The Causes of Unmet Need for Contraception and the Social Content of Services
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The Causes of Unmet Need for Contraception and the Social Content of Services

John Bongaarts and Judith Bruce

Since the 1960s, survey data have indicated that substantial proportions of women who have wanted to stop or delay childbearing have not practiced contraception. This discrepancy is referred to as the “unmet need” for contraception. The traditional interpretation, that these women lack access to contraceptive supplies and services, has led in turn to an emphasis on expanding family planning programs. This study analyzes survey data and related anthropological studies on the causes of unmet need and concludes that the conventional explanation is inadequate. Although for many environments geographic access to services remains a problem, the principal reasons for nonuse are lack of knowledge, fear of side effects, and social and familial disapproval. This finding underscores the need for expanded investment in services that not only provide contraceptives, but also attend to closely related health and social needs of prospective clients. Programs are likely to be most successful when they reach beyond the conventional boundaries of service provision to influence and alter the cultural and familial factors that limit voluntary contraceptive use. (Studies in Family Planning 1995; 26, 2: 57–75)

The presence of an unmet need for contraception in many developing countries was first demonstrated with data collected in surveys in the 1960s that inquired about women’s knowledge of, attitudes toward, and practice of birth control, as well as about family-size preferences (Berelson, 1966; United Nations, 1979). Results from these surveys indicated that a substantial portion of women who wanted to stop childbearing were not practicing contraception. Methodologies for measuring this unmet need for contraception have become increasingly refined and complex (Boulier, 1984; Westoff, 1978 and 1988; Westoff and Pebley, 1981; Bongaarts, 1991; Westoff and Ochoa, 1991). The most recent estimates, which include the unmet need for spacing births, put the total number of women with an unmet need in the developing world at approximately 120 million (Robey et al., 1992; World Bank, 1993). The existence of this unmet need has provided a key rationale for expanding family planning programs (Freedman, 1987).

An unmet need for contraception exists because there is a cost associated with practicing contraception or a lack of information about it. The term “cost” is used here in the broadest sense to include not just expenses for commodities, travel, and services, but also health, psychological, and social considerations brought into play as women decide whether or not to adopt or continue a method (Easterlin, 1975). For current users, the benefits of practicing contraception (that is, avoidance of pregnancy) apparently exceed the costs. The reverse is true for women with an unmet need.

The term “unmet need” implies that services have a further role to play in reducing mistimed and unwanted pregnancies. Some authors view lack of access to service points as a primary reason for nonuse among the otherwise motivated (Robey et al., 1993). Where this is the case, increased investment in new service points and promotion should provide remedies. However, as will be demonstrated below, an effective program is frequently one that goes far beyond the provision of family planning and contraceptive services by addressing social obstacles to use, such as fear of side effects and social or familial disapproval. The best example of family planning performance under adverse conditions is that of Bangladesh. In the invigorated national family planning program, an active cadre of female family planning health visitors reaches into the community and home environments of women; the visitors make themselves available on a regular and predictable basis. This

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program’s success can be attributed largely to the presence of such women as guarantors of contraceptives, as role models, as referral sources for contraceptives and vital child health care, and as negotiators in otherwise covert family bargaining (Simmons et al., 1988). Such a program acts directly to supply knowledge about and access to contraceptives, while also mitigating the psychological and cultural barriers to use.

The analysis of the causes of unmet need and the search for programmatic solutions described in this article cover the entire range of factors that both women and men must contend with in order to regulate their fertility. We explore the causes of unmet need in developing countries through a comprehensive overview of the roles of family planning services, and propose an ambitious agenda for what programs could offer.

Causes of Unmet Need in the Developing World

The wide range of factors that may inhibit apparently motivated married women from practicing contraception are documented and discussed in this section. Data are derived from national Demographic and Health Surveys (DHS) in which women’s views on these matters are recorded, as well as from more specific studies on topics of relevance.

Several sources of uncertainty surround the unmet need estimates derived from these surveys. Interviewing is usually confined to women, even though women often cannot act effectively to realize their reproductive intentions in the face of real or perceived objections from their husbands or others. Only a few special fertility studies of men exist. Another potential problem occurs because the unmet need category is estimated as a residual after excluding women who are infecund or who are current users, as well as those who say they want a birth soon. Women were not asked directly whether they had an unmet need for contraception. That status is inferred from a discrepancy between stated reproductive intentions and current contraceptive behavior. The uncoupled and unmarried are often neglected as well, as noted by Dixon-Mueller and Germain (1992).

Before turning to the analysis of the specific causes of unmet need, we briefly review the available data on its prevalence.

Prevalence of Unmet Need

Most recent estimates of unmet need include both women who state that they want no more children in the near term (“spacers”) and women who have reached their desired family size and are not using any method of contraception (“limiters”). As available statistics on unmet need are largely confined to women who are married or living in consensual unions, the data in our discussion are limited to these women. In any given population, the proportion of fecund, sexually active women who do not wish to become pregnant soon can be considered to have a potential demand for contraception. Among these women with a potential demand, some are practicing contraception and some are not. The former are current users whose need for a method of contraception is considered to have been met (even though they may not be happy with their current method); the latter are considered to have an unmet need for contraception:

\[
\text{Potential demand for contraception} = \frac{\text{current users + nonusers}}{\text{(met need)}} = \frac{\text{unmet need}}{\text{(unmet need)}}
\]

Estimates for these three variables are available for the following countries for the period 1986 to 1990:

- Sub-Saharan Africa: Botswana, Burundi, Ghana, Kenya, Liberia, Mali, Nigeria, Togo, Uganda, Zimbabwe
- North Africa/Middle East: Egypt, Jordan, Morocco, Tunisia
- Asia: Indonesia, Pakistan, Sri Lanka, Thailand
- Latin America: Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, Guatemala, Mexico, Peru, Trinidad and Tobago

Regional averages (unweighted) derived from these country-specific estimates are provided in Table 1. Sub-Saharan Africa stands out as the region with the lowest potential demand and contraceptive prevalence while having the highest unmet need. The unmet need in this region actually exceeds the contraceptive prevalence; as a result, the proportion of demand that is satisfied is only 0.41 (15.9/38.9). In contrast, in the other regions, 60 percent or more of women are currently not seeking to become pregnant, and two-thirds of them are using some method of contraception, leaving fewer than 20 percent

<table>
<thead>
<tr>
<th>Region (N)</th>
<th>Potential demand</th>
<th>Current use</th>
<th>Unmet need</th>
<th>Proportion of demand satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa (10)</td>
<td>38.9</td>
<td>15.9</td>
<td>23.0</td>
<td>0.41</td>
</tr>
<tr>
<td>North Africa/ Middle East (4)</td>
<td>59.8</td>
<td>40.9</td>
<td>18.9</td>
<td>0.68</td>
</tr>
<tr>
<td>Asia (4)</td>
<td>60.8</td>
<td>46.7</td>
<td>14.1</td>
<td>0.77</td>
</tr>
<tr>
<td>Latin America (6)</td>
<td>67.1</td>
<td>47.8</td>
<td>19.4</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Source: See Note 1. N is the number of countries included in each region.

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of all married women potentially at risk of unwanted pregnancy. The unmet need in Asian countries is only 14 percent, and the proportion satisfied in this region is 0.77 (0.85 without Pakistan). The differences between unmet need levels in Asian and African countries are in part attributable to the more effective family planning programs available in Asia.

Further insights into the variation among countries can be gained by grouping them by level of development. Among the many available indicators, we rely here on the "human development index" (HDI) produced by the United Nations Development Programme (1991). This index is calculated as the weighted average of three socioeconomic variables: gross national product per capita, adult literacy, and life expectancy at birth. The result is an index with values ranging between 0 and 1. For present purposes, countries are grouped into four human development levels: (I) HDI less than 0.25, (II) HDI between 0.25 and 0.50, (III) HDI between 0.50 and 0.75, and (IV) HDI over 0.75.

Average levels of potential demand for contraception and its spacing and limiting components for these four groups of countries are plotted in Figure 1. As expected, the proportion of women not currently seeking to become pregnant and those who do not want children (that is, total demand for contraception) rises from 29 to 73 percent between the lowest and the highest levels of development (see top line in Figure 1). This variation in total demand is almost entirely the result of variations in the demand for limiting, which is strongly related to the level of development, because women tend to want fewer children in more favorable socioeconomic circumstances. This demand is, as yet, only partially satisfied, thus creating an unmet need for contraception.

