

Examining the Increasing Prevalence of Traditional Contraceptive Methods in Honduras

By David Hubacher, Margarita Suazo, Stanley Terrell and Marco Pinel

The use of traditional methods has risen sharply in Honduras, from 19% of all contraceptive use in 1987 to 26% of prevalence in 1991–1992. A multivariate analysis of data from two national probability sample surveys shows that contraceptive users interviewed in 1991–1992 were significantly more likely to use rhythm than were those interviewed in 1987; reliance on withdrawal was not significantly different between survey years. The following factors all significantly raised the probability that a woman would select rhythm over modern methods—being 40–44 years old, having 0–2 living children, being legally married, living in a rural area, needing to travel more than one hour to a health facility, wanting more children and recently hearing a family planning message over the radio. Those factors that significantly predicted the choice of withdrawal over modern methods included four of the same variables—marriage, residence, travel time and 0–2 living children—plus being younger than 25, having fewer years of education and having eight or more children.

(International Family Planning Perspectives, 22:163–168, 1996)

The use of both modern and traditional methods* contributes to overall contraceptive prevalence, yet while family planning programs encourage and promote the use of modern methods, they virtually ignore traditional method use. When modern method use is rising, program managers can afford to be indifferent toward reliance on traditional methods. However, when use of modern methods remains stagnant (or worse, declines) and traditional method use increases, program personnel should investigate promptly the reasons for such changes. Did gains in traditional method use come at the expense of modern methods, or is the relationship between prevalence rates of each type completely independent? Why has reliance on traditional methods increased? Who uses them? And should the national family plan-

ning program take new steps to address the changes in contraceptive use patterns?

The broad goal of a family planning program is to help couples prevent unwanted births. Since traditional methods are less reliable, on average, than modern methods and produce more unwanted births (although traditional methods prevent pregnancies better than does nonuse), programs tend to promote modern methods. Researchers have estimated that during typical use, pregnancy rates (based on 12 months of use) for withdrawal and rhythm are 19% and 20%, respectively, while those for the pill and the Copper-T IUD are 3% and 1%, respectively.¹

Although pregnancy rates are important, women's choice of a method is not always motivated by the likelihood of failure; it is often a function of personal preference and circumstance as well. The reasons why couples rely on traditional methods instead of modern methods are numerous and include a lack of knowledge about modern methods, the greater convenience of traditional methods, fear of actual or perceived side effects, cultural constraints and lack of accessibility (including cost). Programs need to be aware of these reasons to understand the factors influencing contraceptive method mix.

Some previous research on traditional method use has been limited to descriptive characteristics of users at a given point in time. For example, a survey in Turkey found that traditional method use was associated with residence in rural areas, lower educa-

tional levels and being in the youngest and oldest age-groups.² A study in Uganda revealed that employment status and religion strongly influenced traditional method use.³ Both of these research efforts used data from single cross-sectional surveys.

In contrast, other studies have used multiple surveys to examine how and if social and demographic characteristics of users of specific methods vary over time. For example, Goldscheider and Mosher used results from four cycles of the U.S. National Survey of Family Growth (for the years 1973, 1976, 1982 and 1988) to show that the relationships between method choice and religious affiliation were stable over a 15-year period.⁴ According to Zablan and colleagues, who analyzed data from three Philippine surveys (conducted in 1973, 1978 and 1983), the strength of factors such as age, education, number of living children and residence on the decision to use rhythm changed over time.⁵ Similar analyses using data from Sri Lanka for 1975 and 1982 found that traditional method use was associated with marital duration in both years, but that the impact of variables such as ethnicity and education changed over time.⁶ Although these studies used multiple surveys to incorporate the passage of time into the analyses, they essentially compared cross-sectional results, describing how the profiles of specific method users changed or did not change over time.

