ARTICLES

Fertility Preferences and Contraceptive Change In Developing Countries

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Context: *The causes of the substantial increase in contraceptive prevalence in developing countries since 1960 have been intensely debated. An important unresolved issue concerns the relative contributions of changes in fertility preferences (such as increases in the proportion of women who want no more children) versus improved implementation of established preferences (such as increased contraceptive use among women who do not want another child).*

Methods: *Contraceptive prevalence data from the World Fertility Surveys and Demographic and Health Surveys for 26 countries in Latin America, Asia and Africa from the 1970s to the 1990s are analyzed through regression decomposition. The aim is to determine how much of the change in prevalence can be attributed to changes in fertility preferences (referred to as "composition") and how much is due to changes in rates of contraceptive use within preference categories ("rates").*

Results: *The substantial increases in contraceptive prevalence in the period since the 1970s in Latin America, Asia and Africa were less the result of increased demand for smaller families and more the result of the satisfaction of existing demand. The rates component dominated in all 26 countries, representing more than 70% of the increase in contraceptive prevalence in 24 countries and exceeding 80% in two out of three. Only in Ghana and Ecuador did the composition component account for one-third or more of the increase in prevalence, while at the other extreme, changes in preferences constituted less than 10% of the increase in prevalence in Colombia, Peru, Thailand, and Zambia. This implies that most of the observed increase in contraceptive prevalence would have occurred even if there had been no change in couples' fertility preferences. In Sub-Saharan Africa, changes in fertility preferences accounted for more of the increase in contraceptive prevalence than in other regions.*

Conclusions: *The findings are consistent with the premise that has justified the investment in family planning programs in many countries during the past three decades. Moreover, they undercut arguments that dismiss the potential for producing substantial increases in prevalence by satisfying existing demand for fertility regulation. Possible reasons for the increased implementation of preferences include improved access to contraceptive supplies or the reduction of costs not directly related to contraceptive access (such as cultural, social and health concerns).*

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Since 1960, fertility has declined substantially in developing countries. While there has been little dispute that the increased practice of contraception is the primary direct cause of this historic development, considerable disagreement has arisen about the causes of the increase in contraceptive prevalence. The various factors that have been posited as causes can be classified into two general groups, which have conventionally been labeled "demand-side" and "supply-side" factors.

"Demand" refers to the demand for children, as expressed in the desire to avoid pregnancy (either temporarily or indefinitely). The fraction of the population that desires to avoid pregnancy can change in response to shifts in the desired number of children surviving to adulthood, changes in infant and child mortality, and alterations in the distribution of the population in terms of stage of reproductive career (e.g., age or number of children ever born). Any one of these is sufficient; for example, substantial improvements in children's survival chances can increase couples' motivation to practice contraception, even if the desired number of living children remains stable.[1]

"Supply" is a broader concept than the term implies, because it refers to all of the obstacles to practicing contraception among those who desire to avoid pregnancy. This concept encompasses the geographic accessibility of family planning services and the cost and quality of those services, as well as those social, psychic and cultural factors that are often termed the "nonaccess costs of fertility regulation."[2]

While the latter costs may well be key determinants of contraceptive practice in many settings,[3] they have received less attention in research on trends in contraceptive use; in any case, typically they are not rigorously measured in demographic surveys. Nevertheless, substantial indirect evidence suggests that reducing nonaccess costs is an important means by which family planning programs can increase contraceptive prevalence—for example, by improving knowledge about contraceptive technology or by establishing the social legitimacy of using contraceptives.[4]

A long-running debate has focused on the relative contributions of changes in the desire to avoid pregnancy (itself a function of changes in desired family size, child survival and changes in birthspacing preferences) and of changes in the costs of prac-

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ticing contraception (in particular, as determined by the scale and design of organized family planning programs). The debate has been highly contentious: At stake is the rationale for substantial investments in family planning programs.

The classic statements of demographic transition theory portray fertility decline as a direct consequence of decreased demand for live births. This lessened demand itself is seen as a response to improved child survival and a decreased demand for surviving children, as a result of structural changes in society that reduce the benefits and increase the costs of rearing children.[5]

Although this view fits comfortably with the mainstream of social science theory on fertility, the first fertility surveys conducted in poor countries in the 1960s revealed that large proportions of women wanted to avoid further births but were not practicing contraception.[6] The conclusion drawn from this evidence was that a lack of interest in curtailing fertility was by no means the only, or perhaps even the primary, explanation for low levels of contraceptive prevalence in the low-income countries of Asia, Africa and Latin America.

Several influential interpretations of the historical European fertility decline also stressed the causal impact of changes in the knowledge, means and social legitimacy of practicing contraception.[7] It was logical to infer from this body of research that improved access to contraception can in itself lead to increased prevalence (that is, that contraceptive practice can respond to changes in supply-side factors in the absence of accompanying changes in demand-side factors).

Such a proposition presumes that there is unsatisfied demand for fertility regulation—a view that can be held without denying the substantial contribution that demand-side factors also make to reproductive change. Indeed, few demographers argue for one set of factors at the expense of the other. Rather, the consensus is that both demand-side and supply-side factors operate. The empirical challenge is to determine the relative magnitude of the two, because this varies among settings.[8]

The debate has continued in these general terms from the 1960s to the present. One specific and critical issue in this debate has been whether the data on fertility desires that are collected in demographic surveys are meaningful. Doubts about their validity have led to skepticism that the "KAP-gap" and "unmet need" estimates are truly indicative of the potential for fertility decline in the absence of increases in the desire to avoid pregnancy.[9]

The weight of accumulated empirical research is that survey data on fertility desires, as assessed either at the aggregate or at the individual level, are valid.[10] Hence, in the debate during the 1990s about the relative contributions of supply-side and demand-side factors, the overall validity of fertility preferences data has not been questioned. In this article, we also start from the premise that the standard questionnaire items employed in the major international survey programs of the past three decades—the World Fertility Survey (WFS) in the 1970s and 1980s and the Demographic and Health Survey (DHS) in the 1980s and 1990s—adequately measure fertility desires.

There is no simple, decisive test of the relative merits of the supply-side and the demand-side arguments. Research can be designed, however, that yields findings more consistent with one or the other argument; that is the strategy we follow here. The demand-side argument implies that changes in reproductive behavior are due principally to changes in fertility preferences—i.e., the desire to avoid altogether or to postpone further pregnancies. The supply-side argument, in contrast, allows for substantial change in reproductive behavior in the absence of changes in preferences; in such instances, change comes about because couples implement more completely their existing fertility preferences (via use of contraceptives and other fertility-regulation practices).

This is the main criterion utilized in a controversial attack on the supply-side argument.[11] The author, Lant Pritchett of the World Bank, concluded that declines in fertility in the past three decades could be attributed almost entirely to declines in desired fertility; from this and other evidence, Pritchett dismissed supply-side factors—family planning programs in particular—as making only the most minor contribution to recent fertility declines.

