

# Contraceptive Use and Fertility in Costa Rica, 1986

**Between 1976 and 1986, contraceptive prevalence among married couples in Costa Rica remained relatively constant; however, the method mix changed over that period, with pill use falling and reliance on the condom rising somewhat.**

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## Summary

Contraceptive prevalence in Costa Rica is higher than almost anywhere else in Latin America, with 70 percent of currently married women using a contraceptive method. Differentials in contraceptive use by educational level and between urban and rural areas are actually quite small compared with those in other Latin American countries. While levels of contraceptive use among married women 20–44 years of age remained relatively stable between 1976 and 1986, total fertility rates increased slightly over that period, perhaps because of changing fertility intentions or changing patterns of contraceptive use. For example, Costa Rican women have increased their reliance on barrier methods and decreased use of the pill. The majority of women who were not practicing contraception were either pregnant or breastfeeding an infant; only about one in five nonusers could be considered candidates for contraceptive use. One-fifth of all 15–19-year-old women and two-fifths of all 20–24-year-olds had had premarital intercourse. Most young adults who had had premarital intercourse did not practice contraception at first intercourse.

## Introduction

Costa Rica is unique among Central American nations in its level of social development: The literacy rate is high (90 percent of adults can read), life expectancy is 74 years at birth and the infant mortality rate is low (19 infant deaths per 1,000 live births).<sup>1</sup> About half of all Costa Ricans live in rural areas, and the nation's economy is largely agricultural, predominantly based on export crops such as coffee and ba-

nanas. The nation's advanced level of social development and its strong health care system have attracted research interest in Costa Rica's demographic and health status.

Between 1976 and 1986, Costa Rica conducted three national surveys of fertility and contraceptive use. In 1976, the country's Statistics and Census Bureau participated in the World Fertility Survey.<sup>2</sup> In 1981, the Costa Rican Demographic Association conducted a contraceptive prevalence survey, with technical assistance from Westinghouse Health Systems.<sup>3</sup> Finally, in 1986, the Costa Rican Demographic Association conducted a national Fertility and Health Survey, with technical assistance from the U.S. Centers for Disease Control.<sup>4</sup> The last was a self-weighted area-probability survey that utilized the 1984 national household census as a sampling frame. Census sectors were chosen with probability of selection proportional to the size of the sector's population, and clusters of 15–20 households were selected in each sector. Sectors in sparsely populated areas (which represented only two percent of all households) were excluded. All women 15–49 years of age in each selected household were enumerated, and every other woman was interviewed. Of eligible respondents, 95 percent completed interviews.

In this article, we summarize the changes in fertility and contraceptive use in Costa Rica that have taken place over the decade spanned by these three surveys. Although the three were generally comparable in design, the 1976 survey covered only women 20–49 years of age, whereas the two latter surveys included those 15–19 as

**Table 1. Total fertility rate (TFR) and total marital fertility rate (TMFR)\* among women aged 15–44 (1986) and women aged 20–44 (1976 and 1986), and percentage change among women 20–44 between 1976 and 1986, all by residence, Costa Rica**

Rate and residence	Year			% change
	1976 (20–44)	1986 (15–44)	1986 (20–44)	
<b>Total</b>				
TFR	3.15	3.64	3.23	+3
TMFR	4.17	4.25	4.25	+2
<b>Metro. San José</b>				
TFR	2.61	3.12	2.81	+8
TMFR	3.88	4.06	4.06	+5
<b>Other urban</b>				
TFR	3.29	2.94	2.68	-19
TMFR	4.62	3.57	3.57	-23
<b>Rural</b>				
TFR	3.47	4.40	3.74	+8
TMFR	4.16	4.51	4.51	+8

\*Cumulated by age.

well. This analysis focuses on the results of interviews with 3,277 women aged 15–44 in the 1986 survey. However, when comparisons with the 1976 survey are made, they are restricted to data for women aged 20–44.

