

# Estimating Contraceptive Needs from Trends In Method Mix in Developing Countries

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*Contraceptive prevalence has grown substantially in developing countries, creating problems for donor agencies and program managers trying to estimate the need for contraceptive supplies. Data from 106 national surveys conducted in 35 countries between 1974 and 1992 permit calculation of changes in total and method-specific prevalence and of annual rates of change, upon which contraceptive forecasts can be based. In all, 44% of women in the most recent surveys were practicing contraception; 36% were using a modern method. Between the first and most recent surveys, total contraceptive prevalence rose at an annual rate of 5%, and modern method use increased by 6% annually. The increases were most rapid in Sub-Saharan Africa (9–10% annually) and slowest in Latin America and the Caribbean (3–4%). Whereas reliance on sterilization grew by 8% yearly, increases in prevalence of the pill, IUD and condom were 2% or less annually. In most regions, reliance on sterilization has changed at a much quicker pace than use of other methods; the exception is North Africa and the Middle East, where the annual increase for sterilization has been modest, but IUD use has climbed quite rapidly.*

(International Family Planning Perspectives, 22:92–96)

Contraceptive prevalence levels and trends in developing countries have long been a focus for family planning and population researchers. An understanding of trends in contraceptive prevalence, both overall and for particular methods, is important for donors involved in providing contraceptive commodities to large family planning programs and for in-country managers of these programs.

Availability of contraceptive methods within national family planning delivery systems is clearly a key determinant of prevalence and method choice. The types of delivery systems available to programs may be influenced by major policy decisions made by top-level program managers; within programs, modes of deliv-

ery may be determined by the numbers and types of service delivery points and by the skills and biases of staff.<sup>1</sup>

These and other program characteristics interact with social, cultural, economic and physiologic circumstances to affect overall contraceptive use and use of particular methods. However, no program can operate optimally unless it is able to procure and distribute adequate quantities of desired and appropriate methods<sup>2</sup> to meet the demand when a population is growing and an increasing proportion of men and women wish to practice contraception.

The research upon which this article is based was prompted by concerns about supply imbalances expressed by the U.S. Agency for International Development (USAID). USAID, which has long been the largest donor of contraceptives to developing countries, has been joined by other major donors in its concern about the validity of annual national contraceptive forecasts on which these donors must base procurement and supply decisions. Often, these concerns have stemmed from supply underestimates and consequent shortages of contraceptives. At other times,

they have emerged when supplies of contraceptives have considerably exceeded subsequent demand, resulting in overstocking and sometimes expiration of dated commodities.

Projections of country programs' contraceptive requirements are sometimes based on long-term demographic goals and desired levels of use, with little attention to the program infrastructure required to meet these objectives. Consequently, the utility of such projections is limited. Shorter term forecasts are intended to reflect both contraceptive needs and the capacity of public- and private-sector distribution systems to meet these needs. Too often, however, little effort is made to assess the validity of such projections by comparing them with international trends and other countries' experience.

Our intent here is to utilize individual country surveys, aggregated by region, to present data on annual changes in overall and method-specific prevalence, upon which more realistic contraceptive forecasts may be based. While other work has also focused on trends in contraceptive prevalence in less developed countries,<sup>3</sup> our purpose here is to examine these trends and their implications from the standpoint of family planning program managers and donors.

## Methodology

Our data are derived mainly from Demographic and Health Surveys (DHS), World Fertility Surveys and Contraceptive Prevalence Surveys conducted between 1974 and 1992 in 35 developing countries.<sup>4</sup> For each country, we used at least two surveys, conducted a minimum of two years apart, that provided measures of total and method-specific prevalence. (For Brazil, where no national survey was available before 1986, we examined four regions, comparing data from earlier state or regional family plan-

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**Table 1. Countries and survey years for which data on contraceptive prevalence were available, by region**