The Honduran Situation

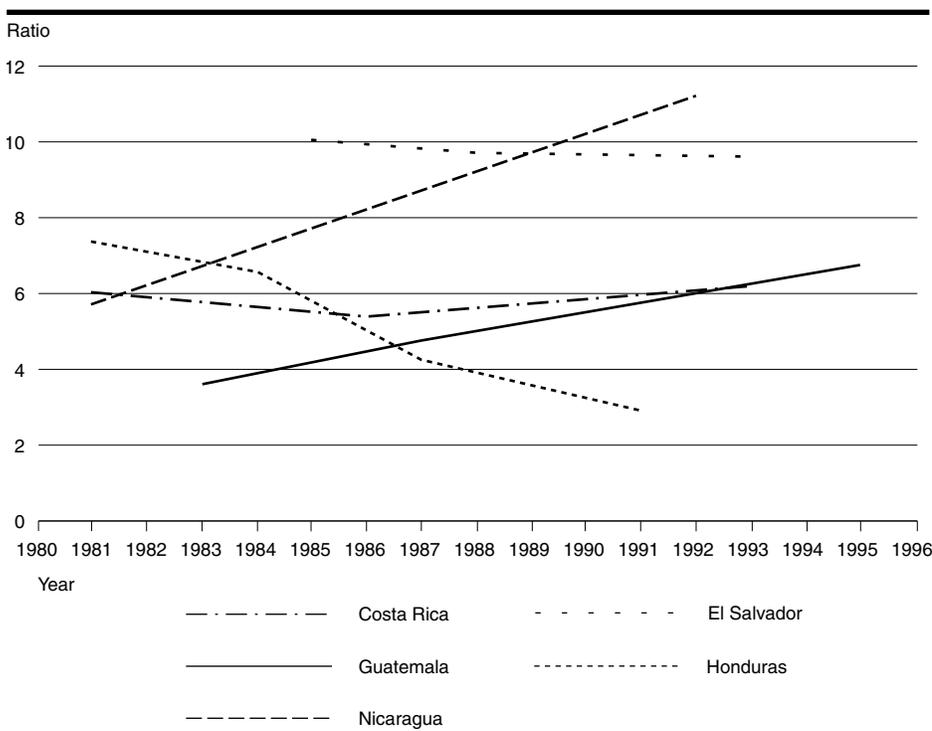
The Central American nation of Honduras has recently experienced changes in contraceptive use patterns that challenge program managers to reassess their efforts. Specifically, traditional method use has risen markedly, while modern method use has not.

Figure 1 (page 164) shows data for Costa Rica,⁷ El Salvador,⁸ Guatemala⁹ and Nicaragua,¹⁰ in addition to Honduras,¹¹ to illustrate how it compares with other Central American countries on the ratio of modern to traditional contraceptive use over time. The vertical axis plots the ratio

*For purposes of this article, traditional methods are rhythm and withdrawal (unless noted otherwise).

David Hubacher is research associate at Family Health International (FHI), Research Triangle Park, N. C., USA. At the time this article was written, Margarita Suazo was director of evaluation, Asociación Hondureña de Planificación de Familia (ASHONPLAFA) in Tegucigalpa, Honduras; Stanley Terrell was Child Survival Advisor with the United States Agency for International Development (USAID) in Tegucigalpa; and Marco Pinel was principal survey investigator with the Ministerio de Salud Pública, Tegucigalpa. The authors would like to thank Barbara Janowitz, Patricia Bailey and Willard Cates, Jr., of FHI for their helpful comments on earlier drafts of this article, as well as various staff members at USAID, Honduras and an anonymous reviewer. They also thank Richard Monteith of USAID, Honduras, for his assistance in locating economic data, and Emelita De Leon-Wong and Lucinda Glover (both at FHI) for their technical input. The statements in this article do not necessarily reflect the opinions of the authors' institutions.

Figure 1. Trends in ratio of modern contraceptive use to traditional contraceptive use, five Central American countries



Sources: **Costa Rica**—see reference 7; **Guatemala**—see reference 9; **Nicaragua**—see reference 10; **El Salvador**—see reference 8; and **Honduras**—see reference 11.

of the percentage using a modern method to the percentage using a traditional method. Honduras's ratio of modern to traditional methods was 7.4 in 1981, and subsequently slipped to 6.6 in 1984, to 4.3 in 1987 and to 2.9 in 1991–1992. Honduras is the only country in Central America where this trend has been downward: The ratios for modern methods to traditional methods in Nicaragua and Guatemala, for example, have risen remarkably, while those for El Salvador and Costa Rica have remained relatively stable (and high) over the past 15 years.

Table 1 presents contraceptive prevalence data collected in four Honduran surveys.¹² The largest increase in traditional use occurred between the two most recent surveys, as prevalence rose by more than four percentage points, from 7.6% in 1987 to 12.0% in 1991–1992. Modern method use increased most from 1981 to 1984, but since 1984 had risen by only 4.4 percentage points; from 1987 to 1991–1992, modern method use rose by less than two percentage points.

Thus, there is some evidence that the growth in modern contraceptive use in

*Women who had had a hysterectomy, menopausal women and those who had not been pregnant in at least three years, despite not having used a contraceptive in that interval.

Honduras has slowed in recent years relative to increases in reliance on traditional methods. These recent developments provide an interesting backdrop for studying traditional method use in a new way, without relying on the static, cross-sectional approach of the past. In this article, we analyze simultaneously the interplay of user characteristics and different time periods on method choice, drawing attention to the changes in use that confront the Honduran family planning program. We first describe the change in contraceptive use patterns between 1987 and 1991–1992, and then explore user characteristics associated with the adoption of traditional methods.