## Fertility and Breastfeeding

Costa Rica has recently undergone a demographic transition to low levels of mortality and moderately low levels of fertility. The total fertility rate (TFR) declined from 6.5 births per woman before 1970<sup>5</sup> to 3.6 per woman in 1986. However, when data from the 1976 and 1986 surveys are compared (Table 1), we can see that overall,

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**Table 2. Percentage distribution of currently married\* women aged 15-44, by current contraceptive use, according to selected characteristics, Costa Rica, 1986**

Characteristic	Currently using										Not currently using	Total	N
	Total	Pill	Fem. ster.	Male ster.	Condom	Rhythm	IUD	Withdrawal	Injectable	Other			
<b>Total</b>	<b>69.5</b>	<b>20.7</b>	<b>13.9</b>	<b>0.5</b>	<b>13.4</b>	<b>8.1</b>	<b>8.0</b>	<b>3.1</b>	<b>1.0</b>	<b>0.8</b>	<b>30.5</b>	<b>100.0</b>	<b>1,914</b>
<b>Age</b>													
15-19	51.2	28.5	0.0	0.0	8.9	8.1	2.4	2.4	0.0	0.8	48.8	100.0	123
20-24	59.5	29.8	1.7	0.0	13.5	5.0	5.5	3.9	0.0	0.3	40.5	100.0	363
25-29	65.1	23.9	4.2	0.0	13.5	7.2	12.1	2.3	0.8	1.1	34.9	100.0	473
30-34	73.8	19.7	17.2	0.9	12.8	9.7	8.4	3.7	0.9	0.4	26.2	100.0	431
35-39	83.7	12.4	28.1	1.6	16.7	11.4	7.8	2.9	1.6	1.0	16.3	100.0	306
40-44	77.5	8.3	36.7	0.5	11.9	7.3	6.0	2.8	2.8	1.4	22.5	100.0	218
<b>Education</b>													
<Primary	65.7	18.7	19.5	0.4	11.8	4.4	4.8	5.0	0.8	0.4	34.3	100.0	502
Primary complete	69.2	24.4	12.9	0.3	14.2	7.9	5.5	3.2	0.6	0.2	30.8	100.0	634
Secondary incomplete	71.6	24.2	7.7	0.3	12.9	8.5	11.8	3.0	1.4	1.7	28.4	100.0	363
≥Secondary	72.3	14.3	13.8	1.2	14.3	12.6	12.4	0.7	1.5	1.4	27.7	100.0	412
<b>Residence</b>													
Metro. San José	74.2	18.2	12.8	1.2	15.8	8.9	12.3	2.6	0.5	1.8	25.8	100.0	570
Other urban	72.9	21.1	15.8	0.0	12.0	9.9	9.3	2.5	1.6	0.7	27.1	100.0	443
Rural	64.8	22.1	13.7	0.3	12.5	6.7	4.7	3.7	1.0	0.2	35.2	100.0	901
<b>No. of living children</b>													
0	28.0	12.0	0.7	0.0	5.3	6.7	2.7	0.0	0.0	0.7	72.0	100.0	150
1	63.9	28.6	1.1	0.6	11.9	10.0	7.2	3.6	0.0	0.8	36.1	100.0	360
2	73.8	23.8	5.2	0.6	16.5	9.4	12.7	3.0	1.7	0.9	26.2	100.0	534
3	78.8	17.1	23.6	0.9	14.5	8.8	9.0	3.7	0.2	0.9	21.2	100.0	433
4-5	79.0	17.9	32.4	0.3	13.1	4.5	4.5	3.1	2.4	0.6	21.0	100.0	290
≥6	63.9	15.6	25.2	0.0	10.9	5.4	2.0	3.4	1.4	0.0	36.1	100.0	147

\*Women who are in a formal marriage or a consensual union.

Note: In this and subsequent tables, percentages may not add to subtotals because of rounding.

both the TFR and the total marital fertility rate (TMFR) increased slightly over that 10-year period. These increases were restricted to metropolitan San José and to the rural areas of Costa Rica, where fertility rose by 5-8 percent among women 20-44. It was only in urban areas outside of San José that fertility declined substantially: The TFR in those areas decreased from 3.3 to 2.7 births per woman between 1976 and 1986, leaving the estimated level of fertility little different from that seen in metropolitan San José. In addition, total marital fertility in the other urban areas fell substantially below that seen in San José.