Country and region	Survey years
<b>Sub-Saharan Africa</b>	
Botswana	1984, 1988
Cameroon	1978, 1991
Ghana	1980, 1988
Kenya	1978, 1989
Mauritius	1985, 1991
Nigeria	1982, 1990
Senegal	1978, 1986
Zimbabwe	1984, 1989
<i>Median initial year</i>	<i>1981</i>
<i>Median final year</i>	<i>1989.5</i>
<i>Overall median year</i>	<i>1985.5</i>
<b>Asia</b>	
Bangladesh	1976, 1980, 1989, 1991
Indonesia	1987, 1991
Korea, Rep. of	1974, 1979, 1988
Nepal	1976, 1981
Pakistan	1975, 1991
Sri Lanka	1975, 1982, 1987
Thailand	1975, 1978, 1981, 1984, 1987
<i>Median initial year</i>	<i>1975</i>
<i>Median final year</i>	<i>1988</i>
<i>Overall median year</i>	<i>1981</i>
<b>Latin America &amp; Caribbean</b>	
Bolivia	1983, 1989
Brazil (Piauí)	1979, 1982
Brazil (Northeast)	1980, 1986
Brazil (São Paulo)	1978, 1986
Brazil (South)	1981, 1986
Colombia	1976, 1978, 1980, 1986, 1990
Costa Rica	1976, 1978, 1981, 1986
Dominican Republic	1975, 1983, 1986, 1991
Ecuador	1979, 1987, 1989
El Salvador	1978, 1985, 1988
Guatemala	1978, 1983, 1987
Haiti	1977, 1983, 1989
Honduras	1981, 1984
Jamaica	1976, 1983, 1989
Mexico	1977, 1979, 1982, 1987
Panama	1976, 1980, 1984
Paraguay	1977, 1979, 1987, 1990
Peru	1978, 1981, 1986, 1992
Trinidad & Tobago	1977, 1987
<i>Median initial year</i>	<i>1978</i>
<i>Median final year</i>	<i>1989.5</i>
<i>Overall median year</i>	<i>1982.5</i>
<b>North Africa &amp; Middle East</b>	
Egypt	1980, 1989
Jordan	1976, 1983, 1990
Morocco	1980, 1984, 1987, 1992
Tunisia	1978, 1983, 1988
<i>Median initial year</i>	<i>1980</i>
<i>Median final year</i>	<i>1989.5</i>
<i>Overall median year</i>	<i>1983.5</i>
<b>All regions</b>	
<i>Mean years between surveys</i>	<i>9.6</i>
<i>Median initial year</i>	<i>1978</i>
<i>Median final year</i>	<i>1988.5</i>
<i>Overall median year</i>	<i>1983</i>

ning and maternal and child health surveys with similar later surveys or with the 1986 DHS survey results for those regions.) Table 1 lists the years covered by the 106 surveys that met these criteria.\*

While other reports have presented prevalence estimates weighted in terms of population size,<sup>5</sup> we have elected to give all countries equal weight with re-

spect to population size, because our focus is on prevalence change as a function of country-based programs. Thus, we are equally interested in the patterns observed in a small population (for example, Jamaica) and in a larger population (such as Bangladesh or Nigeria). However, to give proportionately greater weight to rates of change in prevalence observed over longer time periods, our computations of annual aggregate rates of change incorporate weights equal to the number of years between surveys. This weighting reduces the proportion of observed variance attributable to random variation relative to underlying secular trends.†

Two measures are used to describe trends in contraceptive prevalence. The first, the annual percentage-point change, is a linear interpolation of prevalence at the initial and final survey dates. It is simply the difference in prevalence between the two time-points, divided by the number of years elapsed between surveys. For regional and total computations of this measure, we have summed the difference in prevalence between the initial and later surveys, and divided the result by the sum of the years between surveys. (Individual country rates, which could be unduly sensitive to the use of complete years rather than fractional years between surveys, are not given.) We note that the method of aggregation for computing regional rates minimizes the effects of some intersurvey intervals' being more or less than complete years.

