at first by concerns about *population growth*. The field has since shifted its priorities and is now focused on enabling women and couples to meet their own *fertility aspirations*. Meeting women's unmet need for contraception is thus central to the international family planning program efforts. Moreover, studies of the potential demographic impact of addressing unmet need have demonstrated that while family planning and reproductive health programs might focus on supporting the well-being of individuals, meeting unmet need can also serve broader agendas of social and economic development.

The Demographic and Health Surveys (DHS), a series of nationally-representative, standardized surveys of women that collect information on family planning and fertility indicators, were introduced in 1984, and an algorithm for measuring unmet need using DHS data was developed in 1988. This measure has been employed with few changes since that time, and is considered the *standard measure of unmet need* for contraception. According to this measure, a woman has an unmet need if she is married, in a union or sexually active; is fecund (able to conceive a pregnancy); does not want to have a child in the next two years; and is not using any contraception, either modern or traditional.

The findings in this report are based on data from the Demographic and Health Surveys conducted in 53 countries in Asia, Africa, and Latin America between 1995 and 2005; 40 were conducted between 2000 and 2005.

We find that more than *one in seven married* and *one in 13 never-married women* aged 15–49 *have an unmet need* for contraception in the countries reviewed in this report. In Sub-Saharan Africa, 24% of married women have an unmet need for contraception. The regional average level of unmet need ranges from 10% to 12% in South and Southeast Asia, North Africa and West Asia, and Latin America and the Caribbean. In the past decade, the level of unmet need has improved least in Sub-Saharan Africa, compared with other regions.

In Sub-Saharan Africa, 9% of never-married women have an unmet need for contraception, and in the Latin American region, 5% have an unmet need. Regional estimates of unmet need are not available for nevermarried women in Asia or North Africa.

Some patterns are apparent in the distribution of unmet need outside of Sub-Saharan Africa, with *rural*, *uneducated* and *poor women* generally at a greater risk of unplanned pregnancies than urban, educated or wealthy women. In contrast, no such pattern in the distribution of unmet need can be ascribed to the African subcontinent. But the results do offer a profile of the women most likely to be at risk of an unwanted pregnancy in each surveyed country.

The most common reasons given by married women for not using contraception are associated with access to *supplies and services*. In this general category, concerns about the side effects, health effects and inconvenience of methods were by far the most prominent. Method-related concerns were also common reasons for *discontinuation* of use among women with unmet need who had used family planning in the past.

Significant proportions of married women with an

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unmet need gave *exposure-related* reasons for nonuse: They believed they were not at risk of getting pregnant, most often either because they were breastfeeding or not having sex frequently. Among never-married women, infrequent sexual activity was by far the most common reason for not using contraceptives, as was the notion that they need not or should not adopt a method until they are married.

Opposition to contraceptive use is cited with relative infrequency among women with an unmet need. In most countries, more than half of women who are opposed to family planning indicated that they nevertheless intended to use contraception in the future. Overall, the majority of women with an unmet need indicated that they *intend to use contraception* in the future.

These findings support *recommendations* that programmatic efforts to address unmet need should: (1) address unmet need in Sub-Saharan Africa; (2) focus national efforts on populations with the greatest unmet need in each country; (3) offer a range of contraceptive methods; (4) include counseling and services to help women sustain contraceptive use; (5) improve contraceptive technologies; and (6) educate women about their risk of getting pregnant.

Millions of women worldwide become pregnant when they do not intend to. International family planning efforts so far have made significant inroads in addressing the demand for contraception. Future interventions can have a tremendous impact on the ability of women and couples to achieve their fertility goals and, ultimately, on the health and well-being of women, their families and society.

## Chapter 1 Introduction

The concept of unmet need for contraception has been central to international family planning programs and research for more than forty years, but it has perhaps never been more salient to research and practice than it is now.

In the early decades of the family planning movement, the central justifications for programs were the reduction of environmental, economic and societal pressures of population growth. In the past 10-15 years, and most prominently at the 1994 International Conference on Population and Development (ICPD), the motivation for supporting family planning programs has shifted towards a focus on helping individuals-both women and men-achieve their preferences for smaller families and have their children when they want them.<sup>1</sup> The concept of unmet need has served to mediate between the concerns of governments and social scientists focused primarily on controlling population growth and those of public health professionals and human rights activists who advocate for a focus on women's health and rights. Research indicates that addressing unmet need will both result in contraceptive prevalence rates that exceed many countries' targets and help women achieve their own goals—and thus relieve population pressures.<sup>2</sup>

The measure of unmet need has also become increasingly important in the context of the United Nations (UN) Millennium Development Goals (MDGs). The MDGs, conceived at the UN Millennium Summit in 2000 and developed in the ensuing years, build on the broad development objectives that were advanced at the ICPD in 1994. The goals are comprised of eight agenda items relating to such topics as education, gender equality and health. At the World Summit in 2005, the importance of reproductive health and family planning to the realization of the MDGs was affirmed.<sup>3</sup> The UN Secretary-General has recommended adding a target of universal access to reproductive health to the MDG monitoring framework.<sup>4</sup> Subsequently, the Interagency and Expert Group on MDG Indicators recommended that unmet need for family planning serve as an indicator of progress on this target.<sup>5</sup>

The benefits of helping women and couples access and effectively use family planning extend into many realms. These benefits include the prevention of health risks associated with unwanted and unsafe pregnancies. On a broader scale, increased access to family planning can improve women's education and employment opportunities and their participation in social and political domains.<sup>6</sup> 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.<sup>7</sup>

Over the past four decades, the measure of unmet need has been developed and refined, drawing on advances in the conceptualization of the phenomenon, survey methodology, analytic tools and in-depth studies. For the most part, the international community has now settled on a measure of unmet need initially developed by Princeton University demographer, Charles Westoff. This measure draws upon data collected through large-scale, nationally representative surveys of women, the Demographic and Health Surveys (DHS), which are conducted in many countries throughout the developing world. The standardized measure has been included as part of the reports produced for each country since the late 1980s.<sup>\*,†</sup>

The aim of this report is to provide donors, policymakers and program planners the evidence and analyses needed to determine how to best direct limited

<sup>\*</sup>More information on the Demographic and Health Surveys is available at <http://www.measuredhs.com>.

<sup>+</sup>Other survey programs measure unmet need for family planning (e.g., the Reproductive Health Surveys, supported by the Centers for Disease Control and Prevention, and the Family and Fertility Surveys in Europe). Discussions are underway to bring such results into alignment with the standard DHS methodology.

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resources toward meeting needs for family planning in the developing world. The specific objectives of this report are to

- *synthesize the literature* addressing the measurement of unmet need for a family planning method and reasons for not using contraception;
- *provide current estimates* of the level of unmet need, at the regional and national levels, and for key population subgroups, and identify groups with disproportionate unmet need; and
- analyze the reasons that women who do not wish to become pregnant do not use a method or stop using a method, nationally and among key subgroups.

While other reports have documented the level of unmet need at national and international levels, this report is broader both in scope and depth than the literature available to date on this topic. A comprehensive analysis such as the one presented here of reasons for non-use among women with an unmet need has not been previously available.

This report is not oriented specifically to family planning programs, and does not specifically measure the need for program inputs such as service capacity, counseling and other aspects of quality of care, or contraceptive supplies. This report does provide a measure of unmet need from women's perspectives, which is influenced by constraints on access to information, services and supplies, as well as by personal, cultural and community-based factors. As such, it does offer a wealth of information that can help program planners design effective services.

Also, this report focuses only on the unmet need of women. Studies that address fertility intentions and contraceptive use among men or couples have yielded different results from research that focuses on women,<sup>8,9</sup> but comprehensive information about men and couples is not available.

## Chapter 2 The Historical Context of Unmet Need

The international family planning movement began to take shape more than fifty years ago, and was motivated in the early decades by concerns about population growth. The field has since shifted in its scope and priorities, and in the past two decades has focused primarily on enabling women and couples to meet their own fertility aspirations, as well as on protecting their reproductive health and rights.

The concept of meeting women's unmet need for contraception has become increasingly important to family planning policy formulation and program planning. In light of the heightened relevance of this concept, we review the history of its development and measurement so that policymakers and program planners can more clearly understand its meaning, strengths and weaknesses, and can thus more readily utilize this important tool. We also review related research that sheds light on the potential impact of meeting unmet need in developing countries, and research that has addressed reasons for nonuse of family planning among women with an unmet need. An older but more extensive review of the literature on unmet need explores these and other issues in detail.<sup>10</sup>

#### **Brief History of the Measure of Unmet Need**

The general concept of unmet need was first introduced in the 1960s, when researchers began to demonstrate and measure the discordance between women's desires to limit their births and their actual use of contraception in much of the developing world.<sup>11</sup> The gaps between knowledge, attitudes and practice—the "KAPgap"—were measured in national surveys undertaken in developing countries from the 1960s through the early 1980s. In most of these studies, the KAP-gap was defined as the proportion of married women who wished to stop childbearing but were not using contraception. Estimates of the KAP-gap during this period did not account for unmet need among unmarried women or those who wanted to space births, partly because of the limitations of survey design. The definition of the KAP-gap was further developed by Westoff<sup>12</sup> and Westoff and Pebley,<sup>13</sup> at which time the concept was renamed "unmet need for family planning." Westoff delineated many of the factors that should be taken into consideration in the definition of unmet need, including whether the woman is pregnant or otherwise infecund, whether she is breastfeeding and whether she is using a traditional method of contraception.

With the inception in 1984 of the Demographic and Health Surveys (DHS)-a series of nationally-representative, standardized surveys that collect information on a range of family planning, fertility and reproductive health indicators\*-it became possible to incorporate some of the proposed refinements to the definition of unmet need. These surveys ask a standard set of questions in each country in which they are administered. In 1988, Westoff developed an algorithm for measuring unmet need using DHS data.<sup>14</sup> The new definition took into account unmet need for contraception to space births. In addition, pregnant or amenorrheic women were considered to have a need for family planning if they reported that their current or most recent pregnancy was unwanted or mistimed, on the assumption that these women would have had an unmet need had their most recent pregnancy not occurred.

In the years since, *further refinements to the measure* of unmet need have been proposed. Bongaarts presented a model-based approach to adjusting Westoff's estimates of unmet need.<sup>15</sup> The model accounts for the reduced length of time a woman would spend with an unmet need for limiting births if her needs for spacing births were met in the course of her reproductive years. Dixon-Mueller and Germain argued for expanding the concept to include unmet need for effective family planning among women who do not use contraception

<sup>\*</sup>The DHS followed and expanded upon the World Fertility Surveys, a series of nationally representative surveys that were conducted in the late 1970s and early 1980s.

regularly or who do not use their methods effectively, or who need contraceptive methods that are more appropriate to their circumstances than the methods they are using, as well as among women who are unmarried and sexually active.<sup>16</sup>

Other recommended modifications have had practical applications to the analysis of DHS measures of unmet need. Some researchers assert that measures of unmet need should assume that women using a traditional method of contraception have an unmet need, noting that these methods are relatively ineffective.<sup>16,17</sup> This definition was applied in a large-scale comparative study of more than 40 developing countries.<sup>6</sup> The resulting estimate of unmet need in developing countries was almost 50% higher, with a total of three in 10 women having an unmet need for a modern method of contraception. It is generally accepted that classifying users of traditional methods as having unmet need will somewhat overestimate the prevalence of unmet need, and excluding them will result in conservative estimates of unmet need levels.

Others have proposed classifying pregnant and amenorrheic women according to their future fertility intentions.8 This improvement is meant to avoid underestimation of unmet need that results when pregnant and breastfeeding respondents report their most recent pregnancies as wanted regardless of their fertility intentions at the time of conception. In a review of unmet need in 27 countries, Ross and Winfrey determined that, if the needs of women with postpartum amenorrhea were based on their future fertility intentions, the estimated proportion of married women with unmet need would increase by about 50%, and one-third of women would have an unmet need.<sup>18</sup> The standard DHS measure of unmet need, therefore, provides a conservative estimate of the degree to which fertility desires are implemented.

Researchers have also recommended incorporating *preferences of husbands* into the unmet need definition, and identifying couples, rather than women, with unmet need. Various algorithms have been proposed for classifying couples with discordant fertility preferences.<sup>8,9</sup> It is noted that measures that assume that unmet need exists only when both partners do not want a child soon will yield lower estimates of the level of unmet need than measures relying on women's preferences alone.

In a 1995 report, Westoff and Bankole developed procedures to measure unmet need among *unmarried women* and applied these to analyses of DHS data from 19 Sub-Saharan African countries. The primary difference between this measure and the measure for married women was in the determination of sexual activity. In the proposed algorithm, never-married women were considered sexually active if they had had intercourse in the month preceding the survey.

In the past 20 years, the DHS has been conducted in more than 70 countries in the developing world and Central Asia. While many of the proposed refinements to Westoff's measure of unmet need have not been refuted on conceptual grounds, the measure developed in 1988 has been employed 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 (ie, not pregnant, amenorrheic or otherwise infecund, according to her own report); (3) does not want to have a child in the next two years and (4) is not using any contraceptive method, either modern or traditional. In addition, pregnant or amenorrheic women in union are considered to have an unmet need if they report that their current or most recent pregnancy was unplanned. While 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 prevailing definition includes women who meet all of the criteria listed above except the first, and who have had sexual intercourse in the past month.

The Centers for Disease Control and Prevention (CDC) has been administering the Reproductive Health Survey (RHS) since the 1980s in parallel with the DHS.<sup>19</sup> Like the DHS, the RHS is administered to nationally representative samples of women in developing countries and collects information on reproductive health indicators. To analyze these data, the CDC developed a definition of unmet need which is very similar to the one developed by Westoff. One important distinction is that the CDC definition does not assess unmet need among women who are pregnant or postpartum. However, the DHS definition of unmet need can also be derived from the RHS, and researchers have extracted from the RHS a measure of unmet need that corresponds with the standard DHS definition in order to obtain comparable measures from the two surveys.<sup>18</sup>

It is worth noting that separate research in the *United States* has also aimed to estimate the numbers and characteristics of women at risk of unintended pregnancy and in need of family planning services and supplies.<sup>20-25</sup> The definition of women "in need of con-

traceptive services and supplies" in the United States has generally been similar to the definition of "women with an unmet need for contraception" used in developing countries. Within the population of women with an unmet need for contraception, however, work in the United States has focused on women in need of *publicly funded* services and supplies, on the basis of information about their age and family income.

#### **Unmet Need Vs. the Demand for Contraception**

Another line of discourse on unmet need has addressed whether it accurately measures the level of unsatisfied demand for family planning. It has been argued that many women with an unmet need would not use contraception even if it were available to them, for reasons including personal or familial opposition to family planning, and that the proportion of *women who intend to use family planning* in the future is a better measure of demand for contraception than unmet need.<sup>26</sup> Where longitudinal data are available, researchers have attempted to assess the two measures by comparing whether unmet need or women's stated intentions to use contraception better predict subsequent use of family planning.

Curtis and Westoff undertook a study of women in Morocco and found that, among those who stated that they intended to use a method in the year following the initial survey, 76% had taken up a method within the following three years.<sup>27</sup> In a separate analysis based on the same surveys, Westoff and Bankole observed that 35% of women with unmet need at baseline were users of contraception three years later and another 36% no longer had a need for contraception because they were trying to conceive, they were not fecund, or for other reasons.<sup>28</sup>\* This finding demonstrates that different women will be captured by repeated surveys measuring unmet need because the measure is sensitive to changes in preferences and circumstances.

To some extent, measures of unmet need for contraception and intention to use a method capture the *same groups of women*. In a comparative study of 27 DHS surveys, Westoff and Bankole observed that 26–79% of women with an unmet need stated that they intend to use a method at some time in the future.<sup>29</sup> Similarly, in an updated comparative study in 2000, 26–83% of women with an unmet need intended to use a method.<sup>30</sup> In an analysis of 25 DHS surveys, Ross and Heaton observed that, on average, 65% of women with an unmet need intended to use a method, and 40% of women who intend to use a method were categorized as having an unmet need.<sup>31</sup>

More generally, these studies rely on the assumption that subsequent use of family planning is the standard against which to validate measures of unmet need for contraception. Women who are classified as having an unmet need and do not go on to use a method nevertheless may be at risk of an unwanted pregnancy and have an unmet need for contraception. Additionally, a woman's need status can change over time, and a measure of unmet need is meant to assess circumstances at the time the measurement is made, while levels of intention to use contraception might include anticipated demand for contraception.

Other demographers have questioned the effectiveness of targeting nonusers of contraception altogether, by comparing the proportion of all unwanted pregnancies that occur among women categorized as having an unmet need with the proportion of unwanted pregnancies that occur among women who were using their methods suboptimally or who discontinued method use. These comparisons recall the recommendation of Dixon Mueller and Germain to count such women among those with unmet need.<sup>16</sup> Using a combination of longitudinal data from Peru and a simulation model, Jain concluded that more unintended pregnancies would be averted if efforts focused on preventing method failure or discontinuation among contraceptive users than if resources were directed to providing family planning to women with unmet need.<sup>32</sup> In contrast, in a recent longitudinal study in Upper Egypt, women with unmet need contributed a larger share of unintended births during follow-up than contraceptive users.33

The findings together suggest that, in settings where contraceptive users comprise a much larger proportion of the population than women with an unmet need, they may contribute a greater proportion of all unintended pregnancies than women with unmet need, even though contraceptive users experience a much lower unintended pregnancy rate than nonusers.<sup>34</sup> A comprehensive review by Singh et al. using DHS data from several countries indicates that one-third of all unintended pregnancies in developing countries are among women using a modern or traditional contraceptive method, and two-thirds are among women using no method at all.<sup>6</sup> Additional research could further our understanding about the populations that carry the

<sup>\*</sup>Westoff and Bankole used a modified version of the standard DHS definition of unmet need, using the fertility intentions of pregnant and amenorrheic women to assess their childbearing preferences, rather than the wantedness of their most recent pregnancy. If the standard DHS measure were used, larger proportions of women with unmet need might have been observed taking up contraception in the follow-up period.

greatest burden of unintended pregnancy, and could enhance our understanding of the interventions necessary to reduce the incidence of intended pregnancy.

#### The Potential Demographic Impact of Addressing Unmet Need

In the years since the activities of the international family planning movement began to incorporate a broader reproductive health agenda, there has been discussion of whether the concept of unmet need can satisfy the missions both of advocates of population control and proponents of meeting the reproductive health aspirations of individuals. Using extensive analyses of empirical data from recent decades, Pritchett developed the argument that most declines in fertility have been attributable to *changes in fertility desires* rather than the satisfaction of pre-existing unmet need, and concluded that programs and policies would be more effective at controlling fertility if aimed at influencing women's fertility preferences rather than satisfying unmet need.<sup>35</sup>

Others have used models to estimate the potential impact of meeting unmet need globally. Sinding et al. projected that the contraceptive prevalence rates and total fertility rates that would prevail if unmet need were satisfied would meet or exceed most demographic targets.<sup>2</sup> Westoff and Bankole generated more conservative projections, assuming that only a subset of women with unmet need would use contraception, even if services were fully available.<sup>14</sup> They nevertheless found that meeting unmet need would result in significant reductions in fertility, representing 20–50% of the difference between current fertility and replacement-level fertility.

Shortly thereafter, Bongaarts challenged Pritchett's earlier conclusions by pointing out that family planning programs might erroneously appear to be ineffective in reducing unwanted fertility if declines in desired family size are occurring simultaneously with provision of family planning.<sup>36</sup> Feyisetan and Casterline also questioned Pritchett's argument by analyzing the proportion of the fertility decline in 26 countries over 20 years that was attributable to changes in fertility preferences and the proportion attributable to satisfaction of preferences; they found that *satisfaction of existing demand* represented more than 70% of the increase in contraceptive prevalence in most of the countries.<sup>37</sup>

The interrelationship between demand and unmet need for contraception can affect monitoring of trends. An increase in the demand for contraception can in principle increase unmet need if services do not meet rising demand. If services do succeed in satisfying growing demand for contraception, unmet need might plateau, even while contraceptive use is increasing. In most counties where data are available, however, unmet need has decreased as contraceptive prevalence has risen.

## Research on Why Women with an Unmet Need Do Not Use Contraception

Most studies that have assessed the reasons why women at risk of an unwanted pregnancy are not using contraceptives have been limited in scope. The last comprehensive, cross-regional review of reasons for nonuse was undertaken over a decade ago, and was based on surveys conducted before 1990.<sup>38</sup> At that time, lack of knowledge of family planning was a prominent reason, cited by about a fourth of women in the DHS countries reviewed; this reason was proffered most frequently in Sub-Saharan African countries. The next most frequently cited reasons worldwide fell under the rubric of health concerns, which weighed most heavily in Asia and Latin America.

Westoff and Bankole explored reasons for not intending to use a method among women with an unmet need who stated that they do not intend to use contraceptives in the future, using data from 27 countries between 1990 and 1994.<sup>29</sup> In this group, the most common reason was a stated desire to eventually have another child. Following this reason, patterns were similar to those observed in the analyses by Bongaarts and Bruce: Lack of knowledge was highly prevalent, particularly in Sub-Saharan Africa, and concerns about health and side effects were common outside this region. In the South Asian countries of Bangladesh and Pakistan, opposition to family planning was also strong.

Bongaarts and Bruce noted important limitations to analyses of reasons for nonuse of family planning based on DHS data. At the time of the review, DHS interviews allowed women to provide a single response indicating their most important reasons for nonuse, and the responses might therefore be incomplete in that women may have multiple reasons for nonuse. Some women may also find it difficult to determine the most important among several reasons. Also, true reasons for nonuse might be personal in nature, and women might instead provide answers that they find more acceptable to convey to an interviewer. While some of these potential barriers to understanding women's reasons for nonuse probably still exist, surveys do now allow women to provide multiple reasons for nonuse. Because of the limitations of quantitative surveys as a means of extracting and understanding women's underlying reasons for nonuse, some researchers have undertaken qualitative methods to explore barriers to contraceptive use. An illustrative example is the work of Casterline, Perez and Biddlecom, who undertook indepth *qualitative analyses* to explore reasons for nonuse among women with an unmet need in the Philippines.<sup>39</sup> Their work uncovered many of the same general barriers identified by the quantitative surveys, albeit with some variations in the prevalence of the different reasons and with more explanatory detail of these reasons. They also observed that women with an unmet need might have a weaker preference to avoid pregnancy than family planning users.

A recent review synthesized much of qualitative research to date on the barriers to fertility regulation faced by women and couples.<sup>40</sup> The authors discussed obstacles including limited method choice, financial costs, misinformation, constraints on women's decision-making abilities, health concerns and provider biases.

The available qualitative research on reasons for nonuse enhance our understanding of the barriers to contraceptive use in their respective study populations, but they have not provided a geographically comprehensive picture of women's reasons for nonuse and they have not been able to quantify the prevalence and relative importance of various reasons.

#### Summary

As the definition of unmet need has been honed over the years, there has at times been confusion about exactly how unmet need is defined. However, the prevailing definition of the concept has been in use for over a decade and is now considered the standard definition of unmet need.

The discourse around the strengths and weaknesses of the operational definition of unmet need has been important to our understanding of unmet need, but the predominant view has been that the measure is, fundamentally, a highly useful means of identifying populations of women that are at risk of unintended pregnancy, many of whom could be served by family planning programs. Moreover, there is evidence that while the current focus of family planning and reproductive health programs is on supporting the well-being of individuals, meeting unmet need can serve broader agendas such as reducing the pressures of population growth on societies and economies.

Social scientists have brought attention to the fact that meeting women's unmet need for contraception

has not been the sole contributor to fertility decline historically; changes in family size preference, which is influenced by societal, cultural and economic forces, also affect fertility levels, and in fact drive women's demand for family planning. These forces are largely influenced by broad development efforts and cultural change. Governments' commitments to family planning programs could also legitimize desires for smaller families and empower couples to increase birth intervals for any given desired family size.<sup>36</sup>

In order to most effectively help women and couples avoid unintended pregnancies, it is imperative that we understand reasons why women with an unmet need are not using contraception. Targeted studies have addressed aspects of unmet need in some countries, but a comprehensive review of the barriers that women face to contraceptive use, which elucidates regional patterns, cross-national disparities and even subnational differentials, has not been undertaken. Moreover, it is conceivable that, in response to increased globalization and the impact of family planning programs thus far, the barriers to contraceptive use have evolved and changed since prior, more abridged comparative studies were undertaken on this issue.