Data and Methods

Our analysis focuses on the roughly four-year period separating the 1987 and 1991–1992 rounds of an independent national probability sample survey known as the Epidemiology and Family Health Survey (EFHS). Both rounds were multistage, cross-sectional and self-weighting at the national level (excluding two departments that account for about 2% of the Honduran population). The 1987 EFHS interviewed 10,143 women aged 15–44, while the 1991–1992 EFHS included 8,082 women aged 15–49. Personnel for the two surveys

received similar field training. The survey instruments were very similar, and employed identical items on fertility and contraceptive use. (More detailed information on both surveys is available elsewhere.¹³)

Our analysis is based on women aged 15–44 who were in a union (consensual or formal) at the time of the survey. Interviewers ascertained respondents' current contraceptive use by asking whether they had used in the last 30 days such methods as male or female sterilization, the IUD, injectables, the pill, condoms, vaginal methods, rhythm, withdrawal or any "other methods." Women who used more than one method in the specified period were designated as users of one method only—the most effective one used.

All modern methods were deemed more effective than traditional methods, of which rhythm was ranked more effective, followed by withdrawal and finally "other folk" techniques. Both surveys used the same definitions of traditional methods: Rhythm was defined as the "calendar" method, where "couples avoid sexual relations during the period a woman can get pregnant," and withdrawal was defined as "when the man is careful and withdraws before he is finished."

We created one data set for analysis by combining respondents from the 1987 and 1991–1992 surveys and by adding a variable denoting the survey year. Since we wanted to determine what distinguishes women who use traditional methods from those who use modern methods, the primary data set includes only women who were currently practicing contraception. By evaluating only women who demonstrated a clear desire to avoid pregnancy, by definition we exclude women who were pregnant or were currently seeking pregnancy, who were amenorrheic, who were subfertility* and who were sexually inactive.

We performed chi-square tests of independence (with statistical significance levels of $p < .05$) to compare users of withdrawal, rhythm and modern methods on numerous social and demographic variables. We then used separate logistic regression procedures to model the use of withdrawal or rhythm,

Table 1. Percentage of married women of reproductive age using contraceptives, by year, according to type of method used

Year	Total	Modern	Traditional
1981	26.8	23.6	3.2
1984	34.9	30.3	4.6
1987	40.6	33.0	7.6
1991–1992	46.7	34.7	12.0

Sources: See reference 11.

with users of modern methods as the basis for comparison in each of the regressions. SUDAAN software was used to incorporate the two surveys' sample designs into the estimation techniques.¹⁴

The survey year was designated as the first stratification variable, followed by the survey-specific design variables. Survey year also served as the primary exposure variable in the regression analysis, to measure its effect on the decision to adopt a traditional method; in the context of other explanatory factors, this variable tests the hypothesis that women interviewed in 1991–1992 were more likely than those interviewed in 1987 to be using a traditional method, after all social and demographic factors are simultaneously controlled for.

Before performing the regression analysis, we checked collinearity among the independent variables; all continuous variables were tested for linearity on the logit. The only continuous variable that met the requirements for remaining in its original form was education. We made age and number of living children categorical, using dummy variables, because they showed a U-shaped relationship to the outcome of interest. Based on this curve, we made appropriate divisions to separate one group from the next, and designated the category with the lowest risk for the outcome as the reference group.

The majority of the remaining variables were dichotomous, and for ease in interpreting the coefficients, we selected the category with the lowest prevalence of traditional method use as the reference group. All explanatory variables were used in the final models, although some were not significantly associated with the outcome. (Retaining such variables in the models is recommended when controlling for confounding is important and when the data can support the additional variables.¹⁵)

Results

The two main components of traditional use—rhythm and withdrawal—were at about the same level of prevalence in 1987 (see Table 2). Although the percentage of women using each of these methods increased over the period between the surveys, use of rhythm increased more than that of withdrawal. The prevalence of specific modern methods also changed: Only the pill decreased in prevalence, by three percentage points. The sole modern method to show a sizable increase in use was female sterilization, which grew by three percentage points. Yet the prevalence of rhythm usage increased more than that of any modern method, including female sterilization.

When prevalence is examined only for women currently practicing contraception, the importance of traditional methods is even more apparent: Such methods accounted for 19% of all contraceptive use in 1987, but for 26% of prevalence in 1991–1992 (not shown).

Bivariate Analyses

Table 3 (page 166) shows the social and demographic characteristics of users in the combined samples by type of method (withdrawal, rhythm or a modern method). Users of withdrawal differed significantly from users of modern methods on several variables: They were younger than users of modern methods, had had fewer years of education, had had fewer living children and were more likely to reside in rural areas. Withdrawal users also differed significantly from modern method users on travel time to a health facility, employment status, possession of a functioning television, wantedness of their last pregnancy, desire for additional children, and receipt of a family planning message over the radio in the last month.

Results of a comparison between users of rhythm and users of modern methods revealed similar, but lesser, differences. In general, rhythm users tended to occupy a middle ground between users of withdrawal and modern methods. For instance, while rhythm users were still significantly younger than users of modern methods, they were not as young as withdrawal users. Similarly, rhythm users were not as likely to live in rural areas as were withdrawal users, but they were still less likely than users of modern methods to live in urban areas.