Other empirical analyses have arrived at a different conclusion. In an analysis of DHS data collected in the late 1980s in 18 countries, John Bongaarts of the Population Council showed that the implementation of fertility preferences through contraception varies by level of fertility; from this, he inferred that fertility decline can be attributed in part to increased implementation of preferences.[12] In a second empirical exercise, he decomposed fertility decline during the 1980s in 12 developing countries and calculated that the increased implementation of preferences accounts for 66% of the observed fertility decline, on average, a result that lends considerable credence to the supply-side argument.*[13]

These empirical studies were an effort to assess the extent to which changes in fertility and contraceptive use can be characterized as demand-driven. In this article, we present a further empirical investigation of this issue. Our analysis is both more direct and more comprehensive than previous empirical studies. We take advantage of the fact that in the case of contraceptive practice, the existence for many countries of two or more cross-sectional surveys conducted before and after substantial increases in contraceptive prevalence permits formal decomposition of the increase in prevalence in terms of hypothesized determinants, including fertility preferences.

We use these survey data and conventional demographic methods to address this question: What fraction of the change in contraceptive prevalence can be attributed to changes in fertility preferences? This is a relatively simple question, but the answer speaks to a key issue in the debate

*Two recent single-country studies—one on Indonesia in the 1980s (Gertler PJ and Molyneaux JW, How economic development and family planning programs combined to reduce Indonesian fertility, *Demography*, 1994, 31(1):33-63) and one on Iran from the 1950s to the 1970s (Raftery AE, Lewis SM and Aghajanian A, Demand or ideation? evidence from the Iranian marital fertility decline, *Demography*, 1995, 32(2):159–182)—do not estimate directly the contribution of fuller implementation of preferences; rather, they demonstrate that changes in factors associated with the demand for children (such as schooling, structure of the economy and child survival) appear to account for most of the observed change in contraceptive use or fertility. These same factors can also influence the implementation of preferences, however, and thus these studies do not directly address the question of how much of the fertility change can be attributed solely to changes in fertility desires. The authors of a study of Prussia in the late 19th century concluded that although reductions in the demand for children account for the largest part of the fertility decline, readiness to practice contraception also makes a substantial contribution, accounting for one-sixth to one-third of the decline, under various specifications (see: Lee RD, Galloway PR and Hammel EA, Fertility decline in Prussia: estimating influences on supply, demand, and degree of control, *Demography*, 1994, 31(2):347–373). The authors' calculations rely on indirect indicators of both the readiness to use contraceptives and the demand for children. In a less formal, more interpretative analysis of the countries of South Asia, other researchers have argued that there is considerable unsatisfied demand for fertility regulation in these societies, and hence in the short term, substantial fertility decline could occur with little or no change in fertility desires (see: Shah IH and Cleland JG, High fertility in Bangladesh, Nepal, and Pakistan: motives versus means, in: Leete R and Alam I, eds., *The Revolution in Asian Fertility: Dimensions, Causes, and Implications*, Oxford, UK: Clarendon Press, 1993, pp. 175–207).

about the nature of contemporary fertility transitions.

The way in which we have specified the research question leaves aside other major factors that figure centrally in the demand-side versus supply-side debate—notably, mortality decline and socioeconomic development. We assume that these factors affect contraceptive practice either through fertility preferences or through the implementation of those preferences; hence, we view these as less proximate factors. Indeed, ascertaining what fraction of the change in prevalence can be attributed to changes in preferences is a self-contained question of considerable significance in its own right. (A more elaborate decomposition using the same survey data, one that incorporates socioeconomic and demographic factors in addition to fertility preferences, is presented elsewhere.[14] That decomposition accounts for indirect effects of the socioeconomic and demographic factors operating through fertility preferences.)

Data and Methods

We analyze here survey data collected in the period 1975–1998 in 26 countries in Africa, Asia and Latin America. The selection of countries was governed by the availability of two surveys from the WFS or the DHS programs. In addition, since our analysis focuses on the components of change in contraceptive prevalence, there is little point in examining countries where no change occurred or where the change was negligible. For this reason, we selected only countries that showed at least a five-percentage-point increase in contraceptive prevalence during the period between surveys.*

In most countries, the first survey was a WFS from the late 1970s or early 1980s and the second survey was a DHS from the 1990s (or in some instances from the late 1980s). Surveys were selected so as to maximize the period between surveys, but gaps as small as four years (Zambia) and five years (Tanzania) were permitted if the amount of change in contraceptive use was large enough (on the order of two or more percentage points per year). In 21 of the countries, 10 or more years separated the surveys; in 11, the gap was 15 years or more. In Brazil, Guatemala, Senegal, Tanzania, Uganda and Zambia, data from two DHS surveys were compared, either because no WFS had been conducted or, in the case of Senegal, because a key variable in the WFS was not comparable to its counterpart in the DHS. We relied on the standard recode file for each survey.

A potential problem with this analysis is that requiring countries to have experienced a change in contraceptive prevalence is a form of selection on the dependent variable. Of most concern is whether we have excluded countries where, even though contraceptive use has not changed, fertility preferences may have changed substantially.† Everything else being equal, this would bias the results by assigning more credit to changes in preferences as a cause of increase in contraceptive prevalence (since countries where change in preferences is not answered by change in contraception are excluded). This point should be kept in mind when our findings are assessed.‡

Surveys conducted under the auspices of the WFS and DHS are comparable in their basic features.[15] For both sets of surveys, relatively large probability samples of women of reproductive age were interviewed.§ The questionnaires are broadly similar. While items for our two key variables—contraceptive behavior and fertility preferences—are not identical, they resemble each other closely enough that it is safe to assume that differences in measurement do not account for much of the observed difference between surveys. Some variations in the structure of the WFS and DHS questionnaires deserve mention, however, because they affect the design of our analysis.

First, in the WFS, questions about contraceptive use at the time of the survey were limited to women currently in union, whereas in the DHS these questions were also asked of never-married women (where they were interviewed) and of formerly married women. Our analysis is restricted to women currently in union (legal or consensual)—which, in any case, is the conventional denominator for the contraceptive prevalence rate.

A further difference is that in the WFS, women who perceived themselves to be no longer capable of conceiving (that is, who identified themselves as infecund) were not asked about their contraceptive use at the time of the survey. Hence, for comparability, we have classified infecund women as nonusers in both sets of surveys, except for women who were contraceptively sterilized. (Infecund women were not excluded from the analysis, so calculations are based on all women currently in a union. However, to reduce the possibility of bias due to the different treatment of infecund women in the WFS and DHS questionnaires, women aged 45–49 were dropped.)

Additionally, the depth with which the desire for another child was measured differs between the two survey programs. In the DHS, women who wanted additional children were asked how soon they wanted the next child. Thus, we can distinguish women who wanted to postpone the next birth (and hence were motivated to practice contraception) from women who wanted another child relatively soon. In contrast, only a few WFS surveys included a follow-up question on how soon the next child was wanted.