# Chapter 3 Data and Methodology

#### **Data Sources**

The findings in this report are based on data from the Demographic and Health Surveys (DHS), which are designed to collect information on fertility, family planning, maternal and child health, and other key health issues in developing countries. In all countries, the surveys use a standardized core questionnaire, which has been developed and refined over the past two decades. We use data from the most recent surveys administered to nationally representative samples of women between the ages of 15 and 49 in 53 countries in Asia, Africa and the Latin America between 1995 and 2005. Of the 53 surveys represented, 40 were conducted between 2000 and 2005. The less recent surveys are included here to maximize the geographic breadth of our findings.

The surveys included in this report are listed in Table 3.1. The number of respondents in each survey ranges from 3,848 in the Kyrgyz Republic (1997) to 90,303 women in India (1999). The countries included in this report represent 64% of less developed regions of the world excluding China.<sup>\*,†</sup>

We conduct limited analyses of regional trends in the levels of unmet need among married women. For these analyses we use data from the 40 surveys that were conducted between 2000 and 2005 and 32 DHS surveys that were conducted between 1990 and 1995.

Because the definition of unmet need is constructed somewhat differently for married and unmarried women, and because circumstances surrounding unmet need might differ for these two groups, we treat married and never-married women separately in this report. Of the 53 surveys included in these analyses, 45 included never-married women. In nine of these surveys, women were not asked about sexual activity or the quality of the data on sexual activity was in doubt. The analysis of unmet need among never-married women is based on information from 36 countries.<sup>‡</sup>

Women who were previously married and were not in union at the time of the survey were excluded from these analyses. This is because their circumstances differ substantially from those of never-married women and in most countries they are too few in number to be analyzed separately.

#### **Key Variables**

#### Measure of unmet need for contraception

We use the standard DHS definition of unmet need for contraception as our principal measure in this report (Figure 3.1). According to this definition, a married woman has an unmet need if she

- is married or in a nonmarital union, or if she is never-married but sexually active;
- is fecund;
- does not want to have a child (or another child) in the next two years or at all; and
- is not using a modern or traditional method of contraception.

Also considered to have an unmet need are pregnant or postpartum amenorrheic married women who indicated that their pregnancy or most recent birth was unwanted or mistimed.<sup>§</sup>

<sup>\*</sup>Based on the UN definition of "less developed regions," which includes all areas in Asia (excluding Japan), Africa, Latin America and the Caribbean, as well as Melanesia, Micronesia and Polynesia.

<sup>†</sup>A comparable national survey is not available for China. Contraceptive prevalence is high in China and it is expected that unmet need there is low.

<sup>‡</sup>Information on unmet need among never-married women is unavailable or considered unreliable for the Kyrgyz Republic, Uzbekistan, Guatemala, Mauritania, Niger and the 12 surveys in North Africa and West, South and Southeast Asia.

<sup>§</sup>In the twenty countries listed in Table 6.5, pregnant and amenorrheic women who became pregnant while using a method were not included in this measure of unmet need. The incidence of method failure was less than 3% in all countries involved. However, in four earlier surveys (conducted between 1991 and 1995 in Egypt, Kenya, Malawi and Tanzania), the unmet need measure included pregnant and amenorrheic women who experienced method failures.

This DHS definition considers a woman infecund if she

- was married for at least five years preceding the survey and did not use a contraceptive method, did not have a birth during that time and was not pregnant at the time of the survey;\*
- is neither pregnant nor postpartum amenorrheic, but has not menstruated for at least six months; or
- indicated in response to questions regarding fertility intentions or her reason for not using contraception that she is menopausal, has had a hysterectomy or otherwise cannot get pregnant.

According to the DHS definition, never-married women were assumed to be sexually active if they had sexual intercourse in the month prior to the survey, whereas in this report, never-married women who had sex in the three months prior to the survey were assumed to be sexually active. This definition is used throughout the subsequent sections of the report. All women who are married or in a nonmarital union are assumed to be sexually active. Women who previously married but not currently married or in union are excluded from these analyses because of their small sample size.

#### **Reasons for nonuse of contraception**

All married women who were not using any method of family planning and who had indicated that they did not want to have a child in the near future, and all unmarried women who were not using a method of family planning were asked to indicate their reasons for nonuse. The question took the general form: "You have said that you do not want a child soon/another child soon/any children/any more children, but you are not using any method to avoid pregnancy. Can you tell me why?" To help with coding of women's answers, questionnaires included a list of more than 20 precoded responses and also allowed interviewers to enter women's other, uncoded reasons. Responses were categorized according to whether they related to a woman's perceived low risk of getting pregnant; her opposition to family planning or the opposition of someone close to her; or family planning service provision, including cost, access, education regarding methods and counseling about side effects; as well as other reasons that fall outside these three broad categories.

In the surveys conducted before 1999–2000, the DHS questionnaire asked each woman only about her main reason for nonuse of family planning. Because

women might face a number of important obstacles to contraceptive use, more recent surveys allow women to give multiple reasons for nonuse. We examine reasons for nonuse in the 38 countries whose surveys allow women to provide multiple reasons for not using family planning.<sup>†</sup>

We briefly explore trends in some keys reasons for nonuse by examining the proportions of women citing these reasons in 1986–1990 and 2000–2005 in the eight countries for which data on prevalence are available from both time periods. In the surveys administered in the early 1990s, women's reasons for current nonuse were not solicited, so we did not use these surveys when exploring trends in women's reasons for nonuse.<sup>‡</sup>

#### Intention to use contraception

We identify proportions of women with an unmet need who indicate that they intend to use family planning in the future. In addition, among women who gave each particular reason for not currently using family planning, we calculated the proportion who said they intended to use family planning in the future. This information is meant to assess the extent to which helping women overcome their barriers to contraceptive use is likely to help them use contraception to meet their fertility intentions in the future. Information on women's intention to practice contraception is taken from the question "Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?"

#### Discontinuation of contraceptive use

The DHS collects contraceptive histories for the fiveyear period before interview in countries with relatively high levels of contraceptive use. Women who had discontinued use of a family planning method during the five-year period were asked why they discontinued use when they did. Some women who had an unmet need at the time of the survey had in fact used family planning in the five years preceding the survey. We look at the reasons they gave for discontinuing the use

<sup>\*</sup>Because it does not take abortion into account, this criterion has the potential to overstate infecundity.

<sup>+</sup>Information on reasons for nonuse is not presented for the following countries: Kazakhstan, Kyrgyz Republic, Uzbekistan, Brazil, Guatemala, Jordan, Turkey, India, Vietnam, Central African Republic, Cote d'Ivoire, Niger, South Africa or Togo.

<sup>‡</sup>Women in these surveys who indicated that they would not use contraception in the future were asked their reasons for not intending to use a method. A descriptive analysis of women's reported reasons for not intending to use contraception in surveys conducted from 1990 to 1995 indicates that the desire to have a child was a primary reason given, followed by lack of knowledge about contraception and concerns about health and side effects.<sup>29</sup>

of family planning, focusing on their most recent experience with contraception. This information was collected in 20 of the countries presented here.

#### Social and demographic characteristics

We examine the levels of unmet need among social and demographic subgroups within each country in this study, with a view toward identifying populations with the greatest levels of unmet need. We also explore reasons for nonuse of family planning in these subgroups. Variables used in this exploration include women's age (15–24, 25–34 and 35–49 years old); parity (defined as 0–1 live birth, 2–3 births and 4 or more births among married women, and 0 births or >1 birth for never-married women); area of residence (urban or rural); education (usually defined as fewer than 7 years of schooling and 7 or more years of schooling); and wealth status (described below).

Our aim was to develop categories that correspond with groupings of women, within which the circumstances surrounding unmet need are likely to be similar, while also accounting for sample size limitations that prevent us from slicing the populations too finely. We also sought to examine social and demographic groupings that would be of value to policy and program planning.

While nulliparous women might have different family planning needs than women who have begun childbearing, the majority of married women had already begun childbearing in most countries, so nulliparous women and women with one live birth were grouped together in analyses.

In most countries we look at unmet need among women with fewer than seven years of schooling and women with seven or more years of schooling. In Armenia, Kazakhstan, the Kyrgyz Republic and Uzbekistan, we instead look at women who have completed secondary school and those who have not, because the average level of educational attainment is relatively high in these Western and Central Asian countries.

The household wealth index variable used in these analyses was constructed by DHS staff, drawing from extensive information collected on women's household assets, including various household possessions.<sup>41</sup> The wealth index was constructed by applying a factor analysis to this information. Respondents are classified here as poor if they fall into the lowest one-third of the sample distribution of respondents in the specified survey with respect to wealth.

Levels of unmet need and reasons for nonuse were

also examined separately among women who had and had not ever used family planning in the past. Ever-use of family planning can be viewed as an indicator of women's desire and motivation to control their childbearing, and their receptiveness to the notion of contraception.

#### **Analytic Approach**

We present the percentage of women with unmet need for a family planning method in each country and percentage distributions of women according to whether they have an unmet need to delay a birth or to stop childbearing, whether they have a met need for contraception or whether they have no need. We also present proportions of women with an unmet need in numerous population subgroups, defined by social and demographic characteristics, in each country, and the proportions who cite each of the most commonly cited reasons for contraceptive nonuse.

We present findings on specific reasons and also on broad, summary categories of reasons (supply of methods and services; demand for contraception; and perceived exposure to pregnancy). For each broad type of reason, we create and use a variable that indicates whether a woman gave any reason from that broad category.

DHS staff developed sampling weights for women in each survey to correct for differential representation of some demographic groups and to render more nationally representative samples.<sup>42</sup> We present weighted results throughout this report, along with unweighted sample sizes. The results of statistical tests are presented in the Appendix, and are based on weighted data.

We also present summary measures of the regional averages of the proportion of women with unmet need and proportions of women who gave specific reasons for nonuse of contraception. These averages are weighted by the population of 15–49-year-old women in each country represented in the region, using United Nations population estimates for the year of the survey.

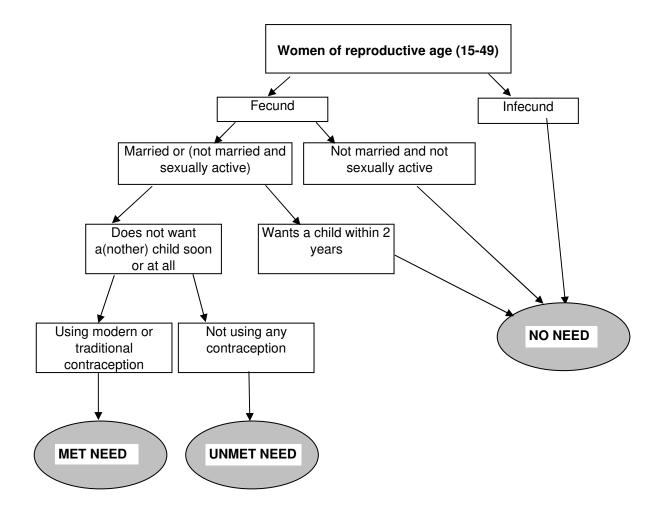


Figure 3.1 Defining characteristics of women with unmet need, met need and no need for contraception

#### Table 3.1 Key features of surveys in the report, by country

			-	# of respondents aged 15–49:					
Region/country	Year survey completed	Number of respondents	Sample	Currently married	Never married	Other			
Central Asia									
Kazakhstan	1999	4,800	all women	3,018	1,215	807			
Kyrgyz Republic	1997	3,848	all women	2,677	834	337			
Uzbekistan	1996	4,415	all women	3,067	1,074	58			
Latin America & Caribbean									
Bolivia	2003	17,654	all women	10,569	5,649	1,438			
Brazil	1996	12,612	all women	7,485	3,853	1,175			
Colombia	2005	41,344	all women	19,762	12,604	4,988			
Dominican Republic	2002	23,384	all women	14,504	5,383	4,005			
Guatemala	1999	6,021	all women	4,045	1,575	482			
Haiti	2000	10,159	all women	5,902	3,185	1,018			
Honduras	2005	19,948	all women	11,709	5,577	2,262			
Nicaragua	2001	13,060	all women	7,678	3,373	2,264			
Peru	2004	11,717	all women	6,328	4,254	1,134			
North Africa & West Asia		,		,	,	,			
Armenia	2005	6,508	all women	4,112	2,006	390			
Egypt	2005	19,474	ever married	18,187	na	1,287			
Jordan	2002	6,006	ever married	5,727	na	300			
Могоссо	2004	16,798	all women	8,851	7,074	942			
Turkey	1998	8,576	ever married	5,893	2,380	278			
South & Southeast Asia	1000	0,070	ovor married	0,000	2,000	2/0			
Bangladesh	2004	10,544	ever married	10,436	na	854			
Cambodia	2000	15,351	all women	9,332		1,396			
India	1999	90,303	ever married	84,862		5,621			
Indonesia	2003	29,483	ever married	27,784		1,626			
Nepal	2000	8,726	ever married	8,324	na	384			
Philippines	2003	13,633	all women	8,671	4,388	574			
Vietnam	2003	5,665	ever married	5,341	4,000 na	327			
Sub-Saharan Africa	2002	5,005	evermaneu	5,541	na	527			
Benin	2001	6,219	all women	4,587	1,351	306			
Burkina Faso	2003	12,477	all women	9,537	2,337	485			
Cameroon	2004	10,656	all women	7,166		930			
Central African Republic	1995	5,884	all women	4,057	1,147	654			
Chad	2004	6,085	all women	4,663	873	549			
Congo	2004	7,051	all women	3,393	2,074	994			
Cote d'Ivoire	1999	3,040	all women	1,716		252			
Ethiopia	2005	14,070	all women	9,066	3,516	1,488			
Gabon	2003	6,183	all women	3,469	2,018	816			
Ghana	2000	5,691	all women	3,409	1,616	526			
Guinea	2003		all women	5,694 6,327		329			
Kenya		7,954				833			
Lesotho	2003 2004	8,195	all women	4,876	2,443				
Madagascar		7,095	all women	3,709	2,373	1,014			
Malawi	2004	7,949	all women	5,140	1,693	1,116			
Mali	2004	11,698	all women	8,312	,	1,416			
	2001	12,849	all women	10,697		395			
Mauritania	2001	7,728	all women	4,232		978			
Mozambique	2003	12,418	all women	8,377	1,961	1,721			
Namibia	2000	6,755	all women	2,827	3,667	476			
Niger	1998	7,577	all women	6,118	851	345			
Nigeria	2003	7,620	all women	5,157	1,926	358			
Rwanda	2005	11,321	all women	5,458	4,328	1,535			
Senegal	2005	14,602	all women	9,866	5,665	795			
South Africa	1998	11,735	all women	4,948	3,941	993			
Tanzania	2004	10,329	all women	6,950	2,371	1,007			
Togo	1998	8,569	all women	5,976	2,137	612			
Uganda	2001	7,246	all women	4,675	1,456	910			
Zambia	2002	7,658	all women	4,731	1,897	1,067			
Zimbabwe	1999	5,907	all women	3,553	1,637	662			

## Chapter 4 Characteristics of Women in the Surveys

#### **Characteristics of Married Women**

The characteristics of married women in the surveys are presented in Table 4.1. Populations were slightly older on average in Asian, Latin American, Caribbean and North African countries than in Sub-Saharan Africa. Parity also tended to be higher among the married women in Sub-Saharan Africa than in other regions. In most Sub-Saharan countries, more than threefourths of women have had at least two children. Parity seems to be lowest in Kazakhstan, where nearly half of women were nulliparous or had one live birth.

The majority of women in most of the countries surveyed live in rural areas. In most Latin American countries, however, populations are more than 50% urban. Most women in the vast majority of countries covered here have fewer than seven years of schooling. In many Sub-Saharan African countries, more than 90% of women have fewer than seven years of schooling. Only in Armenia and the Central Asian countries of Kaza-khstan, Kyrgyz Republic and Uzbekistan does the proportion of women who have completed secondary school approach 90%.

Many women have used either a modern or traditional method of family planning at some point in their lives. In most countries, at least half of women have ever used a method of contraception. Ever-use of family planning was lowest in Chad, at 8%. Outside of Sub-Saharan Africa, ever-use was lowest in Cambodia at 37%. Ever-use was particularly high in Brazil, Colombia, Peru, Morocco and Vietnam, where it ranged from 90–96%.

Current use of family planning varies by region and country. Most married women in Asia, Latin America and the Caribbean, and North Africa currently use some method of contraception. However, most women in Sub-Saharan Africa do not. Current use is particularly low in five countries—Chad, Guinea, Mali, Mauritania and Niger—where fewer than 10% of married women aged 15–49 were using any method at the time of the survey.

One measure of the level of fertility in a population is the total fertility rate (TFR). The TFR indicates the number of children a woman would have by the end of childbearing years if current fertility rates were to remain constant throughout those years. Total fertility rates vary considerably by region (Table 4.2). The TFR is at least 4 throughout Sub-Saharan Africa, with the exception of Lesotho and South Africa. It is as high as 7 in Niger, Uganda and Mali. Fertility in other regions is generally substantially lower. In the Latin America region the TFR ranges from 2.4 (Colombia and Peru) to 5.0 (Guatemala), and in South and Southeast Asia it ranges from 1.9 (Vietnam) to 4.1 (Nepal). Women would have an average of two or fewer children in Kazakhstan, Armenia and Vietnam if current fertility rates prevailed throughout their reproductive lives.

The TFR can be divided into wanted and unwanted fertility rates. The wanted total fertility rate (WTFR) is calculated in the same way as the conventional TFR, except that any recent births that exceed a woman's stated ideal number of children are not included among the births in the rate. It is essentially a measure of average number of children a woman will have if her life-time fertility corresponds with the current levels of wanted childbearing in the population.<sup>43</sup>

Wanted total fertility rates are consistently lower than total fertility rates. The wanted fertility rates are lowest in Colombia, Vietnam, Peru and Armenia at 1.5–1.7. The highest wanted total fertility rate is in Niger, where current data imply women want seven children on average. The gap between the wanted and actual fertility rates is greatest in Haiti, Nepal and Uganda, where women would have an average of 1.5 more children each than they wish to have. These gaps indicate the extent to which women are unsuccessful in avoiding unwanted pregnancies.

The percentage of recent births that were unwanted ranged from only 5-16% in Central Asia and 16-30% in North Africa and West Asia. In South and Southeast Asia, the level ranged from 21% in India to 45% in the

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Philippines. More than 40% of recent births were unwanted in all Latin America and the Caribbean countries, except Guatemala (29%). In Sub-Saharan Africa, the level of unwanted births was less than 20% in six countries, but more than 40% of births were unwanted in Gabon, Ghana, Kenya, Lesotho, Namibia, South Africa and Togo. The percentage of births that are unwanted is generally even lower than the percentage of pregnancies that are unintended, because some unintended pregnancies end in abortion. Where abortion rates are high, such as in many Central Asian countries, the level of unmet need for contraception might be higher than implied by the measure of the wantedness of births.

#### **Characteristics of Never-Married Women**

Surveys in 36 countries—eight in the Latin American region, 27 in Sub-Saharan Africa, and one in Central Asia—included never-married women. The characteristics of never-married women in the surveys are shown in Table 4.3, and their profile differs from that of married women in many respects.

Not surprisingly, the vast majority of never-married women in all countries were younger than 25. In only a few countries—Colombia, the Congo, Namibia and South Africa—were as many as a third of never-married women 25 years or older.

Most never-married women had not given birth yet, but higher proportions of never-married women in Sub-Saharan Africa have started childbearing than of those in Latin America and the Caribbean. Nearly half (47–48%) of never-married women in Namibia and South Africa had given birth.

The vast majority of never-married women in Latin American and Caribbean countries surveyed lived in urban areas. In Sub-Saharan Africa, however, fewer than 50% lived in urban areas in about half of the countries.

Most never-married women in Latin America and the Caribbean (except in Haiti) had at least seven years of education. Education levels among never-married women were lower in Sub-Saharan Africa, and especially in Chad, Rwanda and Central African Republic. Educational attainment in this region was highest in South Africa, Zimbabwe, Namibia and Kenya. In Kazakhstan in Central Asia, achievement of a secondary school education was universal among never-married women.

Not all never-married married are sexually active, and so it is not surprising that family planning use was considerably lower among never-married women than among married women. Perhaps notably, the highest levels of ever-use among never-married women were in Sub-Saharan Africa: In the Congo, Gabon and South Africa, 65% of never-married women had used contraceptives at some point in their lives. But the lowest levels of ever-use are also in this region: Only 2–3% of women in Chad, Ethiopia, Rwanda and Senegal had ever used a method. Current use of contraception was low in all countries. Fewer than one-third of nevermarried women currently used a method in all countries except the Congo, Gabon, Namibia and South Africa.

			Age			Parity				Residence	Education	Contraceptive use	
Region/country	n	15–24	25–34	35+	Total	0–1	2–3	>3	Total	% urban	% <u>&gt;</u> 7 years	Ever	Current
Central Asia													
Kazakhstan	3,018	17	36	47	100	48	39	13	100	53	88*	88	6
Kyrgyz Republic	2,677	24	38	38	100	23	42	35	100	32	88*	83	6
Uzbekistan	3,067	28	37	35	100	23	41	37	100	38	90*	68	5
Latin America & Caribbean													
Bolivia	10,569	23	38	40	100	15	39	46	100	65	46	78	5
Brazil	7,485	19	39	42	100	27	48	25	100	79	40	94	7
Colombia	19,799	19	34	47	100	29	50	22	100	73	57	96	7
Dominican Republic	14,504	26	36	38	100	24	48	29	100	65	62	89	7
Guatemala	4,045	31	36	34	100	20	34	46	100	43	19	51	3
Haiti	5,902	26	37	37	100	27	29	44	100	37	19	55	2
Honduras	11,613	25	38	36	100	25	38	38	100	49	26	88	6
Nicaragua	7,678	31	35	34	100	26	36	39	100	58	38	88	6
Peru	6,328	15	34	51	100	25	43	32	100	63	60	95	7
North Africa & West Asia													
Armenia	4,044	14	32	54	100	20	69	10	100	61	60*	76	5
Egypt	18,187	20	37	43	100	24	42	35	100	41	49	81	1
Jordan	5,727	18	44	38	100	19	28	53	100	80	83	81	5
Morocco	8,851	20	34	47	100	25	34	40	100	57	19	90	6
Turkey	5,893	24	38	38	100	28	45	27	100	57	20	85	6
South & Southeast Asia													
Bangladesh	10,553	39	34	28	100	28	38	34	100	22	23	83	5
Cambodia	9,332	19	39	42	100	20	31	50	100	16	15	37	2
India	84,862	33	37	30	100	25	41	35	100	26	28	55	4
Indonesia	27,784	21	37	42	100	31	44	26	100	54	39	82	6
Nepal	8,324	35	35	30	100	25	34	41	100	10	11	54	3
Philippines	8,671	19	37	44	100	25	38	37	100	54	69	71	4
Vietnam	5,341	15	38	47	100	23	55	22	100	19	39	91	7
Sub-Saharan Africa													
Benin	4,587	33	38	28	100	40	22	39	100	35	8	50	1
Burkina Faso	9,537	34	35	32	100	22	27	51	100	15	4	30	1-
Cameroon	7,166	39	34	27	100	29	28	43	100	49	36	57	2
Central African Republic	4,057	37	36	27	100	31	28	42	100	37	9	39	1
Chad	4,663	32	38	31	100	20	26	55	100	18	4	8	
Congo	3,979	28	40	33	100	25	37	38	100	53	59	94	4
Cote d'Ivoire	1,716	33	37	29	100	25	27	48	100	34	9	42	1
Ethiopia	9,066	25	40	35	100	20	25	55	100	11	6	24	1
Gabon	3,469	33	38	30	100	29	30	41	100	76	47	75	3
Ghana	3,694	23	40	37	100	23	33	44	100	41	42	55	2
Guinea	6,292	23	36	41	100	21	26	53	100	26	6	23	
Kenya	4,876	31	38	31	100	21	33	46	100	22	62	64	3
Lesotho	3,709	33	33	33	100	32	37	31	100	20	66	76	3
Madagascar	5,140	25	38	37	100	23	33	44	100	23	25	47	2
Malawi	8,312	37	37	27	100	24	32	43	100		30	60	3
Mali	10,697	35	36	29	100	21	24	55	100		5	24	
Mauritania	4,232	31	38	31	100	26	25	49	100		40	20	
Mozambique	8,377	35	37	28	100	24	29	47	100		7	57	2
Namibia	2,827	19	40	41	100	22	37	41	100		39	74	4
Niger	6,118	41	33	27	100	23	21	55	100		3	20	
Nigeria	5,157	35	35	30	100	25	24	51	100		25	31	1
Bwanda	5 510	10	40	20	100	17	20	E /	100		10	25	

Table 4.1 Percentage distribution and percentage of currently married women aged 15–49, by country, according to social and demographic characteristics

\*Educational attainment refers to % of women who have completed secondary schooling.