A similar pattern emerged for travel time to a health facility and for employment. The only variable on which rhythm users (but not withdrawal users) significantly differed from users of modern methods was type of union: Rhythm users were significantly more likely to be in a formalized union than were those relying on modern methods (62% vs. 51%).

Users of the two traditional methods differed significantly from each other in a number of ways: In general, rhythm users were older, were more educated, had fewer living children, were more urban, lived closer to a health facility, were more likely to be employed and were more likely to have wanted their most recent pregnancy.

Multivariate Analyses

The fact that users of modern methods differed so much from both rhythm and withdrawal users justifies the need to examine the factors affecting contraceptive

Table 2. Percentage distribution of women in union aged 15–44, by current contraceptive use, according to year

Contraceptive	1987 (N=6,093)	1991–1992 (N=4,322)
Traditional	7.6	12.0
Rhythm	3.5	6.7
Withdrawal	4.0	5.0
Other traditional	0.2	0.3
Modern	33.0	34.7
Pill	13.4	10.1
IUD	4.3	5.1
Female sterilization	12.6	15.6
Male sterilization	0.2	0.2
Condom	1.8	2.9
Injectable	0.3	0.5
Vaginal methods	0.3	0.3
None	59.4	53.3
Total	100.0	100.0

choice. However, since rhythm users were so different from withdrawal users, we could not combine these two groups into one traditional method group. Thus, we constructed two separate multivariate models, one investigating the choice of rhythm over modern methods, and the other the choice of withdrawal over modern methods. All variables shown in Table 3 were included in the multivariate regressions, except for religion (because it was available for the later survey only) and the wantedness status of the last pregnancy (because many women, especially younger ones, had never been pregnant).

According to the regression results shown in Table 4 (page 167), women interviewed in 1991–1992 were about twice as likely as those interviewed in 1987 to practice rhythm rather than use modern methods (adjusted odds ratio of 1.98). In terms of age, 40–44-year-olds were significantly more likely to be rhythm users than were 25–39-year-olds (odds ratio of 1.37). Women with two or fewer living children were 80% more likely than those with 3–7 children to rely on rhythm instead of a modern method (odds ratio of 1.82). Legally married women and rural women were also significantly more likely than were women in consensual unions and urban women to use rhythm instead of a modern method.

The probability that women would practice rhythm increased with lengthening travel time to a health facility: Those living three or more hours from a facility were nearly twice as likely as were women who lived within one hour of services to choose rhythm over a modern method. Moreover, women who wanted more children were nearly 30% more likely than were those who did not want more children to use

Table 3. Percentage distribution of current contraceptive users, by selected characteristics, according to type of contraceptive method used

Characteristic	Any method (N=4,463)	Withdrawal (N=455)	Rhythm (N=503)	Modern (N=3,505)
Age (in yrs.)*, †, ‡				
15–19	4.3	8.1	6.4	3.5
20–24	16.5	26.6	16.5	15.2
25–29	23.4	22.6	23.4	23.5
30–34	22.5	15.2	20.7	23.7
35–39	19.4	14.5	17.1	20.4
40–44	13.8	13.0	15.9	13.6
Education (in yrs.)*, †, ‡				
0	11.2	20.4	9.0	10.4
1–3	24.2	31.6	30.2	22.4
4–6	35.5	34.1	28.0	36.8
≥7	29.0	13.8	32.8	30.4
No. of living children*, †, ‡				
0–1	15.3	21.3	20.7	13.8
2–4	55.7	46.2	53.5	57.3
≥5	29.0	32.5	25.8	29.0
Type of union†				
Consensual	47.6	49.4	38.4	48.7
Formal	52.4	50.6	61.6	51.3
Residence*, †, ‡				
Rural	45.5	69.2	53.9	41.2
Urban	54.5	30.8	46.1	58.8
Travel time to health facility*, †, ‡				
<1 hours	73.4	57.6	65.7	76.6
1–2 hours	22.6	34.7	27.2	20.4
≥3 hours	3.9	7.8	7.0	3.0
Has paid employment*, ‡				
No	63.1	73.4	66.4	61.3
Yes	36.9	26.6	33.6	38.7
Works outside of home				
No	85.8	86.4	87.5	85.5
Yes	14.2	13.6	12.5	14.5
Religion§				
Catholic	63.8	66.8	66.2	62.9
Other/none	36.2	33.2	33.8	37.1
Has functioning radio				
No	36.7	38.9	38.8	36.1
Yes	63.3	61.1	61.2	63.9
Has functioning TV*, †				
No	65.7	72.0	70.2	64.3
Yes	34.3	28.0	29.8	35.7
Wanted last pregnancy*, ‡				
No	35.2	43.4	33.5	34.4
Yes	64.8	56.6	66.5	65.6
Wants more children*, †				
No	64.1	59.3	54.7	66.0
Yes	35.9	40.7	45.3	34.0
Heard a family planning message on radio in the last month*				
No	38.0	69.7	64.0	62.0
Yes	37.0	30.3	36.0	38.0
Total	100.0	100.0	100.0	100.0