The demand for spacing is fairly constant despite changing fertility preferences (see bottom line in Figure 1). This stability is explained by two opposing trends. First, the decline in desired family size with level of development causes a decline in the proportion of women who are spacers; other things being equal, this would cause a decline in the demand for contraception for spacing purposes. Second, the abandonment of traditional birth-spacing methods in the more advanced countries results in an increase in demand for contraception for spacing purposes. These two factors operate in opposite directions; in practice, apparently they offset each other, more or less, which results in the fairly stable demand for spacing across countries by development level that is evident in the figure.

As expected, the prevalence of contraceptive use also increases sharply between the lowest and highest development group (as shown in Figure 1): from 4 to 16 percent for spacing, from 3 to 43 percent for limiting, and from 7 to 59 percent for total use. These prevalence levels imply sharp contrasts in the proportion of overall demand that is satisfied, ranging from 24 percent (7/29) in development group I, to 81 percent (59/73) in group IV. Increases in demand satisfaction are similar for spacers and limiters.

The unmet need levels presented in Figure 1 (hatched parts of bars) are simply the difference between the estimates of the proportion of women with a potential demand and the proportion of women using some form of contraception. The unmet need for spacing declines with development because the prevalence of contraception for spacing rises, while the demand for spacing remains relatively constant. In contrast, the proportion of women who wish to limit and are not doing so successfully shows no significant overall trend; the desire for limiting family size and the prevalence of contraception for limiting purposes rise at approximately the same rate. The modest negative association between level of development and total unmet need largely reflects a decline in the unmet need for spacing. Needless to say, the comparative patterns presented in Figure 1 do not necessarily represent actual trends over time in particular countries or regions.

**Women's Views of the Causes of Unmet Need**

The most obvious place to start an analysis of the causes of unmet need is with the views expressed by women in response to specific questions included in some surveys. For example, in a number of the DHS surveys,
women who are at risk of conceiving (that is, not pregnant or infecund, and sexually active) but are not practicing contraception were asked how they felt about becoming pregnant. Those who did not wish to become pregnant were then asked to identify their principal reason for not using contraceptives.

Table 2 presents the percentages of women giving particular reasons for nonuse based on the 13 surveys for which the necessary data were available. The causes of nonuse are listed from most to least frequently mentioned. The most important reasons for nonuse overall are lack of knowledge (25 percent), health concerns (20 percent), and husband’s disapproval (9 percent). The next three reasons are infrequent sex (6 percent), religion (4 percent), and lack of access (4 percent). The remaining factors are typically considered important by only very small proportions of women. These averages conceal substantial differences among regions and countries. Lack of knowledge is much more important in Africa than in Asia or Latin America except for Bolivia, while health concerns are important in Asia and Latin America but are somewhat less so in Africa. Cost of use is a substantially more significant factor in Latin America than elsewhere. The finding in Table 2 regarding the relatively low significance of access is contrary to the view that women who wish to avoid pregnancy do not use services primarily because they lack access to service points.

The results summarized in Table 2 should be interpreted with caution because they contain several potential problems:

1. **Response error** could result from the need to reply quickly to a complex question in an interview setting. For some women the principal reason given for nonuse might well have been different if time had been available to consider the matter more carefully;

2. **The single response** required in the surveys can give a simplistic and incomplete view of what is typically a multidimensional issue. Many women are likely to have more than one reason for not using contraceptives. The distribution of the principal reasons for nonuse may, therefore, not be an accurate picture of the prevalence of the various obstacles to use (discussed in more detail later).

3. **Politeness/embarrassment bias** may lead some women to respond inaccurately. For example, women may be embarrassed to admit modesty in sexual matters or be too polite to complain about poor family planning services. In these cases, generally more acceptable responses, such as health concerns, could be substituted for the actual reason.

Despite these problems with the question on the reasons for nonuse, the results in Table 2 are probably broadly indicative of the factors that prevent women from practicing contraception even though they do not wish to become pregnant.

In the discussion below, each of the most important causes of unmet need will be reviewed in greater detail, except for “religion,” which is normally not considered easily amenable to intervention, and “infrequent sex,” which is outside the scope of programmatic action.

Table 2  Percentage distribution of married women with unmet need, by principal reason reported for nonuse of contraceptives, 13 DHS countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Lack of knowledge</th>
<th>Health concerns</th>
<th>Husband disapproves</th>
<th>Infrequent sex</th>
<th>Religion</th>
<th>Lack of access/ Difficult to get</th>
<th>Opposed to family planning</th>
<th>Cost is too high</th>
<th>Fatalism</th>
<th>Inconvenient to use</th>
<th>Others disapprove</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>34.8</td>
<td>7.7</td>
<td>5.7</td>
<td>7.4</td>
<td>3.5</td>
<td>3.3</td>
<td>1.0</td>
<td>4.5</td>
<td>3.0</td>
<td>4.1</td>
<td>1.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>35.5</td>
<td>16.0</td>
<td>10.7</td>
<td>2.7</td>
<td>6.3</td>
<td>5.3</td>
<td>3.9</td>
<td>2.9</td>
<td>na</td>
<td>3.4</td>
<td>0.5</td>
<td>13.1</td>
</tr>
<tr>
<td>Kenya</td>
<td>27.6</td>
<td>16.8</td>
<td>19.6</td>
<td>7.3</td>
<td>2.7</td>
<td>1.2</td>
<td>4.1</td>
<td>0.2</td>
<td>1.9</td>
<td>2.2</td>
<td>0.4</td>
<td>16.0</td>
</tr>
<tr>
<td>Mali</td>
<td>41.3</td>
<td>4.6</td>
<td>12.1</td>
<td>0.5</td>
<td>12.3</td>
<td>3.4</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>3.2</td>
<td>22.6</td>
</tr>
<tr>
<td>Sudan</td>
<td>32.8</td>
<td>26.3</td>
<td>10.7</td>
<td>1.2</td>
<td>7.5</td>
<td>4.2</td>
<td>3.0</td>
<td>1.2</td>
<td>9.6</td>
<td>2.7</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Uganda</td>
<td>48.2</td>
<td>8.0</td>
<td>8.4</td>
<td>3.9</td>
<td>1.7</td>
<td>10.1</td>
<td>3.9</td>
<td>4.9</td>
<td>2.8</td>
<td>2.8</td>
<td>0.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>10.4</td>
<td>19.3</td>
<td>14.6</td>
<td>13.3</td>
<td>3.6</td>
<td>3.2</td>
<td>3.2</td>
<td>0.3</td>
<td>na</td>
<td>2.0</td>
<td>0.6</td>
<td>29.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>4.4</td>
<td>34.8</td>
<td>2.1</td>
<td>11.8</td>
<td>7.5</td>
<td>1.8</td>
<td>8.5</td>
<td>0.6</td>
<td>na</td>
<td>4.2</td>
<td>na</td>
<td>24.3</td>
</tr>
<tr>
<td>Bolivia</td>
<td>52.8</td>
<td>9.3</td>
<td>5.6</td>
<td>7.0</td>
<td>na</td>
<td>1.5</td>
<td>na</td>
<td>7.8</td>
<td>1.0</td>
<td>1.9</td>
<td>1.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Colombia</td>
<td>8.2</td>
<td>29.7</td>
<td>5.9</td>
<td>5.1</td>
<td>na</td>
<td>4.5</td>
<td>7.4</td>
<td>6.7</td>
<td>3.6</td>
<td>1.0</td>
<td>na</td>
<td>27.9</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>7.2</td>
<td>31.1</td>
<td>3.5</td>
<td>5.9</td>
<td>0.5</td>
<td>0.7</td>
<td>9.2</td>
<td>2.0</td>
<td>5.3</td>
<td>na</td>
<td>34.6</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>5.6</td>
<td>31.5</td>
<td>5.6</td>
<td>1.9</td>
<td>7.4</td>
<td>7.4</td>
<td>1.9</td>
<td>3.7</td>
<td>11.1</td>
<td>na</td>
<td>24.1</td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>17.4</td>
<td>29.7</td>
<td>11.0</td>
<td>9.0</td>
<td>1.3</td>
<td>7.1</td>
<td>1.3</td>
<td>9.0</td>
<td>1.9</td>
<td>na</td>
<td>12.3</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>24.9</td>
<td>20.4</td>
<td>8.6</td>
<td>6.4</td>
<td>4.2</td>
<td>4.1</td>
<td>3.6</td>
<td>3.4</td>
<td>3.1</td>
<td>1.9</td>
<td>0.6</td>
<td>18.8</td>
</tr>
</tbody>
</table>

na = Not available.