Our analysis is therefore necessarily restricted to examining the demand for contraception to limit family size. As a result, we probably understate the degree to which trends in contraceptive prevalence are a response to changes in fertility preferences. Other research suggests, however, that in most settings, increases in the desire to space births contribute far less to overall trends in contraception and fertility than do increases in the desire to limit family size.[16] (Trends in the implementation of spacing preferences are another matter altogether: In Sub-Saharan Africa, increases in the implementation of spac-

*Several countries that appear to satisfy these criteria are not included either because one of the data sets was not available for analysis (Jordan), because a key questionnaire item was constructed differently in the two surveys (Cameroon—fertility preferences), or because examination of the data raised serious concerns about the comparability of measurement across surveys (Bolivia and Pakistan—fertility preferences).

†We excluded six countries with two available surveys that lacked change in contraceptive prevalence—Benin, Haiti, Madagascar, Mali, Togo and Zimbabwe. Among these, only Benin and Haiti showed substantial changes in fertility preferences. In both countries, the percentage wanting no more births increased by about 11 percentage points.

‡The requirement that there be at least two surveys is also a kind of selectivity, but whether it leads to bias is more difficult to assess. Such countries may have more clearly articulated antinatalist population policies and better-developed family planning programs than countries lacking two surveys. If so, then this selection criterion may favor countries where the implementation of preferences in contraceptive use may be more important than changes in preferences (if, for example, there was a relatively large reduction in the costs of contraception). This would bias the findings in favor of the supply-side argument.

§In Indonesia and Ye**m**en, the DHS covered more regions than did the WFS. Here, we excluded regions not sampled in the WFS. Thus, for Indonesia, the DHS sample was limited to DKI Jakarta, West Java, Central Java, DI Yogyarkarta, East Java and Bali. For Yemen, the DHS sample was limited to the Sana'a, Dhamar, Al Mahweet, Sa'dah (North), Taiz, Ibb (South), Hajjah, Hodiedah (West), Ma'arib, and Al Beida (East) governorates.

ing preferences appear to account for a substantial fraction of recent trends in contraception.[17])

A further difference between surveys is that in the WFS, information about the desire for another child was not obtained from infecund women (just as these women were not asked about current contraceptive use). We have grouped infecund women with those who indicated that they wanted another child, because both sets of women lacked a motivation to use contraceptives for the purpose of family-size limitation. For consistency, we applied this rule to both the WFS and the DHS data.

The two key variables for this analysis are contraceptive use and fertility preferences. Contraceptive use has two categories: use at the time of the survey and nonuse. For most countries, the list of contraceptive methods was not identical in the WFS and DHS, but the differences appear to be too slight to have an impact on the results.* Fertility preferences were measured through two variables: the desire for additional children, and the difference between the actual and ideal number of children. Desire for additional children has two categories: wanting more and not wanting more.

Our classification approach was generally straightforward for nonpregnant women, based on their response to a direct questionnaire item about fertility preferences.† Bangladesh presented a special problem, however. In the 1976 WFS, women were asked if they wanted an additional child "soon." To ensure comparability with this eccentric wording, we combined women in the 1993 DHS who stated that they wanted no more children with those who wanted to delay the next birth for at least two years. (Thus, we assumed that "soon" in the 1976 WFS meant within two years.) In both Bangladesh surveys, therefore, the contrast is between women who wanted another child soon and those who wanted to postpone or stop childbearing.

For pregnant women, the procedure was more complicated, because demand for contraception at the survey date was a matter of whether the current pregnancy was wanted, and in some countries this information was not gathered. For countries where both surveys provided information on the wantedness of the current pregnancy (Bangladesh, Colombia, Dominican Republic, Egypt, Indonesia, Morocco, Peru, Tanzania, Turkey and Zambia), we classified a pregnant woman as wanting no additional children if the pregnancy was unwanted and if she did not desire another child after the one she was carrying. Where one of the surveys did not provide this information, we classified a pregnant woman as wanting no additional children if her number of living children was equal to or greater than her desired number of children and if she did not want another child after the one she was carrying.

The difference between the actual and ideal number of children was constructed as the simple arithmetic difference between the two variables (actual minus ideal).‡ We interpret this difference to be an indicator of the extent to which desired fertility has been attained: The closer the absolute difference is to zero, the closer the agreement between desired and achieved fertility. A negative number indicates that the desired fertility is yet to be attained, whereas a positive number indicates that desired fertility has been exceeded. (For convenience, in this article, the shorthand label "actual-ideal gap" is used for this variable.)

In almost one-third (15) of the surveys, more than 10% of respondents gave a nonnumeric response (such as "whatever God wishes"), with the highest such proportion in the 1979 Yemen WFS (43%). In half of the surveys (26), fewer than 5% gave a nonnumeric response. In all of these cases, we imputed the ideal number of children by means of a regression equation. For women who gave a numeric response, we regressed the ideal number of children on age, woman's and partner's years of schooling, rural-urban residence and partner's occupation. The resulting regression equation was used to calculate a predicted ideal number of children for those women lacking a numeric response. The predicted value was then rounded to the nearest integer.

Including two fertility preference variables—the desire for additional children and the actual-ideal gap—in this analysis represents a departure from most recent research, where the practice has been to rely entirely on the first variable. In controlling for the desire for additional children, which is a simple dichotomy, we assume that the actual-ideal gap captures the strength of the desire to avoid pregnancy. Consistent with this interpretation, among those who indicated that they wanted no additional children, those who attained or exceeded their ideal family size were more likely to use contraceptives in

Table 1. Percentage of currently married women aged 15–44 using a contraceptive method, by survey and year of survey, and percentage-point increase in contraceptive use between surveys, according to country

Country	Survey 1		Survey 2		Increase
	%	Year	%	Year	
Sub-Saharan Africa					
Côte d'Ivoire	3.0	1980	11.4	1994	8.4
Ghana	9.9	1979	20.5	1993	10.6
Kenya	6.8	1978	36.4	1998	29.6
Senegal	4.8	1986	12.6	1997	7.9
Tanzania	10.6	1992	18.3	1996	7.7
Uganda	4.4	1988	14.4	1995	10.0
Zambia	15.3	1992	26.8	1997	11.5
North Africa & West Asia					
Egypt	24.6	1980	49.2	1995	24.6
Morocco	20.3	1980	42.2	1995	21.9
Tunisia	32.0	1978	50.7	1988	18.6
Turkey	41.5	1978	64.5	1993	23.0
Yemen	1.2	1979	8.3	1991	7.2
South Asia & Southeast Asia					
Bangladesh	8.2	1976	49.0	1996	40.8
Indonesia	27.8	1976	56.1	1993	28.3
Nepal	2.3	1976	28.0	1996	25.6
Philippines	38.7	1978	48.7	1998	10.0
Sri Lanka	33.7	1975	60.7	1987	27.0
Thailand	35.7	1975	67.5	1987	31.8
Latin America					
Brazil	66.9	1986	76.2	1996	9.3
Colombia	42.6	1976	70.9	1996	28.2
Dominican Republic	33.4	1975	63.1	1996	29.7
Ecuador	35.1	1979	44.9	1987	9.7
Guatemala	23.8	1987	31.1	1995	7.3
Mexico	32.7	1977	54.5	1987	21.8
Paraguay	38.6	1979	49.4	1990	10.8
Peru	33.4	1978	65.1	1996	31.6

Note: Percentage-point increases are based on the number of women included in the analysis after cases with missing values on any of the variables of interest were excluded.