Our second measure is the stepwise annual rate of change, or the exponential change that would be required to move in annual increments from the initial to the final year's prevalence.‡ This measure can be thought of as the annually compounded rate of change that must be applied to the initially observed prevalence to attain the level observed at the subsequent survey. The intersurvey rate of change is more sensitive than the annual percentage-point change to small absolute changes in program activities when programs are in their early stages and initial prevalence is still very low. The regional and overall rates of change are composed of the average of the rates of change of the individual countries, weighted by the number of years between surveys; we computed these rates by summing the products of the individual rates of change and the years between surveys, and dividing the result by the sum of the years between surveys.

While the absolute change in prevalence is the better-known of these measures, the stepwise annual rate of change is more

useful for donors and managers who must plan for program expansion at early program stages. At the higher levels of prevalence typical of mature programs, the sheer growth of the eligible population becomes a major determinant of increases in supply requirements. This factor is much less important in "young" programs with large proportions of women in need of contraception, where program growth can far outpace the growth of the eligible population. Simply put, once the initial transport, storage and distribution procedures for contraceptives are established in a given area, an increase in contraceptive demand due to population growth can be more easily accommodated.

In our analyses, we distinguish between traditional and modern methods. Traditional methods are periodic abstinence, withdrawal and douche. Modern methods are male and female sterilization (although the great majority of procedures are female), oral contraceptives, IUDs, injectables, condoms and other barrier methods. We refer to all modern contraceptives other than sterilization as supply-based methods; from an overall program perspective, whether these methods require consistent resupply (as is the case with condoms and oral contraceptives) or are long-acting (injectables and IUDs), their effectiveness depends upon their uninterrupted availability to clients.

The annual absolute change for traditional and modern methods does not always add up exactly to the annual absolute change for all methods, since folk methods were classified in some surveys as "other" and in some as traditional. Because of the definitional inconsistencies among surveys regarding traditional

\*The two-year minimum interval requirement necessitated the exclusion only of the 1978 Mexico survey. In addition, the two most populous countries, China and India, had to be excluded because neither had appropriate data available.

†When unweighted measures of change were computed, the regional rankings for all methods and for modern methods remained identical, and the overall magnitude of change for each region differed only slightly from the weighted measures.

‡The stepwise annual rate of change (R) is calculated as follows:  $R = (P_1/P_0)^{1/N} - 1$ , where  $P_0$  is prevalence at the date of the initial survey,  $P_1$  is prevalence at the date of the second survey and  $N$  is the number of years between surveys. In initial analyses, we used the continuous rate of annual change, calculated as  $R = \log_e(P_1/P_0)/N$ , rather than the stepwise rate of change. For the vast majority of countries, the two rates differed by less than 0.01. We selected the stepwise formulation as being more reflective both of the way supplies are ordered and procured, and of the annual incremental change to which program managers are most accustomed in their thinking and planning.

**Table 2. Percentage of women of reproductive age using a contraceptive method in initial and final survey years, by type of method, and mean number of years between surveys, according to region**

Region	Any method		Modern		Traditional*		Mean years between surveys
	Initial	Final	Initial	Final	Initial	Final	
<b>All</b>	<b>31.6</b>	<b>44.0</b>	<b>24.0</b>	<b>35.5</b>	<b>7.6</b>	<b>7.2</b>	<b>9.6</b>
Sub-Saharan Africa	21.6	28.6	13.1	18.8	8.4	7.6	7.9
Asia	24.9	45.1	20.3	38.7	4.6	4.8	11.1
Latin America & Caribbean	39.5	50.4	30.5	41.5	9.1	8.2	9.5
North Africa & Middle East	25.8	42.0	20.8	35.3	4.8	6.0	11.3

\*Calculations exclude Brazil (Northeast, São Paulo, South), Honduras and Korea.

methods, we focus on modern methods, although we present summary data for traditional methods in the tables.