Although the TFR in 1986 was lower in San José than in rural areas (3.1 vs. 4.4 births per woman, for those 15-44), the difference between urban and rural areas is actually modest by Central American standards.<sup>6</sup> Although the slight increases in fertility observed between 1976 and 1986 are within the 1986 survey's sampling error, vital statistics data have also shown that Costa Rica's fertility rate appears to have increased in the mid-1980s; however, available figures indicate that a subsequent decline took place in 1987.<sup>7</sup>

Costa Rican health officials have recently intensified their efforts to persuade mothers to breastfeed their infants, and these efforts appear to have paid off. In both urban and rural areas, 90 percent of women who had had a live birth in the two years prior to the survey breastfed their last child (not shown). The mean duration of breastfeeding increased from 6.7 months in 1976 to 8.2 months in 1986.\* Breastfeeding duration increased in all educational groups and in all regions of the country.<sup>8</sup> Women in rural areas breastfed slightly longer, on average, than did women in San José (8.9 months vs. 7.4 months).

### Contraceptive Use

The overall level of contraceptive use in Costa Rica was quite high in 1986, with 70 percent of currently married† women 15-44 years of age using a method (Table 2). Marital status was an important determinant of contraceptive use, as just 36 percent of separated, widowed or divorced women and only five percent of never-married women were using a method of contraception (not shown).

Contraceptive use increased with age,

from 51 percent among married women 15-19 years of age to 84 percent among married 35-39-year-olds. Among women who were less than 35, oral contraceptives were the most common method; the level of pill use peaked at 30 percent among 20-24-year-olds. The condom was the second leading method among women under 30. Female sterilization was the second most commonly used method among 30-34-year-olds, and after age 34, it became the most prevalent method. Over one-third of married women 40-44 had been sterilized, three times the proportion protected by condoms, the next most widely used method in this age-group.

Contraceptive use was positively associated with education, but the difference in prevalence between the least educated and the most educated groups was actually very small—only about seven percentage points. Educational differences were relatively large among users of several methods: For example, the most educated

\*Estimated by the incidence-prevalence method, using births in the 24 months before the survey.

†Includes women in consensual unions.

women were far more likely than the least educated to use the IUD (12 percent vs. five percent) and to rely on rhythm (13 percent vs. four percent).

Use in rural areas was about 8–9 percentage points lower than in metropolitan San José and other urban areas of Costa Rica. However, even in rural areas, women tend to rely mostly on the more-effective, modern methods, with little observable difference in overall prevalence of such methods between rural and urban women. For example, 41 percent of married women in rural areas relied on sterilization, the IUD or the pill, compared with 45 percent of married women in San José.

Among parous women, pill use was substantially higher among those with one child (29 percent) than among those with three or more children (16–18 percent). On the other hand, reliance on sterilization increased with parity, from five percent among those with two children to 32 percent among those with 4–5.

Studies in Panama and Guatemala have suggested that use of maternal and child health (MCH) services is correlated with use of contraceptives.<sup>9</sup> In Costa Rica, women who received prenatal care or sought out well-baby care for their most recent child were more likely to be using contraceptives than were women who had not made use of these MCH services (Table 3). The differences are quite substantial: Seventy-five percent of women who received both prenatal and well-baby care were practicing contraception, compared with only 43 percent of women who received neither service and 51–57 percent of those who received one. (Just two percent of the mothers had used neither of the services, and these women tended to be older and poorer.<sup>10</sup>)

A history of one or more abortions (either spontaneous or induced) was reported by 23 percent of currently married women, but this figure is probably an underestimate.<sup>11</sup> Since induced abortion is illegal in Costa Rica, the survey respondents were not asked whether a reported abortion was spontaneous or induced.

Trends in contraceptive use can be analyzed for the decade 1976–1986 if women 15–19 are excluded from the comparison. As can be seen in Table 4, contraceptive use among currently married women 20–44 years of age remained relatively stable. The most important change over the decade was the change in method mix. Oral contraceptive prevalence declined from 25 percent of married women in 1976 to 20 percent in 1986. Reliance on sterilization (both female and male) increased from

**Table 3. Among currently married women aged 15–44 who had a birth within five years of the survey, percentage who were using a method of contraception, by receipt of maternal and child health services at time of most recent delivery, Costa Rica, 1986**

MCH service	%	N
<b>Total</b>	<b>70.6</b>	<b>1,219</b>
<b>Prenatal care*</b>		
Yes	72.4	1,101
No	53.9	117
<b>Well-baby care†</b>		
Yes	73.3	1,018
No	54.0	150
<b>Combination of services‡</b>		
None	42.9	28
Prenatal only	56.6	122
Well-baby only	50.9	59
Well-baby and prenatal	74.7	959

\*Excludes one woman whose prenatal care status was unknown.