*Difference between users of withdrawal and modern methods significant at $p < .05$. †Difference between users of rhythm and modern methods significant at $p < .05$. ‡Difference between users of withdrawal and rhythm significant at $p < .05$. §Available for 1991–1992 survey only (N=2,004). Note: Some distributions are based on fewer women because of missing data.

rhythm rather than modern methods. Finally, having recently heard a family planning message on the radio increased the likelihood by 25% that a woman would select rhythm over modern methods.

period between the surveys. Lay ministers, who had been trained in counseling couples on how to practice rhythm, were very active in the early 1990s. Moreover, officers of various religious organizations had easy access

The results of the regression comparing users of withdrawal and users of modern methods differed from those of the previous regression in several important ways (Table 5). First, the year of the survey was not a significant determinant of the decision to select withdrawal over modern methods: Women interviewed in 1991–1992 were no more likely to use withdrawal than were women interviewed in 1987. Each additional year of education, however, lowered the probability of withdrawal use by about 10%.

Use of withdrawal instead of modern methods was significantly more likely among 15–19-year-olds and 20–24-year-olds than among women aged 25–39 and also more likely among women with eight or more living children than those with 3–7 children. Moreover, as was also the case with rhythm, legally married women, rural women and those who had to travel longest to get to a health facility were significantly more likely than were their counterparts to choose withdrawal over modern methods (adjusted odds ratios of 1.41, 1.98 and 1.92, respectively).

Discussion

That the survey year significantly determined the decision to use rhythm but not withdrawal is reasonable, given the efforts made by numerous Catholic and Protestant organizations to actively promote rhythm in the

to the Honduran media, especially newspapers and radio, to promote traditional contraceptive methods over modern methods. These religious organizations continue to provide many Honduran couples with information on traditional methods. For example, a 1995 follow-up study of traditional method users in Honduras found that rhythm users were three times more likely than users of withdrawal to have received information on the method from a church.¹⁶ Withdrawal, on the other hand, survives primarily through word of mouth. The 1995 study showed that 60% of withdrawal users found out about the method from family, friends and sexual partners, whereas the comparable proportion among rhythm users was only 31%.

The regression analysis showed that women who wanted children were more likely to use rhythm than were those who did not. This finding has two possible explanations. First, such women might avoid modern methods because of concerns that they might compromise future fertility. Second, these women may generally be less concerned about the consequences of a method failure.

In the regression comparing users of rhythm with women relying on modern methods, those who had heard family planning messages on the radio were positively influenced in their decision to adopt rhythm; this was not the case with withdrawal, however. Unfortunately, women were never asked about the content of the messages, so it is impossible to know whether the messages promoted rhythm or modern methods, or even dissuaded listeners from using modern methods. All three types of messages are routinely broadcast on Honduran radio. If radio broadcasts influence contraceptive choice, the messages promoting the use of rhythm seem to be having the most impact.

Levels of educational attainment were important only in the decision to adopt withdrawal: While less-educated women were significantly more likely than other women to choose withdrawal over modern methods, there were no significant differences in the educational profiles of users of rhythm and modern methods.

Trends in contraceptive prevalence in Honduras in the 1980s and early 1990s should be viewed in relation to trends in fertility over the same period. The total fertility rates (TFRs) calculated in the four surveys mentioned earlier were 6.5 lifetime births per woman in 1981, 5.5 births in 1984, 5.6 births in 1987 and 5.2 births in 1991–1992.¹⁷ Thus, although the TFR declined sharply between 1981 and 1984, the

decrease in the subsequent eight-year period has been very slight, at best. Although changes in contraceptive prevalence take a long time to produce changes in the TFR, the current contraceptive trends in Honduras suggest that sizable decreases in the TFR are unlikely; it is especially difficult to predict how the TFR will respond to a contraceptive prevalence increase that is dominated by methods with high failure rates.

What country-level changes were occurring in Honduras that might explain the increase in traditional method use over the study period, particularly the rise in the use of rhythm? Might access to health facilities have deteriorated to such an extent that modern family planning methods became too difficult to obtain (thus leaving women to default to traditional methods)? To test this hypothesis, we examined program information from the Honduran ministry of health and the country's leading family planning association, Asociación Hondureña de Planificación de Familia (ASHONPLAFA).