*An exception is Senegal, where periodic abstinence was excluded from the list of contraceptive methods in the 1986 DHS. For consistency, we excluded abstinence from the list of methods in the 1997 DHS.

†Women who were contraceptively sterilized or whose husbands were sterilized were classified as not wanting additional children. Those who were undecided about whether they wanted additional children—a small fraction in all surveys, the largest being 11% in the 1978 Kenya WFS—were classified as wanting additional children.

‡Current pregnancies were excluded when we calculated the actual number of children. This exclusion resulted in the equivalent treatment of pregnant women on the two preference variables (i.e., that a pregnant woman's desire for another child refers to the time when she became pregnant, rather than her desire for another child after the termination of her current pregnancy).

Table 2. Percentage of currently married women wanting no more children, mean ideal number of children, gap between actual and ideal fertility, and percentage of women for whom actual number of children exceeds ideal number, by survey, according to country

Country	% wanting no more		Mean ideal no.		Actual-ideal gap*		% by which actual ≥ ideal	
	Survey 1	Survey 2	Survey 1	Survey 2	Survey 1	Survey 2	Survey 1	Survey 2
Sub-Saharan Africa								
Côte d'Ivoire	3.1	14.5	8.1	6.0	–5.3	–2.8	3.5	18.8
Ghana	8.0	27.3	6.0	4.8	–3.1	–1.9	9.9	25.7
Kenya	11.5	40.7	7.0	4.1	–3.3	–0.8	17.7	43.9
Senegal	14.5	18.9	7.1	5.8	–4.2	–2.6	14.2	23.2
Tanzania	16.6	22.3	6.4	5.8	–3.3	–2.8	13.9	17.1
Uganda	15.0	24.7	6.7	5.6	–3.5	–2.5	15.1	20.1
Zambia	17.3	21.1	6.0	5.6	–2.8	–2.6	18.9	19.9
North Africa & West Asia								
Egypt	46.4	54.5	4.0	2.9	–1.0	0.0	45.6	61.6
Morocco	31.6	42.6	4.8	3.8	–1.2	–0.5	39.0	48.0
Tunisia	37.8	52.4	4.1	3.5	–0.5	–0.2	48.4	54.3
Turkey	49.9	61.3	3.0	2.4	–0.2	0.1	55.2	66.2
Yemen	13.6	29.4	5.3	5.5	–2.7	–1.5	17.1	35.8
South Asia & Southeast Asia								
Bangladesh	56.8	69.5	3.8	2.5	–0.8	–0.1	45.1	60.1
Indonesia	30.3	40.1	4.2	2.8	–1.4	–0.5	33.2	47.6
Nepal	25.2	50.4	4.0	2.9	–1.6	–0.2	33.0	56.8
Philippines	45.5	49.5	4.3	3.4	–0.5	–0.5	50.0	49.5
Sri Lanka	49.6	61.7	3.7	3.0	–0.4	–0.4	54.3	53.1
Thailand	49.3	56.5	3.6	2.7	–0.5	–0.5	49.9	49.9
Latin America								
Brazil	61.8	66.7	3.0	2.5	–0.3	–0.1	50.9	60.4
Colombia	55.3	59.1	4.1	2.8	–0.3	0.1	45.9	56.2
Dominican Rep.	44.5	53.4	4.6	3.3	–1.1	–0.7	33.2	41.7
Ecuador	45.5	58.3	4.0	3.3	–0.6	–0.3	43.1	51.6
Guatemala	43.7	42.4	4.3	4.0	–0.9	–0.6	42.9	47.0
Mexico	45.2	58.2	4.4	3.3	–0.6	–0.2	43.7	53.9
Paraguay	25.4	33.6	5.1	4.4	–1.8	–1.2	20.2	30.4
Peru	53.5	60.6	3.7	2.6	–0.2	0.2	51.9	61.7

*Number of living children minus ideal number of children. *Note:* For years in which surveys were conducted, see Table 1.

virtually every survey analyzed here. In this article, we address the extent to which the actual-ideal gap increases the overall explanatory power of fertility preferences, as well as whether the marginal gain from including the actual-ideal gap varies by social factors such as stage of fertility transition and region.

Our primary aim is to determine the extent to which changes in fertility preferences can account for changes in contraceptive prevalence. To accomplish this, we employed a regression-decomposition approach,[18] essentially the same as has been used in several previous regional[19] and country-specific[20] studies of contraceptive change (see Appendix, page 107).

Using the decomposition results, we can express the observed change in contraceptive prevalence as the simple sum of two components: the changes in fertility preferences and the changes in the effects of preferences on use (that is, the regression coefficients).* Following the terminology of classic demographic decomposition,[21] we labeled the first component as "composition" and the second as "rates." Contraceptive prevalence can change as a result of either mechanism—changing preference structures or changing propensity to use a method within preference categories (much of which can be regarded as changes in the "implementation of preferences"†). Either can account for a relatively small or large part of the observed change in prevalence.

Results

Trends in Use and Preferences

The increase in contraceptive prevalence between surveys among currently married women aged 15–44 (Table 1, page 103) was largest in Bangladesh (41 percentage points), followed by Thailand and Peru (32 points), Dominican Republic and Kenya (30 points), Indonesia and Colombia (28 points) and Sri Lanka (27 points). At the other extreme, six countries had an increase of less than 10 percentage points—Guatemala and Yemen (seven points), Côte d'Ivoire, Senegal and Tanzania (eight points) and Brazil (nine points). Some of the variability in the increase in prevalence may be due to the fact that the length of the intersurvey period differed among the 26 countries. However, some of the larger increases occurred over relatively short periods (for example, in Thailand and Sri Lanka).

With only a few exceptions, all of the indicators of fertility preferences (the percentage of women wanting no additional children, the mean ideal number of children, the mean actual-ideal gap and the percentage of women for whom the actual number of children equals or exceeds their ideal) suggest that the demand for fertility limitation increased during the period between surveys (Table 2). The largest increase in the desire for no additional children was in Kenya (29 percentage points), followed by Nepal (25 points) and Ghana (19 points). These countries were at the onset of transition at the time of the first survey.

Nearly half of the countries recorded increases in the desire to stop childbearing of less than 10 percentage points—Colombia, the Philippines, Senegal and Zambia (four points), Brazil (five points), Tanzania (six points), Peru and Thailand (seven points), Egypt and Paraguay (eight points), and the Dominican Republic (nine points). In Guatemala, the percentage of women wanting no more children declined by one percentage point (a decline that could be accounted for by sampling error). Countries with relatively small percentages of women wanting no more children at the first of the two surveys tended to show larger increases in the intersurvey period.