5,510

9,866

4,948

6,950

5,976

4,675

4,731

3,553

Rwanda

Senegal

Tanzania

Uganda

Zambia

Zimbabwe

Togo

South Africa

#### Table 4.2 Total fertility rates and fertility preferences, by country

Table 4.2 Total leftinty rates and leftinty	preferences, by country	<i>y</i>	
Region/country	TFR	WTFR	% of births unplanned*
Central Asia			
Kazakhstan	2.0	1.9	16
Kyrgyz Republic	3.4	3.1	13
Uzbekistan	3.3	3.1	5
Latin America & Caribbean	010	0.1	Ũ
Bolivia	3.8	3.1	60
Brazil	2.6	1.8	
Colombia	2.4	1.7	
Dominican Republic	3.0	2.3	
Guatemala	5.0	4.1	29
Haiti	4.7	2.8	54
Honduras	3.3	2.3	49
Nicaragua	3.2	2.3	48
Peru	2.4	1.5	
North Africa & West Asia			
Armenia	1.7	1.6	16
Egypt	3.1	2.3	
Jordan	3.7	2.6	
Morocco	2.5	1.8	
Turkey	2.6	1.9	28
South & Southeast Asia			
Bangladesh	3.0	1.9	28
Cambodia	3.8	3.0	
India	2.8	2.1	21
Indonesia	2.6	2.2	
Nepal	4.1	2.5	
Philippines	3.5	2.5	
Vietnam	1.9	1.6	
Sub-Saharan Africa			
Benin	5.6	4.6	23
Burkina Faso	5.9	5.1	24
Cameroon	5.0	4.5	21
Central African Republic	5.1	4.7	23
Chad	6.3	6.1	17
Congo	4.8	4.4	33
Cote d'Ivoire	5.2	4.5	28
Ethiopia	5.4	4.0	35
Gabon	4.2	3.5	45
Ghana	4.4	3.7	40
Guinea	5.7	5.1	14
Kenya	4.9	3.6	44
Lesotho	3.5	2.5	
Madagascar	5.2	4.7	15
Malawi	6.0	4.9	39
Mali	6.8	6.1	
Mauritania	4.5	4.1	
Mozambique	5.5		
Namibia	4.2		
Niger	7.2		
Nigeria	5.7	5.3	
Rwanda	6.1	4.6	
Senegal	5.3	4.5	
South Africa	2.9	2.3	
Tanzania	5.7	4.9	
Тодо	5.2	4.2	
Uganda	6.9	5.3	
Zambia	5.9	4.9	
Zimbabwe	4.0	3.4	

\*Percent of all births 3 years preceding survey year. Notes: TFR=Total fertitly rate. WTFR=Wanted total fertitly rate.

Table 4.3 Percentage distrubution of never-married women, by country, according to social and demographic characteristics
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		Age Parity							Residence	Education	Contraceptive use	
Region/country	n	15–24	25–34	35+	Total	0	1+	Total	% urban	% <u>&gt;</u> 7 years	Ever	Current
Central Asia												
Kazakhstan	1,215	81	12	7	100	96	4	100	57	99*	16	8
Latin America & Caribbean												
Bolivia	5,649	83	12	4	100	89	11	100	75	82	18	8
Brazil	3,853	77	16	8	100	91	9	100	85	63	28	15
Colombia	15,548	69	19	12	100	84	16	100	80	77	42	21
Dominican Republic	5,383	85	12	3	100	94	6	100	73	89	13	6
Haiti	3,185	85	13	2	100	97	3	100	60	48	13	6
Honduras	5,583	84	11	5	100	90	10	100	60	57	11	4
Nicaragua	3,373	87	10	4	100	93	7	100	70	66	9	4
Peru	4,254	74	19	7	100	90	10	100	78	88	25	11
Sub–Saharan Africa	,											
Benin	1,351	93	6	1	100	93	7	100	59	31	30	17
Burkina Faso	2,337	96	4	0	100	94	6	100	44	26	21	15
Cameroon	2,560	91	8	2	100	85	15	100	69	66	42	26
Central African Republic	1,147	83	13	4	100	71	29	100	54	15	22	12
Chad	873	97	2	0	100	99	1	100	30	17	3	1
Congo	2,082	84	13	4	100	74	26	100	63	65	72	46
Cote d'Ivoire	925	85	13	2	100	74	26	100	57	28	51	32
Ethiopia	3,516	90	9	1	100	98	2	100	32	28	3	2
Gabon	2,018	85	12	3	100	65	36	100	86	60	65	39
Ghana	1,616	88	11	1	100	92	8	100	65	72	28	13
Guinea	1,311	95	4	0	100	88	12	100	52	27	20	16
Kenya	2,443	86	11	3	100	81	20	100	29	76	21	E
Lesotho	2,373	86	9	4	100	80	20	100	30	72	36	16
Madagascar	1,693	82	13	5	100	77	23	100	31	37	16	10
Malawi	1,970	95	4	1	100	90	10	100	73	59	10	4
Mali	1,730	92	7	1	100	86	14	100	59	26	17	10
Mozambigue	1,961	91	7	2	100	78	23	100	61	30	38	27
Namibia	3,667	65	26	9	100	52	48	100	38	77	54	33
Nigeria	1,926	88	11	1	100	93	7	100	44	73	25	16
Rwanda	4,263	88	9	2	100	92	8	100	21	12	3	1
South Africa	5,665	66	24	11	100	54	47	100	60	86	65	45
Senegal	3,941	87	12	2	100	97	3	100	65	29	2	1
Tanzania	2,371	88	10	2	100	82	18	100	41	64	18	10
Togo	2,137	92	7	1	100	92	9	100	55	26	49	31
Uganda	1,456	91	, 8	2	100	85	15	100	27	47	26	14
Zambia	1,400	91	8	1	100	79	21	100	50	64	22	5
Zimbabwe	1,637	91	8	2	100	87	13	100	44	90	14	7

\*Educational attainment refers to % of women who have completed secondary schooling.

## Chapter 5 Levels of Unmet Need for Contraception

#### Levels of Unmet Need for Contraception Among Married Women

#### Regional levels and trends

We estimated the average prevalence of unmet need among married women in each region of the developing world using survey estimates from each country for which data were available for 2000–2005, and United Nations estimates of the population of women aged 15–49 in these countries (Figure 5.1).

In the Sub-Saharan African countries in this report, 24% of married women had an unmet need for contraception. Unmet need was lower on average in South and Southeast Asia (11%), North Africa and West Asia (10%) and the Latin America region (12%).\*

Among women who do not have an unmet need, some women have a met need and are contraceptive users, while others have no need for family planning, primarily because they wish to have a child in the near future. In the regions outside of Sub-Saharan Africa, an average of 59–69% of women had a met need for family planning. In Sub-Saharan Africa, met need was much lower, at 20%. Fertility levels were still high in this region, and 55% of women here, most of whom want to have another child soon, were characterized as having no demand for family planning.

We compare the regional levels of unmet need in 2000–2005 to regional levels in 1990–1995. This review of trends also sets Sub-Saharan Africa apart from other regions: Unmet need in that region declined very little, by only 2 percentage points in the past decade. In contrast, unmet need declined by 4–7 percentage points in the other three regions presented here.

#### Unmet need at the country level

The proportion of women with an unmet need for a contraceptive method in each country surveyed between 1995 and 2005 varies widely within most regions (Figure 5.2). In Central and Western Asia and North Africa 9–14% of married women had an unmet need for any method of contraception. The level of unmet need in Latin America and the Caribbean ranged from 6–7% in Brazil and Colombia to 40% in Haiti, which had the greatest level of unmet need of all 53 countries represented. Unmet need in South and Southeast Asia ranged from 5% in Vietnam to 30% in Cambodia. In Sub-Saharan Africa, unmet need was lowest in Zimbabwe (13%) and highest in Rwanda (38%). In about one-third of the countries in that region, the proportion of women with unmet need was 30% or greater.

In most countries outside of Sub-Saharan Africa, women with a met need outnumbered those with no need. In Sub-Saharan Africa, the picture is less consistent. For example, met need is relatively high in Zimbabwe and South Africa, but the absence of need (i.e., the desire to have another child) is relatively high in the Central African Republic and Chad. Countries with a high prevalence of no need for contraception might face an unmet need in the future, as social and economic development affects family size preferences.

#### Unmet Need for Spacing and Limiting Births Among Married Women

Women with unmet need can fall under two categories: those who wish to delay or space their births and those who wish to have no more children (Figure 5.2). Both groups of women are at risk of unwanted pregnancy, but appropriate contraceptive methods may differ for women who wish to eventually have a child or another child and women who do not want to have any (or more) children. For example, in countries where large proportions of women want to space their births, programs that focus on promoting permanent methods of contraception, or long-term methods that are not easily

<sup>\*</sup>A regional average for Central Asia is not available for this period because all surveys were conducted before 2000. In the period from 1995 to 1999, the average proportion with unmet need in Central Asian countries surveyed was 12%.

reversible in low resource settings, will not be appropriate to the needs of women seeking to delay a birth.

In the majority of countries in Asia, Latin America and the Caribbean, and North Africa, similar proportions of women with unmet need wanted to space or delay their births and to stop having children. In some of these countries, slightly higher proportions of women wanted to limit their births. The largest proportions of women in these regions who were seeking to stop childbearing were in Armenia and Bolivia (73–78% of women had an unmet need).

In contrast, in most of the countries surveyed in Sub-Saharan Africa, the majority of women with unmet need wished to have a child sometime in the future. In Chad and Niger, 84–89% of women with unmet need wanted to have a child later. The only two countries in the region in which significantly higher proportions of women with unmet need wanted to stop childbearing rather than delay a birth were Lesotho and South Africa.

The distribution of unmet need for a method to delay a birth or to stop childbearing often corresponds with fertility and wanted fertility rates: Where women want and have many children, they spend more time in their reproductive years spacing births and less time limiting births, compared with women who want few children.

#### Unmet Need for Contraception in Subgroups Of Married Women

Levels of unmet need were highest among the youngest women and declined with age in most countries outside of Sub-Saharan Africa (Table 5.1). The pattern was not consistent in Sub-Saharan Africa: In many countries, unmet need was about equally high for women in all age-groups; in some (such as the Congo, Cote d'Ivoire, Ethiopia, Kenya, Malawi, Mauritania, Senegal, Togo and Uganda), it was lowest among women aged 35 and older; and in some others (Cameroon, Gabon, Mozambique, Zambia and Zimbabwe), unmet need was highest among women 35 and older.

In many countries, women who had had more than three live births tended to have higher levels of unmet need than women who were nulliparous or who had had 1–3 live births. This probably reflects, to some degree, a greater unmet need to stop childbearing after the desired family size is reached compared to the unmet need to space births. Exceptions include the Dominican Republic and India, where women with one child or no children had higher levels of unmet need than women of higher parity. Unmet need was higher among rural women than urban women in about half of the countries in this report, and urban and rural women experienced unmet need fairly equally in most other countries. In the Central African Republic, Chad, Mauritania and Niger, unmet need was greater among urban women than rural women.

Unmet need is often higher among married women with relatively little schooling, compared with more educated women. In the Central African Republic and Chad, however, higher proportions of women with more than seven years of schooling than of those with little or no education had an unmet need.

Unmet need was more common among poor women than nonpoor women in 22 countries. Some of the largest differentials in unmet need by economic status were in Latin America and the Caribbean and South and Southeast Asia, especially in Bolivia, Guatemala and Cambodia. In many Sub-Saharan African countries, levels of unmet need were fairly equal across wealth status. In the Central African Republic and Guinea, nonpoor women had higher levels of unmet need than poor women. The pattern in Gabon, Ghana, Kenya, Lesotho, Malawi, Namibia, South Africa and Zimbabwe more closely resembled other parts of the world, with greater proportions of poor than of nonpoor women experiencing unmet need.

The wide variation in the distributions of unmet need is not very surprising, and sometimes mirrors the social and economic development status of countries. Historically, educated women and nonpoor women have begun to want smaller families and therefore to have had a demand for family planning before their less educated and poorer counterparts. Unmet need among nonpoor women is often a reflection of changes in fertility intentions that outpace acceptance of and access to family planning services. Unmet need among poorer or less educated women can mean that changing fertility preferences have extended to these populations, who continue to face inequitable access to services. So, for example, unmet need is probably more common among urban, nonpoor and educated women in Chad because the desire to have fewer children is just beginning to take hold in this country. By the same token, a low level of unmet need does not necessarily correspond with high prevalence of contraceptive use in a given population: Some women might not have a demand for family planning because they still desire large families.

#### Levels of Unmet Need for Contraception Among Never-Married Women

Regional estimates of the average proportion of nevermarried women with an unmet need for a family planning method are only available for the Latin America region, where it is estimated that 5% of never-married women are at risk of unintended pregnancy, and in Sub-Saharan Africa, where 9% are estimated to be at risk (not shown). Unmet need is low among never-married women because many have not begun to have sex or are not currently sexually active. It has also been suggested that some never-married women do not report their sexual activity in surveys, particularly in Latin America, and that levels of unmet need are therefore underestimated.<sup>29,30,44</sup>

At the country level, unmet need among never-married women in Latin America and the Caribbean ranged from 2% in Nicaragua and Honduras to 10% in Haiti (Figure 5.3). In Sub-Saharan Africa the proportion ranged from less than 2% in Ethiopia, Rwanda and Senegal to 15–18% in Benin, Gabon, Guinea, Mali and Mozambique. In Kazakhstan, the only country in Central Asia with information on fertility preferences of never-married women, 5% of never-married women had an unmet need for contraception.

In most countries, the majority of never-married women do not yet need contraception because they report that they are not sexually active. Notable exceptions are Brazil, the Congo and South Africa, where about half of never-married women were using contraception and therefore had a met need. A third or more of never-married women were contraceptive users in Gabon, Namibia, Cote-d'Ivoire and Togo.

#### Unmet Need for Spacing and Limiting Births Among Never-Married Women

The vast majority of never-married women who want to avoid pregnancy but are not using a method would like to have a child later in their lifetimes (Figure 5.3). In Latin America and Caribbean, the greatest need for family planning to limit births altogether was in Nicaragua, where 37% of never-married women with unmet need did not want to have a child or another child.

At least 90% of never-married women who had an unmet need for contraception wanted to have another child eventually in many Sub-Saharan African countries. In Lesotho, South Africa and Namibia, however, 42–48% of never-married women with unmet need did not want to have any (or any more) births.

#### Unmet Need for Contraception in Subgroups Of Never-Married Women

Levels of unmet need were relatively similar across age-groups of never-married women in Latin America and the Caribbean and most Sub-Saharan countries (Table 5.2). In Benin, Cote d'Ivoire, Gabon and Malawi unmet need was particularly high among women aged 35 and older. In most countries, unmet need was higher among never-married women who had already given birth than among those who were still nulliparous.

Urban and rural never-married women experience unmet need for contraception fairly equally in most countries. In all the Latin American and Caribbean countries represented in the report, the level of unmet need was similar among never-married women with less than seven years of schooling and those with at least seven years schooling. The same was true in most Sub-Saharan countries, with notable exceptions in Cote d'Ivoire and Togo, where unmet need was relatively high among less-educated women. Levels of unmet need were also fairly constant across poverty status in most countries.

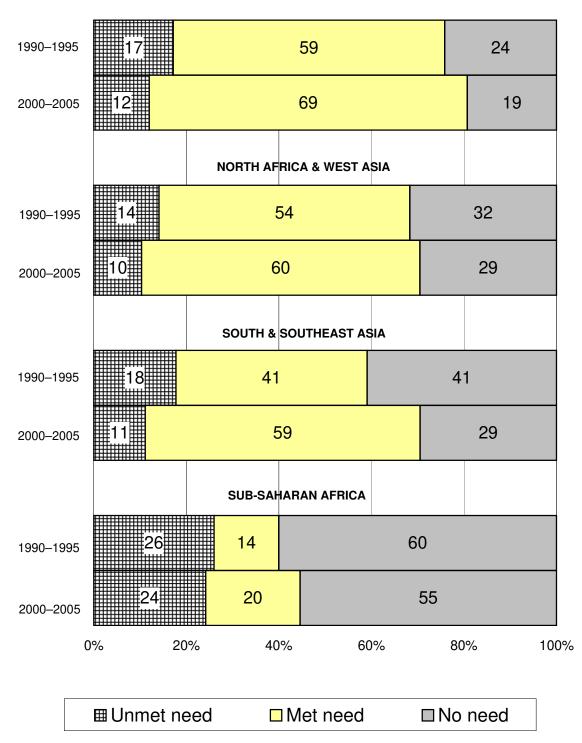
#### The Number of Women with Unmet Need

Almost 71 million married women were at risk for unwanted pregnancy and were not using contraception in the 53 countries in this report (not shown). Women in India accounted for the largest share by far of the world's unmet need, and nearly 31 million married women in that country alone were at risk of an unintended pregnancy. Although no country approaches India in this respect, other countries with high levels of unmet need include Brazil, the Philippines, Nigeria, Indonesia, Bangladesh and Ethiopia with 2.0–3.6 million married women living with an unmet need in each country. Assuming these 53 countries are representative of their respective regions, we estimate that 108<sup>\*</sup> million married women in these regions have an unmet need for contraception.

Altogether, 4.2 million never-married women were at risk of an unwanted pregnancy in the 36 countries in which they are represented here (not shown). The largest numbers of never-married women with an unmet need were in Brazil (682,000), Nigeria (758,000) and South Africa (602,000). Data were not available for enough countries to estimate the total number of never-married women with unmet need in these regions.

<sup>\*</sup> This number is derived by applying regional average proportions of women with unmet need estimated from the surveys to UN estimates of the married female population aged 15-49 in each region in 2007.

## Figure 5.1 Percentage distribution of married women by need for contraception according to region, 1990–1995 and 2000–2005



#### LATIN AMERICA & THE CARIBBEAN

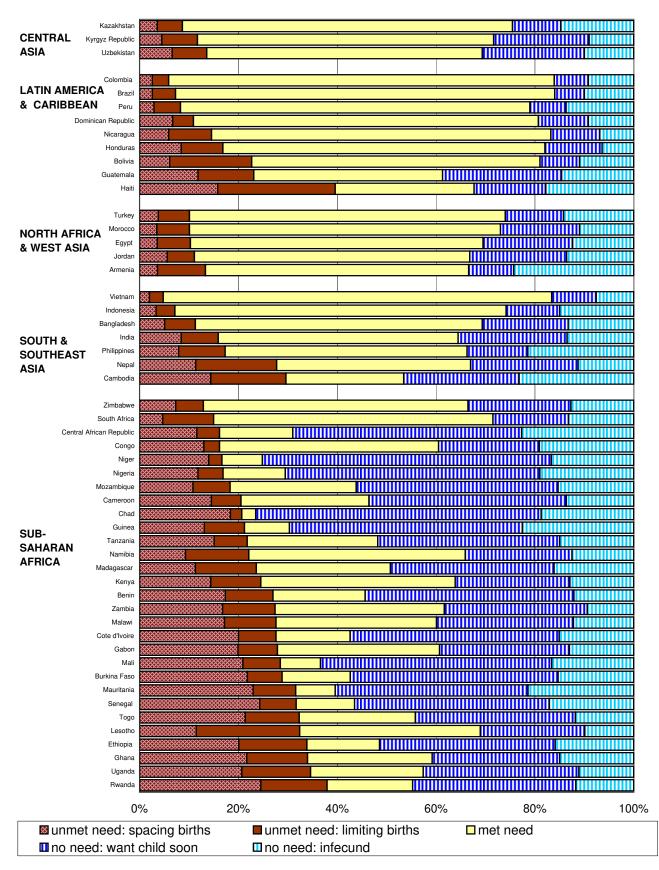


Figure 5.2 Percentage distribution of married women by need for contraception, by country

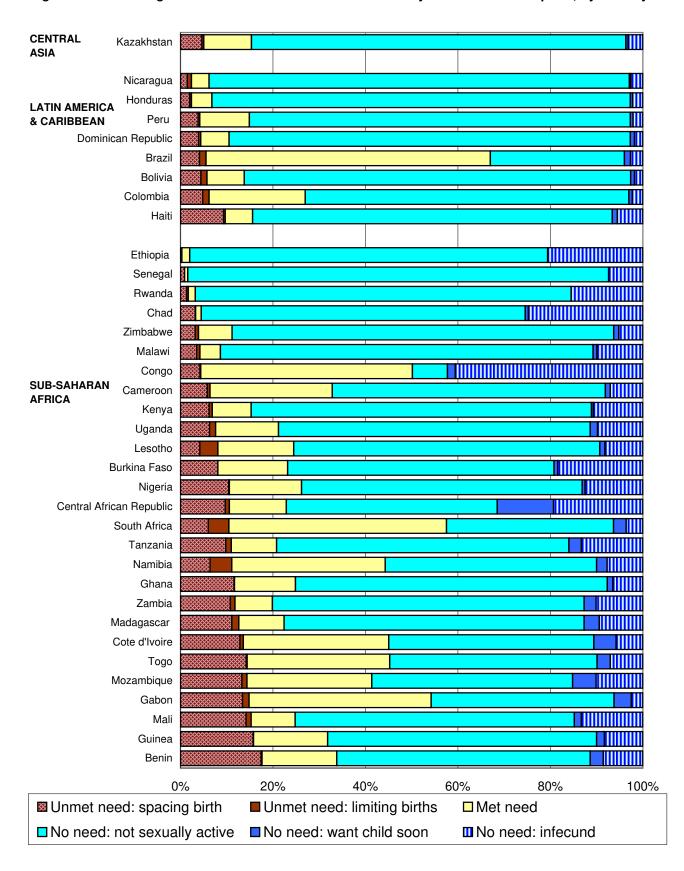


Figure 5.3 Percentage distribution of never-married women by need for contraception, by country

Table 5.1 Percentage of married women 15-49 with an unmet need, by country, according to select social and demographic characteristics
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by webs meed         n         liszal         2s-30         Portor         Residence         Education         Portor         Residence           Central Asis Krazabetan         9         0.02         1         0         0	Table 5.1 Percentage of marrie	d women 1	5–49 with a	an unmet i	need, by c	ountry, a	ccording t	o select s	ocial and	l demogra	phic cha	racteristics	i		
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Cartral Asis         Cartral Asis         Cartral Asis           Kazabatan         9         262         14         10         7         7         9         10         8         10         11         8         14         9         10         11         12         14         16         11         8         14         9         10         16         11         12         14         16         11         8         14         9         10         16         11         12         14         16         11         13         11         17         13         11         14         12         14         16         17         15         10         6         13         9         13         4         13         4         13         4         13         4         10         11         12         11         14         19         13         4         13         4         13         4         13         4         13         4         11         12         11         14         14         13         4         13         4         13         4         13         4         13         4         11         11	De sie s /e e contra			15.04		05	0.1		0						
kranketan92221410779108101111177Veryork Panulla131112131112131112141611121415Lettin America Caribbar232.3.36312418272025166183028163118Banal611.5.023111264495658865181011121419141414Colomican Fapula1115.023111418141214 <th>Region/country</th> <th>need</th> <th>n</th> <th>15-24</th> <th>25-34</th> <th>35+</th> <th>0-1</th> <th>2-3</th> <th>&gt; 3</th> <th>Urban</th> <th>Hurai</th> <th>&lt;7 years <math>2</math></th> <th>years</th> <th>Poor</th> <th>Nonpoor</th>	Region/country	need	n	15-24	25-34	35+	0-1	2-3	> 3	Urban	Hurai	<7 years $2$	years	Poor	Nonpoor
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Latin America & Gardbearg         No.         No. <td>Kyrgyz Republic</td> <td>12</td> <td>3,116</td> <td>13</td> <td>8</td> <td>14</td> <td>9</td> <td>10</td> <td>16</td> <td>11</td> <td>12</td> <td>16*</td> <td>11*</td> <td>13</td> <td>11</td>	Kyrgyz Republic	12	3,116	13	8	14	9	10	16	11	12	16*	11*	13	11
Bolva Bolva20202020808080906013906013908014131414Colombia Colombia611.511264905658065806580658071111121414907011111212101517141012111412111412151714101314111711101011111013141117111011101110131411171110151510131314111111111110131314111111111013131411111110131011101313141111111111101313141111111111111110131314111111111013131411	Uzbekistan	14	424	18	13	12	13	15	13	13	14	12*	14*	16	12
Bazul         7         556         16         7         5         9         5         10         6         13         13         4           Calonbia         6         1151         12         6         4         9         5         6         5         8         6         9         14         14         18         9         7         11         11         12         12         12         12         12         12         12         12         14         13         34         34         38         45         38         40         13         14         14         14         14         15         17         15         17         15         12         16         12         17         11         17         13         14         14         15         13         14         15         13         14         15         13         16         13         16         13         16         13         16         13         16         13         17         10         12         17         13         11         10         13         14         13         17         13         13         13         13	Latin America & Caribbean														
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Dominan Papuble         11         1.2.02         2.3         11         4         18         9         7         11         11         12         11         14         18           Hali         40         2.3.61         46         40         35         33         38         45         38         40         41         33         43         38           Hali         10         1.3         1.1         1.2         1         1.1         1.0         1.1         1.0         1.1         1.0         1.1         1.0         1.1         1.0         1.1         1.1         1.1         1.1         1.1         1.0         1.1         1.0         1.1         1.0         1.1         1			556	16	7	5			10						4
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Honduras         17         1988         24         17         12         19         16         17         14         19         18         14         21         15         12         16         12         19         17         11         20         11           Paru         8         52         12         15         12         16         12         19         17         11         20         11           Paru         Amenia         13         535         19         15         10         13         13         14         11         17         13         13'         13'         13'         13'         13'         13'         13'         11'         10'         13'         13'         11'         11'         14'         11'         11'''''''''''''''''''''''''''''''''''															
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Pru         S         524         12         9         7         8         8         9         7         12         11         7         13         6           Marnita & Mest Asia         13         536         19         15         10         13         13         14         11         17         13'         13'         13'         13'         14'         11         17         13'         13'         13'         13'         11'         10'         15'         10'         12'         11'         10'         15'         10'         13'         13'         10'         11'         11'         11'''''''''''''''''''''''''''''''''''															
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Zambia 27 1,287 26 26 31 19 25 33 26 29 28 27 29 26	•														
	0														
	Zimbabwe														

\*Educational attainment refers to % of women who have and have not completed secondary schooling.