*Women who gave postpartum amenorrhea or menopause/infecund as the reason for nonuse are excluded.

Source: Demographic and Health Survey data files.

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Availability of Family Planning Methods

Obviously, a couple must have access to a contraceptive method in order to adopt it. A direct relationship would, therefore, be expected between the availability of a method and the prevalence of its use. Documenting and quantifying this relationship has been the objective of numerous studies (for example, Rodriguez, 1978; Jones, 1985; Tsui and Ochoa, 1992; Ochoa and Tsui, 1991; and Wilkinson et al., 1993). A typical approach employed by analysts is to examine how contraceptive behavior changes as the distance or travel time between a woman’s home and service points rises. The results generally show a statistically significant effect of proximity of services on their use (Tsui and Ochoa, 1992). Yet the precise magnitude of this effect remains unclear and is often found to be modest (Ochoa and Tsui, 1991; Anderson and Cleland, 1984); recent findings based on evidence gathered in DHS surveys are typical in this regard (Wilkinson et al., 1991 and 1993). A so-called service-availability module has been added to a selected number of DHS surveys in order to obtain a description of the service environment, including an estimate of the distance from the respondents’ communities (clusters) to the nearest facilities providing family planning services. Averaging the findings from 10 countries (Columbia, Dominican Republic, Ecuador, Egypt, Guatemala, Thailand, Togo, Tunisia, Uganda, and Zimbabwe) yields the following overall result for married women in rural areas:

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>Contraceptive prevalence (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–4</td>
<td>36</td>
</tr>
<tr>
<td>5–14</td>
<td>33</td>
</tr>
<tr>
<td>15+</td>
<td>31</td>
</tr>
</tbody>
</table>


As expected, contraceptive prevalence declines as distance to family planning facilities lengthens, but the difference between women in the nearest and farthest categories is just five percentage points. Moreover, this simple bivariate relationship does not take into account socioeconomic factors that determine desire for more children; previous studies have found that the introduction of controls for such factors (for example, education) attenuates the already modest distance effect (Avery, 1988).

The effect of poor access on contraceptive behavior depends not only on the decline in prevalence as distance increases but also on the distribution of the population by distance to outlets. As a consequence, improving the density of service points will have a relatively small impact in countries where this density is already high, while a significant effect can be expected where a large proportion of women live far from a source.

Admitting all the potential measurement problems and biases affecting these distance-use studies (see Tsui and Ochoa, 1992; Wilkinson et al., 1993; and Arendts-Kuennning and Mensch, 1994, for a discussion of these issues), the results from these studies are consistent with the relatively low proportion of women reporting access as the principal cause of unmet need (see Table 2).

To this point, discussion of the impact of increased access to services has focused on contraceptive prevalence rather than on the role of access in reducing unmet need by satisfying client demand. This focus is largely the consequence of a lack of data and of previous studies on the subject. Figure 2 presents relevant data available from the DHS. This plot of average unmet need by median distance to nearest family planning facility in rural areas shows no significant correlation between these two variables in this group of nine countries.

In sum, the relevant evidence suggests that distance to service points has some inhibiting effect, but, except in settings with low densities of service points, it is apparently not an overriding deterrent to contraceptive use in the countries examined here.

Knowledge of Contraception

Lack of knowledge is evidently an important cause of nonuse, but what is meant by the term is not entirely clear. Some women identified as lacking knowledge...
may never have heard of a method, while others may not know how to use it or where to obtain it. There is no commonly accepted definition of knowledge of a method and, in practice, knowledge varies widely among women from nonexistent to extremely detailed. We will consider a woman to have acceptable knowledge of a method if she can describe how it is used, its main side effects, and where it can be obtained. Based on this definition studies can be designed to measure the prevalence of key elements of knowledge of different methods. Because such in-depth investigations have not been carried out, we must rely on selected questions included in DHS surveys on the following related topics:

Spontaneous knowledge of a method is measured by asking women whether they have ever heard of a way or a method that a couple can use to delay or avoid pregnancy. Unfortunately, estimates of spontaneous knowledge derived from the responses to these questions can be biased. For example, women who are reluctant to discuss birth control with an interviewer may fail to respond even though they are familiar with one or more methods. On the other hand, women may mention a method even though they know only its name. The net impacts of these positive and negative biases are unknown, but they are at least partially offsetting.

Recognition of methods is obtained by reading a brief description of each method and then asking women whether they recognize the method. Measures based on this question are likely to overestimate knowledge, in part because recognition is an incomplete indicator of adequate knowledge, and in part because some respondents may be embarrassed to admit they have never heard of any method, leading them to overstate the number they recognized.

Source knowledge is obtained by asking a woman who recognizes a method where she would get the method if she wanted to use it.

Knowledge of side effects is obtained by inquiring about the main problem, if any, with use of particular methods. This question produces a range of responses, including “no problem.” In many countries, a significant proportion of women did not provide a response or opinion, presumably because they were not sufficiently familiar with the method. We will use this proportion as an indicator of lack of method knowledge.

Based on responses to these questions, we calculated simple measures of knowledge of at least one modern method among women with an unmet need, as shown in Table 3. As might be expected, the range of the four indicators among countries is wide: from 10 to 98 percent for spontaneous knowledge, from 29 to 99 percent for name recognition, from 23 to 99 percent for source knowledge, and from 18 to 95 percent for opinions on side effects. The four indicators are strongly correlated and the countries identified as having high or low levels of knowledge are similar regardless of which indicator is used. In general, sub-Saharan countries with low prevalence score poorly (especially Mali), while the two Asian countries with high prevalence, Sri Lanka and Thailand, score very high on most indicators.

None of the four measures of knowledge is ideal. The recognition indicator is perhaps the most flawed because of its upward bias. Although the source and opinion measures do not contain obvious large biases, each measures only one dimension of knowledge. To obtain a more comprehensive assessment of knowledge, we have created a combined knowledge index that equals the proportion who spontaneously mentioned at least one method and knew its source and offered an opinion on its possible side effects. Although this measure, presented in the last column of Table 3, is still incomplete (for example, it does not assess a woman’s knowledge of how to use a method), it is preferable to the other four, simpler measures. According to this combined indicator, more than half of the women with an unmet need lack knowledge of a method in Peru and in all sub-Saharan countries except Kenya. This finding suggests that lack of knowledge is even more widespread than is indicated by its rating as a principal cause of unmet need.