†Excludes 51 women whose most recent pregnancy ended in abortion or still birth.

16 percent in 1976 to 18 percent in 1981, but subsequently declined to 15 percent in 1986. (This decline in the use of sterilization may have been related to a legal interpretation that imposed restricted medical indications for sterilization during the three years prior to the 1986 survey.)

The proportion of currently married women relying on the condom increased by almost five points, from nine percent to 14 percent. Use of the IUD and rhythm also increased (each from six percent to eight percent), but use of injectable contraceptives declined from two percent to one percent. This decrease was undoubtedly related to the Costa Rican government's decision in 1983 to remove contraception

as an approved indication for use of Depo-Provera, the most popular injectable contraceptive in Costa Rica.

When methods are classified as more effective (sterilization, hormonal methods and the IUD) and less effective (the condom, rhythm and withdrawal), the prevalence of the more-effective methods declined slightly between 1976 and 1986, from 48 percent to 45 percent. This decline was most pronounced in rural areas, where use of the more-effective methods fell from 50 percent in 1976 to 43 percent in 1986. Use of the less-effective methods, on the other hand, rose from 17 percent to 23 percent in rural areas, largely because of increased reliance on condoms and rhythm.

The shift to less-effective methods in Costa Rica is in part a result of the restrictions placed on access to sterilization and on the use of injectable contraceptives and to the lack of clear policies on contraceptive supplies for rural clinics. In addition, an age-related shift in contraceptive use occurred between 1976 and 1986: Contraceptive prevalence decreased by two percentage points among 20–34-year-old women in union, but increased by eight percentage points among 35–44-year-olds (not shown). Because older women in Costa Rica are more likely than younger women to rely on rhythm and less likely to use oral contraceptives, this shift in age-specific contraceptive use explains, in part, the change in method mix. Finally, recent press reports on adverse effects of oral contraceptives have contributed to fear of the pill in Costa Rica.<sup>12</sup>

In Table 5, we compare data from the 1986 Costa Rica survey with results from recent surveys in Mexico and other coun-

**Table 4. Percentage distribution of currently married women aged 20–44, by current contraceptive use, according to residence, Costa Rica, 1976, 1981 and 1986**

Method	Total			Residence								
				Metro. San José			Other urban			Rural		
	1976 (N=)	1981 (N=)	1986 (N=)	1976 (N=)	1981 (N=)	1986 (N=)	1976 (N=)	1981 (N=)	1986 (N=)	1976 (N=)	1981 (N=)	1986 (N=)
	2,377	2,176	1,791	721	662	546	465	454	416	1,191	2,176	829
<b>Users</b>	70.1	67.6	70.8	75.7	70.8	74.8	70.0	69.0	73.8	67.1	64.5	66.2
Pill	25.0	22.2	20.2	23.6	19.8	17.9	25.2	24.2	19.7	25.9	22.8	21.9
Fem. ster.	14.9	17.5	14.8	14.2	18.3	13.4	14.0	19.6	16.8	15.8	16.0	14.8
Male ster.	1.0	0.5	0.6	1.9	0.1	1.3	0.4	0.2	—	0.6	0.8	0.4
IUD	5.5	6.2	8.4	7.1	8.3	12.6	3.4	5.9	9.7	5.3	4.9	4.8
Injection	1.7	2.1	1.1	0.7	0.9	0.5	1.3	3.5	1.7	2.5	2.2	1.1
Condom	9.1	8.5	13.7	13.7	10.6	15.9	11.6	7.7	12.0	5.3	7.5	13.0
Rhythm	5.6	6.5	8.1	6.8	7.1	8.8	6.7	5.5	10.6	4.5	6.6	6.4
Withdrawal	4.8	2.7	3.1	4.2	2.9	2.7	4.1	1.8	2.6	5.5	2.9	3.6
Other	2.5	1.4	0.8	3.5	2.8	1.7	3.3	0.6	0.7	1.7	0.8	0.2
<b>Nonusers</b>	<b>29.9</b>	<b>32.4</b>	<b>29.2</b>	<b>24.3</b>	<b>29.2</b>	<b>25.2</b>	<b>30.0</b>	<b>31.0</b>	<b>26.2</b>	<b>32.9</b>	<b>35.5</b>	<b>33.8</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table 5. Percentage distribution of currently married women aged 15–44, by current contraceptive use, nine countries or areas of Central America and the Caribbean**