Further evidence of the increase in demand for fertility limitation is that the ideal number of children declined between the two surveys in all countries except Yemen (Table 2), and that the difference between the number of living children and the ideal number of children became more positive in all countries except the Philippines, Sri Lanka and Thailand. Moreover, the percentage of women for whom the actual number of children exceeds the ideal increased in all countries except those three Asian nations. These

*The decomposition methodology that we adopted eliminates the interaction component present in some decomposition approaches by using as weights, in the calculation of the decomposition, averages of the values for the two surveys (see: Iams HM and Thornton A, reference 18).

†Increased rates of use among those who do not desire additional children represent increased implementation of stopping preferences. Increased rates of use among those who desire more children can reflect either increased implementation of spacing preferences or an increase in the fraction wishing to space; the two are mixed together in this analysis. Other research indicates, however, that birthspacing preferences change little over the course of the fertility transition; hence, in most countries, increased rates of use among those who desire more children can be assumed to result mainly from increased implementation of spacing preferences.

Table 3. Percentage-point change between surveys in contraceptive prevalence, and percentage distribution of change, by contribution of changes in composition of fertility preferences or contribution of changes in rates of use within preference categories, by country

Country	Change in prevalence	% distribution	
		Composition*	Rates†
Sub-Saharan Africa			
Côte d'Ivoire	8.4	24.2	75.8
Ghana	10.6	39.2	60.8
Kenya	29.6	22.8	77.2
Senegal	7.9	24.9	75.1
Tanzania	7.7	19.4	80.6
Uganda	10.0	16.2	83.8
Zambia	11.5	8.1	91.9
North Africa & West Asia			
Egypt	24.6	19.4	80.6
Morocco	21.9	17.9	82.1
Tunisia	18.6	25.2	74.8
Turkey	23.0	17.7	82.3
Yemen	7.2	18.8	81.2
South Asia & Southeast Asia			
Bangladesh	40.8	13.5	86.5
Indonesia	28.3	13.0	87.0
Nepal	25.6	24.5	75.5
Philippines	10.0	13.8	86.2
Sri Lanka	27.0	15.2	84.8
Thailand	31.8	8.8	91.2
Latin America			
Brazil	9.3	12.1	87.9
Colombia	28.2	3.5	96.5
Dominican Rep.	29.7	12.0	88.0
Ecuador	9.7	33.7	66.3
Guatemala	7.3	–7.1	107.1
Mexico	21.8	16.5	83.5
Paraguay	10.8	17.8	82.2
Peru	31.6	3.6	96.4

*Composition of the population according to fertility preferences: desire for additional births and the actual-ideal gap. †Rates of use within fertility preference categories. *Notes:* Respective contributions of composition and rates were determined through a regression decomposition analysis. For years in which surveys were conducted, see Table 1.

patterns of change are generally consistent with increases in the percentage desiring no additional children. In the Philippines, Sri Lanka and Thailand, the percentage wanting no more children increased modestly, and the actual and ideal number of children appear to have declined at the same rate, resulting in little change in the actual-ideal gap.

What is especially striking about trends in the ideal number of children (and, accordingly, the actual-ideal gap) is the magnitude of the decline in Sub-Saharan Africa, exceeding one child in the five countries where the interval between surveys was 10 or more years and exceeding two children in Côte d'Ivoire and Kenya. The increases in the percentage desiring no additional children also were substantial in this region, but in fact the declines in ideal family size outpaced these increases in the expressed desire to stop. In African societies, a precipitous decline in the total number of children desired appears to be a prominent feature of the early stage of the fertility transition.

Decomposition of Change

The trends in fertility preferences reveal increases in the desire to limit childbearing, some of them substantial, in all regions. A strong individual-level relationship between fertility preferences and contraceptive behavior is well documented.[22] From this relationship, it follows that the increased demand for fertility limitation led to increases in contraceptive prevalence during the same intersurvey period. The question can be articulated more precisely, however, as: What fraction of the increase in contraceptive use can be attributed to changes in fertility preferences?

The answer to this question is in the percentage decomposition of the increase in contraceptive prevalence into contributions of "composition" (that is, changes in fertility preferences) and "rates" (changing rates of use within categories of fertility preferences). Clearly, increases in contraceptive prevalence are due overwhelmingly to increased rates of use within preference categories, not to changes in fertility preferences (Table 3). The rates component accounts for more than 70% of the increase in contraceptive prevalence in 24 of the 26 countries and exceeds 80% in more than two-thirds.

In only two countries (Ghana and Ecuador) did changes in preferences (the composition component) account for more than one-third of the increase in prevalence (39% and 34%, respectively). In four countries (Colombia, Peru, Thailand and Zambia), changes in preferences accounted for less than 10% of the increase in prevalence. There was one important regional differential in the decomposition results: The composition component was in general larger for Sub-Saharan Africa than for any of the other regions.

In short, increased implementation of fertility preferences was the primary explanation for the increase in contraceptive use during this period of time in these countries, not changing preferences. This outcome is even more impressive, given that we excluded from the analysis countries with changes in preferences but no change in contraceptive use.

Our analysis departs from most recent research in making use of two fertility preference measures: the desire for another birth and the difference between the number of living children and the ideal number of children. The results in Table 4 demonstrate what is gained from including the actual-ideal gap, by showing the composition component in decompositions based solely upon the desire for no more births, based solely on the actual-ideal gap and based upon the two together (as in the decomposition in Table 3).* Comparing the three columns in Table 4 shows that the countries are roughly evenly split into those where the desire for no additional children accounts for more of the increase in prevalence and those where the actual-ideal gap accounts for more of the increase in prevalence.

Table 4. Percentage of the change in contraceptive prevalence due to specified changes in fertility preferences, by country

Country	Wanting no more only	Actual-ideal gap only	Both
Sub-Saharan Africa			
Côte d'Ivoire	9.2	23.9	24.2
Ghana	25.2	33.5	39.2
Kenya	19.8	18.8	22.8
Senegal	4.5	27.9	24.9
Tanzania	11.0	18.4	19.4
Uganda	10.8	16.6	16.2
Zambia	5.7	6.7	8.1
North Africa & West Asia			
Egypt	13.2	29.5	19.4
Morocco	14.7	16.2	17.9
Tunisia	25.3	12.7	25.2
Turkey	18.6	7.1	17.7
Yemen	12.3	16.4	18.8
South Asia & Southeast Asia			
Bangladesh	12.6	6.4	13.5
Indonesia	11.9	20.5	13.0
Nepal	22.0	19.6	24.5
Philippines	13.6	–0.1	13.8
Sri Lanka	17.2	0.4	15.2
Thailand	8.7	0.4	8.8
Latin America			
Brazil	13.6	3.6	12.1
Colombia	3.9	2.2	3.5
Dominican Rep.	12.0	4.8	12.0
Ecuador	33.6	7.9	33.7
Guatemala	–5.9	9.7	–7.1
Mexico	16.6	5.6	16.5
Paraguay	16.2	11.7	17.8
Peru	5.0	2.1	3.6

Note: For years in which surveys were conducted, see Table 1.