Concerns about Health, Side Effects, and Behavioral Requirements

Direct inquiry into the causes of nonuse indicates that health concerns and side effects of contraceptive methods play a predominant role. This finding is confirmed by women’s responses to additional survey questions about the main problems of specific methods, as pre-

<table>
<thead>
<tr>
<th>Country</th>
<th>Sponaneous knowledge</th>
<th>Recognizes method</th>
<th>Knows source</th>
<th>Has opinion on side effects</th>
<th>Knowledge index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>23.8</td>
<td>60.5</td>
<td>54.2</td>
<td>28.0</td>
<td>12.2</td>
</tr>
<tr>
<td>Ghana</td>
<td>47.9</td>
<td>85.6</td>
<td>79.2</td>
<td>59.7</td>
<td>32.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>78.0</td>
<td>91.2</td>
<td>90.0</td>
<td>74.7</td>
<td>64.3</td>
</tr>
<tr>
<td>Mali</td>
<td>10.0</td>
<td>28.8</td>
<td>23.2</td>
<td>18.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Sudan</td>
<td>61.9</td>
<td>79.5</td>
<td>64.8</td>
<td>56.0</td>
<td>45.2</td>
</tr>
<tr>
<td>Uganda</td>
<td>37.7</td>
<td>85.7</td>
<td>79.5</td>
<td>63.2</td>
<td>27.5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>92.5</td>
<td>96.1</td>
<td>93.3</td>
<td>67.6</td>
<td>57.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>97.8</td>
<td>98.2</td>
<td>98.2</td>
<td>93.6</td>
<td>91.4</td>
</tr>
<tr>
<td>Colombia</td>
<td>94.0</td>
<td>98.4</td>
<td>98.4</td>
<td>95.4</td>
<td>89.6</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>90.3</td>
<td>98.8</td>
<td>98.8</td>
<td>94.4</td>
<td>80.8</td>
</tr>
<tr>
<td>Ecuador</td>
<td>73.5</td>
<td>87.8</td>
<td>77.6</td>
<td>73.5</td>
<td>63.3</td>
</tr>
<tr>
<td>Peru</td>
<td>41.5</td>
<td>70.8</td>
<td>62.6</td>
<td>53.8</td>
<td>34.4</td>
</tr>
</tbody>
</table>

Source: Demographic and Health Survey data files.
presented in Table 4, as well as about reasons for discontinuation of use (data not shown). Among women who express a concern or report a problem regarding the three most frequently used methods (the pill, the IUD, and sterilization), health concerns are expressed with greater frequency than any other problem. In fact, in most countries, health concerns are more frequently reported than all other concerns combined.

Extensive epidemiological research over the past quarter century has produced a detailed understanding of the prevalence and significance of the major and minor health effects of contraceptive methods (Parnell, 1989). All current methods have some undesirable characteristics that are likely to discourage adoption by some potential users. Choosing a method is clearly not a simple matter because it involves weighing a variety of drawbacks to find the method that is least objectionable.

The most serious health effects are those that are potentially life-threatening. These include cardiovascular complications of the pill; pelvic inflammatory disease, uterine perforation, and anemia for the IUD; and various infections associated with sterilization and other methods. Mortality caused by contraceptive use is small but certainly not negligible, and it varies by method (Hatcher et al., 1990). Unfortunately, mortality statistics are based on studies in developed countries. Comparable data for developing countries are not available, but it is likely that death risks are higher there.

Non-life-threatening but observable physiological effects of contraceptive methods occur much more frequently and are particularly important to women’s decisionmaking and their judgment that methods are safe or healthful. These effects include nausea, headaches, and weight gain for the pill; increased bleeding, dysmenorrhea, and expulsion for the IUD; menstrual changes for implants and injectables; and irreversibility for sterilization. Although such effects are often labeled “minor” in the clinical sense, they can be important to women, and they can affect a large proportion of users. For example, about two-thirds of implant users experience changes in their bleeding patterns. Some will miss irregular bleeding as a minor side effect, while others will consider it a grievous problem (Buckley and Gottlieb, 1988).

In addition to health and physiological effects, other drawbacks play potentially important roles in the decision to adopt a method. For example, manipulation of genitals or interruption of intercourse may be embarrassing, but it is required for the use of the condom, diaphragm, cap, sponge, and spermicides. Many women dislike the physical exams (often performed by male providers) required for IUD insertions and for fitting the diaphragm and caps. Others fear the surgical procedures associated with sterilization and implants. Fear of loss of potency may be a concern for some men who might otherwise consider a vasectomy or condoms (Rogow, 1995). Other unfounded beliefs about adverse effects (for example, loss of contraceptive devices in the body) are fairly common (Nag, 1984).

The effects of health concerns about the pill, IUD, and sterilization on contraceptive use are analyzed in Table 5. The use of each method among those who report “no problem” for that method exceeds by a large margin the use of the method among those who report a health concern. Health concerns reduce prevalence on average by 71 percent for the pill, 86 percent for the IUD, and 52 percent for sterilization, indicating that these concerns are the strongest deterrent for IUD use and the
Table 5 Percentage of method use among women reporting health concerns and among those reporting no problem with particular methods, 12 DHS countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Pill</th>
<th>IUD</th>
<th>Sterilization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health concerns</td>
<td>No problem</td>
<td>Health concerns</td>
</tr>
<tr>
<td>Burundi</td>
<td>3</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Ghana</td>
<td>4</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Kenya</td>
<td>2</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Sudan</td>
<td>12</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Uganda</td>
<td>16</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>16</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Thailand</td>
<td>30</td>
<td>30</td>
<td>18</td>
</tr>
<tr>
<td>Colombia</td>
<td>11</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>6</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Ecuador</td>
<td>7</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Peru</td>
<td>6</td>
<td>17</td>
<td>7</td>
</tr>
</tbody>
</table>

Dash (–) indicates no significant effect.

Note: Estimates are based on logistic regressions with controls for age, level of education, urban/rural residence, and desire for more children.

Source: Demographic and Health Survey data files.

Weaker for sterilization. We also examined the effects of health concerns for either the pill, IUD, or sterilization on the use of any method. In nearly all cases, this impact was in the expected direction, but in the majority of cases, these effects were not statistically significant (data not shown).

The impact of health perceptions on method use varies among societies depending on the amount and accuracy of information available to potential users and on the significance attached to them in particular cultural settings. Information about methods may be obtained by word of mouth from friends and relatives; from the mass media; by reading pamphlets, magazines, or books; and by discussion with family planning providers. In many developing countries, especially poor ones, some or all of these channels are lacking or far from satisfactory. Furthermore, where literacy levels are low, print media are rendered ineffective for much of the population. As a combined consequence of poor community information levels, inadequate services, and low literacy, a large proportion of women may not be sufficiently knowledgeable about the health effects of methods to make an informed and comfortable decision about contraception. In such an environment, the impact of unknowns, unfounded rumors, or negative perceptions of methods on contraceptive use will depend largely on the adequacy of the program communication strategies and client–provider exchanges. Cultural and service-giving contexts and the client’s characteristics—her class, education, and partnership arrangements—can be crucial determinants of how realistic health concerns are, and how she evaluates risks and benefits and translates them into nonuse, effective use with reservations, or fully satisfied use.

Objections from Husbands

For many married women, objections to family planning from their husbands (or partners) would be a sufficient reason not to practice contraception despite their own desire to do so. Substantial proportions of married women who are not seeking to have children say they face opposition from their spouses, as is indicated by the estimates for selected sub-Saharan countries in Table 6 (comparable data are not available for countries on other continents). When women were asked about their husbands’ views on family planning, proportions ranging from 6 percent in Burundi to 44 percent in Sudan indicated spouses’ disapproval. In addition, large proportions of women did not know their spouses’ views; lack of discussion is apparently the main reason for this finding. Surprisingly, a majority (68 percent) of women who report their husbands as disapproving have never discussed family planning with them. This finding is likely the result of an asymmetrical male–female power relationship and women’s concerns about not offending their husbands. Ignorant of their spouses’ views, women assume them to be negative, and are inhibited from action. Failure to pursue discussions may not only reflect a woman’s personal characteristics and the nature of her marital relationship but also the broader personal status and rights environment for women. Family limitation and negotiation over sexual matters may not be considered respectable subjects. Their very discussion may jeopardize women, for example, in societies where women can be divorced without notification or where the husband is free to take a second wife. Women who feel that they are at risk by raising the question would naturally avoid the subject. That this subject is approached with reluctance is supported by the evidence in the last column of Table 6, which indicates that in the sub-Saharan countries examined here (except Kenya) more than half of married women with an unmet need have never discussed family planning with their partners.

The DHS did not include follow-up questions to identify the reasons for husbands’ objections. Among several possibilities, such objections may often be based on conflicting reproductive intentions. If a husband wants more children and the wife does not, disagreement about the practice of contraception would be expected. For example, in Ghana (where husbands were also interviewed), among women who wanted to stop childbearing, 46 percent had husbands who wanted
more children (Ghana Statistical Service and Institute for Resource Development/Macro Systems, 1989). Another reason for a husband’s disapproval may be his desire to control his wife’s behavior.

Husbands’ disapproval (real or feared) is likely a strong contributory factor to having an unmet need. This factor was suggested by the data in Table 2, which gave the proportion of women who list husband’s disapproval as the principal reason for nonuse (in a questioning method that provided for only one reason to be given). Estimates of the proportions of women who say their husbands disapprove in answer to a direct question (see Table 6) indicate that this obstacle to use may be even more important.