Current use	Puerto Rico, 1982 (N=1,557)	Costa Rica, 1986 (N=1,914)	Panama, 1984 (N=5,222)	Jamaica, 1983* (N=1,544)	Dom. Rep., 1986* (N=4,137)	Mexico, 1982* (N=6,059)	El Salvador, 1985* (N=3,104)	Honduras, 1984 (N=2,639)	Guatemala, 1983 (N=2,709)
<b>Currently using</b>	<b>70.4</b>	<b>69.5</b>	<b>58.2</b>	<b>51.4</b>	<b>50.0</b>	<b>47.7</b>	<b>47.3</b>	<b>34.9</b>	<b>25.0</b>
Pill	9.3	20.7	11.8	19.3	9.0	14.2	6.6	12.7	4.7
Sterilization†	44.1	14.4	32.8	10.9	33.0	13.7	32.5	12.3	11.1
Condom	4.6	13.4	1.6	7.6	1.0	0.9	1.2	0.9	1.2
Rhythm	5.5	8.1	2.3	1.1	1.0	3.8	1.9	2.9	3.4
IUD	4.1	8.0	6.0	2.2	3.0	6.6	3.3	3.8	2.6
Other	2.8	4.9	3.7	10.3	3.0	8.5	1.8	2.4	2.0
<b>Not using</b>	<b>29.6</b>	<b>30.5</b>	<b>41.8</b>	<b>48.6</b>	<b>50.0</b>	<b>52.3</b>	<b>52.7</b>	<b>65.1</b>	<b>75.0</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\*Women 15–49 years of age. †Male and female.

tries in Central America and the Caribbean.<sup>13</sup> As can be seen in the table, Costa Rica, Puerto Rico and Panama have the highest contraceptive prevalence in the

**Table 6. Percentage distribution of currently married women aged 15–44 not currently using a method of contraception, by reason for not doing so, according to level of education, Costa Rica, 1986**

Reason	Education				
	Total (N=584)	<Primary (N=172)	Primary complete (N=195)	Secondary incomplete (N=103)	≥Secondary (N=114)
<b>Reasons related to sexual activity or reproduction</b>	<b>77.6</b>	<b>67.4</b>	<b>76.3</b>	<b>85.5</b>	<b>87.7</b>
Currently pregnant	37.5	26.2	38.5	40.8	50.0
Breast-feeding	18.5	20.4	20.0	21.4	10.5
Infertile/subfecund	10.1	11.6	8.6	7.8	12.2
Desire for pregnancy	8.2	5.2	7.2	13.6	9.7
Sexually inactive	2.1	1.7	1.5	1.9	3.5
Menopausal	1.2	2.3	0.5	0.0	1.8
<b>Other reasons</b>	<b>22.5</b>	<b>32.6</b>	<b>23.6</b>	<b>14.5</b>	<b>12.3</b>
Dislike of birth control	3.4	5.8	4.6	1.0	0.0
Fear of side effects	3.3	4.7	3.6	1.9	1.8
Spousal opposition	0.9	2.9	0.0	0.0	0.0
Religious reasons	0.9	1.7	1.0	0.0	0.0
Medical reasons	0.3	0.0	0.0	1.9	0.0
Other	6.0	6.4	6.2	3.9	7.0
Unknown	7.7	11.1	8.2	5.8	3.5
Total	100.0	100.0	100.0	100.0	100.0

region. In Puerto Rico, Panama, the Dominican Republic, El Salvador and Guatemala, the most commonly used method is sterilization. In Honduras and Mexico, similar proportions of women rely on sterilization and the pill, while only in Costa Rica and Jamaica are oral contraceptives the most commonly used method. Condom use is far more common in Costa Rica than in any other country in the region.