## Results

### Total Intersurvey Change

To provide a summary measure of contraceptive prevalence trends by region, we used data from the first and the most recent surveys in each country to calculate mean prevalence for modern and traditional methods and for individual methods. As Table 2 shows, total prevalence increased between surveys by at least 10 percentage points in all regions except Sub-Saharan Africa; Asia showed the greatest absolute increase, from 25% at the initial survey to 45% at the final survey. The prevalence of modern method use also increased most for Asia (18 points) and least for Sub-Saharan Africa (six points). Traditional method use showed little net change, increasing very slightly in Asia and in North Africa and the Middle East, and decreasing very slightly in the other regions examined.

The most substantial growth in method-specific prevalence between the initial and final survey years (eight percentage points overall) occurred for sterilization (see Table 3); the increases were especially large in Asia (14 points) and Latin America and the Caribbean (nine points). Indeed, consistent with findings from other studies,<sup>6</sup> sterilization has become the

leading contraceptive method overall (with a prevalence of 13%, compared with 12% for the pill and 3–6% for the IUD and condom). However, reliance on sterilization still trails oral contraceptive use in Sub-Saharan Africa, and lags behind both pill and IUD prevalence in North Africa and the Middle East.

Increases in the prevalence of pill and IUD use amounted to 1–2 percentage points overall and were generally less than three points in each region. The exception was that IUD prevalence grew by nine percentage points in North Africa and the Middle East. Condom use showed negligible change.

### Annual Rates of Change

While considerable variability is evident among countries, the great majority showed marked increases in total prevalence; a few exhibited little intersurvey change.\* Haiti, with a sharp drop in reported prevalence, was a notable exception to the general pattern. In 30 of the 33 countries for which both measures could be calculated, the prevalence of sterilization grew at a substantially faster rate than that of other modern methods.

The annual percentage-point change in total contraceptive use was greatest for Asia (1.8 points; see Table 4); in descending order, the absolute changes in North Africa and the Middle East, Latin America and the Caribbean, and Sub-Saharan Africa followed. In each region, however, the annual rate of change in the prevalence

of modern method use was larger than the rate of change for all methods combined, underscoring that most of the increase in total contraceptive prevalence was due to the increase in use of modern methods.† For the annual rate of change, Sub-Saharan Africa headed the list (9%); the other regions maintained their sequence, with 3–7% increases. It was not surprising that Sub-Saharan Africa had the largest rate of change, since initial prevalence was so much lower there than in the other regions.

Data on specific methods (Table 5) show that the greatest growth in prevalence was for sterilization, which gained one percentage point each year. Oral contraceptive, IUD and condom prevalence levels increased only slightly. The use of sterilization increased particularly rapidly in Asia and in Latin America and the Caribbean, where prevalence grew by slightly more than one percentage point annually. In the other regions, by contrast, the absolute increase was only a fraction of a point.

Sub-Saharan Africa had by far the largest annual rate of increase in sterilization prevalence (21%); notable gains also occurred in Asia (14%) and Latin America and the Caribbean (9%). In North Africa and the Middle East, where policymakers, service providers and couples may offer greater resistance to the use of permanent contraception, sterilization prevalence grew by only 5% annually.

Annual absolute increases in the use of orals, IUDs and condoms were much smaller—a fraction of a percentage point. Among these methods, the annual absolute increase was greatest for IUDs (0.24 percentage points); however, this growth varied by region. The annual rate of change was greatest for IUDs as well (4%). IUD prevalence made the largest gains in North Africa and the Middle East. It also grew in Latin America and the Caribbean and in Sub-Saharan Africa, but decreased slightly in Asia. These trends held for both measures.

Sub-Saharan Africa had the greatest increase in oral contraceptive use, followed by Asia and North Africa and the Middle East. In Latin America, the prevalence of

\*Only small changes were reported for Indonesia, Mauritius, Panama, and Trinidad and Tobago. Some of these findings of minimal changes may be attributable to differences in the sampling frames, along with standard sampling error.