Given that use of the "want no more" variable is conventional, the major question to ask here is what we gain by in-

*Because a regression decomposition is used, the composition component calculated on the basis of one of the two measures can exceed the composition component calculated on the basis of the two measures—an outcome that seems illogical. This outcome occurs in 11 of the 52 comparisons in Table 4, but in only five of these does it amount to as much as a two-percentage-point discrepancy. These discrepancies occur when the decrease in the absolute value of one regression coefficient (for example, desire for additional children) is not compensated for by the additional contribution to the decomposition of changes in the other preference variable (for example, actual-ideal gap). This can be viewed as a standard collinearity problem in regression analysis.

Table 5. Adjusted percentage practicing contraception, by desire for another birth and survey, and absolute difference and log odds difference in percentage between those wanting more births and those wanting no more births, by survey, all according to country

Country	Wanting more		Wanting no more		Difference			
					Absolute		Log odds	
	Survey 1	Survey 2	Survey 1	Survey 2	Survey 1	Survey 2	Survey 1	Survey 2
Sub-Saharan Africa								
Côte d'Ivoire	2.8	10.5	8.1	15.3	5.4	4.8	1.1	0.4
Ghana	9.0	17.3	16.4	27.1	7.4	9.8	1.7	0.6
Kenya	5.2	23.2	19.0	55.7	13.8	32.5	1.5	1.4
Senegal	4.1	11.9	6.7	14.6	2.6	2.7	0.5	0.2
Tanzania	8.4	15.1	19.2	27.3	10.8	12.2	1.0	0.8
Uganda	3.0	10.5	9.1	24.1	6.1	13.5	1.2	1.0
Zambia	12.7	24.2	24.3	34.9	11.6	10.7	0.8	0.5
North Africa & West Asia								
Egypt	11.5	22.4	35.7	71.5	24.2	49.1	1.5	2.2
Morocco	10.0	30.0	39.1	57.4	29.1	27.4	1.8	1.1
Tunisia	21.9	34.5	46.8	65.4	24.9	30.9	1.1	1.3
Turkey	26.7	31.9	56.2	84.4	29.5	52.5	1.3	2.4
Yemen	0.6	5.6	2.9	13.4	2.3	7.8	1.6	1.0
South Asia & Southeast Asia								
Bangladesh	1.7	9.7	13.5	65.9	11.9	56.2	2.2	2.9
Indonesia	18.6	39.4	47.5	80.6	28.8	41.2	1.4	1.9
Nepal	0.6	6.0	5.3	49.4	4.7	43.4	2.2	2.7
Philippines	23.5	28.5	56.8	69.4	33.2	41.0	1.5	1.7
Sri Lanka	15.1	39.0	51.9	74.8	36.7	35.8	1.8	1.5
Thailand	18.2	40.3	53.7	88.2	35.5	48.0	1.7	2.4
Latin America								
Brazil	45.5	44.4	79.8	90.7	34.3	46.2	1.6	2.5
Colombia	32.5	44.9	50.7	88.2	18.2	43.3	0.8	2.2
Dominican Rep.	17.9	34.9	52.8	87.8	34.9	52.8	1.6	2.6
Ecuador	22.5	29.8	50.4	55.5	27.9	25.7	1.3	1.1
Guatemala	9.6	13.9	41.5	55.4	31.9	41.5	1.9	2.0
Mexico	22.2	34.6	45.5	68.7	23.3	34.1	1.1	1.4
Paraguay	35.9	39.2	46.4	69.5	10.5	30.3	0.4	1.3
Peru	23.6	47.1	42.1	76.2	18.4	29.1	0.9	1.3

Notes: All data were adjusted through logistic regression analysis; the other independent variable is the actual-ideal gap. For years in which surveys were conducted, see Table 1.

cluding the actual-ideal gap. Its addition results in substantial increases in the composition component in Sub-Saharan Africa, more than doubling this component in Côte d'Ivoire and Senegal. Outside of Sub-Saharan Africa, including the actual-ideal gap leads to substantial increases in the composition component in Egypt and Yemen. With the exception of Egypt, the countries where the actual-ideal gap makes a relatively large contribution are countries near the onset of fertility transition; most are also African. As we noted earlier, Sub-Saharan African societies are characterized by a sharp decline in ideal family size in the early stages of transition. Table 4 suggests that failing to incorporate this aspect of the fertility transition—unmistakably a feature of African transitions, and perhaps of the early stages of transitions in other regions as well—seriously underestimates the causal impact of changing fertility preferences.

We also examine in more detail the finding that change in prevalence is due mainly to shifting rates of use within preference categories. Table 5 shows contraceptive prevalence separately for women who wanted more children and those who wanted no more, for each of the two surveys. Consistent with the predominance of the rates component in the decompositions in Table 3, in most countries contraceptive use increased substantially in both preference categories (Table 5).

A further question is whether the increase in use tends to be sharper in one category than in another (i.e., whether the differential in use between preference categories widens or narrows over time). The answer depends on the measure used for the comparison. If the measure is the absolute percentage-point increase in contraceptive prevalence, this is generally larger in the "want no more" category, resulting in a widening over time of the differential between the "want more" and "want no more" categories. (Exceptions are Côte d'Ivoire, Ecuador, Morocco, Sri Lanka and Zambia.)

However, percentage-point differences do not adjust for the floors and ceilings in the contraceptive prevalence rate, which cannot fall below 0% or exceed 100%. A common strategy for coping with this problem is to apply the logit transform.* When we do this, no dominant pattern emerges: The differential in use between the two preference categories widens in 15 countries, reflecting a more rapid increase in contraceptive use in the "want no more" subgroup, and narrows in 11 countries, reflecting a faster rate of increase in the "want more" subgroup (Table 5, last two columns).

Discussion

Our major finding is that the substantial increases in contraceptive prevalence in the period since the 1970s in Latin America, Asia and Africa were less the result of increased demand for family-size limitation and more the result of the satisfaction of existing demand. In concrete terms, this means that the primary reason for the growth in contraceptive prevalence from the 1970s to the late 1980s and 1990s was that couples who in the earlier period wished to avoid pregnancy but were not using contraceptives were far more likely to be doing so in the more recent period, presumably because of the weakening of obstacles to use (access or nonaccess) that previously prevented them from implementing their fertility preferences.

Another way to express these results is to say that the increase in contraception came about primarily through the satisfaction of unmet need for family planning. This conclusion emerges even though some features of our research design on balance probably bias the results in the opposite direction—namely, the criteria for the selection of countries (in particular the exclusion of countries with little or no increase in contraceptive prevalence) and the decomposition methodology's inability to take into account feedback effects on fertility preferences of the increased ability and willingness to regulate fertility.