	% with unmet			Age		Pari	ty	Resid	ence	Educati	on	Wea	lth
Region/country	need	n	15–24	25–34	35+	0	1+	Urban	Rural	< 7 years <u>&gt;</u> 7	' years N	lonpoor	Poor
Central Asia													
Kazakhstan	5	62	4	10	8	5	18	6	4	4*	5*	2	7
Latin America & Caribbean	Ŭ	02		10	Ũ	0	10	0			Ũ	-	,
Bolivia	6	322	6	7	2	0	8	6	5	6	6	6	6
Brazil	5	194	5	6	5	4	12	6	3	6	5	5	5
Colombia	6	932	8	7	4	6		7	5	5	7	6	6
Dominican Republic	4	237	5	4	4	4	16	5	3	3	5	4	5
Haiti	10	308	10	7	4	9	25	11	8	9	10	7	11
Honduras	2	132	2	3	1	2	6	3	2	3	2	2	3
Nicaragua	2	81	2	4	1	2	12	3	1	2	3	1	3
Peru	4	146	4	7	1	4	8	4	3	5	4	3	4
Sub-Saharan Africa									•	-		-	
Benin	18	243	18	11	39	18	24	21	14	19	16	13	19
Burkina Faso	8	190	8	12	0	8	13	8	8	9	7	9	8
Cameroon	6	164	6	9	2	5	14	6	8	7	6	7	6
Central African Republic	11	123	10	14	8	9	15	13	8	11	11	8	12
Chad	3	29	3	5	0	3	33	6	2	3	5	2	4
Congo	5	94	5	3	5	3	9	3	7	6	4	6	4
Cote d'Ivoire	14	126	14	11	24	13	16	10	18	17	6	21	12
Ethiopia	0.3	+	+	+	+	+	+	+	+	+	†	+	+
Gabon	15	300	15	14	21	12	20	14	19	17	14	20	13
Ghana	12	189	12	14	10	11	21	10	14	12	12	15	11
Guinea	16	208	16	18	0	16	18	15	17	18	11	15	16
Kenya	7	170	7	10	8	6	11	8	7	5	7	7	7
Lesotho	8	194	7	11	21	7	12	9	8	9	8	9	8
Madagascar	13	214	14	10	4	11	19	13	13	15	9	14	12
Malawi	9	183	9	23	27	9	17	14	8	8	10	8	10
Mali	15	265	15	21	15	13	28	15	15	15	15	17	15
Mozambique	15	284	15	9	9	15	13	14	15	17	10	12	15
Namibia	11	406	10	12	14	9	13	10	11	15	10	13	10
Nigeria	11	205	10	15	4	10	23	10	11	9	11	12	10
Rwanda	2	72	2	3	2	1	15	3	1	2	3	1	2
Senegal	1	35	1	3	1	1	11	1	1	1	1	1	1
South Africa	11	616	10	11	13	10	12	9	13	15	10	15	9
Tanzania	11	261	11	12	5	9	20	11	11	13	10	13	10
Тодо	14	308	15	13	11	14	14	11	18	17	8	17	14
Uganda	8	111	7	9	13	6	15	7	8	7	8	7	8
Zambia	12	223	12	8	0	11	13	10	13	14	11	15	11
Zimbabwe	4	64	4	5	11	3	11	4	4	6	4	4	4

Table 5.2 Percentage of never-married women 15–49 with an unmet need, by country, according to select social and demographic characteristics

\*Educational attainment refers to % of women who have and have not completed secondary schooling. †Sample size too small for analysis.

### Chapter 6

## Reasons for Nonuse Among Women with Unmet Need

The reasons women with an unmet need do not use contraception, and the geographic areas in which certain types of reasons prevail, can inform the design of appropriate policies to reduce unmet need and the allocation of limited resources to reduce the incidence of unwanted pregnancy.

Women provided somewhat detailed reasons for nonuse, and these have been grouped into three broad categories: reasons that indicate the woman perceives she is at low risk of getting pregnant (*exposure-related reasons*); reasons relating to the availability of contraceptive supplies and services, including women's knowledge of family planning, their access to contraceptives or their concerns about the health or side effects of contraception (*supply of methods and services*); and opposition to family planning, either on the woman's part or on the part of her partner or another influential person, including opposition on religious grounds (*demand-side reasons*).

We explore barriers to contraceptive use among married women through three different sets of analyses. First, we examine why women with an unmet need reported they were not using contraception at the time of the survey. Secondly, where possible, we look at the subset of married women with an unmet need who had used family planning in the recent past, and the reasons they gave for discontinuing contraceptive use. This analysis is intended to shed light on the extent to which and means by which family planning programs could address women's unmet need for contraception. Lastly, we identify the proportions of married women in each country who have an unmet need and have stated that they intend to use a method in the future, and levels of intent to practice contraception among the subgroups of women who gave each reason for current nonuse noted above, so as to better understand where overcoming the barriers to use might be most fruitful in helping women achieve their fertility desires. We examine the distribution of reasons across broad regions and across countries and, for some key reasons, we examine the distributions among population subgroups within each country.

We also briefly explore trends in the distribution of some key reasons for nonuse by comparing results of surveys conducted in 1986–1990 with surveys conducted in 2000–2005. We limit these analyses to eight countries that were surveyed in both time periods.

We address the reasons for nonuse among married and never-married women separately, because the circumstances surrounding nonuse are likely to be quite different in these two populations. Samples of nevermarried women are smaller than samples of married women, and we only analyze the current reasons for nonuse in the whole population of never-married women; we do not examine the subgroups of women who used contraception in the past or who intend to use it in the future.

Tables in the appendices provide more detailed information on women's reasons for nonuse among social and demographic subgroups in each country, and help identify the groups most likely to benefit from policy interventions at the subnational level.

#### Reasons for Nonuse Among Married Women With Unmet Need

Women were asked to indicate all of their reasons for not using contraception. On average, 85% of women gave only one reason for nonuse and the average number of reasons per respondent was just over 1.1. Therefore, while Figure 6.1 and Table 6.1 are based on all the reasons given by women for nonuse, they are likely to represent an approximation of the distribution of women's primary reasons for nonuse.

Overall, more than 60% of married women with an unmet need in the North Africa and West Asia region, nearly half of women in the Latin America region and more the a third of women in South and Southeast Asia and Sub-Saharan Africa indicated they were not using contraceptives because they did not believe they were at risk of getting pregnant (Figure 6.1). Between 32%

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and 38% of women in all of these regions gave reasons that pertained to knowledge of family planning, access to contraceptives or method-related concerns. Only 11–12% of women outside of Sub-Saharan Africa cited opposition to family planning, but opposition was stronger in Sub-Saharan Africa, where 23% of married women gave this reason for nonuse.

#### Perceived low risk of pregnancy

Women who gave a reason for nonuse that pertains to their "exposure" to pregnancy indicated that they believe they are at low risk of getting pregnant either because they have sex infrequently, they are experiencing postpartum amenorrhea, or they are generally infecund or subfecund. As noted above, this set of reasons was frequently cited in most regions of the world.

Many of these women may have definitive reasons for believing they are at low risk of getting pregnant. For example, older women are likely to be less fecund than younger respondents. On the other hand, as we review below, many are also likely to have made an inaccurate appraisal of their risk. Even among groups of women with a lower-than-average risk of getting pregnant, it is important for women who do face some risk of getting pregnant to understand their true probability of conceiving in order to make an informed choice about contraceptive use.

We created an indicator of the proportion of women who gave any exposure-related reason for nonuse, and found that these reasons were prominent in all three North African and West Asian countries represented here (59–66% in Armenia, Egypt and Morocco; Figure 6.2). Outside of this region, these reasons were also commonly cited in Honduras, Peru, Nepal, Mozambique and Zambia (57–64%). At the other extreme, only 16% of women gave an exposure-related reason for nonuse in Gabon. The distribution of specific reasons for nonuse is described in further detail below.

• Infrequent sexual activity. About 10–50% of married women with an unmet need cited infrequent sexual activity as a reason for not using a method of family planning across the countries represented (Table 6.1). This reason was especially prevalent in Honduras, Peru, Armenia, Egypt and Morocco (40–52%), and was also cited by about a third or more of women in seven other countries.

A substantial proportion of these married women were sexually active within the three months preceding the survey, including about half of women with an unmet need in Latin American and Caribbean countries who indicated infrequent sexual activity. In Benin and Mozambique (the Africa countries in which large proportions of women cited infrequent sexual activity), 34–37% of these women had had unprotected sex recently. In the South and Southeast Asian region, 47–86% of women who cited infrequent sexual activity had unprotected sex recently in the countries for which this information was available (not shown).

• *Postpartum amenorrhea*. Significant proportions of married women in many countries believed they were not at risk of pregnancy because they were still amenorrheic postpartum or because they were breastfeeding. This reason was more commonly cited in Sub-Saharan Africa than in other regions, most likely because both higher fertility rates and longer durations of breastfeeding and postpartum abstinence result in a higher prevalence of these conditions at any point in time. About 23–41% of women in the Congo, Guinea, Kenya, Malawi, Mozambique, Rwanda, Senegal and Zambia said that they were not using contraceptives for these reasons; this was true of 27% of women in Nepal.

According to the World Health Organization definition of the lactational amenorrhea method as a means of contraception, the contraceptive benefits of lactation are limited to women who are exclusively breastfeeding and extend for just six months postpartum or the duration of postpartum amenorrhea, whichever is shorter.<sup>45</sup> In the two countries in this report with the highest proportions of women citing lactational amenorrhea (Nepal and Kenya) 32-34% of these women were not amenorrheic at the time of the survey. Moreover, while women in many traditional countries tend to breastfeed for an extensive period, the duration of exclusive breastfeeding is often short. Analyses of exclusive breastfeeding patterns among the survey respondents is beyond the scope of this report, but according to a recent comparative study, the prevalence of exclusive breastfeeding among infants younger than six months of age was only 39%, on average, in developing countries.<sup>46</sup> Many women who perceive that they cannot get pregnant for these reasons might in fact be at risk of an unintended pregnancy.

• Subfecundity and infecundity. Much less common exposure-related reasons for not using contraception among married women with an unmet need were self-reported subfecundity or infecundity. The highest prevalence of these reasons was in Morocco and Zambia, where 10–11% of married women who were classical self.

sified as having an unmet need for contraception cited these reasons.\*

#### **Opposition to use**

Women who face opposition to family planning are conceptually less likely to be served by the provision of contraceptive supplies. Opposition to family planning can stem from a woman's personal beliefs or the position of her partner or another person who holds sway on her contraceptive decision making. Some women specified that their opposition was on religious grounds. Some who cited personal opposition may have partners who are also opposed, though they might not have indicated their partners' opposition in the survey once theirs was already noted.

We combined all types of opposition to use of contraception into a single indicator and found the highest prevalence of this reason was in Chad, Guinea, Mauritania and Nigeria (30–45%), and that this reason was given by more than 20% of women in 15 other countries. Only 5–9% of women gave one of these reasons in Colombia, Peru, Morocco, Indonesia, Ghana and Zambia.

In a few countries, married women's own opposition to contraception was frequently cited, and in other countries it was uncommon. Outside of Africa, personal opposition to family planning was relatively prominent among married women with an unmet need in Armenia and Cambodia (22% of women were opposed). In Sub-Saharan Africa, it was highest in Chad, Guinea, Mauritania and Nigeria (25–40%). On the other hand, in about half of the countries represented, fewer than 10% of women at risk of an unwanted pregnancy cited personal opposition to family planning.

The prevalence of others' opposition to family planning as a woman's reason for nonuse ranged from 1% (Morocco and Cambodia) to 14% (Uganda). In most countries, fewer women cited someone else's opposition to family planning than indicated their own opposition as a reason they were not using a method.

# Reasons relating to knowledge, access or side effects

Reasons related to the supply of contraceptive methods and services includes lack of knowledge about contraceptive methods; problems accessing contraception (including cost, not knowing a source and not being able to get to a point of care); and problems related to methods themselves (side effects, health concerns, and difficulties or inconvenience in using methods). The provision of basic contraceptive services probably has not reached the women with poor knowledge and access. Women who cite reasons related to methods themselves may base their reasoning on their personal experience with contraception, on the experiences of women they know, or simply on their perceptions of family planning; where these reasons prevail, women probably have not obtained services of sufficient quality to help them cope with the specifics of contraceptive use.

• Lack of awareness of family planning. Women who indicated that they are not using contraception because they do not know about contraceptive methods could be unfamiliar with specific methods of contraception or could lack an awareness of the concept of fertility control. Only 0–2% of women with an unmet need indicated that they had no knowledge of contraception in 19 countries. Even where lack of knowledge was most prevalent, only 10–15% of married women with unmet need cited this reason for nonuse (Benin, Cameroon, Chad, Ethiopia, Madagascar, Mali and Mauritania). Bolivia was the only country outside of Sub-Saharan Africa in which a substantial proportion of married women with unmet need cited this reason (12%).

• *Cost and access*. Cost was not a frequently cited obstacle to use among married women with an unmet need: Fewer than 5% of married women in 28 countries indicated cost constraints. The highest proportion of women who felt that contraception was prohibitively expensive was 12% in Burkina Faso.

Also, fewer than 5% of married women at risk for unintended pregnancy did not have access to a source of contraception in 16 countries. Ten to 20% of women in seven Sub-Saharan African countries (Benin, Burkina Faso, Ethiopia, Madagascar, Mali, Mozambique and Uganda) and 10-11% of women in Nepal and Peru said they had no source of or access to family planning.

• *Side effects, health concerns and inconvenience.* These are the most common reasons given by married women with an unmet need for not using contraception in most countries. These reasons were cited by 20–50% of married women at risk of an unintended pregnancy in 26 of

<sup>\*</sup>Women who indicated that they were subfecund were coded together with those who said they were infecund, so it was not possible to remove the infecund women from the group of women at risk of pregnancy. Women who responded that they were menopausal or had had a hysterectomy were classified as infecund and not at risk of getting pregnant.

the 36 countries with information on this question.

In the Latin America region, one-quarter to onethird of married women with an unmet need in Bolivia, the Dominican Republic and Nicaragua, and 43% of similar women in Haiti stated fear of side effects, health issues or inconvenience as a reason they did not use family planning.

In North Africa and West Asia, 26–34% of women in Egypt and Morocco cited method-related reasons, but this proportion was only 13% among women in Armenia, where use of traditional family planning is high.

Method-related reasons were fairly prevalent in South and Southeast Asia, where half of married women with unmet need in Cambodia cited these reasons, as did 37–41% of such women in Indonesia, Nepal and Philippines.

A third or more of married women with an unmet need did not intend to use contraception because of method-related concerns in six Sub-Saharan African countries (Ghana, Kenya, Lesotho, Madagascar, Malawi and Tanzania). Few women in Burkina Faso (9%) said that side effects kept them from using contraception, while relatively large proportions had indicated that they lacked access to a source of contraception or that costs were too high.

#### Other and unknown reasons

Women were allowed to indicate more than one reason for nonuse of contraception. In some countries, a moderate proportion of married women with unmet need indicated that they had another, unspecified reason for not using family planning, either in addition to the reasons discussed above or as a sole reason. Twenty to 25% of women in Bangladesh and Indonesia indicated they had other reasons than the ones listed above for not using contraceptives.

The proportion of women who said they did not know their reason for nonuse was very small-5% or less in almost all countries. Exceptions were Bolivia, Burkina Faso, Cameroon, Congo, Madagascar, Mali and Namibia (6–11%).

# Subgroup Differences in the Prevalence of Reasons Relating to Health or Side Effects

Because concerns about the side effects, health consequence and inconvenience of contraceptive methods are prevalent among married women with unmet need, and because of the important policy implications of these barriers to use, we explore differences among subgroups of women in the proportion reporting this type of reasons for not using contraception (Table 6.2).

#### Latin America and the Caribbean

As noted earlier, 21–43% of women in the Latin American region indicated that method-related concerns prevented them from using family planning. A closer look at the women in these countries reveals that patterns across social and demographic subgroups cannot be generalized to the whole region, but should be evaluated for each country individually.

In Bolivia, Colombia and the Dominican Republic, the prevalence of concerns about methods was fairly evenly distributed (14–29%) among women in urban and rural areas and those with different levels of wealth and education. In Peru and Honduras, method-related concerns were slightly more concentrated in rural areas, among poor women and among women with little schooling (21–26%).

In Haiti and Nicaragua, the prevalence of methodrelated concerns was higher than in the other countries in the region and was especially prominent in urban areas and among nonpoor women. These concerns were more prevalent among women older than 25 relative to younger women, especially in Haiti. Women in these subgroups might have had more experience with contraceptive methods in these countries than rural and poor women.

#### North Africa and West Asia

In Morocco, method-related concerns were concentrated among rural, poor and uneducated women (28–31%), and in Egypt these concerns were highly prevalent in urban areas (47%), but there was little variation there by wealth and education.

#### South and Southeast Asia

In the five Asian countries representing this region, higher proportions of women aged 25 and older with an unmet need cited method-related obstacles to use, compared with younger women. In other respects, the distribution of method-related obstacles must be observed on a country-specific level. In Bangladesh these obstacles are concentrated among poor women and women with fewer than seven years of schooling (20-24%). In Indonesia, on the other hand, higher proportions of nonpoor women and educated women cited side effects or health consequences (41-42%). In Cambodia, methodrelated barriers to use were relatively equally distributed across urban and rural regions of residence and among women of all levels of wealth and educational attainment. In Nepal, this barrier to use was heavily concentrated among uneducated women (39%), but not necessarily rural or poor women.

#### Sub-Saharan Africa

In the overwhelming majority of countries in Sub-Saharan Africa, a higher proportion of urban women with an unmet need than of similar rural women cited a fear of side effects as a reason for not using family planning. This pattern was especially strong in Benin, Burkina Faso, Cameroon and Nigeria, where the proportion of urban women citing the concerns was more than double the proportion of rural women. In most countries in the region, equal proportions of poor and nonpoor women cited these obstacles and in the remaining countries, higher proportions of nonpoor women than of poor women indicated these concerns.

Similarly, method-related obstacles tended to be evenly distributed among women of all levels of educational attainment, although in some countries (especially Benin, Burkina Faso, Chad, Ghana, Madagascar and Senegal), higher proportions of relatively well-educated women with unmet need had these concerns, compared with their less-educated counterparts. For the most part, the probability of citing method-related concerns was directly associated with age, except in Namibia.

# Subgroup Differences in the Prevalence of Reasons Relating to Knowledge or Access

Although small proportions of women with unmet need at the national level cited constraints in access to or knowledge of contraception in most countries, it is worth determining whether these obstacles were more substantial in population subgroups, as these barriers often can be overcome with the provision of services and counseling (Table 6.3).

#### Latin America and the Caribbean

Throughout the Latin American and Caribbean countries covered here, married women with an unmet need who were poor, relatively less educated or who lived in rural areas more commonly faced poor access to family planning or knowledge of methods than their nonpoor, better educated and urban counterparts. Differentials were especially strong in Bolivia, where 26–32% of rural, poor or less educated women cited lack of access or knowledge, compared with 8–10% of women who were urban, nonpoor or relatively educated.

#### North Africa and West Asia

Lack of access and poor knowledge of methods were cited with low frequency among married women in this region, and analysis of the distribution of this reason across social and demographic subgroups was not possible because of small sample size.

#### South and Southeast Asia

Among married women with an unmet need for contraception in this region, lack of knowledge or access was not a common reason for nonuse, but in Bangladesh, Cambodia, Indonesia, Nepal and the Philippines, about twice as many poor women indicated a lack of access or knowledge as wealthier women. The highest prevalence of this reason was among poor women in Cambodia (17%). A higher proportion of women who lived in rural areas and had little or no education indicated these reasons for nonuse than did urban and educated women. The lack of access to family planning or sufficient knowledge of methods was roughly equivalent among women of all ages in all countries.

#### Sub-Saharan Africa

Reasons relating to knowledge of or access to methods were more common in Sub-Saharan Africa than in the other developing regions. Higher proportions of rural women than of urban women in this region indicated poor access to or insufficient knowledge of family planning. In Benin, Burkina Faso and Chad, 30-36% of rural women faced these barriers to use. In general, a greater share of poor women in Sub-Saharan Africa faced access- and knowledge-related obstacles, compared with wealthier women. The highest prevalence of these reasons was in Burkina Faso, where 43% of poor women lacked access or knowledge. Not surprisingly, higher proportions of women with little or no schooling than of women with at least seven years education indicated these reasons for nonuse in all countries. Age was not a significant determinant of probability of facing these issues.

# Never-Married Women with Unmet Need: Reasons for Not Using Contraception

Never-married women with an unmet need for contraception also cited a variety of reasons for not using a method (Table 6.4). The most frequently cited reasons for nonuse were perceived low risk of pregnancy because of infrequent sexual activity, a perception that they should not or need not use contraception because they are not married, and concerns about side effects or health consequences of contraception.

It is not clear why some sexually active women who were not married gave their nonmarried status as a reason for not using contraception. Women might have given this response because they are not having sexual intercourse regularly, or because they felt it would be wrong or unacceptable to seek out contraceptive supplies before they were married.

#### Perceived low risk of pregnancy

By far the most common reason for nonuse cited by never-married women was their belief that they are not at risk of getting pregnant, either because they were having sex infrequently, unmarried or infecund.

• Infrequent intercourse. In the Latin American region, 36–82% of never-married women with an unmet need said that they do not use family planning because they do not have sex frequently (Table 6.4). By definition, all unmarried women at risk of an unintended pregnancy in this report had sexual intercourse in the three months prior to the survey. Also, by definition, these women were not using any methods, even a traditional method such as the rhythm method, to control their fertility.

In Sub-Saharan Africa, at least one in five nevermarried women with an unmet need did not consider herself to be sufficiently sexually active to warrant using family planning, except in Madagascar and Malawi (18%) and Nigeria (7%). In Tanzania, Uganda and Kenya, 47–64% of never-married women with unmet need cited infrequent sexual activity.

A small proportion of women cited subfecundity as the reason they are not using a method. This included self-reported infecundity, postpartum amenorrhea, breastfeeding and menopause. Ten to 15% of nevermarried women with unmet need in Nicaragua, Namibia, Uganda and Zimbabwe were not using a method because they felt subfecundity limited their risk of pregnancy. In the Congo and Rwanda, 21–25% of women cited this reason.

• *Marital status as a reason for nonuse*. About onethird or more of never-married women with unmet need in Bolivia, Dominican Republic, Honduras, Nicaragua and Peru said that they are not using contraception because they are not married. Fewer nevermarried women with unmet need in Haiti and Colombia (6–11%) cited this reason than the other Latin American and Caribbean countries in this report.

This reason was more prominent in sub-Saharan Africa: about one-quarter to one-third of never-married women with an unmet need for contraception did not use a method because they were not married in most countries represented from that region. Malawi and Madagascar stand out in this respect, with one half to two-thirds of never-married women with unmet need having cited this reason.

We created an indicator of the proportion of never married women who gave any exposure-related reason for non-use, and found that at least two-thirds of women gave one or more of these reasons for non-use in all Latin America and the Caribbean countries except Haiti (45%) (Figure 6.3). In sub-Saharan Africa, one or more reasons from this category were cited by more than half of women in most countries.