The most powerful evidence of the role of husbands’ perceived disapproval is provided in Table 7, which reports the effect of disapproval of family planning on the probability of contraceptive use. Contraceptive prevalence among women who say their husbands disapprove is a small fraction of the prevalence among those who say their husbands approve in each of the five countries with a significant effect. On average, husbands’ disapproval led to a reduction in use by two-thirds. Clearly, engaging men’s interest and support could be a big factor in reducing unwanted fertility and unmet need.

**Removing Single Causes of Unmet Need**

Before turning to the programmatic implications of the preceding analysis, a brief discussion of the impact on contraceptive use that may be anticipated when any given cause of nonuse is eliminated may be useful. Since the empirical evidence on this subject is limited, we will rely largely on a hypothetical analysis.

The simplest estimate of the proportional reduction in unmet need that can be achieved by removing one of its causes is the proportion of women reporting that cause, as was shown in Table 2. This approach can give potentially misleading results, because this table presents the distribution of principal causes of unmet need, which is different from the proportions of women for whom a given factor is one of several contributing causes of unmet need. A substantial proportion of women will have more than one cause for their unmet need. As a consequence, the percentage of women who indicate a particular factor as the principal cause of unmet need substantially underestimates the actual prevalence of this problem for other women with an unmet need.

Figure 3 illustrates this phenomenon for one country (Peru) and one cause (lack of knowledge). Twenty-five percent of married women are estimated to have an unmet need. Adding this to the observed contraceptive use among married women, by husband’s approval or disapproval of family planning, selected sub-Saharan populations

<table>
<thead>
<tr>
<th>Country</th>
<th>Husband approves</th>
<th>Husband disapproves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Ghana</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Kenya</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td>Mali</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Uganda</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>18</td>
<td>6</td>
</tr>
</tbody>
</table>

Dash (—) indicates no significant effect.

Note: Estimates are based on logistic regressions with controls for age, level of education, urban/rural residence, and desire for more children.

Source: Demographic and Health Survey data files.

**Figure 3 Percentage of married women who report lack of knowledge as the principal or contributing cause of unmet need, Peru, 1986**

![Figure 3](image-url)
tive prevalence of 46 percent yields a total potential demand of 71 percent, as indicated by the bar in Figure 3. Lack of knowledge was reported as the principal cause of nonuse by 17 percent of women not seeking to become pregnant; this percentage corresponds to 4 percent (.17 x 25) of all married women. If we accept our combined index of knowledge of contraception in Table 3 as a measure of the proportion of women for whom lack of knowledge is either a contributing or a principal factor, then this cause plays a significant role among 68 percent of women with an unmet need, or 17 percent (.68 x 25) among all married women, a fourfold increase. Clearly, in this example, lack of knowledge is more widespread than would be estimated on the basis of women’s report of the principal causes of nonuse. As was demonstrated earlier, similar conclusions apply to other causes and in other populations.

The implications for the effect of a particular cause of unmet need on contraceptive use are not straightforward. We must account for a multiplicity of interlinked reasons for nonuse among women not seeking to become pregnant. If a principal cause of nonuse is of overriding importance, its removal would presumably lead to the adoption of contraception. Removing a contributing cause instead might also lead to adoption if the program intervention reduces the cost of contraception sufficiently. The key here is not only the strength of principal versus contributory reasons, but also the balance of costs the client is considering. Is there a little adjustment that would make a difference, or is a major adjustment needed? Is the principal cause a dominant one, or is it one among several almost equally important contributory causes?

In general then, at a theoretical level, the effect of removal of a single cause of nonuse on contraceptive prevalence could be as high as the proportion of all women for whom that cause is a contributory factor. On the other hand, the effect of eliminating a single cause might be no larger than its prevalence as a principal cause predicts. In reality, the role of a given cause of nonuse is likely to fall somewhere between these extremes.

Program Considerations

Past analyses have emphasized service coverage and the availability of modern contraceptive technologies as the key to effective programs (Lapham and Simmons, 1987). But the ability to regulate one’s fertility in a healthful manner is clearly also affected by lack of information, fear of technology or caregiving systems, and poor male-female communication and power differentials.

Our analysis of what services can do in response to the wide range of factors contributing to unmet need takes into consideration the social, familial, and cultural context, and relies on four sources of information: the tabulations of DHS data presented above; results from recent assessments of service readiness and the adequacy of care; reports on program experiments; and an increasing ethnographic literature on male and female dynamics in families and on women’s scope for negotiation within the domestic sphere.

Access with Quality

Access limitations and the monetary cost of contraception apparently are relatively modest causes of unmet need. This statement does not mean that users would not be pleased to have cheaper services closer to home, but it can mean that what clients require has less to do with monetary outlay and travel costs than with the content of services. Discussions about the importance of quantity versus quality are unproductive because both are vital. The most appropriate concept is access with quality. Clients need both. Service points may exist, but they can be of such poor quality or of such limited availability (open for few or unpredictable hours) that clients do not perceive them as realistic sources of care. Access with quality is the availability of adequate services that can be used without undue personal costs—psychological costs, travel time, monetary outlay, and so forth.

Egypt provides particularly strong support for the notion of considering access with quality. Rural Egypt has geographically intense service coverage—with respondents in the DHS reporting a median distance of 0.7 km from a service point—yet the unmet need is still 27 percent (see Figure 2). A pilot study of the relationship between the quality of family planning services and contraceptive prevalence in Egypt (Sayed et al., 1992), conducted in 18 communities (three urban and 15 rural), found that 42 percent of the women sampled used services outside their communities. Three main reasons were given: Services were not readily available in their community, services were better elsewhere, or greater privacy was available at distant service-delivery points.

Data derived from Situation Analyses—rapid appraisals of the quality of services conducted by the Population Council’s Operations Research projects—provide other useful information on the meaning of access. A sampling of service-delivery points was visited, providers interviewed, and client–provider exchanges observed. In sub-Saharan African countries, a typical finding was that a majority of the users (75 percent) relied on only a small proportion of the available service-delivery points (25 percent) (Mensch et al., 1994). This find-
ing was not fully explained by differences in the nature of service points (for example, well-equipped hospitals versus small clinics), because similar skewing of use was observed within categories of service-delivery points. Mensch and her colleagues conclude:

For Nigeria, the majority of new clients seen by 15 rural clinics went to two facilities. For Tanzania, the hospital distribution reveals that three hospitals of the 13 in the sample dominate. For Zimbabwe, the distribution of new clients in the 23 ZNPPC [Zimbabwe National Family Planning Council] clinics, which are located in urban and periurban areas, shows that there are some clinics that receive a new acceptor once every two weeks and others that have nearly four new clients, on average, every day. (Pp. 24–25)

Variation in service quality may be an important cause of these findings.

The role of quality in clients' choices has not been definitively determined by using Situation Analysis data, because in the past, such appraisals inventoried only the experience of current clients, not that of people dissuaded from use by poor service quality. However, the Nigeria, Peru, and Ghana Situation Analyses * provide some evidence regarding the role of quality. Interviewers for these surveys queried clients as to whether they were using the service point closest to their home. The proportion of clients not using the closest service-delivery point for Nigeria was 39 percent; for Peru, 24 percent; and for Ghana (among those who knew of two service points), 51 percent. The leading reason given for not using the service point closest to home was that better services were available elsewhere (65 percent in Nigeria, 36 percent in Peru); among Ghanian respondents, 18 percent said that better services could be obtained elsewhere, and 12 percent said that a wider range of services could be found elsewhere. The authors of the Nigerian study add that the more heavily used facilities are those preferred by clients traveling farther for care and those that they identify as offering a better or wider range of services.

**Increasing Knowledge of Family Planning in Traditional Settings**

Poor knowledge of contraception coincides with low prevalence; no country in which our knowledge index is below 50 percent has a prevalence above 13 percent, and the average is 8 percent among the 12 countries in Table 3. Knowledge levels can be raised by means of radio programs and other electronic media, but person-to-person strategies are crucial in traditional or remote settings.