The empirical results are at odds with theories that assign a dominant causal role to changes in fertility desires, and they certainly refute the more extreme view that increased implementation of existing preferences has contributed only trivially to the fertility declines of the past three decades.[23] Reconciling our results with those of Pritchett[24] is not straightforward, and is discussed at some length elsewhere.[25] In brief, Pritchett seems to have

*The logit transform is the natural logarithm of the odds of using contraceptives, $\ln \{U_{ps}/(1-U_{ps})\}$, where U is the proportion practicing contraception, p denotes the preference category ("want more" or "want no more"), and s denotes the survey (first or second). We applied this transform to the proportion practicing contraception in each preference category for each survey, and then calculated the difference between preference categories for each survey.

incorrectly interpreted his main empirical results by not recognizing that unwanted fertility will increase in the early and middle stages of fertility transition, unless the fertility rate among those at risk of unwanted births declines, as a result of increased reliance on contraception or induced abortion.

The pattern that Pritchett observed is therefore consistent with a historical process in which satisfaction of unmet need makes a major contribution to fertility decline. In addition, some of the discrepancy between our conclusions and those of Pritchett may be a function of the analysis of trends in contraception as against trends in fertility (to which changes in marriage patterns can make a major contribution) and of differences in the samples of countries analyzed. All of this is difficult to sort out.

Our findings were obtained by means of a relatively straightforward decomposition exercise; as such, they stand as a relatively unambiguous description of the process of contraceptive change in 26 Asian, African and Latin American countries in the years under examination. By demonstrating that considerable gains in contraceptive prevalence can be achieved simply by enabling couples to carry through on their desires to avoid pregnancy and limit family size, these results clearly are more compatible with a supply-side perspective than with a demand-side perspective.*

We must again stress that while the dominance of the rates component (i.e., more complete implementation of preferences) may be the consequence of couples' improved access to contraceptive supplies, it might also reflect the reduction of nonaccess costs of using contraceptives (cultural, social and psychic costs). Population policies and programs may have a great deal or little to do with such reductions. In particular, these costs may decline because of social diffusion processes that operate relatively independently of population policies and programs. On the other hand, social diffusion processes equally may serve to reinforce or amplify the effects of such policies and programs.[26]

We must be cautious about extending the conclusions of this research beyond the specific historical period and regions from which the data are drawn. Most fertility transitions, if observed over the entire period from pretransition to posttransition, are probably characterized by marked declines, on the order of two or more children, in the desired number of children. This generalization applies to the best-documented East Asian and Southeast Asia transitions (for example, in Taiwan and Thailand),[27] where the first fertility surveys suggested that rather modest family-size desires (typically around four children per couple) predominated at the onset of transition. Certainly, if fertility declines in Sub-Saharan Africa are to proceed as far as replacement-level fertility (or, more conservatively, to total fertility rates of three or fewer lifetime births per woman), large departures from pretransition desires for six or more births are likely to be required. Judging from evidence from two radically different settings (East Asia and Southeast Asia, and Sub-Saharan Africa), substantial declines in the number of children desired is a fundamental and necessary component of contemporary fertility declines.

This argument risks exaggerating both the causal centrality of a decline in the demand for children and the magnitude of such declines, however, especially if the measure is the number of children surviving to adulthood rather than the number of births.[28] A modest number of children surviving to adulthood may have been the desirable outcome in most societies for most of human history. If so, pretransition and posttransition societies may differ less in the prevalence of their aspirations for large families than has been imagined. Moreover, fertility transition may have less to do with a fundamental revaluation of children than with the replacement of child mortality as an unintentional mechanism for limiting family size with deliberate mechanisms—chief among them contraception, but also induced abortion.

Although some of the central tenets of the demand-side explanation can be reconciled with this argument, the main thrust of this argument is that fertility transition is a historical process in which the principal dynamic is not decline in the demand for children, but rather a shift toward increased reliance on contraception to achieve family-size desires—that is, fertility transition driven by increased implementation of fertility preferences through contraceptive practice. Our empirical results, themselves specific to low-income countries in the latter decades of the 20th century, are consistent with this more sweeping depiction of the forces underlying fertility transition.

Whether or not we can make inferences from the results presented here to larger questions about the nature of fertility transition, our findings indicate that significant increases in contraceptive prevalence can occur without accompanying changes in fertility desires. This is an important empirical verification of the premise that has justified the investment in family planning programs in many countries during the past three decades—namely, that unsatisfied demand for fertility regulation is widespread, and that satisfying this demand will lead to large increases in contraceptive prevalence.[29]

At the same time, changes in fertility preferences cannot be dismissed entirely, as these account for one-fifth, on average, of the observed increase in prevalence in the countries and over the period examined. This fraction is relatively larger in those societies with the highest fertility, particularly in Sub-Saharan Africa. Here, more complete implementation of existing fertility preferences will not in itself lead to high levels of contraceptive prevalence. Rather, in these societies, transformation of fertility preference structures toward much smaller family-size desires will be an additional and necessary component of fertility transition, and the design of population policies and family planning programs should be informed by this fact.

Appendix

In separate estimations for each survey (Surveys 1 and 2), we regressed contraceptive use on the two fertility-preference variables specified in the article, using the equations $U_1 = a_1 + b_1P_1 + e_1$ and $U_2 = a_2 + b_2P_2 + e_2$, where U is an indicator of contraceptive use (1=use, 0=nonuse), a is the regression intercept, b is the coefficient for the effects of P, P are the indicators of fertility preferences and e is the regression disturbance.

The two equations can be combined in an expression for change in mean levels of use (that is, contraceptive prevalence) between the two dates as $\underline{U}_2-\underline{U}_1 = (a_2-a_1)+(b_2\underline{P}_2-b_1\underline{P}_1)$, where the underlined terms denote a mean value.

For the purposes of decomposition, we rearranged and expanded this equation as $\underline{U}_2-\underline{U}_1 = (a_2-a_1)+\underline{P}(b_2-b_1)+\underline{b}(\underline{P}_2-\underline{P}_1)$, or $\Delta\underline{U} = \Delta a+\underline{P}\Delta b+\underline{b}\Delta P$, where Δ indicates a first difference.

*This conclusion does not change if the analysis is enlarged to encompass changes in spacing preferences. In the six countries with two DHS surveys, an indication of the desire to postpone the next pregnancy is available for both surveys. When the regression decomposition for these six countries was recalculated using this indicator, the contribution of changing fertility preferences was slightly larger in three countries, but only by three percentage points (Uganda) or by two percentage points (Senegal and Zambia). In the other three countries—Brazil, Guatemala and Tanzania—the contribution of changes in preferences actually declined (the largest decline being seven percentage points in Guatemala), because the fraction of women wishing to postpone the next pregnancy dropped between surveys. In short, it seems safe to assume that omitting direct measures of spacing preferences from our main analysis had little bearing on the results.

As a result, change is decomposed in terms of three components: change in the intercepts (Δa); change in the coefficients (or "effects") of preferences (Δb), weighted by the average composition (P); and change in the composition of women in terms of preferences (ΔP), weighted by the average coefficients (b). The first two components together comprise the total contribution of changes in coefficients. Any one of the components can be positive or negative in sign, but by definition they must sum to the total amount of change in U (that is, to 100%, if the decomposition is expressed in percentage terms).