#### **Opposition to use**

Opposition to family planning was not frequently cited among never-married women with an unmet need. It could be, though, that some women who said they were not practicing contraception because they were not married (discussed above) were opposed to the notion of contraceptive use before marriage, and also did not have a demand for contraception.

Opposition to family planning—either on personal or religious grounds—was more prominent among never-married women in Haiti (27%) than in any other country in this report. In the Dominican Republic and Nicaragua, 10–15% of never-married women with unmet need were personally opposed to family planning. Considerably fewer never-married women gave this reason in Bolivia, Colombia and Peru (1–3%), and few women in Latin America and the Caribbean were influenced not to use a method because their partners or other people opposed contraception use (0–2%).

In Sub-Saharan Africa, personal opposition to using family planning was strongest in Benin, Burkina Faso, the Congo, Mali, Nigeria, Namibia and Tanzania, where 13–18% of never-married women with unmet need said they were opposed to contraception. In Burkina Faso, 14% of women faced opposition from partners or other friends and family, either in conjunction with or in contrast to their own feelings about family planning.

According to the summary measure indicating whether a women cited either personal opposition or opposition from someone else, these reasons were cited relatively infrequently in the Latin America region, with the exception of Haiti (29%; Figure 6.3). Opposition was cited by 20–27% of women in four African countries (Benin, Burkina Faso, Mali and Namibia), but was otherwise cited fairly infrequently in this region.

# Reasons relating to knowledge, access or side effects

Very few never-married women at risk for an unintended pregnancy in the Latin American and Caribbean countries covered here said that they were unaware of any methods to prevent pregnancy (0-2%). Cost and lack of access did not seem to be major reasons for nonuse among these women, either. However, as many as 36% of never-married women with unmet need in Haiti stated that they were not using a method because they either feared health consequences or side effects or found contraception too inconvenient to use. Eleven to 17% of never-married women with unmet need in the Dominican Republic and Nicaragua shared these concerns.

In Sub-Saharan Africa, relatively large proportions of never-married women with an unmet need in Benin, Cameroon and Nigeria indicated they were not aware of a way to avoid pregnancy (10–16%). Cost was not a significant factor preventing never-married women from using a method in Sub-Saharan Africa, but in Benin and Mozambique, 22% and 26% of respondents, respectively, were not using a method because they lacked access to family planning. Concerns about side effects, health issues or inconvenience were a major barrier to use among never-married women with an unmet need. About one-fourth of eligible women cited these reasons in seven of the 19 African countries covered here.

According to a summary measure indicating whether a woman cited any reason for nonuse pertaining to supply of methods and services, relatively large proportions of women said they faced these barriers. These obstacles to use were most prevalent in Benin (53%), followed by Haiti and Uganda (40%), and were cited by more than one in five never-married women with unmet need in most African countries.

# Married Women with an Unmet Need Who Used Contraception in the Past

Surveys in 20 countries asked married women about their use of family planning in the five years preceding the survey. Contraceptive histories were primarily collected in countries with high contraceptive prevalence, so it is not very surprising that, in many of these countries, the majority of women with an unmet need at the time of the survey had used contraception in the recent past (Table 6.5).

Women were asked the primary reason why they stopped using contraception. Among married women with an unmet need, the most prevalent reasons given were issues regarding side effects or health concerns, the dissolution of a relationship or infrequent sex, and the desire to become pregnant soon.

About one-fourth to one-half of women discontinued using a method because they experienced or feared side effects and health consequences; Armenia, where traditional methods prevail, was the exception (12%). This reason was far more common among women with an unmet need who had previously used a method than among all women with an unmet need (Table 6.1). The most notable contrast was in Bangladesh, where 19% of women with an unmet need cited concerns about side effects (Table 6.1), compared with 36% of the subset of women who had used a method in the past (Table 6.5). The disturbing aspect of this finding is the implication that the failure of services to meet women's family planning needs, or perhaps the inadequacy of methods themselves, has left these women at high risk of having unwanted pregnancies.

Marital dissolution and infrequent sex were cited infrequently (4–8%) as reasons for discontinuation in the Sub-Saharan countries surveyed, and were cited by 6-31% of women with unmet need in most countries outside this region. Exceptions include Morocco (42%) and Armenia (57%), where these reasons were cited more frequently than any other.

Some women discontinued contraceptive use because they wanted to become pregnant. This reason accounted for discontinuation in proportions ranging from 5% of ever-users in Peru to 25% in Malawi. Even though these women discontinued use of a method in the past because they wanted to get pregnant, and may have had a child since then, they did not want a child soon and were not using a method at the time of the survey.

Other reasons for discontinuing use included method failure and limited access to services or supplies. Method failures were cited most frequently in Kazakhstan, Guatemala, Peru, Armenia, Turkey and the Philippines (10–14%). In Colombia, the Dominican Republic, Peru, Kenya and Tanzania, 10–15% of women with an unmet need cited access, availability or cost as a reason for discontinuing method use, and in Zimbabwe 23% of women cited one of these reasons.

# Married Women Who Intend to Use a Method and Their Current Reasons for Nonuse

A significant proportion of women with an unmet need expressed an intention to use a contraceptive method in the future (Table 6.6). These women are conceivably more amenable to becoming contraceptive users when their stated reasons for current nonuse are overcome than are other nonusers.

More than half of women with unmet need indicated they intend to use family planning in all countries except Chad and Mauritania, where only 30–43% of women expect to do so. Intention to use a method was particularly high in Colombia, the Dominican Republic, Honduras, Peru, Bangladesh, Nepal, Burkina Faso, Malawi, Uganda and Zambia, where at least 80% of women with an unmet need indicated that they would use a method in the future.

Most women who indicated they are not currently practicing contraception because they are temporarily not at risk of getting pregnant-either because they are having infrequent sex or no sex, or because they are amenorrheic or breastfeeding postpartum-indicated that they would use contraception in the future. Seventy to 92% of women who said they were having infrequent or no sex said they would use a method in the future, except in Cambodia, Indonesia and the Philippines (60–65%), and in nine countries in Sub-Saharan Africa (50-69%). Among women who were amenorrheic or breastfeeding, the level of interest in future use of contraception was even higher, with 87-100% of women outside of Sub-Saharan Africa indicating they would use a method in the future and 56-96% of women in most of Sub-Saharan Africa saying they would do so. Only in Chad and Mauritania was intention to use among these women markedly low, at 36% and 23%, respectively.

Understandably, far smaller proportions of women who identified themselves as generally subfecund stated an intention to use family planning in the future. In most countries fewer than half of these women indicated an intention to use contraceptives in the future.

Surprisingly, among women who were currently refraining from contraception because they, their partners or others were opposed to family planning, proportions willing to use a method in the future were moderate and even high in many countries. In fact, when we created a composite indicator for all women of whether they cited some form of opposition to contraception among their reasons for nonuse, more than half of these women indicated they would use a method in the future in most countries (not shown). In many countries, including all Sub-Saharan countries represented here, higher proportions of women who indicated that others were opposed to family planning than of women who were personally opposed said they would use a method in the future. Overall, the levels of intention to use family planning among those who currently were not using because of opposition to use suggest that some of these women might be receptive to family planning.

Among women who cited concerns about health consequences and side effects of contraception, the level of intention to use family planning was lower than the national average in every country. The only exceptions were Chad and Mauritania, where the proportion not intending to use family planning in this subgroup matched the national average. Patterns suggest that many women with method-related reasons for nonuse live in countries with high contraceptive prevalence, and their reasoning may be based on personal experience or the experiences of women they know. If this is so, the reluctance of these women to use family planning in the future implies that the quality of care women initially experience when they interact with family planning service providers can have an indelible impact on their future contraceptive use. Women's concerns may also reflect limitations of the methods currently available to them.

In contrast, women who indicated that they were not using contraception because they lacked access to a source of family planning indicated a greater level of intent to use a method in the future than the larger group of women with unmet need. The only notable exceptions were women in Chad and Honduras. Similarly, larger than average proportions of women who cited cost constraints expressed the intent to practice contraception in the future, except in Indonesia, Nepal, the Philippines, the Congo and Nigeria.

# Trends in Selected Reasons for Nonuse Among Married Women

Studies of women's reasons for contraceptive nonuse based on earlier DHS results are not technically comparable with the current set of findings. Earlier surveys asked women to provide only their primary reason for nonuse, and recent studies solicited all reasons without asking women to single out their primary reason. However, since most women gave only one reason for contraceptive nonuse in recent surveys, an informal comparison of trends in the barriers women face bears consideration.

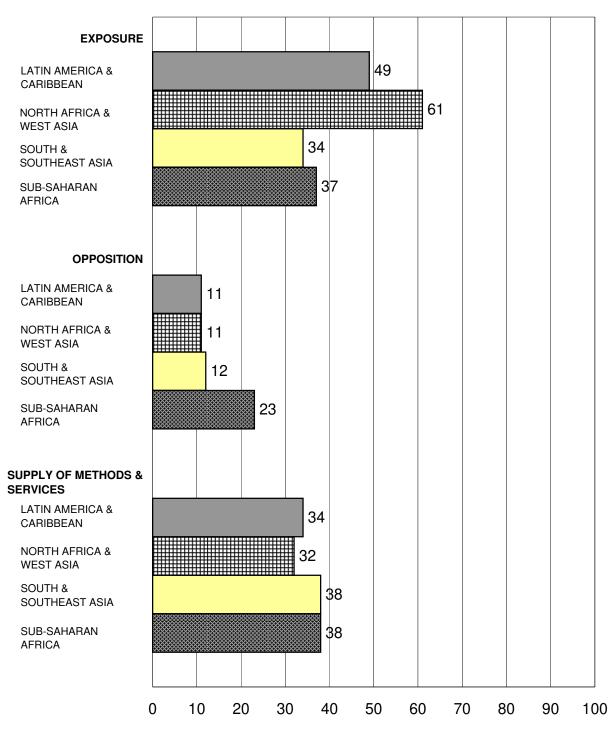
We draw from surveys conducted between 1986 and 1990 to assess women's reasons for nonuse in the past. As noted earlier, we do not use surveys from the early 1990s because the types of information collected on reasons for nonuse were different from the questions about nonuse being examined here. We explore trends in women's reasons in the eight countries for which information was available in both time periods (Figure 6.4).

Lack of knowledge was far more prevalent in the late 1980s than it has been since 2000. This reason was given by 25-44% of women with unmet need in all but three countries in the late 1980s, compared with only 0-12%

in all of the current surveys. On the other hand, concerns about health and side effects of methods increased considerably as a reason for nonuse. This was cited by 6–28% of women in the past, but by 19–36% of women more recently. In all countries except for the Dominican Republic and Peru, the prevalence of this reason increased by from one-fold to more than three-fold.

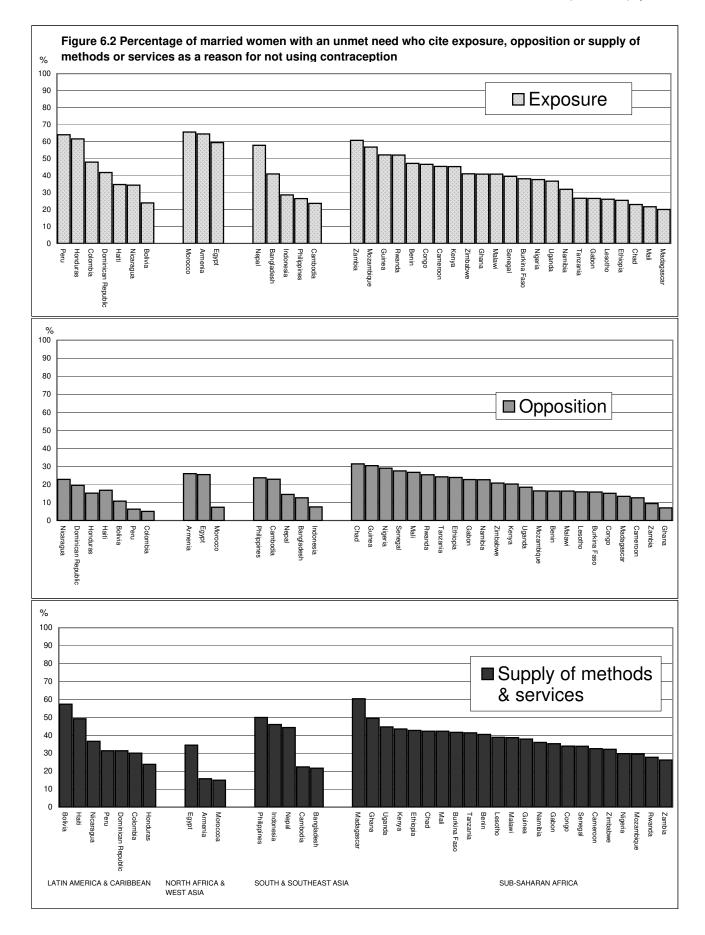
The shift in the distribution of women's reasons for nonuse suggests that family planning programs have had a significant impact in raising women's awareness about contraception in the past two decades. At the same time, however, women have been exposed to either the real side effects of contraceptive methods or misinformation about problems associated with contraception.

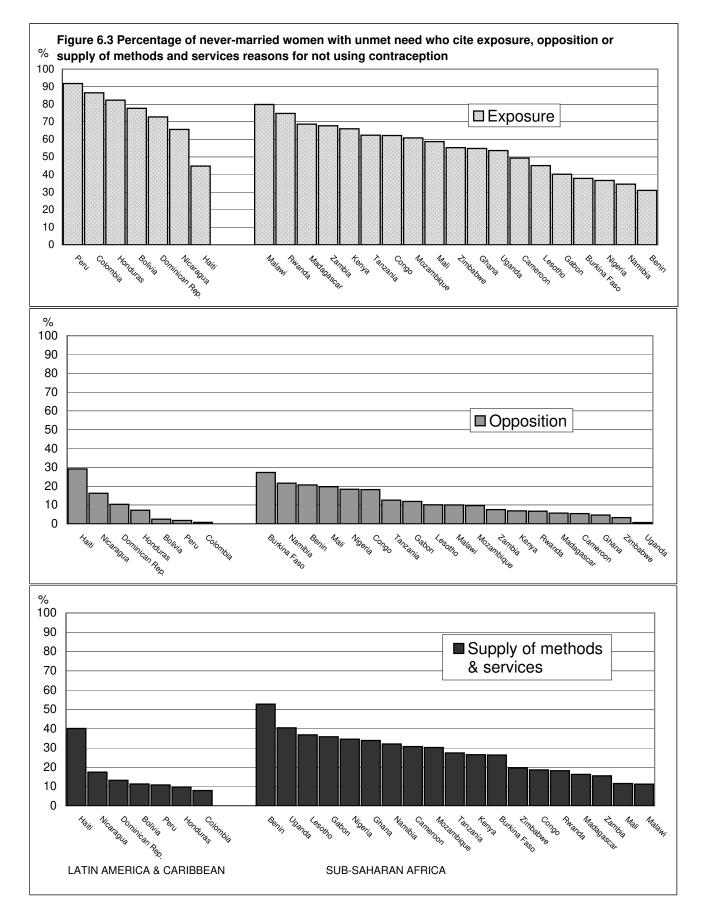
Constraints due to cost of and access to contraception were cited with relatively low frequency in both time periods, but increased in prevalence in all but one country since the late 1980s. The increase in this reason was greater among the Sub-Saharan women surveyed than among women from the Latin America region. This difference could be attributable to the fact that women were able cite multiple reasons in the more recent surveys, or it could suggest that, as knowledge about family planning increases, issues of cost and access become more relevant to women with unmet need.

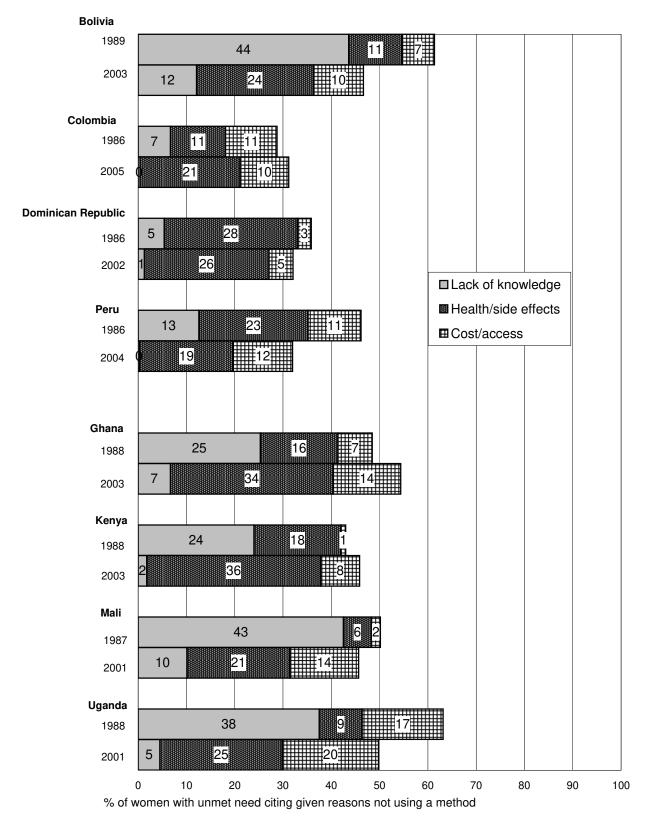


### Figure 6.1 Reasons for not currently using any method by region, married women 15-49

% of married women 15-49 with unmet need citing given reasons for not using a method







# Figure 6.4 Trends in reasons for contraceptive nonuse in selected countries among married women 15-49

#### Guttmacher Institute

#### Table 6.1 Percentages of married women 15-49 with unmet need, by country, according to reasons for not currently using any method

Table 6.1 Percentages of			Postpartum			Partner/				Health or side effects/		
		Infrequent	amenorrhea/		Respondent	others	Unaware of		No source/	inconvenient to		
Region/country	n	sex	breastfeeding	Subfecund*	opposed	opposed	methods	High cost	access	use	Other	Don't know
Latin America & Caribbea	an											
Bolivia	1791	26	15	2	6	6	12	4	7	24	12	8
Colombia	776	34	10	3	2	3	0	9	1		18	
Dominican Republic	1031	25	13	5	17	2	1	3	3		.0	5
Haiti	1735	14	9	2	15	- 3	1	3	4		5	
Honduras	1401	47	15	4	11	6	1	2	3		12	
Nicaragua	765	25	7	4	18	7	2	2	6		14	3
Peru	415	48	16	4	3	5	0	3	11		10	1
North Africa & West Asia												
Armenia	437	49	8	8	22	8	0	2	1	13	4	1
Egypt	1388	40	12	8	5	7	0	0	1		1	1
Morocco	735	52	5	10	6	1	0	1	1	26	6	2
South & Southeast Asia												
Bangladesh	970	32	17	1	8	6	0	1	3	19	25	0
Cambodia	1488	15	9	1	22	1	5	4	7	50	6	4
Indonesia	1860	14	12	4	4	5	1	8	2		20	4
Nepal	1911	35	27	1	4	11	1	1	10	37	5	na
Philippines	1158	16	9	3	18	7	1	8	2	41	12	
Sub-Saharan Africa												
Benin	892	36	12	3	11	6	12	5	15	i 15	6	3
Burkina Faso	2180	28	13	1	5	11	5	12	19	9	5	8
Cameroon	913	31	15	5	8	5	12	4	8	13	13	6
Chad	457	14	9	1	28	4	15	3	9	17	6	4
Congo	794	21	27	2	10	6	8	8	4	17	7	6
Ethiopia	2444	6	19	1	17	8	11	2	15	21	14	3
Gabon	543	23	2	2	17	7	8	9	5	i 18	15	5
Ghana	942	22	20	3	4	3	7	8	8		7	4
Guinea	1072	18	40	3	25	7	5	3	8	26	1	0
Kenya	935	16	31	2	11	11	2	3	6	36	5	2
Lesotho	948	21	0	5	8	9	2	5	4	• ·	5	
Madagascar	950	9	10	1	9	6	13	4	13		2	
Malawi	1597	18	23	4	10	7	1	1	4		8	
Mali	2138	10	12	1	20	10	10	4	11		7	6
Mauritania	999	19	11	2	40	9	13	1	9		8	
Mozambique	1199	39	23	4	9	8	4	3	13		8	
Namibia	395	13	14	7	14	10	6	3	4		10	
Nigeria	631	19	18	2	24	7	9	3	9	-	7	5
Rwanda	1540	10	41	3	19	7	6	2	5		6	
Senegal	2166	16	25	1	18	11	4	3	6		7	3
Tanzania	1197	24	3	0	14	11	2	1	8		8	1
Uganda	1162	15	18	6	5	14	5	7	13		7	3
Zambia	848	30	26	11	4	6	1	1	7	-	9	
Zimbabwe	315	27	7	7	13	9	0	9	4	- 20	9	2

\*May include self-reported infecundity. Notes: Some women may have chosen more than one reason. na=not applicable.

Table 6.2 Perecentage of married women 15–49 not using contraception who cite method-related\* reasons, by country, according to social and demographic characteristics

		Reside	ence	We	alth	Educ	ation		Age	
Region/country	n	Urban	Rural	Poor	Nonpoor	<7 years	≥7 years	15–24	25–34	35+
Latin America & Caribbean										
Bolivia	434	26	23	22	26	23	26	18	28	24
Colombia	160	21	20	22	16	21	21	18	26	19
Dominican Republic	266	25	28	27	26	27	25	26	23	24
Haiti	745	48	40	37	47	43	44	32	44	48
Honduras	269	15	22	26	13	21	14	15	17	26
Nicaragua	228	33	27	26	35	29	32	26	32	30
Peru	81	14	26	24	15	25	14	18	16	23
North Africa & West Asia										
Armenia	56	16	9	11	14	14†	12†	6	13	15
Egypt	468	47	27	32	34	35	32	24	27	43
Morocco	190	23	30	31	22	28	13	12	21	30
South & Southeast Asia										
Bangladesh	182	20	19	25	14	21	12	13	19	28
Cambodia	744	49	50	48	51	50	53	33	52	54
Indonesia	696	45	35	35	44	37	45	27	42	41
Nepal	698	40	36	37	36	39	19	26	36	53
Philippines	471	37	44	43	39	41	41	32	41	45
Sub-Saharan Africa										
Benin	136	24	10	8	20	13	39	12	14	18
Burkina Faso	196	24	7	7	11	9	25	6	10	10
Cameroon	118	19	8	5	18	11	18	4	10	23
Chad	75	18	16	18	15	16	27	14	18	18
Congo	64	19	15	14	20	15	20	14	21	17
Ethiopia	498	25	20	16	23	20	23	14	21	24
Gabon	105	21	15	16	22		25	14	16	26
Ghana	317	41	30	25	42	30	41	30	32	38
Guinea	282	31	25	25	27	26	26	15	21	34
Kenya	336	45	34	35	37	36	36	30	38	39
Lesotho	285	40	29	22	40	28	31	20	32	37
Madagascar	370	50	36	30	45	33	61	30	36	47
Malawi	538	38	33	29	37	33	35	31	35	36
Mali	456	27	19	20	23	21	24	13	23	26
Mauritania	196	25	16	16	23		24	13	23	20
Mozambique	178	23	10	10	16	15	12	9	13	20
Namibia	96	21	20	24	25	21	12	9 27	13 24	21
Nigeria		21		24 7						
Rwanda	84 273		10		17	11	18	11	12	16
Senegal	-	20	17	15	20	18	19	15	16	21
Tanzania	510	31	19	18	28	23	36	13	22	32
	382	44	29	26	36	29	34	26	31	38
Uganda Zambia	295	31	25	22	28	25	29	24	23	30
	155	20	18	14	22		19	14	18	22
Zimbabwe *Befers to women who cite heal	65	20	21	20	21	21	20	9	18	27

\*Refers to women who cite health fears, side effects and inconvenience of method as reasons for not using. †Educational attainment

refers to % of women who have and have not completed secondary schooling.