When information sharing is inhibited by gender-segregated roles and communication patterns, low literacy, and women's limited geographic movements, one-to-one communication and outreach in such communities is vital. In the mid-1980s, Simmons, Phillips, and their colleagues established the acceptability and necessity of female-to-female and male-to-male communication in the Bangladeshi setting. These analyses encouraged the massive hiring and training of female family planning visitors for the national program. Female community-based workers can address a complex of social factors that inhibit knowledge of contraception or action on that knowledge. The health workers become predictable points of contact providing information about family health issues and sometimes mediating family disputes. They offer women not only information that makes them feel more comfortable with contraception, but also the vocabulary they can use in persuading the domestic hierarchy (older men and women) of their value. They also provide new role models, because girls with a matriculate-level education and the daughters of respected local families are often chosen as field-workers. In traditional settings, female family planning workers play a pivotal role in increasing acceptability of contraceptive methods (Simmons et al., 1988).

Where contraceptive prevalence is low, women have, of course, had few encounters with satisfied users, and the potential influence of one individual experience (whether positive or negative) is higher. The personal contact with workers is then even more essential. Simmons and her colleagues (1988) document how workers in Bangladesh assure potential clients with specific reference to the experience of other women: “All of them had the operation. I took them for the operation. Did any of them get pregnant? Did you hear?” (p. 32). In this example, the worker begins purposely to diffuse a message and highlight the few available positive experiences; she is also providing implicit guarantees of the technology. Behind her encouragement is the promise of help should there be a problem. Variations on this theme could include male-to-male communication, as has been tried, for example, to reassure prospective vasectomy clients. Effective communication in these traditional settings must be highly personal and should rely on the development of caring provider–client relations.

The value of personal information delivery is not limited to South Asian societies. In Quechua regions of Peru, for example, the practice of modern contraception is hindered by false concepts of human anatomy and physiology, by fears about the function of contraceptives
in the body, and by the discrepancy in attitudes and beliefs between husbands and wives. An ethnographic study found further that “[s]exual inequality, reflected in male dominance and reinforced by cultural norms, keeps men and women apart and creates barriers to spouses’ communication about regulating family size” (Maynard-Tucker, 1989: 223). Because these matters are seen as private and gender-specific, strategies for dealing with limited male–female communication may, at first, work best through individual and group male-to-male or female-to-female encounters. This process can ease discussion between couples, and, as a result, a more comfortable and accurate community-level dialogue can ensue.

Rural sub-Saharan Africa presents another set of distinctive challenges. Both family-size desires and child mortality remain high and literacy low. Efforts to spread the benefits of family planning must be coupled with measures to improve basic health and socioeconomic conditions, and take into account existing social institutions. Although the structure of African family, religious, and kinship systems militates against fertility regulation, social structure could also represent a resource. Male-dominated kinship and leadership systems, female-dominated trade networks, and lineage groups provide potentially powerful networks through which to organize services and diffuse and sanction fertility regulation. Unfortunately, there are as yet few efforts to link family planning services to traditional community institutions in Africa (Phillips, 1994).

In raising knowledge levels in traditional societies, modern knowledge is not the only valued knowledge. A study of the barriers to the adoption of modern contraception in rural Uganda found that such traditional practices as postpartum abstinence and extended breastfeeding were well understood and respected (Ntouzi and Kabera, 1991). The communication strategy chosen for educational programs should not condemn such positive traditional practices, but build, instead, wherever possible, on a combination of traditional and modern approaches (Hull, 1979).

Promoting Appropriate Health Concerns

The evidence reviewed earlier indicated that contraceptive knowledge increases, so do perceptions about the health risks of various methods. This finding is often greeted with alarm, just as it was 30 years ago in the United States when Senate hearings on the side effects of oral contraceptives brought charges that the discussion of health issues would “scare women off the pill.” While fears about contraceptives may inhibit some women from using them, the far greater risk to women is having no knowledge at all. As noted earlier, societies characterized by low levels of knowledge of contraception—including health concerns—have low levels of use. The increase in health concerns, as levels of knowledge and education rise, is part of a society-wide process that encourages the public sharing of information about contraception and a more conscious process of choice about childbearing.

Health concerns about a specific method need not be an insuperable barrier to use. Substantial proportions of women at all levels of development use some method despite their health concerns, and in some cases they use the very method about which they have expressed concern (see Table 5). When women are motivated to regulate their fertility, they will make the best choice that they can at the time, and improve upon it with the right set of supports. The “free choice” studies undertaken by the World Health Organization in the late 1970s provide an example. Samples of current users in India, the Philippines, Korea, and Turkey were given fuller information and orientation to methods, and in some clinics as many as 40 percent of women indicated they would switch—presumably to more healthful or acceptable methods (WHO, 1980).

Contrasting interpretations of the effects of women’s health concerns are associated with contrasting objectives of programs. Those promoting services for demographic purposes may fear discussions of health issues as potentially changing the use pattern from more effective to less effective methods, or as promoting the switching of methods. Contraceptive services are unlike immunization services, which rely on a one-time visit or a rigid sequence of care. In fact, long-term contraceptive use is often achieved by switching methods, and successful users reevaluate their choice periodically (Bruce, 1990). The expression of health concerns is desirable when it indicates that individuals are learning more about their bodies, their lives, and health technologies, and are making conscientious decisions or changing their minds when they need to.

Providers’ ability to engage in effective discussion of contraceptive and health issues is conditioned both by their knowledge and by their interpretation of clients’ capacities and rights. Examples abound of programs in which the primary providers charged with giving direct information to clients are ill-equipped themselves (Bruce, 1990). A recent set of Situation Analyses and a nine-country evaluation (United Nations Population Fund, 1994) assess the information that providers actually give to clients in their encounters. Data drawn from eight Situation Analyses reveal that typically, fewer than 50 percent of new clients received information about the side effects of the methods they accepted, and in only about 35 percent of cases was the management of side effects discussed. Clients returning
with problems were rarely asked whether they wished to change methods. The switching of methods is an easy remedy for clients’ health or acceptability concerns and a clear means of establishing a provider’s overriding interest in the client’s well-being.

These deficiencies in the client–provider exchange are readily explained by the limited attention given to health concerns and the management of side effects at most service-delivery points. Many service points have no clear protocols for information giving. Even in programs that have more fully articulated standards, typically, a serious gap exists between what the providers are meant to know and what they do know or transmit to clients.

To improve providers’ performance, many programs have begun to identify gaps, conduct retraining sessions, and develop checklists and other tools that improve information exchange. The quality of information giving and provider–client exchanges after such interventions have shown marked improvements that seem to be reflected in clients’ assessments of care (León, 1991; León and Asenjo, 1992).

An experiment to improve family planning counseling skills in Ogun State, Nigeria, sought to train nurses to communicate more effectively. The performance of trained and untrained nurses was compared from several perspectives—client exit interviews, observed interactions, and review of medical records. Trained nurses listened far more attentively, made clients feel more comfortable, and were more likely to request that clients repeat the instructions for the method chosen. They were also more helpful, asking whether the clients had any questions, demonstrating the use of the contraceptive methods, and employing leaflets in discussions with clients. Perhaps most striking was that clients of the trained nurses were almost twice as likely as clients of the untrained nurses to return to the clinic for follow-up visits (Kim et al., 1992). Good counseling may encourage clients to present problems at an earlier point and lead to switching, thus marginally reducing first-method continuation rates; but it may also lay the foundation for longer-term contraceptive use and greater client satisfaction. Using first-method continuation rates as indicators of quality of care, as some analysts have done (Huezo and Malhotra, 1993), is, therefore, not appropriate.

Country-specific research is needed to pinpoint a clear picture of health concerns. Once men’s and women’s deepest fears about specific contraceptives are known, purposeful counseling can be provided. Session-and-answer pamphlets can be developed to guide providers’ interactions and to distribute to clients. Another effective strategy may be to refer potential clients to other clients for consultation (Fisher and de Silva, 1986).