Because contraceptive use is represented by a binary variable—use and nonuse—we estimated logistic regressions. The desire for an additional child was represented by a dummy variable, and the difference between actual and ideal number of children was a continuous variable. Sampling weights were applied.

We examined other specifications of the two preference variables, including nonlinear treatments of the actual-ideal gap and specifications in which the two variables were joined in one composite variable. The specification employed in this article performed best from the standpoint of explanatory power (the deliberate aim was to give fertility preferences maximum explanatory power) and the plausibility of the pattern of effects.

This methodology has a limitation that may be quite significant: The decomposition assumes that the contributions of changes in preferences and in the implementation of preferences are additive, thereby ruling out two plausible dynamics. The first is that as implementation of preferences in contraceptive use increases, this in itself may lead to a shift toward the desire to avoid pregnancy. (That is, a reduction in access or in nonaccess costs of contraception that has the effect of making fertility regulation more feasible may encourage couples to reassess their childbearing aspirations.[30]) This describes an effect of rates on composition; to the extent that this dynamic actually occurs, ignoring it biases downward the estimate of the rates component.

The second is that the fraction of the population falling into a certain preference category may have some bearing on the size of the regression coefficient for that category. For example, a preference category containing a small fraction of the population may be highly selected on other determinants of contraceptive use; hence, growth in the fraction of the population in that category may in itself encourage a decline in the value of the regression coefficient. This describes an effect of composition on rates; the direction of the bias induced by this dynamic is unclear.

It would be desirable to incorporate these two dynamics into the analysis, but that would require either further analysis of the decomposition results (at the country level) or preferably a more complex analytic approach, such as a multiperiod (and multicountry) analysis. Such an approach is beyond the scope of this article, and indeed may not be feasible with existing data.

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Resumen

Contexto: *Se ha discutido mucho sobre las causas del aumento significativo de la prevalencia de uso anticonceptivo en los países en desarrollo, que ha tenido lugar desde 1960 hasta el presente. Un importante aspecto que mayores aún no se ha resuelto es la relativa influencia de los cambios de las preferencias de fecundidad (mayores porcentajes de mujeres que no desean tener más hijos) con relación a una mejor implementación de dichas preferencias (aumentos en el uso de anticonceptivos entre las mujeres que no desean tener otro hijo).*

Métodos: *Mediante una descomposición regresiva, se analizaron los datos sobre la prevalencia del uso de anticonceptivos obtenidos de las Encuestas Mundiales de Fecundidad y las Encuestas Demográficas y de Salud correspondientes a 26 países de América Latina, Asia y Africa, desde la década de los años 70 a los años 90. La meta es determinar el porcentaje de la variación en la prevalencia que se puede atribuir a los cambios de las preferencias de fecundidad (referidos como "composición") y qué porcentaje se debe atribuir a los cambios de las tasas de uso de anticonceptivos dentro de las categorías de preferencias ("tasas").*

Resultados: *El aumento sustancial de la prevalencia del uso de anticonceptivos durante este período en América Latina, Asia y Africa, se debió menos a cambios en el interés de tener familias menos numerosas e incidió más la satisfacción de la demanda existente. El componente de "tasas" prevaleció en los 26 países, y representó más del 70% del aumento de la prevalencia de anticonceptivos en 24 países, y excedió el 80% en dos de cada tres países. Solamente en Ghana y Ecuador la componente de "composición" representó una tercera parte o más del aumento de la prevalencia, en tanto que en Colombia, Perú, Tailandia y Zambia, un cambio en las preferencias en materia de fecundidad explicó menos del 10% del incremento de la prevalencia de anticonceptivos. Esto significa que la mayor parte del aumento observado de la prevalencia de uso de anticonceptivos hubiera ocurrido aun si no se hubieran registrado cambios en las preferencias de fecundidad de las parejas. En el Africa Subsahariana, los cambios de las preferencias de fecundidad explican un mayor porcentaje del aumento de la prevalencia de anticonceptivos que en otras regiones.*

Conclusiones: *Los resultados son congruentes con la premisa que ha justificado la inversión en los programas de planificación familiar que se realizó en países en desarrollo durante las últimas tres décadas. Además, debilitan los argumentos que desestiman el potencial de lograr aumentar la prevalencia atendiendo la demanda que actualmente existe para regular la fecundidad. Las razones probables para una mayor implementación de las preferencias en algunos países incluyen un mejor acceso a los anticonceptivos o la reducción de sus costos no directamente relacionados con el acceso a los anticonceptivos (tales como preocupaciones de tipo cultural, social y de salud).*

Résumé

Contexte: *Les causes de l'augmentation substantielle de la prévalence contraceptive dans le monde en voie de développement depuis 1960 ont fait l'objet d'intenses débats. Une question importante reste à résoudre, concernant la contribution relative de l'évolution des préférences de fécondité (hausse de la proportion des femmes qui ne désirent plus avoir d'enfants, etc.) par rapport à la concrétisation améliorée des préférences établies (pratique contraceptive accrue parmi les femmes qui ne désirent plus d'enfants, etc.)*

Méthodes: *Les données de prévalence contraceptive des Enquêtes mondiales sur la fécondité et des Enquêtes démographiques et de santé de 26 pays d'Amérique latine, d'Asie et d'Afrique, des années 1970 aux années 1990, sont analysées par décomposition de régression. Le but de cette analyse est de déterminer la mesure du changement de la prévalence imputable à l'évolution des préférences de fécondité (la «composition») et celle attribuable aux changements des taux de pratique contraceptive dans les catégories de préférence (les «taux»).*

Résultats: *L'augmentation substantielle de la prévalence contraceptive, depuis les années 1970, en Amérique latine, en Asie et en Afrique, s'avère moins le résultat d'une demande accrue de familles moins nombreuses et davantage celui de la satisfaction de la demande existante. L'element «taux» domine dans les 26 pays, représentant plus de 70% de la hausse de la prévalence contraceptive dans 24 pays et plus de 80% dans deux pays sur trois. L'élément «composition» ne représente plus du tiers de l'augmentation de la prévalence qu'au Ghana et en Equateur, tandis qu'en Colombie, au Pérou, en Thaïlande et en Zambie, l'évolution des préférences justifie moins de 10% de la hausse. Il en ressort que l'augmentation observée de la prévalence contraceptive serait intervenue, pour la plupart, même en l'absence de changement au niveau des préférences de fécondité des couples. En Afrique subsaharienne, l'évolution des préférences de fécondité représente une plus grande partie de l'augmentation de la prévalence contraceptive que dans les autres régions.*

Conclusions: *Les observations sont conformes à l'hypothèse à la base de l'investissement dans les programmes de planning familial de nombreux pays durant les trois dernières décennies. Elles réfutent en outre les arguments rejetant le potentiel d'augmentation substantielle de la prévalence à travers la satisfaction de la demande existante de limitation des naissances. Les raisons possibles de la concrétisation accrue des préférences incluent l'accès amélioré aux prestations contraceptives et la réduction des coûts non directement liés à l'accès à la contraception (considérations culturelles, sociales et de santé, etc.)*