		Resid	ence	We	alth	Educ	ation		Age	
Region/country	n	Urban	Rural	Poor	Nonpoor	<7 years	≥7 years	15–24	25–34	35+
Latin America & Caribbean										
Bolivia	382	10	31	32	8	26	8	18	21	21
Colombia	82	9	14	14	7	14	7	12	10	10
Dominican Republic	61	4	10	10	2	10	3	6	5	8
Haiti	125	3	10	13	3	8	2	9	6	7
Honduras	67	2	7	7	3	5	2	4	6	3
Nicaragua	65	3	14	14	3	11	2	11	8	8
Peru	51	8	17	18	6	17	8	18	14	9
North Africa & West Asia										
Armenia	*	*	*	*	*	*	*	*	*	*
Egypt	*	*	*	*	*	*	*	*	*	*
Morocco	*	*	*	*	*	*	*	*	*	*
South & Southeast Asia										
Bangladesh	30	2	4	5	2	4	1	3	3	3
Cambodia	184	6	13	17	8	13	5	13	12	12
Indonesia	182	4	14	14	6	13	4	5	7	13
Nepal	212	8	11	15	8	12	5	11	11	11
Philippines	126	9	13	14	7	14	9	13	11	10
Sub-Saharan Africa										
Benin	232	20	30	34	21	28	4	26	25	27
Burkina Faso	727	10	36	43	27	34	2	34	39	37
Cameroon	189	16	25	29	15	24	13	24	22	17
Chad	120	13	31	28	25	28	0	30	25	23
Congo	68	16	22	23	15	25	13	17	15	28
Ethiopia	575	5	25	27	21	24	5	27	22	23
Gabon	104	17	25	26	14	22	13	16	26	16
Ghana	179	12	23	28	11	25	8	13	21	21
Guinea	159	9	17	20	11	15	8	14	10	18
Kenya	87	2	11	12	7	14	5	8	10	10
Lesotho	87	0	11	15	5	13	7	11	10	7
Madagascar	219	9	26	31	18	28	4	24	22	24
Malawi	90	5	6	6	5	6	4	6	6	5
Mali	472	10	27	30	16	23	2	20	23	23
Mauritania	141	7	27	32	7	17	12	18	14	14
Mozambique	198	5	22	27	9	17	2	15	15	18
Namibia	48	7	15	19	7	14	10	16	14	10
Nigeria	112	14	20	27	12		9	19	20	15
Rwanda	172	8	12	11	11	12	8	16	12	8
Senegal	232	7	13	16	7	11	3	11	10	11
Tanzania	124	2	12	16	6	15	7	8	11	12
Uganda	259	10	24	30	17	25	9	21	21	25
Zambia	73	2	12	14		11	6	10	9	8
Zimbabwe	37	8	13	11	13	13	11	10	14	12

Table 6.3 Percentage of married women 15–49 not using contraception because they lack knowledge or access, by country, according to social and demographic characteristics

\*Sample size to small for analysis.

		Infrequent			Respondent	Partner/ others	Knows no		No source/	Health or side effects/ inconvenient		
Region/country	n	sex	Not married	Subfecund*	opposed	opposed	method	High cost	access	to use	Other	Don't know
Latin America & Caribbean												
Bolivia	267	57	37	2	2	0	2	1	4	6	6	8
Colombia	754	82	6	- 1	- 1	0	0	1	1	6	6	2
Dominican Republic	185	49	32	5	10	1	0	2	0	11	7	- 3
Haiti	234	36	11	0	27	2	2	0	4	36	2	10
Honduras	95	59	45	3		- 1	- 1	0	0	9	5	0
Nicaragua	66	45	29	10	-	2	0	0	•	17	15	0
Peru	156	83	26	1	2	2	0	2	-		2	0
Sub-Saharan Africa					_	_	-	_	-		_	-
Benin	132	26	8	2	17	4	16	2	26	22	1	5
Burkina Faso	58	24	22	1	13	14	1	3	9	14	1	8
Cameroon	74	34	12	7	4	2	10	1	6	17	16	9
Congo	24	32	10	25	18	0	3	0	6	16	6	10
Ethiopia	+	+	†	+	+	+	+	+	+	†	+	+
Gabon	162	38	. 4	0	11	1	. 8	10	9	14	15	10
Ghana	70	24	36	2	5	0	5	2	2	26	4	13
Guinea	t	†	†	†	†	+	+	†	+	+	+	†
Kenya	80	64	na	6	4	5	3	1	1	24	1	8
Lesotho	122	20	27	2	7	3	8	5	6	21	3	12
Madagascar	121	18	50	3	5	1	4	2	2	10	2	14
Malawi	103	18	67	1	6	4	0	0	3	9	2	1
Mali	46	27	23	9	17	3	4	0	2	5	3	12
Mozambique	149	34	31	3	5	6	5	3	22	5	7	4
Namibia	234	20	na	15	15	7	7	5	3	22	10	8
Nigeria	26	7	14	9	11	0	14	3	4	26	8	5
Rwanda	38	33	36	21	7	0	6	0	4	8	2	2
Senegal	†	†	†	†	†	†	†	†	†	†	†	†
Tanzania	104	49	25	0	12	1	3	1	2	22	7	0
Uganda	53	47	na	10	0	1	4	7	9	24	8	2
Zambia	72	42	33	9	1	7	3	0	5	8	7	7
Zimbabwe	45	44	26	12	3	0	2	6	5	7	1	2

Table 6.4 Percentage of never-married women 15-49 with unmet need, by country, according to reasons for not currently using a contraceptive method

\*Includes self-reported infecundity, subfecundity, postpartum amenorrhea and breastfeeding. †Sample size too small for analysis.

			men who ntinued:							Rea	sons for disc	ontinuing use					
Region/country	% who discontinued a method	any traditional method	any modern method	n	Wanted to get pregnant	Fatalistic	Method failed/ got pregnant	Difficulty getting pregnant	Marital dissolution/ infrequent sex	Partner opposed		Inconvenient to use*	Access/ availability	Cost	Other	Don't know	Total
Central Asia																	
Kazakhstan	69	26	74	175	13	0	14	1	6	2	46	9	0	3	7	, O	100
Latin America & Caribbean	00	20	74	170	10	0	14		0	-		0	0	0	,	0	100
Brazil	63	10	90	328	8	1	6	3	10	4	39	7	2	4	16	6 O	100
Colombia	72	21	79	825	6	1	8	2	18					. 7			100
Dominican Republic	63	13	87	907	11	2	6	0	15	2			5	2	8	3 1	100
Guatemala	18	14	86	162	17	0	10	1	10	6			3	1	7	, 0	
Peru	79	23	72	412	5	0	4	1	31	4				1	6		
North Africa & West Asia																	
Armenia	63	62	38	330	6	0	10	2	57	3	12	4	1	1	5	5 0	100
Egypt	68	3	97	551	8	0	3	1	26	3			1	0	1	0	
Jordan	60	37	63	380	18	0	8	1	17	4	35	12	0	0	5	5 0	100
Morocco	65	20	80	532	14	0	6	2	42	0	25	1	0	0	8	3 0	100
Turkey	53	41	59	275	18	0	10	5	24	3	24	2	0	0	13	3 1	100
South & Southeast Asia																	
Bangladesh	59	10	90	698	12	0	5	1	29	3	36	2	3	0	9	0 0	100
Indonesia	49	2	98	1106	20	3	4	0	9	1	38	5	3	5	14	н O	100
Philippines	34	30	70	473	15	1	12	1	13	3	39	5	3	2	6	6 0	100
Vietnam	59	19	81	152	24	0	7	5	21	1	28	5	2	0	8	3 0	100
Sub-Saharan Africa																	
Kenya	33	14	87	391	14	0	7	1	5	10	44	4	6	4	6	6 0	100
Ethiopia	10	3	97	308	23	1	2	0	7	6	41	7	6	0	9	0	100
Malawi	38	11	89	867	25	0	3	0	5	6	44	4	6	0	7	' 1	100
Tanzania	30	15	85	448	24	0	5	0	8	5	40	5	9	1	4	+ 0	100
Zimbabwe	63	7	93	276	18	1	2	0	4	6	34	3	11	12	8	3 0	100

Table 6.5 Percentage of married women 15-49 with unmet need who discontinued using contraception in the past five years and percentage distribution, by country, according to reasons for discontinuation

\*Includes women who wanted a more effective method

Table 6.6 Percentage of married women 15-49 with unmet need who intend to use a method, by country, according to their reasons for not currently using a method
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Region/country	% intend to use	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent opposed	Partner/ others opposed	Unaware of methods	High cost	No source/ access	Health or side effects/ inconvenience	Other	Don't know
Latin America & Caribbea	n											
Bolivia	77	71	93	40	42	62	66	78	85	65	81	84
Colombia	91	92	100	59	57	64	t	96	†	84	88	94
Dominican Republic	86	92	97	63	70	64	t	84	95	78	87	86
Haiti	72	77	95	42	42	76	81	93	88	51	76	84
Honduras	84	87	95	55	51	72	t	91	81	73	75	75
Nicaragua	79	80	97	54	52	68	t	†	87	76	79	77
Peru	89	89	97	t	†	84	t	t	96	79	91	+
North Africa & West Asia												
Armenia	79	87	92	37	65	71	†	+	+	56	+	t
Egypt	78	86	97	31	32	69	na	t	t	59	t	†
Morocco	64	71	86	17	43	†	t	t	t	46	55	24
South & Southeast Asia												
Bangladesh	89	87	99	†	51	81	†	†	100	86	88	na
Cambodia	69	60	92	47	68	51	84	85	75	67	62	77
Indonesia	67	65	87	42	38	34	65	53	74	56	73	70
Nepal	84	89	94	†	37	79	66	82	86	71	57	71
Philippines	59	63	87	41	37	45	55	51	58	45	59	†
Sub-Saharan Africa												
Benin	74	70	89	37	45	84	86	86	84	63	92	73
Burkina Faso	82	77	87	50	64	79	72	96	83	66	89	85
Cameroon	69	75	78	32	37	44	79	85	86	54	66	69
Chad	43	65	36	†	19	35	13	†	18	43	66	61
Congo	78	86	86	†	50	49	83	65	†	70	88	†
Ethiopia	72	68	87	33	53	75	66	97	81	69	77	65
Gabon	65	72	†	†	46	68	62	84	64	59	59	64
Ghana	70	69	90	36	40	84	73	71	68	49	94	62
Guinea	61	54	65	21	43	60	82	83	80	60	+	†
Kenya	78	79	93	49	41	66	64	93	89	69	97	65
Lesotho	72	77	†	32	57	71	79	80	89	60	57	83
Madagascar	60	72	†	†	26	44	64	76	68	43	95	62
Malawi	84	87	94	58	63	82	†	85	95	77	94	76
Mali	66	63	72	†	45	67	66	81	80	62	82	75
Mauritania	30	31	23	†	18	43	24	†	20	35	41	29
Mozambique	70	75	83	29	43	71	64	72	79	57	69	66
Namibia	75	70	92	52	64	68	47	66	92	71	79	84
Nigeria	54	54	58	†	33	44	68	50	68	51	90	50
Rwanda 2005	75	56	89	51	47	60	88	82	84	61	91	†
Senegal	48	50	56	11	16	42	57	77	64	40	69	73
Tanzania	74	80	91	75	51	65	75	†	81	58	89	†
Uganda	84	78	94	54	57	79	84	97	89	72	94	83
Zambia	85	83	94	38	71	79	92	87	91	80	94	86
Zimbabwe	79	79	96	44	52	65	t	83	t	74	78	72

\*May include self-reported infecundity. †Sample size too small for analysis.

# Chapter 7 Conclusions and Recommendations

Policymakers, program leaders and funding agencies rely on estimates of levels of unmet need for contraception to make the case for policy and program interventions, and to direct resources most effectively and efficiently. In addition to information on the level of unmet need, such policy and program actions can benefit from insights into reasons why women who should be using a method are not doing so. The main objective of this report is to make this information available to the various stakeholders working to improve the reproductive health of women, including donors, policymakers, program planners and social scientists.

#### Who Is at Risk of Having an Unwanted Pregnancy?

More than one in seven married women and one in 13 never-married women aged 15–49 have an unmet need for contraception across the 53 developing countries in this report. Greater proportions of women in Sub-Saharan Africa than of women in other parts of the world have an unmet need for family planning. Unmet need is lower, but still prevalent at substantial levels, in the Latin America region, North Africa, West and Central Asia, and South and Southeast Asia.

Outside of Sub-Saharan Africa, some patterns are apparent in the distribution of unmet need, with rural women, women with little or no education and poor women at a somewhat greater risk of unplanned pregnancies than urban women, educated women or wealthy women.

In contrast, no single pattern in the distribution of unmet need can be ascribed to the Sub-Saharan Africa. But the results do offer a profile of the women with highest levels of unmet need at the country level. In South Africa, for example, women with an unmet need tend to live in rural areas, have had little schooling and are relatively poor. In the Central African Republic, unmet need is concentrated in urban areas and among educated and nonpoor women. In Rwanda, unmet need is distributed roughly evenly according to region of residence, educational level and poverty status. Sub-Saharan Africa does distinguish itself in that the majority of women with unmet need wish to have a child sometime in the future. In contrast, in most countries outside this region, similar proportions of women with unmet need want to have a child at a later point in time as want to stop having children.

Among women who do not have an unmet need for contraception, not all have a met need. In some countries and regions, significant proportions of women have no need for family planning, primarily because they want to have a child or another child. If social and economic development continues to affect family size preferences, some of these women will eventually have a need for contraception. In addition, among women who are categorized as having a met need for family planning, there are some whose needs are not fully satisfied, either because they are using a relatively ineffective method or they are using a method imperfectly. The measure of unmet need is nevertheless highly valuable because it allows us to measure, even if in approximate terms, the level and distribution of need for family planning services.

#### Why Aren't They Using Contraception?

One of the most common reasons given by married women with an unmet need for not using contraception is associated with the supply of methods and services. In this general category, concerns about the side effects, health consequences and inconvenience of methods were by far the most prominent. The prevalence of these concerns is particularly high in South and Southeast Asia, and in urban areas of most countries, where barriers related to access seem to be relatively low. Method-related concerns were also common reasons for discontinuation of use among women with unmet need who had used family planning in the past.

Unmet need that is attributed to limited knowledge of family planning or access to contraception, which also relate to supply of services, is less prevalent than concerns about methods themselves, but knowledge

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and access barriers are still prominent in parts of Sub-Saharan Africa. These barriers are more common in rural areas and among poor and uneducated women compared with urban, nonpoor and educated women in all the regions represented.

Significant proportions of married women with an unmet need in many countries gave exposure-related reasons for nonuse—that is, they believed they were not at risk of getting pregnant. Many felt they were protected from risk because they were breastfeeding or not having sex frequently. Among never-married women, infrequent sexual activity was by far the most common reason for not using contraceptives in many countries, as was the notion that they should not or need not adopt a method until they are married.

Opposition to contraceptive use is cited with relative infrequency among women with an unmet need in most countries. It is, however, prominent in a few countries in each region. Among women who are opposed to family planning, surprising proportions more than half, in most countries—indicated that they nevertheless intended to use contraception in the future. In fact, overall, the majority of women with an unmet need indicated an intention to use contraception in the future.

# What Are the Implications of Women's Levels of and Reasons for Nonuse?

Evidence presented here indicates which populations have the most need for family planning services. Recommendations that flow from these findings include the following:

• Address unmet need in Sub-Saharan Africa. The unmet need for contraception is by far the highest in Sub-Saharan Africa. Shortfalls in services are most dire here, and substantial resources must be directed to this region if African women are to succeed in achieving their fertility goals.

A focus on Sub-Saharan Africa ought not, however, be at the complete exclusion of other developing regions where the level of unmet need is still significant. For example, unmet need is also high in Haiti, Cambodia and Nepal. And absolute numbers of women with unmet need are unacceptably high in India. Even in developing countries that are faring relatively well, significant proportions of women are still at risk of an unintended pregnancy.

• Focus national efforts on populations with the greatest unmet need in each country. As noted above, rural, uneducated and poor women account for the lion's share of unmet need in many countries, but there are important exceptions, most notably in Sub-Saharan Africa. Information on the distribution of unmet need in this report can enable stakeholders to target their efforts toward women at greatest risk of unplanned pregnancies in a particular country.

Findings presented here, along with insights gleaned from family program efforts over the years, also allow us to draw inferences about the types of interventions that can most readily help women make use of family planning services to avoid unwanted pregnancies:

• Offer a range of contraceptive methods. In order to negotiate the side effects associated with various contraceptive methods and to avoid the side effects that are not acceptable to them, women must have access to a broad range of contraceptive methods. Similarly, different methods are appropriate to women who want to stop childbearing than to women who wish to have a child at a later point, and a range of options is necessary in order to serve both of these types of needs.

• Include counseling and education to help women sustain contraceptive use. It is not sufficient to supply contraceptives without providing adequate services and counseling. In fact, evidence presented here on women who have discontinued use suggests that a failure to provide quality care can ultimately dissuade women from using contraception, even if they do not want to get pregnant. Counseling should include components that help women disentangle the fact from the fiction about side effects and make sure that they are aware of the full range of options available. Mechanisms for periodic follow-up can also enable women who facing difficulties switch to another method rather than discontinue use altogether.

• *Improve contraceptive technologies*. The high prevalence of concerns about side effects among women with an unmet need, and especially among those who have discontinued contraceptive use, reflects limitations of the methods currently available to them. As the U.S. Agency for International Development has also recognized, there is a significant need for research to develop methods that can be used in low resource settings and that are accompanied by minimal side effects.<sup>47</sup>

• Educate women about their risk of getting pregnant. Significant proportions of married and unmarried women with an unmet need in many countries believe they are not at risk for pregnancy. As noted earlier, some women may be correct in their assessment that they are not at risk of conceiving, while many others are probably unknowingly at risk. These women need, first and foremost, the information with which to accurately assess their risk of getting pregnant. They will only be reached through messages delivered beyond clinic walls, for example through the media, in schools and in the course of receiving antenatal care. Education as part of antenatal care may be especially appropriate for women who perceive that they are at low risk of getting pregnant during the postpartum period.

• *Raise awareness among populations with little knowledge of family planning*. While proportions of women citing limited knowledge or lack of access to contraception is generally low, there is still a need for basic information about and access to family planning in some rural areas and among poor and uneducated women. This barrier is most prominent in African countries, but also persists in some countries outside this region, such as Bolivia. Dissemination of this information must occur outside of family planning clinic settings, for example, through the media.

• *Recognize that service provision will not help all women achieve their fertility preferences.* Although opposition to fertility control is cited with relative infrequency among women with an unmet need, the power of improvements in the quality of programs and services to influence community attitudes toward family planning remains valuable. Improvements in educational and economic opportunities for women and shifts in cultural values over the long term also affect the attitudes of women and their partners toward fertility control.

It is important to bear in mind that, while increases in contraceptive prevalence can reduce unmet need, other forces might work simultaneously to increase this need. As the age at marriage moves upward and the prevalence of premarital sexual activity increases, unmet need will rise among never-married women. Social and economic development and increased opportunities for women are likely to impact their fertility preferences, and these forces can also drive levels of unmet need upward before family planning programs can respond to increased demand.

In addition, while some women with an unmet need will initiate use when their stated reasons for nonuse are resolved, others might go on to face other, unstated obstacles to use. Surveys will not capture all the subtle motivations that can influence a woman's decision to not use family planning. However, the fact that most women cited only one reason for nonuse suggests that many will be served when the cited obstacle is overcome. Moreover, increased use of family planning in a society can contribute to broadening interest in and acceptability of the notion of limiting family size and using contraception.

Currently, millions of women worldwide become pregnant when they do not intend to. International family planning efforts so far have made important inroads in addressing the demand for contraception. Future interventions can have a tremendous impact on the ability of women and couples to achieve their fertility goals and on the health and well-being of women, their families and society.

# Appendix

# Appendix A: Among married women with an unmet need for contraception, reasons for not using a method by sociodemographic characteristics in each country

# Latin America and Caribbean

#### Bolivia 2003

Sociodemographic subgroup	, n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	412	26	19		11	12	9	18	15	10
25-34	679	20 19	19	1	10	12	9	28	15	8
35+	700	34	19 7	3	10	12	11	28	11	8
p-value	700	34 <0.001	/ <0.001	0.004	0.882	0.934	0.453	0.003	0.077	-
Parity		<0.001	<0.001	0.004	0.882	0.934	0.453	0.003	0.077	0.128
0-1 births	000	05			10			05	10	
2-3 births	226	25	15	1	13	9	4	25	16	8
	591	29	16	2	9	10	10	21	15	9
4+ births	945	26	14	2	11	14	12	26	9	7
p-value		0.270	0.489	0.962	0.286	0.013	0.003	0.139	<0.001	0.407
Education										
<7 years	1233	25	14	2	13	16	13	23	9	8
≥7 years	558	31	16	2	7	4	4	26	18	7
p-value		0.009	0.193	0.302	<0.001	< 0.001	<0.001	0.152	<0.001	0.489
Contraception										
never used	976	21	12	2	13	21	14	24	7	9
ever used	816	34	17	2	9	1	6	25	18	6
p-value		<0.001	0.004	0.878	0.004	<0.001	<0.001	0.669	<0.001	0.015
Residence										
urban	944	31	13	2	11	5	6	26	14	9
rural	847	21	16	2	10	20	16	23	9	7
p-value		<0.001	0.138	0.572	0.375	<0.001	<0.001	0.172	0.001	0.060
Total	1791	26	15	2	11	12	10	24	12	8

May include self-reported infecundity. Note: Some women may have chosen more than one reason

#### Colombia 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	240	05	16	4	7	0	12	18	10	0
25-34	240 247	25		4	4	0	12	26	18	6
35+		31	9	2	•	0			22	2
p-value	280	45	4	9	4	1	9	19	15	1
		<0.001	<0.001	0.002	0.176	0.422	0.552	0.041	0.079	0.008
Parity										
0-1 births	234	33	6	6	4	0	6	24	20	4
2-3 births	339	37	11	4	3	0	10	19	18	3
4+ births	205	31	12	6	9	1	15	20	16	2
p-value		0.292	0.126	0.247	0.005	0.241	0.007	0.424	0.640	0.231
Education										
<7 years	406	31	9	4	8	1	13	21	18	4
≥7 years	370	37	10	6	1	0	7	21	19	2
p-value		0.056	0.745	0.199	< 0.001	0.098	0.004	0.974	0.741	0.112
<b>Contraception</b>										
never used	124	17	10	7	15	2	11	23	17	8
ever used	653	37	10	5	3	0	10	20	18	2
p-value		<0.001	0.996	0.215	<0.001	<0.001	0.656	0.556	0.697	<0.001
Residence										
urban	496	39	9	7	2	0	8	21	19	2
rural	281	26	11	3	- 11	1	13	20	18	5
p-value	201	<0.001	0.218	0.015	<0.001	0.021	0.028	0.862	0.716	0.036
Total	776	34	10	5	5	0	10	21	18	3

# Dominican Republic 2002

			Postpartum		Respondent/		No access/ knows no	Health or side effects/		
Sociodemographic subgroup	n	Infrequent sex	amenorrhea/ breastfeeding	Subfecund*	partner/ other opposed	Unaware of methods	source/ high cost	inconvenient to use	Other	Don't know
subgroup		innequent sex	breastieeding	Subleculiu	opposed	methous	COSI	use	Other	DOITCKIIOW
Age										
< 25	454	23	15	2	17	2	4	29	11	6
25-34	381	26	15	9	19	1	5	23	6	4
35+	195	27	3	11	26	2	7	24	9	2
p-value		0.376	<0.001	< 0.001	0.037	0.188	0.478	0.119	0.014	0.030
Parity										
0-1 births	359	30	8	4	17	1	5	27	7	8
2-3 births	437	23	15	8	19	1	4	26	10	3
4+ births	236	20	15	6	25	1	7	23	9	2
p-value		0.015	0.011	0.108	0.043	0.953	0.329	0.384	0.337	<0.001
Education										
<7 years	442	15	12	7	24	3	8	27	9	5
≥7 years	589	32	13	6	16	1	2	25	8	5
p-value		<0.001	0.743	0.499	0.002	0.007	<0.001	0.391	0.524	0.900
Contraception										
never used	295	12	10	9	32	3	7	23	6	8
ever used	737	30	14	5	15	1	4	27	10	4
p-value		< 0.001	0.089	0.028	<0.001	0.003	0.053	0.163	0.070	0.004
Residence										
urban	695	28	13	7	19	1	3	25	9	4
rural	336	19	11	4	20	2	9	28	9	6
p-value		0.002	0.382	0.030	0.802	0.294	<0.001	0.267	0.999	0.166
Total	1030	25	13	6	20	1	5	26	9	5