†As a result of the method we used to compute regional aggregates of these measures, it is possible for the absolute change to be positive and the rate of change negative, whether a stepwise or continuous rate is computed. This occurs when the product of the number of years between surveys and the negative rate time-points is greater than the product of the number of years between surveys and the positive rate time-points, as in the case of oral contraceptives for North Africa and the Middle East (see Table 5).

**Table 3. Percentage of women of reproductive age using selected contraceptive methods in initial and final survey years, by region**

Region	Sterilization*		Pill		IUD†		Condom	
	Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>All</b>	<b>5.8</b>	<b>13.4</b>	<b>10.9</b>	<b>11.9</b>	<b>3.3</b>	<b>5.5</b>	<b>2.3</b>	<b>2.7</b>
Sub-Saharan Africa	1.0	2.4	7.8	10.1	1.3	2.1	1.8	1.9
Asia	4.6	18.4	6.9	8.4	5.1	4.6	2.0	2.9
Latin America & Caribbean	9.2	18.4	13.3	13.4	3.4	5.7	3.1	3.2
North Africa & Middle East	2.8	5.0	13.0	14.5	4.3	13.3	0.8	1.3

\*Calculations exclude Honduras and Jamaica. †Calculations exclude Brazil (Northeast, São Paulo, South).

**Table 4. Annual absolute change and rate of change in contraceptive prevalence, by type of method, according to region**

Region	Any method*		Modern method	
	Absolute change	Rate of change	Absolute change	Rate of change
<b>All</b>	<b>1.31</b>	<b>4.8</b>	<b>1.22</b>	<b>5.8</b>
Sub-Saharan Africa	0.98	9.1	0.74	10.2
Asia	1.82	7.1	1.65	7.7
Latin America & Caribbean	1.15	2.5	1.16	3.8
North Africa & Middle East	1.44	4.5	1.29	4.9

\*Calculations exclude Brazil (Northeast, São Paulo, South—all years), Honduras, Korea (1988), Mexico (1982, 1987) and Thailand (1984, 1987).

pill use hardly changed. As with IUDs, these trends held for both the absolute change and the annual rate of change.

Condoms, which account for a disproportionate share of donors' commodity budgets, particularly relative to the couple-years of protection they provide, are the method most advocated and used to inhibit the spread of the human immunodeficiency virus (HIV). Condom prevalence increased between surveys, although more slowly than anticipated. The annual absolute change in condom use was negligible, and the annual rate of change was 2%. Condom use grew by about 3% yearly in Asia and in North Africa and the Middle East, but the increase was minuscule in Latin America and the Caribbean. (Condom data for Sub-Saharan Africa are not presented because most of the countries reported a prevalence of less than 1% at both surveys.)

## Discussion

These data have several implications for donor agencies and program managers. The fairly slow observed rate of change in prevalence for supply-based methods should lead program managers and forecasters to guard against unrealistically high expectations when estimating likely growth in contraceptive demand. Although these data are not based on a random sample of less developed countries, and the inferences drawn are somewhat speculative, these findings are nonetheless consistent with others reported in the literature.<sup>7</sup>

The question to program managers and to donor agencies alike is how predictive these observed rates are of future contraceptive commodity requirements. Several considerations deserve mention. Both the rising total prevalence and the rapid increase in use of the most effective methods suggest that prevalence has not yet plateaued for any of the modern methods, so further growth is likely. In addition, the base population of women eligible for contraception continues to grow, typically at 2–3% per year, thus providing built-in po-

tential for greater demand for supply-based methods. Furthermore, two additional and very effective supply-based methods, the three-month injectable and the long-acting hormonal implant, may increasingly be substituted for the supply-based methods we have discussed and thus may af-

fect current trends, particularly in the use of oral contraceptives and IUDs.

Whether improved access to injectables and implants will result in greater overall contraceptive use or whether these methods will simply substitute for IUDs, orals, condoms and other contraceptive methods remains to be seen. Within five years, the progestin-only injectable and quite possibly the five-year hormonal implant are likely to account for a substantial proportion of contraceptives donated by USAID.