Table 4. Beta coefficients and adjusted odds ratios (and 95% confidence intervals) for logistic regression model predicting selection of rhythm over modern methods (N=3,973)

Variable	Coefficient	Adjusted odds ratio
Year of survey		
1987	na	1.00
1991–1992	0.68	1.98** (1.53,2.58)
Age (in yrs.)		
15–19	0.20	1.22 (0.78,1.89)
20–24	-0.21	0.81 (0.59,1.11)
25–39	na	1.00
40–44	0.32	1.37* (1.03,1.84)
No. of living children		
0–2	0.60	1.82** (1.37,2.40)
3–7	na	1.00
≥8	0.32	1.38 (0.92,2.07)
Type of union		
Consensual	na	1.00
Formal	0.46	1.58** (1.28,1.95)
Residence		
Urban	na	1.00
Rural	0.48	1.62** (1.26,2.07)
Travel time to health facility		
<1 hour	na	1.00
1–2 hours	0.33	1.39* (1.08,1.79)
≥3 hours	0.67	1.95** (1.27,3.01)
Wants more children		
No	na	1.00
Yes	0.24	1.28* (1.01,1.62)
Heard a family planning message on radio in the last month		
No	na	1.00
Yes	0.23	1.26* (1.01,1.57)

*Significantly different from reference group at $p < .05$. **Significantly different from reference group at $p < .01$. Note: Analysis is also adjusted for education, employment, functioning radio and functioning TV. na=not applicable.

We found that ASHONPLAFA increased the number of its family planning posts from 1,303 to 1,728 in the period 1987–1991,¹⁸ and that the ministry also increased its health centers over the same period by about 12% (from 651 centers to 729).¹⁹ Most of these new posts were in rural areas. Thus, access to methods provided by programs actually improved between 1987 and 1991. While the concept of “access” is more complex than simply counting the number of existing health facilities, those numbers accurately reflect at least the availability of services.

Why did pill use decrease from 1987 to 1991? Did potential pill users choose traditional methods instead for some tangible reason, such as sporadic or inadequate pill supplies? The only source of this type of information is the Honduras office of the United States Agency for International Development (USAID), which conducts periodic monitoring visits to health districts to check on such issues as the availability of medications and staffing levels, among others. (This office conducts visits to approximately 100 ministry of health facilities each year.)

According to USAID records covering the period 1987–1992, 90–95% of health ministry facilities had the pill in stock in each year except for 1987 and 1990, when the proportions were 80% and 75%, respectively.²⁰ The situation in 1987, however, does not seem to have affected the prevalence of pill use at that time, since pill use was at its highest level (13% of women in union) in that year. And while the drop in pill availability in 1990—when the lowest proportion of facilities had it in stock—could have led to decreases in use in later years, data in the EFHS surveys show that inadequate pill supplies at health facilities were not an important reason for pill discontinuation.²¹

Another potential contributing factor to lower pill use was an increase in prices charged by pharmacies and by the ASHONPLAFA clinics. (Ministry of health clients receive the product for free.) At ASHONPLAFA posts, prices for their two brands of oral contraceptives doubled between 1987 and 1991,²² a price increase that affected pills sold through the agency's social marketing program as well. The largest percentage increase in prices occurred in 1989–1990, around the same time as a severe economic crisis that resulted in a series of currency devaluations and a decline in purchasing power.

In 1990, for example, the exchange rate went from two Honduran *lempiras* to the U.S. dollar to four to one; the currency was further devalued in 1992, to 5.7 *lempiras* to the dollar.²³ Furthermore, increases in

Table 5. Beta coefficients and adjusted odds ratios (and 95% confidence intervals) for logistic regression model predicting selection of withdrawal over modern methods (N=3,923)

Variable	Coefficient	Adjusted odds ratio
Years of education		
0–2	-0.12	0.89** (0.85,0.92)
Age (in yrs.)		
15–19	0.74	2.10** (1.31,3.35)
20–24	0.66	1.94** (1.44,2.60)
25–39	na	1.00
40–44	-0.10	0.91 (0.66,1.24)
No. of living children		
0–2	0.62	1.87** (1.37,2.53)
3–7	na	1.00
≥8	0.64	1.89** (1.31,2.74)
Type of union		
Consensual	na	1.00
Formal	0.34	1.41** (1.11,1.78)
Residence		
Urban	na	1.00
Rural	0.68	1.98** (1.51,2.61)
Travel time to health facility		
<1 hour	na	1.00
1–2 hours	0.38	1.46** (1.12,1.90)
≥3 hours	0.65	1.92** (1.24,2.96)

**Significantly different from reference group at $p < .01$. Note: Analysis is also adjusted for year of survey, employment, functioning radio, functioning TV, desire for more children and receipt of a family planning message on the radio in the previous month. na=not applicable.

the consumer price index of 11.4% in 1989 and of 36.4% in 1990,²⁴ with no concomitant real increase in per capita income,²⁵ combined to decrease the purchasing power of Honduran families in the period between the two surveys.

