

Reprinted from: PAHO Bulletin v. 15(3):226-230, 1981

## ACCESS TO STERILIZATION IN TWO HOSPITALS IN HONDURAS<sup>1</sup>

Barbara Janowitz<sup>2</sup> and Joaquín Núñez<sup>3</sup>

*This article focuses on the availability of postpartum sterilization for women with obstetric deliveries at two hospitals in Honduras. The findings indicate a very low rate of postpartum sterilization and a high percentage of cesarean deliveries among sterilized women. Lack of facilities appears to be an important factor limiting access to sterilization.*

### Introduction

One of the most widely used family planning methods in Latin America is female sterilization. For example, data from recent contraceptive prevalence surveys indicate that 16 per cent of the currently married women 15-44 years of age in the State of São Paulo, Brazil, have been sterilized (1). The comparable figure for El Salvador is 18 per cent (2) and for Panama is 30 per cent (3).<sup>4</sup>

Little is known about contraceptive use in Honduras, because no contraceptive prevalence survey has been done there. Data collected from women having obstetric deliveries at hospitals in the major cities of Tegucigalpa and San Pedro Sula have provided information about these women's past contraceptive use and plans for postpartum contraception. This article focuses upon these women's plans for postpartum sterilization and factors that affect whether those plans are carried out.

### Sources of Information

Data for this analysis were collected at the *Hospital Materno-Infantil* in Tegucigalpa and the *Hospital Leonardo Martínez* in San Pedro

Sula. The *Hospital Materno-Infantil* is the country's major maternity hospital. It is a large, well-equipped, university-affiliated hospital that serves the capital city's population as well as patients referred from the surrounding rural areas. The *Hospital Leonardo Martínez* in San Pedro Sula is a general hospital that serves as the major primary care and referral center for the coastal area. This region is more economically depressed than that served by the *Hospital Materno-Infantil*.

Data were collected using a maternity record form that provided information about patients' sociodemographic backgrounds, obstetric histories, and contraceptive practices. The patients were asked about their use of contraceptives before pregnancy and about their possible plans for contraception after delivery. If the patient was sterilized before leaving the hospital, this information was also recorded on the form.

### Findings

Analysis of these data indicates that the hospitals do not encourage women to be sterilized, and also that they do a poor job of providing services for those who are interested in sterilization.

Of 18,523 women giving birth from 1977 through 1979, 13,241 (71.5 per cent) indicated that they did not want any more children. These women thus constituted a group for which female sterilization could be the contraceptive method of choice.

<sup>1</sup> Also appearing in Spanish in the *Boletín de la Oficina Sanitaria Panamericana*.

<sup>2</sup> Research Associate, International Fertility Research Program, Research Triangle Park, North Carolina, United States.

<sup>3</sup> Medical Director, Family Planning Association of Honduras.

<sup>4</sup> The Panama data are for women 20-49 years of age.

Of these 13,241 women, 3,063 (23.2 per cent) said they planned to be sterilized. In general, women who make this statement have large families. Almost 85 per cent have four or more living children, and over 25 per cent have seven or more children. Of the women who said they planned to be sterilized, only one-tenth were actually sterilized post-partum.

Little variation was found between the two hospitals providing sterilization services with regard to preferred practices or the age and education of the patients. Though personnel at both hospitals preferred to do sterilizations six to seven weeks after delivery, there is reason to believe that many women did not return to the hospital for surgery.

Among women having abortions at these hospitals, about half do not return for a follow-up visit four to six weeks later. (The

two hospitals' records for the period 1977-1978 indicate that 56.7 per cent of the women return for abortion follow-up in Tegucigalpa and 41.4 per cent return in San Pedro Sula.) If follow-up is equally poor for obstetric patients desiring sterilization, then the practice of not performing the surgery at the time of delivery stops many women from obtaining sterilization.

To be eligible for sterilization in Honduras, one is supposed to satisfy the "rule of 80" (living children times age must equal 80). It might be thought, therefore, that many women were not sterilized because they failed to meet this criterion. However, as Table 1 shows, 27.7 per cent of the women who were sterilized at the two hospitals did not satisfy this rule.