**Reasons for Nonuse**

Women who were not using contraceptives were asked an open-ended question on their reasons for not doing so. Seventy-eight percent of currently married nonusers gave reasons related to pregnancy, subfecundity or sexual inactivity (Table 6). The most frequently mentioned reason for not practicing contraception was that the respondent was pregnant at the time of interview (38 percent). (That pregnancy would be the chief reason for nonuse is an expected consequence of the overall high prevalence of contraceptive use.) Breastfeeding was the second most common reason (cited by 19 percent). Ten percent were infertile or subfecund, eight percent were trying to become pregnant, two percent were not sexually active and one percent had experienced menopause.

Thus, at the time of the survey, only 22 percent of nonusers could be considered immediate candidates for adopting contraception. Of these women, 15 percent gave a variety of reasons for nonuse: Three percent each said they disliked contraceptives or were afraid of side effects, one percent each cited spousal opposition or religious objections and six percent gave other reasons. In addition, the reasons of almost eight percent were unknown. However, many of the women who were breastfeeding may well also be candidates for contra-

ceptive use in the near future, because the duration of breastfeeding is relatively short in Costa Rica.

Pregnancy-related or fecundity-related reasons for nonuse of contraceptives predominated among women in all educational groups: Even among those with less than a primary education, two-thirds gave reasons related to pregnancy subfecundity or infertility. The percentage of respondents citing a fear of side effects or giving the vague response that they “do not like” contraceptives decreased with increasing educational status; the same was true for spousal or religious opposition. Urban and rural residents differed little in their reasons for not using contraceptives (not shown).

**Planning Status and Need for Services**

All women who had been pregnant during the five years preceding the interview were asked two questions about the planning status of their most recent pregnancy. The first was, “Recall the period when you became pregnant for the last time. Did you want to become pregnant at that moment?” If the answer to this question was negative, the woman was asked, “Did you want to have no more children, or did you want to wait a while?” Based on the responses to these questions, we were able to classify 13 percent of pregnancies as unwanted, 26 percent as mistimed and 60 percent as planned (Table 7).

Pregnancies were more likely to have been unwanted if the woman was older, less educated or of relatively high parity. For example, 21–22 percent of the most recent pregnancies among 35–44-year-old women were unwanted, compared with six percent or fewer among those under age 25. Similarly, 16 percent of the latest pregnancies among women with less than a complete primary education were unwanted, compared with just nine percent among those who had completed at least a secondary education. Finally, the proportion of pregnancies that were unwanted rose from seven percent among those who had two children to 32–36 percent among those with five or more children. There was little difference by current employment in the planning status of a woman’s most recent pregnancy.

The definitions of mistimed pregnancies differed among the three surveys, so the prevalence of such pregnancies cannot be compared across time. However, in both 1981 and 1986, 12 percent of pregnancies were reported as having been unwanted.

About half (51 percent) of all currently married women were either sterilized or

**Table 7. Percentage distribution of currently married, ever-pregnant women aged 15–44, by planning status of their most recent pregnancy since January 1981, according to selected characteristics, Costa Rica, 1986**

Characteristic	Status					N
	Planned	Mistimed	Unwanted	Unknown	Total	
<b>All women</b>	<b>59.7</b>	<b>25.9</b>	<b>12.5</b>	<b>2.0</b>	<b>100.0</b>	<b>1,269</b>
<b>Residence</b>						
Metro. San José	56.9	27.0	14.6	1.6	100.0	371
Other urban	64.7	24.7	8.1	2.5	100.0	283
Rural	59.0	25.9	13.2	2.0	100.0	615
<b>Age</b>						
15–19	67.4	28.3	3.3	1.1	100.0	92
20–24	57.5	35.0	6.1	1.4	100.0	294
25–29	57.7	28.9	11.5	1.8	100.0	381
30–34	61.6	20.3	16.4	1.8	100.0	281
35–39	58.3	17.2	20.9	3.7	100.0	163
40–44	65.5	8.6	22.4	3.4	100.0	58
<b>Education*</b>						
<Primary	59.3	23.2	15.9	1.7	100.0	302
Primary complete	54.2	30.9	12.4	2.5	100.0	437
Secondary incomplete	62.5	23.5	12.1	1.9	100.0	264
≥Secondary	65.8	23.6	9.1	1.5	100.0	263
<b>Parity</b>						
0–1	78.6	17.9	1.3	2.3	100.0	308
2	60.9	31.5	6.9	0.8	100.0	394
3	53.2	28.2	16.9	1.7	100.0	301
4	45.7	29.1	22.0	3.1	100.0	127
5	43.5	19.4	32.3	4.8	100.0	62
≥6	39.0	20.8	36.4	3.9	100.0	77
<b>Work status</b>						
Not employed	59.3	26.6	11.9	2.1	100.0	1,030
Employed	61.1	23.0	14.6	1.3	100.0	239