Information about the relationship between contraception and sexuality is scarce. Some of the concerns people express about contraception may be disguised worries about sexuality. A fear about side effects actually may be a fear that bleeding will interfere with sex life, leading to disclosure of covert use or to a change in sexual partners. The concern that condoms are desensitizing actually may be a fear that the man using one will lose his erection during intercourse (Rogow, 1995). A program in Brazil began offering consultation about sexuality to women who spontaneously mentioned sexual concerns while at a clinic. Providing these women with additional information resulted in a marked reduction both in their dissatisfaction with contraception and in the types of sexual trouble they attributed to contraception (Goodson et al., 1988).

In environments where communication through radio, television, and print media is an option, dissemination of information can be effective (Westoff and Rodriguez, 1995). However, presenting a balanced picture both of methods and of their health consequences is important, because health concerns will develop, and downplaying them harms validity. The media approach would likely be most effective if it were to address health concerns and supports the notion of individual choice, saying: “There are many methods available; each of them has pluses and minuses. Find the one that’s right for you.”

**Bridging the Gender Divide**

The evidence from DHS surveys, combined with the literature on fertility decisionmaking and bargaining between marital partners, suggests several conclusions:

1. Husbands and wives frequently do not discuss family size or contraception explicitly (MacCauley et al., 1994).
2. When these subjects are discussed, frequent disagreements occur between men and women over the number of children desired (Isiugo-Abanihe, 1994; Lloyd, 1993; National Council for Population and Development, 1989; Mott and Mott, 1985; Mason and Taj, 1987).
3. Even when spouses agree on the number of children desired, their reasons for wanting a given number can be substantially different, highlighting the lack of overlapping interests between men and women in the matter of fertility (Fapohunda and Todaro, 1988).
4. Where there is disagreement, husbands’ views will usually prevail and, in some settings, will clearly override even educated wives’ preferences (Ezeh, 1993).
5 Surreptitious contraception is practiced by a significant proportion of women, but also of men—particularly where extramarital relationships are involved (Blanc, 1993).

6 The burden of contraceptive use falls heavily on women. The ratio of male-to-female use of modern methods of contraception is close to one to four in the developing world (United Nations, 1994).

Programs usually ignore men and male–female negotiations over sexuality and fertility. Male disapproval as a factor in depressing use represents only the most visible portion of the role that male–female inequality in intimate relations plays in deterring safe, effective contraceptive use. The full extent of these tensions is hidden for two reasons. First, research has been limited by a focus on women, and data on the contrasting perspectives and behaviors of men and women are scarce. Male-oriented surveys and in-depth and qualitative research on the male perspective are needed. Second, real or perceived male disapproval is woven into women’s appraisals of services, health risks, and even monetary costs.

The synergistic effects of perceived male disapproval have been suggested by recent research. For example, six studies were undertaken in Kenya and Zambia in the late 1980s to determine “why many African women have never used any modern contraceptives while others begin and soon quit, while others begin and go to all kinds of trouble to keep using it” (Brown et al., 1990). The studies employed qualitative methods, relying on focus groups and in-depth interviews where individuals’ perceptions of situations, gaps, barriers, or constraints were discussed at length. The authors concluded that

the most consistent finding to emerge from these studies is that the husband (or partner) significantly influences a woman’s ability to [use contraceptives] successfully. . . . The importance of being able to [use contraceptives] ‘in secret’ was affirmed by the frequently mentioned concern about side effects, not because of a physical discomfort or danger but because it will show. In a number of cases, women stopped using an effective method they were happy with because of a minor side effect that might have revealed their secret to their unsympathetic husband. (Pp. 45–46; emphasis in original.)

Unwanted fertility and the use of family planning services among the Aymara of Bolivia are explored by Choque et al. (1994) in terms of gender roles. The authors note disagreement between partners over desired family size in negotiations over birth control means, and they find that

[M]en in the study did not necessarily want to have large numbers of children. . . . Rather, in many cases men’s lack of cooperation in fertility regulation appeared to be symptomatic of a more general struggle for control. They saw impregnation as a way of asserting control and assuring fidelity in their partners. (P. 19)

Qualitative work in Ghana found women balking less at the fees associated with contraception than at the fearful possibility of discussing these fees with their husbands (Phillips, 1994). Much of the literature on negotiation between spouses suggests that male–female conflicts over family resources may be an important factor in decisions about sexuality, fertility, and even infant feeding (Dwyer and Bruce, 1988; Bledsoe, 1988; Winikoff et al., 1988).

These findings hold important lessons for program design. Effective approaches must simultaneously support women in autonomous (and sometimes surreptitious and risky) decisionmaking and encourage partner involvement and male responsibility. In the late 1970s and early 1980s, a number of efforts were made to involve men, not in the context of marriages or partnerships, but as a distinct social category to be reached in male surroundings (IPPF, no date). These efforts included intensified condom distribution in Colombia, reaching men in the armed forces and police in Thailand and Mexico, establishing male clinics in Mexico and Brazil, and reaching men en masse through contraceptive social marketing in Egypt. Most of these campaigns were undertaken without parallel efforts to help couples communicate or without support for women’s autonomy and reproductive rights. The limits of the patriarchal approach were evident in a Nepalese vasectomy program that promoted its use as an extension of male authority. Observers remarked that this activity had “created what some regard as ‘excessive male control.’ This led the organization concerned to consider alternative routes to male involvement which draw the female partner further into family planning practice” (IPPF, no date: 12).

Several experiments also show how services can enter into this intimate relationship in a constructive way. In the late 1980s, the Ministry of Health of Madagascar, looking ahead to NORPLANT® implant introduction and building on the experiences in Zambia and Kenya, understood that lack of spousal support could undermine women’s ability to use a method that altered bleeding patterns. A study was undertaken in which husbands were involved at their wives’ request. Among the 25 percent who demanded that husbands be involved, 1 percent had the implants removed within a year of insertion, compared to 10 percent of women who would
have accepted husbands' involvement but who were assigned to the control groups. Husbands who were counseled were able to interpret side effects properly and supported their wives' continued use (Tapsoba et al., 1994).

Another relevant experiment was conducted in Addis Ababa, Ethiopia (Terefe and Larson, 1993): In a randomized field trial of family planning education, women in the control group were given a health talk in their homes on their own; in the experimental group, husbands were included. A greater proportion of couples in the experimental group were practicing modern contraception at two months (25 percent versus 15 percent) and at one year (33 percent versus 17 percent), following the home visitation.

Mass media approaches have also been used to increase male awareness, the use of methods, and the number of men who believe that family planning should be a joint decision (Foreit et al., 1989; Piotrow et al., 1992). However, the goal is to encourage male involvement without enhancing male dominance. One of the unexpected effects of a multimedia communication campaign conducted in Zimbabwe in 1988–89 was that an increased proportion of men believed that they alone should make the decision to practice family planning. The authors observed (p. 373): “In future campaigns, care should be taken to emphasize the need for the husband and wife to share decisions.”

Programs can facilitate desirable changes in the contraceptive decision-making process by asking a few simple questions: “Would you be comfortable discussing this with your partner?” “Would you like your partner to be involved?” Where the response is positive, the client can be offered the chance to bring in a mate for discussion. Special sessions explicitly designed for couples can also be promoted. An opportunity can thereby be provided to discuss behavioral issues resulting from contraception (bleeding patterns, toleration of side effects, implications for sexual practice) and the possibility of sharing the burden of protection from disease and unwanted pregnancy. Such discussion is especially valuable in cases where the woman cannot use available modern methods and male use (of condoms or vasectomy) is the best choice.

Recent research on the behaviors underlying the AIDS epidemic has unveiled women's vulnerability and their ignorance of their partners' sexual activity. Many women who reported themselves as monogamous, and believed their partners to be monogamous as well, have been infected with HIV (Allen et al., 1991; Elias and Heise, 1993). Without forcing the client to state that either she or her partner is not monogamous, services may alert women that the risks of certain contraceptive methods increase if either partner has multiple relationships.

With respect to the IUD, for example, clients can be told, "This method is not recommended if one or the other partner has multiple relationships, because the infection rates are increased. If either of you begins a new relationship, or you believe your partner has, please return and reconsider the healthfulness of your method.” Offering this information to women may prompt more careful consideration of which contraceptive provides the best overall protection; in any case, it would be unethical not to provide the information.