In contrast, the data in Table 2 indicate that only 6.8 per cent of the women who planned

Table 1. Sterilized women with cesarean and vaginal deliveries, showing the percentages not satisfying the "rule of 80."

| Hospital location | Type of delivery |                               |                |                               |                |                               | Percentage of deliveries that were cesareans |
|-------------------|------------------|-------------------------------|----------------|-------------------------------|----------------|-------------------------------|--|
|                   | Vaginal          |                               | Cesarean       |                               | Total          |                               |  |
|                   | No. sterilized   | % not satisfying "rule of 80" | No. sterilized | % not satisfying "rule of 80" | No. sterilized | % not satisfying "rule of 80" |  |
| Tegucigalpa       | 67               | 17.9                          | 136            | 35.3                          | 203            | 29.6                          | 67.0   |
| San Pedro Sula    | 27               | 7.4                           | 73             | 30.1                          | 100            | 24.0                          | 73.0   |
| Total             | 94               | 14.9                          | 209            | 33.5                          | 303            | 27.7                          | 69.0   |

Table 2. Women desiring sterilization who were not sterilized, by type of delivery, showing the percentages not satisfying the "rule of 80."<sup>a</sup>

| Hospital location | Type of delivery |                               |              |                               |              |                               | Percentage of deliveries that were cesareans |
|-------------------|------------------|-------------------------------|--------------|-------------------------------|--------------|-------------------------------|--|
|                   | Vaginal          |                               | Cesarean     |                               | Total        |                               |  |
|                   | No. of women     | % not satisfying "rule of 80" | No. of women | % not satisfying "rule of 80" | No. of women | % not satisfying "rule of 80" |  |
| Tegucigalpa       | 1,841            | 6.0                           | 11           | b                             | 1,852        | 6.4                           | 0.6  |
| San Pedro Sula    | 650              | 7.7                           | 9            | b                             | 659          | 8.2                           | 1.4  |
| Total             | 2,491            | 6.4                           | 20           | b                             | 2,511        | 6.8                           | 0.8  |

<sup>a</sup>A total of 249 women whose age, parity, or method of delivery was unknown have been excluded from these data.

<sup>b</sup>Numbers too small to permit meaningful analysis of proportions not satisfying the "rule of 80."

to be but were not sterilized did not satisfy this rule. If the requirement of meeting the rule were the determining factor affecting who is actually sterilized, then it would be expected that the percentage of women not meeting the "rule of 80" would be lower among sterilized women than among those not sterilized. Since the data indicate that the relationship is exactly the opposite, it must be that other factors are more important in determining who gets sterilized.

An alternative hypothesis is that scarce operating room time is the most important factor affecting who obtains a sterilization. If that were the case, women admitted to the operating room for purposes other than sterilization (e.g., obstetric complications) should find it easier to obtain a sterilization than other women. That is because the former group would have medical reasons other than sterilization for finding a place in an already-crowded operating room schedule, whereas obstetric patients with no medical complications would find it more difficult to have surgery scheduled.

One way to test this hypothesis is to consider the women planning sterilization and to compare those with different types of deliveries in terms of the percentage sterilized. If the hypothesis is valid, women with cesarean deliveries should have a higher probability of being sterilized than women with vaginal deliveries.

At both hospitals, the percentages of women delivered by cesarean section was low compared to the percentages so delivered at hospitals in other countries. In the United States, for example, between 15 and 20 per cent of all deliveries are abdominal. In developing countries, where the majority of uncomplicated births occur at home, and a disproportionate share of hospital deliveries involve complications, one might expect the rate of cesarean deliveries to be at least as high. However, of all deliveries studied at the two Honduran hospitals, only 6.4 per cent of those at Tegucigalpa and 2.8 per cent of those at San Pedro Sula were abdominal deliveries.

Among the women who were sterilized, however, the percentage of those who had cesarean deliveries was a surprising 69 per cent—67 per cent at Tegucigalpa and 73 per cent at San Pedro Sula (see Table 1). In contrast, of the women who said they planned to be sterilized but were not sterilized at delivery, less than 1 per cent had cesarean sections (Table 2). Therefore, it seems apparent that women who have abdominal deliveries find it easier to obtain a sterilization at the time of delivery than do women with vaginal deliveries.<sup>5</sup>

It may be argued that among women planning sterilization, those with cesarean deliveries were more likely to satisfy the "rule of 80" than women with vaginal deliveries. This difference could then partly explain the higher rate of sterilization among women with abdominal deliveries.

At both hospitals, however, the proportion of sterilized women who did not satisfy the rule was higher among those with cesarean deliveries than among those with vaginal deliveries. For example, at the *Hospital Materno-Infantil*, 35.3 per cent of the sterilized women studied who had cesareans failed to satisfy the rule, as compared to 17.9 per cent of those who had vaginal deliveries. Women with cesarean deliveries thus appear less likely to satisfy the legal requirements for sterilization than are women with vaginal deliveries. Furthermore, among women with vaginal deliveries, the percentage not satisfying the "rule of 80" was higher among those sterilized (14.9 per cent) than among those not sterilized (6.4 per cent).<sup>6</sup>

It may still be argued that women sterilized

<sup>5</sup>Over 99 per cent of the women who were sterilized and had cesarean sections had made their plans before delivery. Patients undergoing emergency cesareans do not get sterilized because the necessary paperwork has not been done (personal communication from hospital staff).