\*Excluding three women whose level of education was unknown.

stated that they wanted no more children. We classified a woman as being in need of family planning services if she wanted no more children or wanted to postpone her next pregnancy at least one year, was not currently pregnant and was not using a contraceptive method for reasons unrelated to pregnancy, subfecundity or sexual inactivity. Only 10 percent of currently married women and seven percent of all women 15–44 years of age met this definition. However, the need is greater than suggested here because many currently pregnant women will shortly require family planning services.

### Sexual Activity Among Young Adults

Teenagers and young adults have been shown to be a group with special needs for family planning services in Latin America.<sup>14</sup> Most young Costa Rican women were unmarried—83 percent of 15–19-year-olds and 46 percent of 20–24-year-olds. And as can be seen from the survey results, many young Costa Ricans had had premarital sexual intercourse—18 percent

of all 15–19-year-old women and 41 percent of all 20–24-year-old women. Among never-married women, these proportions were seven and 28 percent, respectively. The mean age at first premarital sexual intercourse was 16.6 years.

Furthermore, most of the young women who had had premarital sexual experience did not practice contraception at first intercourse: Only 15 percent of such women 15–24 years of age had used a contraceptive method at first coitus. As a consequence of both premarital sexual experience and lack of contraceptive practice, many first births to married women were premaritally conceived—28 percent among 15–24-year-olds, for example.

Sexual activity among unmarried young adults is infrequent and sporadic, but contraceptive use among such women remains low even after first intercourse. Twenty-six percent of sexually experienced, unmarried young adults were sexually active during the month before interview; of these, only 55 percent reported having practiced contraception. Thus, al-

though contraceptive use increases considerably after first premarital intercourse, half of sexually active, unmarried young women do not use a method.

### Discussion

Costa Rica's recent increase in fertility may appear paradoxical in view of the level of contraceptive use, but several factors may explain it. First, the method mix has changed in favor of less-effective contraceptive methods; use of oral contraceptives and sterilization has declined while use of rhythm and condoms has increased.

Second, although the overall prevalence of contraceptive use has changed little over the past 10 years, the level of method use decreased by two percentage points among 20–34-year-old women in union but increased by eight percentage points among those 35–44 years of age. Thus, younger women, who are intrinsically more fecund, have actually reduced their use of contraceptives.

Costa Rican demographers have hypothesized that young couples may have deferred childbearing during the severe economic recession of the early 1980s, and that the recent increase in fertility reflects the fact that couples are now making up for births postponed because of economic reasons, rather than representing any change in pregnancy intentions.<sup>15</sup> In fact, preliminary data from vital statistics suggest that the TFR for women 15–44 declined to 3.3 births per woman in 1987.<sup>16</sup> This change is consistent with the hypothesis that the increase in fertility in the mid-1980s represented a transient phenomenon related to delayed childbearing during the economic recession.

Although contraceptive prevalence is higher in Costa Rica than practically anywhere else in Latin America, some problems remain in the utilization of family planning services. One out of every eight marital births is still unwanted, and unprotected sexual intercourse among unmarried young adults is an important challenge for health promotion in the future.

However, Costa Rican educational and urban-rural differentials in contraceptive use are actually quite small in comparison with those seen in other Latin American countries.<sup>17</sup> The high levels of contraceptive use in rural areas and among women with less than a primary education reflect a more homogeneous society than is found in many neighboring countries,<sup>18</sup> but these high levels are also a consequence of Costa Rica's considerable investment of resources in the health and education sectors in recent decades.