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Honduras 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	449	45	20	1	16	1	3	16	13	4
25-34	449 524	45 51	16	3	10	1	6	10	13	4
35+	428	43	7	8	12	0	3	28	13	5
p-value	420	43 0.019	/ <0.001	ہ <0.001	0.028	0.136	0.025	20 <0.001	0.405	0.074
Parity		0.019	<0.001	<0.001	0.028	0.136	0.025	<0.001	0.405	0.074
0-1 births	327	52	12	0	12	0	0	16	11	0
2-3 births	327 483	52	12	3	12	2	3			6
4+ births				4		-			12	2
	591	38	15	3	21	0	6	25	13	3
p-value		<0.001	0.249	0.877	<0.001	0.146	0.065	<0.001	0.792	0.047
Education										
<7 years	464	42	16	3	18	1	5		13	3
≥7 years	189	63	10	7	4	1	2		9	5
p-value		<0.001	0.022	0.001	<0.001	0.922	0.063	0.003	0.120	0.204
Contraception										
never used	383	30	19	4	29	3	7	25	8	4
ever used	1018	52	13	3	10	0	3	18	14	3
p-value		<0.001	0.006	0.536	<0.001	<0.001	0.011	0.008	0.003	0.241
Residence										
urban	565	56	10	5	10	0	2	15	12	4
rural	836	40	18	2	18	1	6	23	12	3
p-value		<0.001	<0.001	0.010	<0.001	0.188	<0.001	<0.001	0.645	0.120
Total	1401	47	15	3	15	1	4	20	12	4

#### Nicaragua 2001

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	228	24	13	1	20	1	10	26	16	4
25-34	243	20	7	5	26	1	7	32	10	1
35+	293	29	2	10	22	2	6	30	13	3
p-value	200	0.057	<0.001	<0.001	0.381	0.707	0.265	0.342	0.579	0.112
Parity		0.007	<0.001	20.001	0.001	0.707	0.200	0.042	0.070	0.112
0-1 births	166	28	6	5	17	2	4	28	20	6
2-3 births	225	26	8	4	22	0	6	33	14	2
4+ births	375	22	6	7	26	2	10	28	12	2
p-value	0.0	0.268	0.811	0.198	0.087	0.263	0.029	0.387	0.054	0.082
Education		0.200	0.011	0.100	0.007	0.200	0.020	0.007	0.001	0.002
<7 years	535	20	8	5	25	2	10	29	13	3
≥7 years	230	34	4	7	17	0	2	32	17	3
p-value	200	<0.001	0.078	0.243	0.012	0.022	<0.001	0.347	0.103	0.772
Contraception		(0.001	0.070	0.2.10	0.012	0.022	0.001	0.017	0.100	0
never used	253	14	6	4	39	4	8	24	12	3
ever used	513	30	7	6	15	0	7	33	15	3
p-value	0.0	<0.001	0.329	0.189	<0.001	< 0.001	0.511	0.016	0.184	0.739
Residence		(0.001	0.020	0.100	101001	(0.001	0.011	0.010	0.101	0.100
urban	352	32	5	8	16	0	2	33	16	3
rural	414	18	8	3	29	3	11	27	13	3
p-value		<0.001	0.198	0.002	<0.001	0.008	<0.001	0.099	0.214	0.694
Total	764	25	7	6	23	2	7	30	14	3

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

# Haiti 2000

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
A	•									
<u>Age</u> < 25	000	10	07	<u>.</u>	10					-
	383	12	27	0	19	2	8	32	4	5
25-34	640	14	20	1	14	1	6	44	6	4
35+	712	16	14	5	19	1	6	48	4	4
p-value		0.183	<0.001	<0.001	0.021	0.314	0.666	<0.001	0.170	0.604
Parity										
0-1 births	303	23	15	0	18	1	4	35	5	6
2-3 births	483	13	20	2	19	0	5	39	4	5
4+ births	949	12	19	4	15	2	8	48	5	4
p-value		< 0.001	0.141	0.001	0.121	0.142	0.008	< 0.001	0.666	0.099
Education										
<7 years	1460	13	20	3	16	1	7	43	5	5
>7 years	276	20	13	0	20	0	2	44	5	2
p-value		0.005	0.005	0.017	0.088	0.051	0.001	0.595	0.930	0.046
Contraception										
never used	903	10	21	1	20	2	9	39	3	6
ever used	833	19	16	4	14	- 1	4	47	6	3
p-value	000	<0.001	0.003	0.001	<0.001	0.038	0.001	0.001	0.003	<0.001
Residence			0.000	0.001	(0.001	0.000	0.001	0.001	0.000	0.001
urban	630	18	14	3	18	0	3	48	2	3
rural	1106	13	21	2	16	2	9	40	6	5
p-value	1100	0.002	<0.001	0.306	0.426	0.003	<0.001	0.001	<0.001	0.005
p value		0.002	<0.001	0.306	0.426	0.003	<0.001	0.001	<0.001	0.005
Total	1735	14	19	2	17	1	7	43	5	4

#### Peru 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	72	29	29	1	6	0	18	18	18	1
25-34	157	47	18	6	3	0	10	16	8	1
35+	186	55	9	4	10	1	9	23	9	0
p-value		0.001	<0.001	0.195	0.016	0.541	0.137	0.297	0.069	0.292
Parity		0.001	101001	0.100	0.010	0.011	0.107	0.207	0.000	0.202
0-1 births	73	63	4	7	3	0	8	14	14	o
2-3 births	193	50	18	5	3	0	12	17	10	1
4+ births	149	39	19	2	13	1	15	26	9	1
p-value		0.001	0.012	0.194	0.001	0.409	0.382	0.034	0.583	0.672
Education										
<7 years	209	33	20	1	10	1	17	25	13	1
≥7 years	206	63	11	7	3	0	8	14	7	1
p-value		< 0.001	0.017	0.006	0.003	0.320	0.005	0.002	0.055	0.571
Contraception										
never used	63	18	25	5	28	2	9	34	8	3
ever used	351	53	14	4	3	0	13	17	11	0
p-value		<0.001	0.025	0.795	<0.001	0.019	0.440	0.001	0.506	0.014
Residence										
urban	219	59	11	6	2	0	8	14	11	1
rural	196	35	20	2	11	1	17	26	10	1
p-value		<0.001	0.011	0.031	<0.001	0.290	0.003	0.004	0.933	0.499
Total	415	47	16	4	6	0	12	19	10	1

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

# North Africa and West Asia

#### Armenia 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	67	33	22	2	36	0	3	6	3	6
25-34	163	42	10	7	26	1	4		2	2
35+	206	60		. 11	21	0	1	15	5	2
p-value		<0.001	<0.001	0.040	0.058	0.432	0.049		0.443	0.264
Parity									•••••	
0-1 births	55	38	16	9	27	0	0	9	6	2
2-3 births	332	50	7	7	25	0	2		4	2
4+ births	51	55	4	14	26	0	2	8	0	6
p-value		0.181	0.024	0.285	0.938	0.852	0.504	0.338	0.286	0.091
Education										
<7 years	76	45	4	15	29	0	3	15	4	0
≥7 years	361	50	9	9	25	0	2	12	3	3
p-value		0.392	0.170	0.030	0.466	0.646	0.826	0.591	0.786	0.273
Contraception										
never used	126	17	23	13	38	1	6	7	2	3
ever used	311	62	2	7	21	0	1	15	4	3
p-value		< 0.001	<0.001	0.034	<0.001	0.116	0.004	0.028	0.177	0.714
Residence										
urban	214	44	9	10	24	0	1	16	5	3
rural	223	54	7	6	27	0	4	9	2	3
p-value		0.039	0.394	0.128	0.353	0.327	0.022	0.029	0.105	0.887
Total	437	49	8	8	26	0	2	13	3	3

# Egypt 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	107	46	22	2	11	0	0	15	12	1
25-34	177	36	16	7		0	2	33	3	1
35+	296	29	.5	15	10	0	2	42	5	0
p-value		0.008	<0.001	<0.001	0.728	0	0.340	<0.001	0.005	0.571
Parity										
0-1 births	66	39	10	3.0	14	0	0	26	12	2
2-3 births	204	41	14	11	10	0	1	24	5	1
4+ births	308	29	10	11	9	0	3	43	5	1
p-value		0.015	0.422	0.131	0.463	0	0.204	<0.001	0.097	0.676
Education										
<7 years	414	32	11	12	11	0	1	36	5	1
≥7 years	165	40	12	7	6	0	3	31	7	1
p-value		0.063	0.956	0.077	0.054	0	0.129	0.292	0.369	0.572
Contraception										
never used	134	25	22	13	19	0	0	26	5	1
ever used	445	37	8	9	7	0	2	37	6	1
p-value		0.012	<0.001	0.276	<0.001	0	0.080	0.016	0.497	0.924
Residence										
urban	163	31	7	15	9	0	3	37	4	1
rural	415	35	13	8	10	0	1	33	7	1
p-value		0.346	0.028	0.024	0.745	0	0.121	0.306	0.312	0.559
Total	578	34	12	10	10	0	2	34	6	1

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Morocco 2004

Sociodemographic			Postpartum amenorrhea/		Respondent/ partner/ other	Unaware of	No access/ knows no source/ high	Health or side effects/ inconvenient to		
subgroup	n	Infrequent sex	breastfeeding	Subfecund*	opposed	methods	cost	use	Other	Don't know
Age										
< 25	84	63	8	0	7	1	4	12	7	0
25-34	191	55	13	4	6	0	2		6	2
35+	459	48	2	15	8	0	2	30	6	2
p-value		0.027	<0.001	<0.001	0.632	0.021	0.575	0.001	0.903	0.479
Parity										
0-1 births	110	64	7	5	7	1	2	14	5	0
2-3 births	212	55	7	11	7	0	1	18	6	1
4+ births	413	47	4	11	8	0	3	33	6	2
p-value		0.003	0.192	0.096	0.874	0.058	0.576	<0.001	0.785	0.392
Education										
<7 years	633	49	5	10	8	0	2	28	7	2
≥7 years	102	71	6	9	3	0	1	13	4	0
p-value		<0.001	0.709	0.620	0.066	0.570	0.379	0.001	0.318	0.180
Contraception										
never used	78	44	9	6	19	0	4	22	4	1
ever used	656	52	5	11	6	0	2	26	6	2
p-value		0.139	0.109	0.242	<0.001	0.626	0.296	0.398	0.398	0.869
Residence										
urban	411	57	5	12	5	0	2	23	7	0
rural	324	45	6	8	11	0	3	30	5	3
p-value		0.001	0.668	0.048	0.001	0.375	0.131	0.036	0.292	0.003
Total	734	52	5	10	7	0	2	26	6	2

# South and Southeast Asia

#### Bangladesh 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	391	29	23	1	14	1	3	13	25	0
25-34	353	32	20	1	11	0	3		25	0
35+	201	38	7	2	14	0	3		22	0
p-value	201	0.102	<0.001	0.549	0.437	0.241	0.829	< 0.001	0.702	na
Parity		0.102	0.001	0.010	0.107	0.211	0.020	0.001	0.702	
0-1 births	239	36	7	1	16	0	3	13	33	0
2-3 births	371	33	21	1	11	0	3		26	0
4+ births	360	28	21	1	13	0	4	25	19	0
p-value		0.112	<0.001	0.901	0.191	0.512	0.415	0.001	0.001	na
Education										
<7 years	762	28	19	1	15	0	4	21	22	0
>7 years	207	44	13	1	6	0	1	12	35	0
p-value		<0.001	0.025	0.950	0.001	0.461	0.046	0.006	<0.001	na
Contraception										
never used	330	23	21	1	26	1	4	12	24	0
ever used	640	36	16	1	6	0	3	23	26	0
p-value		< 0.001	0.073	0.347	<0.001	0.049	0.477	<0.001	0.602	na
Residence										
urban	171	37	13	1	11	0	2	20	26	0
rural	798	31	19	1	13	0	3	19	25	0
p-value		0.075	0.057	0.849	0.370	0.512	0.529	0.679	0.649	na
Total	945	32	18	1	13	0	3	19	25	0

\*May include self-reported infecundity Notes: Some women may have chosen more than one reason, na=not applicable

#### Cambodia 2000

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	230	12	12	0	33	6	11	33	4	11
25-34	621	11	10	1	23	4	9	52	5	3
35+	636	20	7	2	19	4	10	54	7	2
p-value	000	<0.001	, 0.018	0.026	<0.001	0.376	0.797	<0.001	0.045	<0.001
Parity		<0.001	0.010	0.020	<0.001	0.070	0.707	20.001	0.040	<0.001
0-1 births	199	13	9	0	40	4	8	28	5	8
2-3 births	457	14	8	1	23	3	7	51	5	4
4+ births	831	16	9	2	19	5	12	55	6	3
p-value	001	0.342	0.838	0.179	<0.001	0.233	0.021	<0.001	0.630	0.007
Education		0.042	0.000	0.170	<0.001	0.200	0.021	<0.001	0.000	0.007
<7 years	1314	15	9	2	23	5	11	50	6	4
≥7 years	173	12	10	0	23	2	3	53	6	5
p-value	175	0.194	0.452	0.102	0.915	0.065	0.001	0.333	0.918	0.750
Contraception		0.134	0.452	0.102	0.010	0.005	0.001	0.000	0.010	0.750
never used	1052	14	9	1	24	6	12	47	5	6
ever used	436	18	9	2	20	1	6	58	8	1
p-value	400	0.056	0.685	0.683	0.075	<0.001	<0.001	<0.001	0.004	<0.001
Residence		0.000	0.000	0.000	0.070	<0.001	<0.001	20.001	0.004	<0.001
urban	198	23	9	2	25	2	5	49	7	1
rural	1289	14	9	1	23	5	11	49 50	5	5
p-value	.200	0.001	0.909	0.376	0.471	0.032	0.015	0.647	0.351	0.006
Total	1487	15	9	1	23	4	10	50	6	4

#### Indonesia 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	267	9	34	0	7	2	3	27	17	3
25-34	267 682	9	34 13	0	9	2	3	42	17	
35+		13		7		1	-			4
p-value	910		6		6	1	12	41	22	4
•		0.029	<0.001	<0.001	0.062	0.139	<0.001	<0.001	0.087	0.676
Parity 0-1 births		10							10	
	362	16	20	1	8	1	3		19	3
2-3 births	709	16	10	4	4	1	10	41	20	3
4+ births	788	11	10	4	10	1	10	40	20	5
p-value		0.008	<0.001	0.031	<0.001	0.874	<0.001	0.377	0.741	0.062
Education										
<7 years	1211	13	10	4	9	1	12	37	20	4
≥7 years	649	15	16	2	6	1	4	45	19	4
p-value		0.447	<0.001	0.043	0.025	0.229	<0.001	<0.001	0.835	0.718
Contraception										
never used	674	10	17	2	17	3	7	34	13	6
ever used	1186	16	10	5	2	0	10	43	24	2
p-value		<0.001	<0.001	0.001	<0.001	<0.001	0.030	<0.001	<0.001	<0.001
Residence										
urban	834	14	12	4	7	0	4	45	19	5
rural	1026	14	13	3	8	2	13	35	21	3
p-value		0.988	0.410	0.137	0.505	0.001	<0.001	<0.001	0.236	0.082
Total	1859	14	12	4	8	1	9	40	20	4

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Nepal 2001

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	684	41	29	0	14	1	10	26	4	na
25-34	736	34	32	1	14	1	11	36	3	na
35+	492	27	19	2	15	2	11	53	8	na
p-value	.02	<0.001	<0.001	0.057	0.800	0.236	0.977	<0.001	<0.001	na
Parity										
0-1 births	443	47	21	1	12	1	11	24	5	na
2-3 births	645	42	29	1	13	2	8	31	4	na
4+ births	822	22	29	1	17	2	12	48	5	na
p-value		<0.001	0.005	0.412	0.023	0.192	0.030	<0.001	0.266	na
Education										
<7 years	1719	33	27	1	15	1	11	39	5	na
>7 years	192	53	27	0	9	0	5	19	3	na
p-value		<0.001	0.967	0.154	0.035	0.099	0.005	< 0.001	0.172	na
Contraception										
never used	1200	31	30	1	18	2	14	33	3	na
ever used	711	41	22	1	8	0	5	42	7	na
p-value		<0.001	<0.001	0.731	< 0.001	< 0.001	<0.001	<0.001	0.001	na
Residence										
urban	109	35	22	1	8	1	7	40	10	na
rural	1803	35	28	1	15	1	11	36	4	na
p-value		0.966	0.234	0.934	0.063	0.712	0.284	0.391	0.004	na
Total	1912	35	27	1	14	1	11	37	5	na

# Philippines 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	241	12	16	1	22	3	11	32	14	1
25-34	488	12	9	1	24	J 1	10	41	14	0
35+	400 428	15	9	5	24	1	9	41	10	0
p-value	420	0.123	4 <0.001	<0.001	0.764	0.125	0.749	0.003	0.189	0.528
Parity		0.123	<0.001	<0.001	0.764	0.125	0.749	0.003	0.189	0.528
0-1 births	248	17	11	0	21	0	11	32	16	0
2-3 births	248 406	17	9	2	21	2	10	32		0
4+ births				3	24	1		37 48	12	0
	504	14	8	3		1	10		11	1
p-value Education		0.251	0.303	0.459	0.349	0.315	0.962	<0.001	0.083	0.724
							10			
<7 years	434	11	8	3	29	3	12		9	1
≥7 years	724	18	9	3	20	0	9	41	14	0
p-value		0.001	0.494	0.599	0.001	<0.001	0.049	0.938	0.017	0.907
Contraception										
never used	652	10	8	2	27	2	12	41	11	1
ever used	507	23	9	4	20	0	8	40	14	0
p-value		<0.001	0.611	0.148	0.005	0.001	0.016	0.714	0.091	0.048
Residence										
urban	543	20	8	3	22	1	8	37	15	0
rural	616	12	10	3	26	1	12	44	10	1
p-value		<0.001	0.156	0.866	0.130	0.815	0.012	0.034	0.021	0.757
<u>Total</u>	1157	16	9	3	24	1	10	41	12	0

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

# Sub-Saharan Africa

#### Benin 2001

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	195	43	14	1	18	15	16	12	6	3
25-34	351	34	15	2	16	10	17	14	7	3
35+	347	35	9	6	15	12	22	18	5	3
p-value	• · ·	0.090	0.033	0.001	0.799	0.208	0.155	0.091	0.467	0.920
Parity										
0-1 births	131	44	12	2	14	11	14	12	9	4
2-3 births	209	38	15	3	15	12	17	15	5	2
4+ births	552	33	11	3	17	12	21	16	5	3
p-value		0.053	0.433	0.569	0.539	0.875	0.119	0.372	0.240	0.532
Education										
<7 years	824	35	13	3	16	13	20	13	6	3
>7 years	68	41	4	4	15	3	1	39	3	3
p-value		0.332	0.410	0.403	0.719	0.017	<0.001	<0.001	0.263	0.966
Contraception										
never used	461	35	9	2	17	19	24	10	6	3
ever used	432	37	15	4	16	5	13	21	6	3
p-value		0.558	0.006	0.011	0.568	< 0.001	<0.001	<0.001	0.752	0.861
Residence										
urban	340	35	8	3	15	9	15	24	10	3
rural	552	37	15	3	17	14	21	10	4	3
p-value		0.568	0.002	0.661	0.325	0.022	0.013	<0.001	<0.001	0.790
Total	893	36	12	3	16	12	19	15	6	3

#### Burkina Faso 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	556	28	14	0	16	7	28	6	6	10
25-34	772	28	14	0	18	5	20	10	4	8
35+	852	20	9	4	17	5	20	10	4	8
p-value	852					-				
Parity		0.904	<0.001	<0.001	0.322	0.022	0.001	0.007	0.253	0.437
0-1 births	005	33	10	0	17	r	25	7	0	
2-3 births	265	33 27	13	0		5			3	11
2-3 births 4+ births	571		16	0	16	8	25	10	7	6
	1345	27	12	2	16	4	33	9	4	9
p-value Education		0.163	0.054	0.001	0.759	0.001	0.001	0.357	0.027	0.023
			10		10	-			-	
<7 years	2131	27	13	2	16	5	30	9	5	8
≥7 years	49	37	25	0	21	0	2		4	6
p-value		0.146	0.010	0.400	0.332	0.110	<0.001	<0.001	0.911	0.602
Contraception										
never used	1714	26	13	1	16	6	33	7	4	9
ever used	466	33	13	3	17	1	18	18	5	5
p-value		0.004	0.839	0.003	0.539	<0.001	<0.001	<0.001	0.605	0.005
Residence										
urban	246	31	13	2	19	1	9	24	6	8
rural	1933	27	13	1	15	5	32	7	4	8
p-value		0.211	0.725	0.153	0.130	0.004	<0.001	<0.001	0.338	0.937
Total	2180	28	13	1	16	5	30	9	5	8

\*May include self-reported infecundity. Notes: Some women may have chosen more than one reason, na=not applicable

#### Cameroon 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	284	35	19	0	12	17	9	4	11	6
25-34	303	32	13	1	16	12	15	10	12	6
35+	327	28	9	12	11	9	11	23	14	4
p-value	027	0.198	<0.001	<0.001	0.188	0.008	0.113	<0.001	0.468	0.483
Parity		0.100	(0.001	0.001	0.100	0.000	0.110	(0.001	0.100	0.100
0-1 births	133	44	20	1	11	15	6	5	11	6
2-3 births	237	29	16	3	12	16	10	13	13	4
4+ births	544	29	13	6	14	10	14	15	13	6
p-value		0.005	0.107	0.010	0.627	0.065	0.032	0.006	0.876	0.659
Education										
<7 years	624	24	14	4	16	14	14	11	11	8
>7 years	289	47	17	6	7	8	7	18	15	1
p-value		<0.001	0.234	0.358	<0.001	0.006	0.004	0.004	0.103	<0.001
Contraception										
never used	417	22	13	1	19	22	16	7	8	10
ever used	496	40	16	8	8	4	8	18	17	2
p-value		<0.001	0.172	<0.001	< 0.001	< 0.001	<0.001	<0.001	<0.001	<0.001
Residence										
urban	433	31	12	6	11	10	7	19	17	4
rural	480	32	17	4	15	15	16	8	9	7
p-value		0.987	0.014	0.197	0.060	0.034	<0.001	<0.001	<0.001	0.098
Total	914	32	15	5	13	12	12	13	13	6

#### Chad 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea or breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	165	13	12	0	27	17	13	14	0	0
25-34				0					6	6
35+	181	14	8	0	34	13	14		7	3
	111	14	5	2	35	17	6		5	4
p-value		0.991	0.126	0.042	0.220	0.464	0.117	0.550	0.612	0.570
Parity										
0-1 births	74	15	14	0	26	11	12		10	10
2-3 births	115	12	9	0	35	17	12		4	4
4+ births	268	14	8	1	32	15	12	19	6	2
p-value		0.857	0.296	0.492	0.439	0.497	0.984	0.171	0.348	0.016
Education										
<7 years	431	13	8	1	32	16	13	16	6	4
≥7 years	26	27	19	0	15	0	0	27	12	8
p-value		0.041	0.059	0.728	0.072	0.027	0.055	0.136	0.185	0.311
Contraception										
never used	430	14	8	1	32	16	13	16	6	4
ever used	27	15	15	0	22	0	0		7	11
p-value		0.845	0.220	0.722	0.288	0.024	0.050	0.056	0.733	0.048
Residence				•=						
urban	117	13	11	0	35	6	8	18	11	6
rural	340	14	8	1	30	18	13		4	3
p-value	540	0.785	0.362	0.405	0.340	0.001	0.109	0.603	0.006	0.188
Total	457	14	9	0	32	15	12	16	6	4

\*May include self-reported infecundity. Notes: Some women may have chosen more than one reason. na=not applicable

#### Congo 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	133	24	29	0	13	7	11	14	9	5
25-34	145	17	33	1	13	. 8	8	21	4	6
35+	85	21	14	. 7	22	13	19	17	9	5
p-value	00	0.371	0.007	0.002	0.106	0.242	0.049	0.222	0.182	0.970
Parity						•		•		
0-1 births	59	32	24	0	9	7	9	12	7	12
2-3 births	144	18	29	1	15	6	12	21	7	2
4+ births	180	21	26	4	18	11	13	16	7	6
p-value		0.064	0.776	0.167	0.194	0.338	0.631	0.278	0.999	0.016
Education										
<7 years	164	21	315	2	12	13	15	15	8	6
≥7 years	198	21	23	2	18	5	10	20	7	6
p-value		0.995	0.072	0.782	0.142	0.004	0.136	0.214	0.620	0.987
Contraception										
never used	38	24	8	3	13	24	11	32	5	8
ever used	325	21	29	2	15	7	12	16	7	5
p-value		0.880	0.005	0.849	0.717	< 0.001	0.795	0.011	0.631	0.468
Residence										
urban	153	16	23	2	14	6	12	19	7	7
rural	210	24	33	2	16	12	12	15	7	3
p-value		0.066	0.034	0.757	0.654	0.047	0.996	0.340	0.953	0.095
Total	363	21	27	2	15	6	12	18	7	6

\*May include self-reported infecundity. Notes: Some women may have chosen more than one reason. na=not applicable