Regarding condom use trends in the AIDS era, we note that even though data from the most recent national surveys fail to capture any appreciable upsurge in condom use, such changes may have occurred too recently to be reflected in these surveys. Furthermore, since substantial proportions of condom users are unmarried, DHS-type surveys of women in union are not ideal tools for monitoring changes in condom use resulting from concern about HIV transmission. In this case, an examination of condom distribution data may be more indicative of emerging trends.

In a preliminary examination using annual USAID commodities shipment data for 31 countries, we found sizable increases in the number of donor-supplied condoms since 1986. For several countries, particularly in Sub-Saharan Africa, the number of donor-supplied condoms had

increased substantially. Among more extreme examples, supplies to Tanzania increased from 500,000 in 1987 to 26.6 million in 1991, after which they leveled off. In Kenya, condom supplies increased from 4.3 million in 1986 to 58.6 million in 1993, and in Zimbabwe, supplies climbed from three million to 21 million between 1986 and 1990, before declining somewhat.

Some of these extreme increases appear to reflect an expansion in the contraceptive distribution network (in part as a response to HIV) and an effort to fill the existing distribution pipeline, rather than a rapid increase in underlying demand. This is suggested by the subsequent leveling off in requested condom supplies and, in some cases, even a decline from these peak levels in countries having experienced the most rapid increases. However, condom donations to Sub-Saharan Africa have increased substantially, from an annual average of 34 million in 1986 and 1987 to an average of 194 million for 1992 and 1993. USAID condom donations to regions other than Sub-Saharan Africa actually declined somewhat during these years, and increased supplies from other donor agencies, such as the World Health Organization, only partly compensated for this decline. Commodity forecasters obviously must attend closely to future HIV trends and to the potential for a corresponding worldwide increase in the demand for condoms.

Despite campaigns to increase contraceptive demand, the trends we have documented indicate that for the most part, changes in prevalence occur rather slowly. We have noted the direct programmatic implication of these results, which caution against unrealistically high forecasts of requirements for supply-based contraceptives in the absence of increased efforts to both stimulate and meet contraceptive demand. The different patterns of method preference among regions suggest the need for culture-specific data about rea-

**Table 5. Annual absolute change and rate of change in prevalence of use of selected methods, by region**

Region	Sterilization		Pill		IUD		Condom	
	Absolute	Rate of change	Absolute	Rate of change	Absolute	Rate of change	Absolute	Rate of change
<b>All</b>	<b>0.95</b>	<b>10.2</b>	<b>0.11</b>	<b>0.9</b>	<b>0.24</b>	<b>4.3</b>	<b>0.03</b>	<b>2.2</b>
Sub-Saharan Africa	0.35	21.0	0.47	4.1	0.18	7.4	*	*
Asia	1.25	13.8	0.14	2.3	-0.09	-1.6	0.08	2.8
Latin America & Caribbean	1.03	8.5	0.01	0.0	0.24	4.5	0.01	1.4
North Africa & Middle East	0.21	5.1	0.14	-0.2	0.80	11.0	0.05	3.1

\*Prevalence was less than 1% at both surveys. Note: Since the stepwise annual rate of change cannot be calculated for countries where the prevalence at the first survey date is equal to zero or where method-specific prevalence data are missing for any survey year, such countries are omitted from their respective regions and the totals. Surveys with missing information on any method are excluded from rate calculations for that method. Sterilization calculations exclude Cameroon, Ghana, Haiti (1977, 1983), Honduras, Jamaica (1989), Mexico (1982, 1987), Morocco (1980, 1984), Nigeria, Senegal and Thailand (1984, 1987). Pill calculations exclude Cameroon, Ghana, Nepal and Nigeria. IUD calculations exclude Bangladesh (1976, 1980), Brazil, Cameroon, Ghana, Haiti, Nepal and Nigeria. Condom calculations exclude Bolivia, Brazil (Piauí only), Cameroon, Ghana, Honduras, Kenya, Morocco (1980), Nepal, Nigeria and Senegal.

sons for method preferences, as well as donor programs to meet these preferences or, in some cases, to influence users toward the use of more effective methods,<sup>8</sup> especially in Sub-Saharan Africa.<sup>9</sup>

Increases in contraceptive prevalence, and particularly in the use of more effective modern methods, are associated with observed declines in fertility. A corollary to this observation is that problems with availability and access to effective contraceptives can hinder reductions in population growth rates and efforts to impede the spread of HIV.