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**Resumen**

Los niveles de prevalencia anticonceptiva son más altos en Costa Rica que en casi cualquier país de América Latina: el 70 por ciento de las mujeres casadas utilizan algún método. Comparado con otros países latinoamericanos, son verdaderamente muy reducidos los diferenciales en uso por nivel educacional y por áreas urbanas y rurales. Mientras que los niveles de uso anticonceptivo entre las casadas de 20 a 44 años permanecieron relativamente estables entre 1976 y 1986, la tasa global de fecundidad (TGF) subió ligeramente durante ese período, probablemente debido al mayor empleo de métodos de barrera y al escaso uso de la píldora. Las mujeres que no practican la anticoncepción son, en la mayoría, las embarazadas y las que están amamantando, de modo que sólo puede considerarse como candidatas para uso anticonceptivo una de cada cinco de las no usuarias. El 20

por ciento de las mujeres de 15 a 19 años, y el 40 por ciento de las de 20 a 24, habían tenido relaciones sexuales premaritales, aunque los porcentajes eran reducidos entre las mujeres que nunca han contraído matrimonio. La mayoría de las que tuvieron relaciones premaritales no utilizaron ningún método anticonceptivo en el momento de la primera relación.

**Résumé**

Avec 70 pour cent des femmes actuellement mariées utilisant une méthode de contraception, Costa Rica détient un taux d'usage de contraceptifs supérieur à celui de presque tous les autres pays d'Amérique Latine. Comparés au reste de l'Amérique Latine, le degré d'instruction et les différences entre les zones rurales et urbaines ne jouent qu'un rôle mineur sur la prévalence contraceptive.

Bien que cette prévalence contraceptive pour les femmes âgées de 20 à 44 ans soit restée relativement stable entre 1976 et 1986, l'indice synthétique de fécondité a augmenté légèrement pendant cette période, fait qui est peut-être attribuable à une baisse de l'utilisation de la pilule en faveur d'une méthode à adjuvant.

La majorité des femmes qui n'utilisaient pas la contraception étaient soit enceintes soit en train d'allaiter un enfant; seulement une non-usagère sur cinq pourrait être considérée comme candidate à la contraception. Un cinquième de toutes les femmes âgées de 15 à 19 ans avaient eu des relations sexuelles avant le mariage, bien que ces proportions soient plus faibles parmi les femmes qui ne s'étaient jamais mariées. La plupart de celles qui avaient eu des relations sexuelles pré-nuptiales n'avaient pas employé de méthode contraceptive lors du premier rapport sexuel.

**Letters from Readers**

(Continued from page 83)

dex rather than to mix all the information together (the correct with the incorrect) and work with a data base of varying reliability, as this can only lead to dubious estimates, both within the country and in terms of comparability between countries.

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**Fertility and Women's Education**

I was greatly interested to read the article "The Relationship Between Women's Education and Fertility: Selected Findings from the World Fertility Surveys," by Mary Beth Weinberger [13:35, 1987]. However, in Al-

geria the relationship between female education and fertility has been somewhat more complicated than the article suggests, at least for the past five years or so.

If we take the example of a married couple in which both the husband and wife have a university education, we find their ideal and actual family size to be no more than three children, unless no son is produced (in our society, as the reader probably knows, it is very important for families to have at least one son). By comparison, in the case where only the wife has some schooling (a much larger group overall, forming part of Algeria's new middle class), even if she wants 2-3 children, the couple will probably have an average of seven, at the husband's insistence.

Furthermore, many young girls with several years of schooling are married at a very early age, either because their parents fear the loss of their daughter's virginity

or because the young woman is already premaritally pregnant. A great many young Algerian women finish their university education after they are married.

However, I remain optimistic about the future for two reasons. The first is that family planning services are far better organized now than they were in the past. The second is that education is now free and compulsory for children of both sexes. In addition, the number of university students has greatly increased, and these students tend to marry among themselves.

Finally, there are few remaining differences in attitude or behavior between urban and rural inhabitants, thanks to the enormous effort the Algerian government has made in providing health services, housing, and communication and information services throughout the rural areas.

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