# Ethiopia 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	622	7	22	1	21	11	18	15	15	4
25-34	1026	6	18	•	21	10	18	22	15	4
35+			18	0				22		3
p-value	796	6		2	25	11	14		12	3
•		0.636	0.030	0.005	0.240	0.777	0.014	<0.001	0.299	0.936
Parity										
0-1 births	390	9	18	1	23	9	14		17	3
2-3 births	555	7	22	1	24	10	15	18	15	3
4+ births	1498	5	18	1	24	11	15	25	12	3
p-value		0.009	0.175	0.764	0.904	0.466	0.995	<0.001	0.027	0.968
Education										
<7 years	2357	5	19	1	24	11	15	21	13	3
≥7 years	87	32	13	2	10	0	1	25	23	1
p-value		<0.001	0.131	0.083	0.003	0.001	<0.001	0.331	0.007	0.251
Contraception										
never used	2139	5	18	1	26	12	16	20	13	4
ever used	305	12	27	1	11	1	7	31	15	0
p-value		<0.001	<0.001	0.209	<0.001	< 0.001	<0.001	<0.001	0.615	0.002
Residence										
urban	142	29	20	1	7	1	2	27	19	1
rural	2301	5	19	1	25	11	15	21	13	4
p-value		<0.001	0.646	0.340	<0.001	<0.001	<0.001	0.063	0.055	0.072
Total	2444	6	19	1	24	11	15	21	14	3

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Gabon 2000

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	141	31	2	1	19	5	11	12	14	5
25-34	183	24	3	1	18	11	19	14	13	7
35+	220	18	0	5	29		10	24	18	4
p-value	220	0.025	0.032	0.025	0.012	0.159	0.011	0.006	0.310	0.525
Parity										
0-1 births	71	39	0	1	14	4	9	14	13	10
2-3 births	134	26	2	2	18	8	11	13	15	3
4+ births	338	19	2	3	26	9	15	20	15	5
p-value		0.001	0.449	0.543	0.028	0.392	0.268	0.140	0.890	0.105
Education										
<7 years	353	22	2	3	26	11	14	15	14	5
≥7 years	189	27	1	2	16	3	11	22	18	6
p-value		0.196	0.420	0.757	0.011	< 0.001	0.311	0.038	0.224	0.363
Contraception										
never used	163	22	1	1	34	15	20	12	10	5
ever used	380	24	2	3	18	6	10	20	17	5
p-value		0.639	0.755	0.244	<0.001	< 0.001	0.001	0.036	0.029	0.864
Residence										
urban	400	24	2	2	22	7	12	19	16	5
rural	143	23	0	4	24	13	15	14	12	6
p-value		0.918	0.070	0.315	0.708	0.012	0.438	0.198	0.276	0.474
Total	543	23	2	2	23	8	13	18	15	5

#### Ghana 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	213	20	23		6	5	9	30	10	0
25-34				1		5				9
35+	374	21	21	1	10		15	32	7	4
	355	25	16	6	5	8	16	38	4	2
p-value		0.327	0.071	<0.001	0.008	0.391	0.088	0.086	0.019	0.001
Parity										
0-1 births	185	23	23	1	6	4	8	34	9	7
2-3 births	282	22	16	3	7	6	16	31	8	6
4+ births	476	22	20	3	7	8	16	35	6	2
p-value		0.905	0.205	0.317	0.849	0.274	0.019	0.456	0.216	0.009
Education										
<7 years	603	21	21	2	8	10	18	30	6	5
≥7 years	339	24	17	4	6	2	6	41	8	4
p-value		0.314	0.068	0.092	0.322	<0.001	<0.001	<0.001	0.430	0.486
Contraception										
never used	518	18	18	1	9	11	21	31	6	5
ever used	425	27	21	5	5	1	6	38	7	3
p-value		<0.001	0.307	<0.001	0.033	< 0.001	<0.001	0.024	0.575	0.172
Residence										••••=
urban	308	24	16	4	4	4	8	41	7	4
rural	634	21	22	2	8	8	17	30	7	4
p-value	504	0.220	0.033	0.023	0.020	0.035	<0.001	0.002	0.803	0.618
Total	942	22	20	3	7	7	14	34	7	4

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Kenya 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	280	12	39	0	23	1	6	30	6	4
25-34	393	13	35	1	20	2	9	38	5	2
35+	263	24	18	4	18	2	9	39	4	2
p-value		<0.001	<0.001	<0.001	0.456	0.843	0.326	0.042	0.576	0.222
Parity										
0-1 births	112	17	23	0	24	2	6	34	3	5
2-3 births	286	13	37	1	21	2	7	31	7	2
4+ births	536	16	30	2	19	2	9	39	4	2
p-value		0.450	0.020	0.199	0.414	0.815	0.468	0.071	0.097	0.068
Education										
<7 years	417	15	29	2	24	3	12	36	3	2
>7 years	518	16	34	1	17	1	5	36	7	3
p-value		0.840	0.106	0.135	0.013	0.030	<0.001	0.859	0.005	0.725
Contraception										
never used	527	15	28	2	26	3	10	35	4	3
ever used	409	17	35	1	13	0	6	38	6	2
p-value		0.445	0.023	0.249	<0.001	0.001	0.058	0.298	0.184	0.156
Residence										
urban	135	16	24	1	15	0	2	45	7	3
rural	800	16	33	2	21	2	9	34	4	2
p-value		0.984	0.034	0.429	0.135	0.086	0.007	0.016	0.134	0.613
Total	936	16	31	2	20	2	8	36	5	2

# Lesotho 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	311	27	0	0	12	2	10	21	4	3
25-34	267	20	0	5	12	2	9	33	4	3
35+	370	16	0	10	18	2	6	39	7	6
p-value	370	0.002	0.458	0.000	0.098	0.697	0.144	0.000	, 0.311	0.033
Parity		0.002	0.450	0.000	0.055	0.037	0.144	0.000	0.311	0.055
0-1 births	213	29	0	2	13	1	9	21	5	4
2-3 births	327	23	0	6	13	2	5	32	5	4
4+ births	327 407	16	0	6	14	2	9	32	5	5
p-value	407	0.001	0.516	0.041	0.062	0.619	0.620	0.000	0.671	0.453
Education		0.001	0.516	0.041	0.062	0.619	0.620	0.000	0.671	0.455
<7 years	369	18	0	5	18	4	10	30		4
,	579	23	0	5	18	4	7	33		4
≥7 years	5/9									
p-value Contraception		0.091	0.424	0.663	0.093	0.000	0.108	0.357		0.692
never used	o / =						1.0			
ever used	245	245	0	0	22	3	10	24		3
	703	703	0	7	14	1	8	34		4
p-value		0.782	0.555	0.000	0.005	0.015	0.346	0.003		0.435
Residence			-		_	-	-			-
urban	125	31	0	13	5	0	0	40		3
rural	824	19	0	4	18	2	10	30		4
p-value		0.002	0.698	0.000	0.000	0.143	0.000	0.026		0.592
<u>Total</u>	947	21	0	5	16	2	8	31		4

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Madagascar 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	209	4	19	1	12	14	18	31	5	15
25-34	332	10	12	0	17	12	14	37	1	12
35+	409	10	.=	2	12	14	17	47	2	.=
p-value		0.022	<0.001	0.130	0.078	0.527	0.386	<0.001	0.001	0.006
Parity		0.022	40.001	0.100	0.070	0.027	0.000	(0.001	0.001	0.000
0-1 births	107	8	18	1	24	13	24	27	2	7
2-3 births	281	10	11	1	10	9	9	48	5	11
4+ births	562	8	9	1	13	16	19	38	- 1	11
p-value		0.751	0.023	0.879	0.001	0.016	<0.001	<0.001	<0.001	0.329
Education										
<7 years	747	7	12	1	13	17	20	34	2	12
>7 years	202	13	6	2	13	0	4	62	3	5
p-value		0.006	0.037	0.624	0.848	< 0.001	<0.001	<0.001	0.334	0.003
Contraception										
never used	603	5	8	1	16	20	22	31	1	15
ever used	348	15	15	1	9	1	6	56	4	3
p-value		<0.001	0.001	0.985	0.003	<0.001	<0.001	<0.001	0.028	<0.001
Residence										
urban	178	11	10	2	15	5	7	51	3	8
rural	773	8	11	1	13	15	19	37	2	11
p-value		0.168	0.903	0.129	0.414	<0.001	<0.001	<0.001	0.144	0.178
Total	950	9	10	1	13	13	16	40	2	11

#### Malawi 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	686	23	34	1	24	2	5	27	2	2
25-34	763	19	26	2	27	1	7	32	1	2
35+	598	21	18	6	25	1	6	36	2	1
p-value	000	0.123	<0.001	<0.001	0.466	0.158	0.173		0.181	0.155
Parity		0.120	0.001	0.001	0.100	0.100	0.170	0.002	0.101	0.100
0-1 births	337	28	30	2	24	2	5	26	2	2
2-3 births	640	20	31	2	22	2	5	32	1	2
4+ births	1071	19	22	4	28	1	6	33	1	1
p-value		0.001	<0.001	0.238	0.013	0.018	0.420	0.026	0.666	0.240
Education										
<7 years	1652	19	26	3	27	2	6	31	1	2
≥7 years	395	30	27	2	20	0	4	34	2	1
p-value		<0.001	0.720	0.105	0.003	0.011	0.039	0.291	0.380	0.078
Contraception										
never used	1267	19	29	2	30	2	6	30	1	2
ever used	781	24	22	4	19	0	6	35	2	1
p-value		0.012	<0.001	0.050	<0.001	0.001	0.790	0.014	0.495	0.355
Residence										
urban	234	24	26	4	16	0	3	41	2	0
rural	1813	20	26	3	27	1	6	31	1	2
p-value		0.149	0.984	0.238	0.001	0.223	0.108	0.001	0.632	0.174
Total	2047	21	26	3	25	1	6	32	1	2

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Mali 2001

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	622	11	18	0	29	11	11	13	8	8
25-34	742	8	13	0	25	11	15	23	7	6
35+	775	10	5	2	32	8	16	26	7	4
p-value		0.197	<0.001	< 0.001	0.004	0.091	0.007	<0.001	0.625	0.008
Parity										
0-1 births	238	13	17	1	27	12	8	13	8	11
2-3 births	461	12	14	0	28	12	14	18	6	6
4+ births	1439	8	10	1	29	9	16	24	8	5
p-value		0.013	0.002	0.090	0.698	0.154	0.005	<0.001	0.593	<0.001
Education										
<7 years	2038	9	12	1	29	11	15	21	7	6
≥7 years	100	18	8	1	33	1	2	24	13	5
p-value		0.004	0.250	0.765	0.372	0.002	<0.001	0.541	0.028	0.726
Contraception										
never used	1642	9	11	0	28	12	17	19	7	7
ever used	496	13	13	2	30	3	7	28	10	3
p-value		0.011	0.487	< 0.001	0.529	< 0.001	<0.001	< 0.001	0.050	0.010
Residence										
urban	591	12	14	1	28	8	3	27	10	7
rural	1547	9	11	1	29	11	19	19	6	6
p-value		0.041	0.060	0.210	0.541	0.016	<0.001	<0.001	0.001	0.328
Total	2139	10	12	1	29	10	14	21	7	6

# Mozambique 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	288	52	34	1	16	5	12	7	5	1
25-34	397	41	28	2	18	5	12	13	7	2
35+	515	32	28	2 8	16	3	18	21	11	2
p-value	515	<0.001	<0.001	ہ <0.001	0.627	0.249	0.012		0.005	0.289
Parity		<0.001	<0.001	<0.001	0.627	0.249	0.012	<0.001	0.005	0.209
0-1 births	135	53	33	4	15	1	10	6	5	
2-3 births	299	43	28	4	15	5	10	11	5	2
4+ births	299 765	43	28	4 5	18	5	16	18	9	2
p-value	765	36 <0.001	<0.001	с 0.988	0.856	4 0.098	0.037	<0.001	9 0.264	0.492
Education		<0.001	<0.001	0.988	0.856	0.098	0.037	<0.001	0.264	0.492
	1131	20	00		17		15	15	0	0
<7 years	69	39 55	23 26	4	17	4	15		8	2
≥7 years	69			7		0	2		7	1
p-value		0.006	0.568	0.244	0.655	0.081	0.002	0.462	0.811	0.844
Contraception										
never used	531	44	29	2	19	6	13	9	5	2
ever used	668	36	19	7	14	2	15	20	11	2
p-value		0.009	<0.001	<0.001	0.013	<0.001	0.263	<0.001	<0.001	0.756
Residence										
urban	387	42	24	6	14	1	5		11	2
rural	812	38	23	4	18	6	19	12	7	2
p-value		0.141	0.776	0.065	0.110	<0.001	<0.001	<0.001	0.008	0.714
Total	1200	39	23	5	16	4	14	15	8	2

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Namibia 2000

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	62	10	21	2	19	3	13	27	13	3
25-34	143	13	18	8	18	7	.0	24	8	6
35+	190	14	.0	8	27	. 6	4	23	11	11
p-value		0.712	0.011	0.206	0.140	0.584	0.028	0.789	0.597	0.089
Parity		0.7.12	0.011	0.200	0.110	0.001	0.020	0.700	0.007	0.000
0-1 births	61	10	12	13	22	5	13	23	8	8
2-3 births	136	15	15	6	21	7	6	27	6	8
4+ births	199	13	14	6	24	6	5	22	14	9
p-value		0.629	0.830	0.105	0.872	0.898	0.077	0.558	0.062	0.988
Education										
<7 years	192	14	18	8	24	7	7	21	8	7
>7 years	204	12	10	6	21	5	6	27	12	9
p-value		0.702	0.023	0.454	0.509	0.319	0.562	0.223	0.251	0.577
Contraception										
never used	133	11	16	4	27	12	5	22	4	8
ever used	262	13	13	8	20	3	8	25	13	8
p-value		0.557	0.383	0.084	0.129	< 0.001	0.237	0.457	0.003	0.949
Residence										
urban	156	9	11	7	28	4	4	31	10	8
rural	239	15	16	7	19	8	8	20	11	9
p-value		0.075	0.195	0.869	0.053	0.134	0.076	0.015	0.786	0.710
Total	395	13	14	7	23	6	7	24	10	8

# Nigeria 2003

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	144	9	25	na	32	8	11	10	4	8
25-34	233	17	21	na	25	11	15	10	10	4
35+	253	27	11	na	31	8	9	10	6	3
p-value	200	<0.001	0.001		0.220	0.520	0.156	0.283	0.073	0.061
Parity		(0.001	0.001		0.220	0.020	0.100	0.200	0.070	0.001
0-1 births	97	9	20	na	41	7	7	5	6	9
2-3 births	123	21	28	na	20	3	9	20	6	6
4+ births	411	21	15	na	29	11	14	11	8	4
p-value		0.027	0.003		0.002	0.027	0.082	0.002	0.740	0.063
Education										
<7 years	441	19	18	na	30	11	14	10	5	6
≥7 years	190	21	18	na	28	4	7	17	12	2
p-value		0.572	0.986		0.688	0.007	0.010	0.010	0.003	0.014
Contraception										
never used	420	14	19	na	33	12	14	8	5	6
ever used	212	30	16	na	20	3	9	19	11	3
p-value		<0.001	0.246		0.001	< 0.001	0.063	< 0.001	0.007	0.109
Residence										
urban	203	21	17	na	28	4	11	21	7	2
rural	429	18	18	na	30	11	12	8	7	6
p-value		0.410	0.784		0.627	0.006	0.575	<0.001	0.943	0.024
Total	630	19	18	na	29	9	12	12	7	5

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Rwanda 2005

Sociodemographic subgroup	; n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	256	8	44	0	23	8	10	15	5	2
25-34	662	6	48	1	23	7	8	16	7	- 1
35+	620	14	33	6	29	4	5	21	5	2
p-value	020	<0.001	<0.001	<0.001	0.045	0.009	0.010	0.015	0.087	0.042
Parity		(0.001	0.001	0.001	0.010	0.000	0.010	0.010	0.007	0.012
0-1 births	119	12	22	3	29	11	13	13	8	3
2-3 births	424	9	47	0	23	6	7	15	5	1
4+ births	997	10	41	3	26	5	6	19	6	1
p-value		0.509	<0.001	0.002	0.299	0.036	0.005	0.060	0.294	0.062
Education										
<7 years	1296	10	40	3	16	6	7	18	6	1
>7 years	245	8	49	1	20	4	5	18	6	2
p-value		0.269	0.008	0.171	0.156	0.106	0.134	0.771	0.877	0.537
Contraception										
never used	1154	8	41	2	19	8	7	16	6	1
ever used	385	16	43	5	13	1	4	22	7	2
p-value		<0.001	0.442	<0.001	0.008	< 0.001	0.044	0.011	0.394	0.505
Residence										
urban	190	13	41	1	23	5	4	20	5	1
rural	1351	9	42	3	16	6	7	17	6	1
p-value		0.082	0.809	0.182	0.018	0.464	0.158	0.381	0.700	0.815
Total	1541	10	41	3	17	6	7	18	6	1

# Senegal 2005

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	550	19	33	0	28	5	8	13	7	0
25-34		19	33 29	0	28		8			2
35+	840			1		4	-	23 33	6	4
	776	14	15	3	29	3	9		8	3
p-value		0.064	<0.001	<0.001	0.406	0.139	0.203	<0.001	0.578	0.273
Parity										
0-1 births	305	23	22	0	29	7	5		9	6
2-3 births	596	19	35	1	21	4	6	19	7	2
4+ births	1266	12	21	2	30	3	9	29	7	3
p-value		<0.001	<0.001	0.009	<0.001	0.013	0.035	<0.001	0.541	0.034
Education										
<7 years	2009	15	25	1	29	4	8	23	7	3
≥7 years	157	24	23	1	11	0	3	36	13	3
p-value		0.002	0.495	0.423	< 0.001	0.009	0.012	< 0.001	0.004	0.565
Contraception										
never used	1588	14	26	1	31	5	9	20	6	3
ever used	578	20	22	2	18	1	5	335	10	3
p-value		0.001	0.036	0.277	<0.001	<0.001	0.007	<0.001	0.002	0.595
Residence										
urban	858	18	25	1	21	3	5	32	10	4
rural	1308	14	26	2	32	4	10	19	5	3
p-value		0.019	0.499	0.342	<0.001	0.071	<0.001	<0.001	<0.001	0.229
Total	2167	16	25	1	28	4	8	24	7	3

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Tanzania 2004

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	330	31	3	0	17	2	7	26	7	3
25-34	485	19	4	0	25	1	, 10	31	, 10	1
35+	381	26	1	1	30	3	9	36	6	, (
p-value	001	<0.001	0.012	0.005	0.001	0.045	0.288	0.002	0.151	0.001
Parity		<0.001	0.012	0.000	0.001	0.040	0.200	0.002	0.101	0.001
0-1 births	153	37	1	0	13	1	5	26	7	3
2-3 births	375	22	3	0	24	2	8	32	7	1
4+ births	669	23	3	1	27	2	10	33	. 8	
p-value	000	<0.001	0.228	0.137	0.002	0.433	0.106	0.182	0.795	0.002
Education										
<7 years	552	23	2	1	25	3	12	29	5	1
>7 years	645	25	3	0	24	1	6	34	10	1
p-value		0.563	0.117	0.015	0.648	0.002	< 0.001	0.088	< 0.001	0.965
Contraception										
never used	769	21	3	0	29	3	8	28	7	1
ever used	429	40	2	1	15	0	11	38	9	1
p-value		0.001	0.661	0.039	< 0.001	< 0.001	0.179	<0.001	0.141	0.222
Residence										
urban	216	27	2	1	19	0	2	44	9	1
rural	979	24	3	0	25	2	11	29	8	1
p-value		0.280	0.396	0.015	0.039	0.022	<0.001	<0.001	0.528	0.431
Total	1197	24	3	0	24	2	9	32	8	1

# Uganda 2001

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	330	8	24	2	22	5	18	24	6	4
25-34	480	18	24	4	16	4	19	23	9	- 3
35+	352	17	10	10	19	- 5	23	30	5	2
p-value	552	<0.001	<0.001	<0.001	0.051	0.729	0.239	0.095	0.113	0.283
Parity		<0.001	<0.001	<0.001	0.051	0.725	0.233	0.000	0.115	0.200
0-1 births	83	13	15	2	20	5	20	23	7	11
2-3 births	274	12	25	3	20	5	14	25	, 7	2
4+ births	805	16	17	7	18	4	22		7	2
p-value	000	0.298	0.009	0.053	0.568	0.865	0.024	0.787	0.978	<0.001
Education		0.200	0.000	0.000	0.000	0.000	0.021	007	0.070	(0.001
<7 years	950	14	18	5	18	5	23	25	7	3
≥7 years	212	16	22	7	23	2	8	29	6	2
p-value		0.548	0.152	0.270	0.086	0.044	< 0.001	0.210	0.558	0.528
Contraception										
never used	792	12	17	4	21	6	23	25	8	3
ever used	369	21	22	8	14	1	14	26	6	2
p-value		<0.001	0.039	0.005	0.003	<0.001	<0.001	0.737	0.411	0.623
Residence										
urban	103	22	20	8	13	4	7	31	7	2
rural	1059	14	18	5	19	5	21	25	7	3
p-value		0.022	0.712	0.315	0.116	0.761	<0.001	0.165	0.888	0.668
Total	1162	15	18	6	19	5	20	25	7	3

\*May include self-reported infecundity Note: Some women may have chosen more than one reason

#### Zambia 2002

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	239	31	36	1	7	2	9	14	11	4
25-34	274	32	33	5	7	1	8	18	10	2
35+	335	27	13	22	14	1	6	22	8	1
p-value	000	0.339	<0.001	<0.001	0.003	0.432	0.404	0.079	0.366	0.121
Parity		0.000	101001	0.001	0.000	0.102	0.101	0.070	0.000	0.121
0-1 births	94	34	23	5	10	5	10	13	11	5
2-3 births	222	28	35	6	6	1	9	17	8	3
4+ births	533	30	23	13	11	1	7	20	9	2
p-value		0.553	0.002	0.004	0.168	0.003	0.498	0.203	0.764	0.052
Education										
<7 years	468	31	25	9	10	2	9	18	11	2
>7 years	381	28	27	12	9	1	6	19	7	3
p-value		0.442	0.720	0.112	0.646	0.416	0.049	0.539	0.113	0.251
Contraception										
never used	295	29	29	3	10	4	13	14	11	3
ever used	553	30	24	14	9	0	5	21	8	2
p-value		0.674	0.198	<0.001	0.576	< 0.001	<0.001	0.012	0.117	0.330
Residence										
urban	289	27	29	18	9	1	2	20	6	3
rural	559	31	24	7	10	2	11	18	10	2
p-value		0.275	0.095	<0.001	0.559	0.499	<0.001	0.447	0.043	0.221
Total	848	30	26	11	10	1	8	18	9	2

#### Zimbabwe 1999

Sociodemographic subgroup	n	Infrequent sex	Postpartum amenorrhea/ breastfeeding	Subfecund*	Respondent/ partner/ other opposed	Unaware of methods	No access/ knows no source/ high cost	Health or side effects/ inconvenient to use	Other	Don't know
Age										
< 25	71	39	14	0	21	na	10	9	7	3
25-34	87	26	9	3	26	na	10	18	, 10	1
35+	157	20	3	12	17	na	14	27	8	2
p-value	157	0.020	0.010	0.001	0.241	na	0.767	0.005	0.776	0.734
Parity		0.020	0.010	0.001	0.241	11d	0.707	0.005	0.770	0.734
0-1 births	44	36	5	0	22	na	11	9	14	5
2-3 births	77	34	14	5	16	na	14	9 17	7	1
4+ births	194	22	5	10	23	na	12	24	8	2
p-value	194	na	na	na	na	na	na	na	na	na
Education		na	i ia	na	na	na	na	na	na	na
<7 years	130	27	5	9	20	na	13	21	8	2
≥7 years	186	27	9	6	20	na	13	20	9	2
p-value	100	0.922	0.273	0.270	0.728	na	0.539	0.822	0.640	0.661
Contraception		0.522	0.275	0.270	0.720	na	0.000	0.022	0.040	0.001
never used	82	26	7	9	42	na	2	7	6	4
ever used	234	28	8	5	42	na	15	25	9	4
p-value	234	0.704	0.912	0.503	<0.001	na	0.002	0.001	0.371	0.177
Residence		0.704	0.912	0.505	<0.001	11d	0.002	0.001	0.371	0.177
urban	66	32	3	9	27	na	8	20	5	2
rural	249	26	8	5	19	na	13	20	10	2
p-value	249	0.320	0.134	0.530	0.156	na	0.237	0.844	0.189	0.795
<u>Total</u>	315	27	7	7	21	na	12	20	9	2

\*May include self-reported infecundity. Notes: Some women may have chosen more than one reason. na=not applicable

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