The complex Honduran political situation may also have played a role in the shift from modern to traditional methods, as modern methods have been attacked by several different groups since 1986.²⁶ The debate over the role of family planning peaked in 1989, when the government voted down a proposal to draft a population law addressing the problems associated with high fertility and low contraceptive use. After the measure was defeated, opponents introduced a bill in the legislature that would have limited family planning services; this proposal was also defeated. The controversies ignited much public debate, which filled local newspapers with articles and editorials on the issue.

Conclusions

This brief examination of events in Honduras that may have contributed to the increase in traditional method use suggests that changes in access to modern methods were probably not responsible. On the other hand, economic and political turmoil in Honduras may have discouraged some women from using modern meth-

ods and created a more suitable climate for adopting traditional alternatives.

Despite the enormous efforts of health providers and donor agencies to increase modern contraceptive use in Honduras over the past decade, the family planning program appears to have stalled in recent years. As use of modern methods leveled off, reliance on traditional methods increased rapidly; unfortunately, it is impossible to determine whether this increase came at the expense of modern methods. If method choice is interrelated, however, then the trend in Honduras suggests that women were adopting rhythm in lieu of adopting the pill, the use of which declined rapidly over the period.

This article's findings highlight some disturbing developments in the Honduran family planning program—namely, that efforts to attract new acceptors of modern methods are failing, while women are increasingly using less-effective traditional methods. To successfully counter the increasing reliance on traditional methods, the national family planning program will need to initiate new efforts and campaigns to make modern methods more attractive to potential users and to keep current users satisfied and informed of appropriate alternatives if they desire to change methods.

References

1. R. A. Hatcher et al., *Contraceptive Technology: Sixteenth Revised Edition*, Irvington Publishers, New York, 1994.
2. H. I. Goldberg and A. Toros, "The Use of Traditional Methods of Contraception Among Turkish Couples," *Studies in Family Planning*, 25:122–128, 1994.
3. J. P. M. Ntozi and J. Kabera, "Family Planning in Rural Uganda: Knowledge and Use of Modern and Traditional Methods in Ankole," *Studies in Family Planning*, 22:116–123, 1991.
4. C. Goldscheider and W. D. Mosher, "Patterns of Contraceptive Use in the United States: The Importance of Religious Factors," *Studies in Family Planning*, 22:102–115, 1991.
5. Z. Zablan et al., "Contraceptive Method Choice in the Philippines, 1973–83," *Journal of Biosocial Science*, Supplement No. 11, 1989, pp. 61–74.
6. J. R. Kahn, S. Thapa and H. W. Gaminiratne, "Sociodemographic Determinants of Contraceptive Method Choice in Sri Lanka: 1975–82," *Journal of Biosocial Science*, Supplement No. 11, 1989, pp. 41–60.
7. Caja Costarricense de Medicina Preventiva, Programa Salud Reproductiva, *Fecundidad y Formación de la Familia: Encuesta Nacional de Salud Reproductiva de 1993*, San José, Costa Rica, May 1994.
8. Asociación Demográfica Salvadoreña and Centers for Disease Control and Prevention (CDC), *Encuesta Nacional de Salud Familiar (FESAL-93)*, San Salvador, El Salvador, April 1994.
9. CDC, *1987 Guatemala Demographic and Health Survey: Further Analysis of Data. A. Women 15–44 Years of Age*, Atlanta, Ga., USA, Oct. 1991; and Macro International, *Guatemala Demographic and Health Survey, Preliminary Report*, Calverton, Md., USA, 1996.

10. J. A. Ross, W. P. Mauldin and V. C. Miller, *Family Planning and Population: A Compendium of International Statistics*, The Population Council, New York, 1993; and Pro-familia and CDC, *Encuesta Sobre Salud Familiar: Nicaragua, 92–93, Informe Final*, Managua, Nicaragua, Nov. 1993.

11. Ministerio de Salud Pública y Asistencia Social, Dirección General de Estadística y Censos, Consejo Superior de Planificación Económica, Asociación Hondureña de Planificación de Familia (ASHONPLAFA) and Westinghouse Health Systems, *Honduras: Encuesta Nacional de Prevalencia del Uso de Anticonceptivos, 1981, Resultados Generales*, Tegucigalpa, Honduras, 1982; Honduran Ministry of Public Health, ASHONPLAFA, Family Health International and Management Sciences for Health, *Maternal-Child Health and Family Planning Survey, Honduras, 1984, Final Report*, Research Triangle Park, N. C., USA, Dec. 1986; Honduran Ministry of Public Health, ASHONPLAFA, Family Health International and Management Sciences for Health, *Epidemiology and Family Health Survey, Honduras, 1987*, Research Triangle Park, N. C., USA, May 1989; and Ministerio de Salud Pública de Honduras, *Encuesta Nacional de Epidemiología y Salud Familiar (ENESF)*, Honduras, 1991/1992, *Borrador del Informe Final*, Tegucigalpa, Honduras, Dec. 1992.