In sum, services and communication strategies must reach women and men both as individuals and, where possible, as couples (whether married or not). Program design and also communication should emphasize that sexual encounters (in all their variety) should be fully voluntary, and also that couples can be adequately protected from unwanted pregnancy and disease. Self-determination, the responsibility to bear only those children one feels one can support, and more shared communication and responsibility between men and women should be central themes. Individuals can interpret these themes according to their own realities, whether they are part of closed and traditional family systems, or of modernizing and open ones.

The Special Needs of Adolescents

As noted earlier, discussions of unmet need usually proceed with little attention to the unmarried, particularly the very young. This omission is, in part, the result of limited research designs and (in some parts of the world) reluctance to interview the youngest and the unmarried about their sexual and contraceptive behavior. The needs of young people are evident from high rates of premarital conception, from mortality and morbidity that are the results of unsafe abortions, and from the fact that half of the people in the world carrying the human immunodeficiency virus are younger than 25. We must find ways to reach and protect young men and women.

The existence of early sexual activity and unwanted pregnancy requires special programs designed for adolescents, informed by studying the patterns of unmet need among their married counterparts. Adolescents, married or not, also lack knowledge and fear contraceptive side effects, and their relationships are often characterized by stark inequalities. The condition of young women is of particular concern. Though they may operate within the context of a modernizing society, their situation is often not dissimilar to that of older women in traditional societies. Few safe pathways exist through which adolescent women can obtain information about and access to contraception. In most societies, family planning and reproductive health services are configured in

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ignorance of the special needs of young women and men.

In reaching the young in societies where early sexual activity is common, the mass media have a clear role to play. Experimentation is needed to find media approaches that do more than state policies or religious points of view, or talk to families about planning. Effective messages must carry carefully crafted assurances that address distorted perceptions of methods, sexuality, and the relative risk of conception, recognizing that young people are outside most existing channels for contraceptive and health information, and are likely to carry misconceptions in fearful isolation.

Telling young people that contraception exists is not enough; service locations must also be identified. In the United States, for example, public transportation advertisements designed to attract young people to services depict the face of a friendly provider. The possibility of sympathetic counseling in an impersonal urban environment is likely a great comfort to young women. Additionally, media messages should make clear that these services are fully confidential.

Some uncomfortable truths about sexual relations must be recognized. Recent studies in a number of countries document that a substantial portion of first or early sexual encounters are the result of incest, rape, or some sort of coercion (Rosas, 1992; AMREF, 1994; Boyer and Fine, 1992). In many countries, the age differences between girls and their partners at first sexual encounter indicate a power imbalance in sexual initiation. The media may have to promote explicitly the dignity of women and girls in these matters to help strengthen their resistance to male appeals. Messages must be designed to overcome young people's denial of the risks they face, and boys should be encouraged to take responsibility for contraception and for children they might father. Girls should be encouraged to acknowledge to themselves, at least, that they are sexually active and that they face the risks of disease and pregnancy.

High levels of unwanted pregnancy in this age group have been documented in many parts of the world (United Nations, 1989). Fears about unwanted pregnancies are widespread as well. The menstrual cycles of young women do not settle into predictability sometimes for years after menarche; young women's periods are frequently late for reasons other than pregnancy (Harlow, forthcoming). Official willingness to discuss unwanted pregnancy and to offer pregnancy tests may encourage girls to approach services. While a substantial proportion are not pregnant, the availability of pregnancy testing and counseling brings many vulnerable girls with the most intense unmet need into the purview of care. Ideally, those who are not pregnant should be offered contraception, and, where allowed, those who decide on pregnancy termination should receive it, followed by contraceptive information, counseling, and services.

Adolescent peer-group discussions of sexuality, physiology, and life dilemmas can discourage unprotected intercourse and unwanted pregnancy successfully, but more attention should be given to disaggregating the world of adolescence into different gender interests. Program strategies necessary to reach young women must be distinguished from those necessary to reach young men. Young men may be reachable on street corners and through peer networks with contraceptives (condoms), while a smaller proportion of girls may be reached through schools. But a substantial proportion of girls do not attend school, nor are they approachable through community-based organizations. An untapped potential for organizations exists, apart from schools, to convene girls to discuss these matters and the girls' transition into adulthood. Evaluation of an unusually successful program for young people in Mexico City documents their transition from gender neutrality to gender sensitivity with respect to program content, but the issue of how to provide female-controlled contraceptives to girls is still unsolved (Marques, 1993).

To reduce unwanted sexual contact and pregnancy, we must assist girls to envision future identities apart from sexual, marital, and mothering roles. Such assistance can rarely be accomplished in the presence of males who hold restrictive views of girls' roles. Focus groups of boys and girls often reveal a significant proportion of young men who express exploitative attitudes toward young women (Barker and Rich, 1992; Ajayi et al., 1991). Obviously, attempting to reach young women with such young men present is not fair, nor is it fair to acquiesce tacitly in a boy's assumption that having sex with a girl on any terms is acceptable. Girls need a realistic sense of what might happen should they become pregnant. Recent studies in Latin America of the partners of unmarried women aged 15 to 24 indicate that only a minority of girls made pregnant are supported morally and financially by the fathers of their unplanned and often unwanted children (Morris, 1993). Peer-group discussion programs should start not only with thinking along gender lines, but also with tackling gender roles. If we are to protect girls from unwanted fertility, we will have to begin to protect them from devalued social and sexual roles.

Conclusion: Expanding the Social Content of Services

Although many environments remain in which access in the geographic sense remains a problem, the principal causes of unmet need for contraception in much of
the developing world are lack of knowledge, fear of side effects, and social and familial disapproval. While many programs are technical wonders, in some respects, they are social failures. They are wonders in the sense that contraceptive services are available even in many remote areas of poor countries. Often they are social failures because they have not yet actively engaged prospective clients in necessary dialogue about health fears and misinformation, nor have they facilitated couples’ communication about disease avoidance and contraception. Services must be made more explicit and purposeful in their efforts to close the gap between knowledge, intentions, and use; more considered efforts are vital to address low information levels and health concerns among current and potential clients. Such strategies require more innovative communication from service providers, community workers, and print and electronic media. Services also need to make specific plans to assist clients in their negotiations with partners, to draw in men to dispel perceived or real spousal disapproval, and to increase male responsibility for contraception. These adjustments are not necessarily costly; indeed, they require new thinking about the mission of programs and the dilemmas clients face, as much as they do new equipment or people. Such a shift in emphasis can be cost-effective even in constrained circumstances.

In sum, the unmet need is for services that are responsive to the social and health context of fertility decisionmaking. Although the decision to regulate fertility involves key health considerations, it is also a social act requiring negotiating power. Programs can be more successful if they reach beyond the conventional boundaries of service to operate on the cultural and familial factors that limit voluntary contraceptive use.

Notes

1 Estimates of unmet need are derived from data for DHS I countries provided in Westoff and Ochoa (1991). To increase the representativeness of the group of countries included in our analysis, two large countries (Nigeria and Pakistan) were also included, with the data taken from their corresponding country reports. Unmet need estimates in these previous studies were obtained with a methodology proposed by Westoff (1988). For reasons given by Bongaarts (1991), actual unmet need estimates are somewhat lower—by an average of 30 percent for spacing and 3 percent for limiting. In the present study, all estimates are adjusted by these correction factors to remove the potential biases identified by Bongaarts (1991). Averages throughout the paper are unweighted.

2 Tables 2, 3, 4, and 6 are based on responses of women who are currently married and sexually active, not wishing to become pregnant, not using contraceptives, and not pregnant or amenorrheic. Only a single question was asked about reasons for nonuse. The necessary data for selecting women with an unmet need at the time of the survey were available for only 13 DHS I countries.

3 This concept was developed by Anrudh Jain.

4 The following figures are drawn from the unpublished data of the Operations Research Strengthening Situation Analysis Methodology Subproject 1994–95.

5 These data are drawn from the Burkina Faso, Ghana, Kenya, Nairobi City, Nigeria, Pakistan, Tanzania, and Zimbabwe studies. The basis of calculation varies slightly between studies; therefore, approximate orders of magnitude were calculated.

6 For example, Access to Voluntary and Safe Contraception and its affiliates have invested much energy in learning about the specific fears relating to sterilization and include these points in a question-and-answer format in client education materials and mass communications.

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