<sup>6</sup>As may be seen in Table 2, the number of women who had cesarean sections and desired sterilization but were not sterilized was too small to permit meaningful comparison of the proportion not satisfying the "rule of 80" vis-a-vis the proportion that had cesarean sections and were sterilized but did not satisfy the rule.

concurrently with cesarean delivery have a cesarean section at least in part to simplify procedures required to obtain a sterilization. For all women who were sterilized, however, the data indicate that in nearly all cases where a cesarean section was performed there was ample justification for the procedure. In fact, there are good arguments to support doing more cesarean sections among the group with vaginal deliveries. For example, the usual medical practice would be to perform an abdominal delivery for any woman who previously had a cesarean section; yet, of the 109 women sterilized at the time of delivery, eight with previous cesarean sections were delivered vaginally.

The data also indicate that many women delivered vaginally who planned to be but were not sterilized had strong indications favoring cesarean section. That is, of the 2,673 women with vaginal deliveries, 58 previously had cesareans and 1,135 (42.5 per cent) had some other condition that would be considered an indication for cesarean section.

### Conclusions

This article focuses on two findings—the very low rate of postpartum sterilization at two hospitals in Honduras and the high proportion of sterilizations that are done concurrently with cesarean sections. These two findings may be explained by one set of circumstances.

Both hospitals are crowded, and operating room time is scarce. Women who are already in the operating room because they are having cesarean sections can be sterilized using only a small amount of additional operating room time. Other women who want to be sterilized are likely to be sterilized only if an operating room happens to be free when they deliver

their babies.

These circumstances also help to explain why the "rule of 80" is more often broken for women with cesarean sections than for those with vaginal deliveries. The former group have medical reasons for cesarean sections, which may indicate that future pregnancies would be difficult; over 40 per cent of the women sterilized at the time of a cesarean section, for example, had previously had a cesarean section. Therefore, given such stronger contraindications for future pregnancies, it was to be expected that the group with cesarean sections should be less likely to meet the formula requirements for sterilization—as was in fact the case. In addition, much of the regulatory paperwork involved in performing a sterilization is reduced if the procedure can be justified on medical grounds. We may therefore conclude that a major factor restricting sterilizations at both hospitals has been available space, particularly operating room space.

The limitation on operating room space may also explain why personnel at these hospitals preferred to do interval rather than postpartum sterilizations. Interval sterilizations can be fitted into a busy operating room schedule at some specific time (for example, the *Hospital Materno-Infantil* does six interval laparoscopic sterilizations every Tuesday). Postpartum sterilizations not concurrent with cesarean sections can rarely be done, since operating room time is not likely to be available.

At present, two operating rooms for sterilization at the *Hospital Materno-Infantil* have been equipped but are not yet operational. It is expected that with this increase in facilities, the demand for sterilization at this hospital can be more adequately met. Plans are currently underway for evaluating the impact of these new facilities.

### SUMMARY

This article examines postpartum plans for sterilization and factors that affect whether those plans are carried out for women delivering babies at two hospitals in Honduras. Of 13,241 women who wanted no more children, only 3,063 (23 per cent) said they planned to be sterilized. Of these 3,063 women, however, only one-tenth were sterilized postpartum.

To be technically eligible for sterilization in Honduras, one must fulfill the "rule of 80" (living children X age must equal 80). Nevertheless, many women who are sterilized do not satisfy this rule, and data from this study indicate that other factors are more important in determining who gets sterilized.

Scarce operating room time appears to be the most important factor affecting sterilization. Whereas the percentage of women who deliver their babies by cesarean section has been extremely low (less than 7 per cent at both hospitals), the percentage of cesarean deliveries among women being sterilized has been extremely high (69 per cent). The apparent reason is that women already in the operating room for a cesarean section can be sterilized using only a small amount of additional operating room time. Other women who want to be sterilized are likely to be sterilized only if an operating room happens to be free when they deliver their babies.

### REFERENCES

(1) Milton, S., Leo Morris, Barbara Janowitz, John E. Anderson, and Joaquín Barreto Fonseca. Contraceptive use and fertility levels in São Paulo State, Brazil. *Studies in Family Planning* 11 (7-8): July-August 1980.

(2) Morris, Leo, Angela M. de Mendoza, John E. Anderson, Charles W. Warren, and Ricardo C. Rugamas. The Use of Contraceptive Prevalence Surveys to Evaluate the Family Planning Program

in El Salvador. Paper presented at the Annual Meeting of the American Public Health Association held in New York, U.S.A., on 4-8 November 1979. American Public Health Association, 1979.

(3) Mascarín, Félix, John E. Anderson, and Richard S. Monteith. Final Report, 1981. Family Planning Maternal and Child Health Survey, Republic of Panama, 1979.