12. Ministerio de Salud Pública de Honduras, 1992, op. cit. (see reference 11).

13. Honduran Ministry of Public Health. . . , 1989, op. cit. (see reference 11); and Ministerio de Salud Pública de Honduras, 1992, op. cit. (see reference 11).

14. B. V. Shah et al., *SUDAAN User's Manual*, Research Triangle Institute, Research Triangle Park, N. C., USA, 1991.

15. K. Rothman, *Modern Epidemiology*, Little, Brown and Co., Boston, Mass., USA, 1986.

16. ASHONPLAFA, *Estudio de Razones que Inciden en el Uso de Métodos Tradicionales de Anticoncepción, Informe Final*, Tegucigalpa, Honduras, 1995.

17. Ministerio de Salud Pública y Asistencia Social. . . , 1982, op. cit. (see reference 11); Honduran Ministry of Public Health. . . , 1986, op. cit. (see reference 11); Honduran Ministry of Public Health. . . , 1989, op. cit. (see reference 11); and Ministerio de Salud Pública de Honduras, 1992, op. cit. (see reference 11).

18. ASHONPLAFA, unpublished data, 1995.

19. Honduran Ministry of Health, unpublished data, 1995.

20. E. A. Pinto, *Informe Final de las Monitorías a las Regiones Sanitarias*, for the years 1987–1992, U.S. Agency for International Development (USAID), Tegucigalpa, Honduras.

21. Honduran Ministry of Public Health. . . , 1989, op. cit. (see reference 11); and Ministerio de Salud Pública de Honduras, 1992, op. cit. (see reference 11).

22. ASHONPLAFA, *Informes Bi-Mensuales de la Sección de Ventas Comunitarias*, for the years 1987–1992, Tegucigalpa, Honduras.

23. Personal communication, Liliana Matute, Controller's Office, USAID, Tegucigalpa, Honduras, June 1996.

24. *Memoria 1990*, Banco Central de Honduras, Tegucigalpa, Honduras, 1991.

25. *Latin America and the Caribbean, Selected Economic and Social Data*, USAID, Washington, D. C., 1995.

26. ASHONPLAFA, *Pasos Hacia el Próximo Siglo. Plan Estratégico 1995–2000*, Tegucigalpa, Honduras, 1994.

Resumen

En Honduras, ha aumentado notoriamente el uso de métodos tradicionales anticonceptivos, el cual ascendió del 19% del uso total de anti-conceptivos en 1987, al 26% de prevalencia en

1991–1992. Mediante un análisis multivariado de datos recopilados de dos encuestas nacionales de muestras de probabilidad, se revela que las usuarias de anticonceptivos entrevistadas en 1991–1992 eran significativamente más proclives a usar el ritmo que aquellas entrevistadas en 1987; el uso del método del retiro no fue estadísticamente diferente entre las encuestas. Los siguientes factores aumentaron significativamente la probabilidad de que una mujer seleccione el método del ritmo en lugar de los métodos modernos—tener 40–44 años de edad, tener 0–2 hijos vivos, estar legalmente casada, vivir en una zona rural, tener que viajar más de una hora para asistir a un centro de salud, desear tener más hijos y recién escuchar un mensaje de planificación familiar en la radio. Los factores que significativamente indicaban la elección del método del retiro en lugar de los métodos modernos incluyen cuatro de las mismas variables—el matrimonio, el lugar de residencia, el tiempo de viaje para asistir a un centro de salud, y tener 0–2 hijos vivos—además de ser menor de 25 años, tener menos años de escolaridad y tener ocho o más hijos.

Résumé

La pratique des méthodes traditionnelles a augmenté nettement au Honduras, passant de 19% de la pratique contraceptive globale en 1987 à 26% de la prévalence observée en 1991–1992. Une analyse multivariée des données de deux enquêtes d'échantillons probabilistes nationaux révèle que les femmes qui pratiquaient la contraception en 1991–1992 étaient nettement plus susceptibles de pratiquer l'abstinence périodique que leurs homologues interviewées en 1987; la pratique du retrait ne présentait, elle, pas de grande différence entre les deux enquêtes. Les facteurs suivants sont tous apparus comme accroissant significativement la probabilité de sélection de l'abstinence périodique de préférence aux méthodes modernes: tranche d'âge de 40 à 44 ans, nombre d'enfants vivants de 0 à 2, mariage légal, vie en milieu rural, distance de plus d'une heure d'un centre de soins de santé, désir d'avoir encore des enfants et entente récente d'un message de planning familial à la radio. Les facteurs d'influence nette du recours au retrait par rapport aux méthodes modernes se sont révélés inclure quatre des mêmes variables: mariage, lieu de résidence, distance et nombre d'enfants vivants de 0 à 2, avec, en plus, l'âge inférieur à 25 ans, une scolarisation moindre et un nombre d'enfants de huit et plus.