Mauldin and Ross<sup>10</sup> have estimated the levels of contraceptive practice required to achieve alternative population growth rates. For the countries represented in this study, even the United Nations "medium variant" for growth rates will not be achieved with current trends in prevalence. Therefore, to achieve societal goals of fertility reduction and health promotion, national policymakers and program managers must continue to engage in activities aimed at creating demand in both family planning and the prevention of HIV and other sexually transmitted diseases, while simultaneously expanding access to contraceptive methods for underserved populations.

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## Resumen

La prevalencia del uso de anticonceptivos ha aumentado sustancialmente en los países en desarrollo y esto crea problemas a las agencias donantes y a los administradores de programas que tratan de evaluar las necesidades de abastecimiento de métodos anticonceptivos. Los datos de 106 encuestas nacionales realizadas en 35 países, entre 1974 y 1992, permiten realizar cálculos de variaciones en la prevalencia del uso global y de métodos específicos y de las tasas de cambios anuales, en las cuales se pueden basar los pronósticos de uso de anticonceptivos. En general, el 44% de las mujeres recientemente encuestadas practicaban la anticoncepción, y el 36% utilizaban un método moderno. Entre la primera encuesta y la más reciente, la prevalencia de anticoncepti-

vos aumentó en una tasa anual del 5% y el uso de métodos modernos aumentó en un 6% anual. Los incrementos más importantes ocurrieron en el África Subsahariana (9–10% anual) y el menor en América Latina y el Caribe (3–4%). Si bien el uso de la esterilización aumentó en un 8% anual, el incremento en la prevalencia de la píldora, el DIU y el condón fue del 2% anual o menor. En la mayoría de las regiones, el uso de la esterilización ha cambiado en un ritmo mucho más rápido que la práctica de otros métodos; la excepción se registra en África del Norte y el Oriente Medio, donde el aumento anual de la esterilización ha sido modesto, aunque el uso del DIU ha aumentado rápidamente.

## Résumé

La prévalence contraceptive s'est nettement accrue dans les pays en voie de développement, au point de susciter des problèmes pour les organismes donateurs et les dirigeants de programmes responsables de l'estimation des besoins d'approvisionnement en contraceptifs. Les données de 106 enquêtes nationales menées dans 35 pays entre 1974 et 1992 permettent de calculer les changements survenus en termes de prévalence totale et de prévalence spécifique par méthode, ainsi que de déterminer les taux annuels de changement pouvant servir de base aux prévisions contraceptives. Au total, 44% des femmes interrogées dans le cadre des enquêtes les plus récentes pratiquaient la contraception, et 36% avaient recours à une méthode moderne. Entre les premières et les dernières enquêtes, la prévalence contraceptive totale a augmenté au taux annuel de 5%, tandis que la pratique des méthodes modernes s'accroissait de 6% par an. L'augmentation s'est révélée la plus rapide en Afrique subsaharienne (9 à 10% par an), et la plus lente en Amérique latine et aux Caraïbes (3 à 4%). Bien que le recours à la stérilisation se soit accru de 8% par an, la prévalence de la pilule, du stérilet et du préservatif n'a augmenté, au plus, que de 2% par an. Dans la plupart des régions, le recours à la stérilisation a évolué de manière beaucoup plus rapide que la pratique des autres méthodes, sauf en Afrique du Nord et au Moyen-Orient, où la hausse annuelle de la stérilisation est restée modeste, par rapport à une augmentation beaucoup plus rapide du recours au stérilet.