FAMILY PLANNING AND MATERNAL/CHILD HEALTH SURVEY
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1983 Guatemala Family Planning and Maternal/Child Health Survey

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Contraceptive Use

Findings of a Family Planning and Maternal/Child Health Survey conducted in Guatemala in 1983 show a relatively modest prevalence of contraceptive use with female sterilization as the most prevalent method. Fertility rates correspond to levels of contraceptive use with an estimated Crude Birth Rate (CBR) of 44 per 1,000 population.

Twenty-five percent of married women age 15-44 were using effective contraceptive methods at the time of the survey with 44 percent of all users or their husbands surgically sterilized. Prevalence of use varied by residence/ethnic group, with almost half of married women living in the Department of Guatemala using, compared to 29 percent for Interior Ladinos and less than 5 percent for Interior Indians. Although the use of vasectomy accounts for slightly less than 1 percent of use, Guatemala is the first country in Latin America to record a level of use of male sterilization ever this high. Survey data show that contraceptive use is not very high among young, married women with few children and that use increases only as age and family size increases, with sterilization as the method of choice. Data for nonusers indicate the need to promote the use of reversible methods among young, married women who may not have completed their families and who are interested in spacing their children.

An increase in contraceptive use is documented by comparing results of the 1983 survey with those of the 1978 Family Planning and Maternal/Child Health Survey. There was a 6 percentage point increase in contraceptive use among

married women, from 19 percent in 1978 to 25 percent in 1983. The greatest increase in use occurred among Ladino women; there was essentially no increase among Indians, the group with the lowest usage. For the country as a whole, most of the increase in prevalence between surveys was in the use of surgical contraception which accounted for 75 percent of the increase.

Comparing the 1983 Guatemala results with recent survey results from other countries in the region, Guatemala has the lowest prevalence rate while Costa Rica in 1981 had the highest prevalence rate (65 percent). However, Guatemala's prevalence would be higher (35 percent) if only Ladinos were considered. In Panama, Dominican Republic, El Salvador, and Guatemala, the most prevalent method is sterilization, while oral contraceptives are the most prevalent method in Costa Rica, Mexico, and Honduras. Sterilization and oral contraceptives are the two most prevalent methods in every country in the region with survey data.

Women in Need of Family Planning Services

Overall, about one woman in five was found to be "in need" of family planning services. In absolute terms, this represents approximately 330,000 women 15-44 years of age. The percentage in need of services is greatest among Indian women. However, because Interior Ladino women represent a larger proportion of the Guatemala population than Indian women, they represent, in absolute terms, the largest group of women in need. In general, the survey data indicate that the family planning program of Guatemala should be oriented toward high parity, married women living in the Interior, both Ladino and Indian, who have less than a primary education, and who are unemployed.

The 1978 and 1983 survey results and a recent study on the impact of accessibility of contraceptives on contraceptive prevalence in Guatemala using data from the 1978 survey suggest that the greatest impact on contraceptive use in Guatemala can be made if program efforts are focused on Ladino women living in the Interior of the country. Two-thirds of Ladino women who did not want any more children were interested in sterilization. However, many of these women will not obtain sterilizations unless their personal fears about the operation and institutional barriers such as cost and physician refusal are reduced or eliminated. Focusing on Ladino women is not to say that the program should neglect Indian women, among whom the greatest need for family planning services exists. Every effort should be made to continue to make contraceptive services culturally acceptable and physically accessible to them. However, overcoming cultural resistance and isolation, which appear to be major factors associated with nonuse among Indians, may require years of effort and involvement of other agencies and programs in Guatemala, in addition to the family planning program.

Use of Maternal and Child Health Services

Findings of the survey show low to moderate use of maternal and child health (MCH) services by women (associated with their last live birth). As expected, use of MCH services, such as prenatal, post-partum, and well-baby care, was highest for women living in the Department of Guatemala and lowest among Indian women. In addition, paying patients and those covered by health insurance were more likely to use MCH services than others. However, overall, only 18 percent of women said that they had used all three MCH services. In contrast, 28 percent reported that they used none of these services.

Fifty-eight percent of women reported that their last child was delivered by a midwife. This percentage increases to 84 percent for Indian women while more than half of Interior Ladino women were also attended by a midwife. Of all last deliveries occurring in a hospital, 17 percent were Cesarean. In general, private hospitals perform a higher proportion of Cesarean deliveries than Social Security (IGSS) and Ministry of Health (MOH) hospitals. Thus, women of higher socioeconomic status are more likely to have Cesarean deliveries than women of lower socioeconomic status. Cesarean deliveries occurring to Indian women suggests that high risk pregnancies are referred to hospitals and higher complication rates associated with high parity for these women may indicate the use of this procedure.

Prevalence of Diarrhea

Nearly 26 percent of children less than 5 years of age living in the sample households were reported to have had diarrhea during the week prior to interview. Thirty percent of Indian children were reported to have had diarrhea. A prevalence of diarrhea in Guatemala of 26 percent is relatively high, especially during a time of year not generally considered to be the peak season for diarrhea (the survey was conducted during the months of September-December). This suggests that diarrhea is a serious health problem in the country. Of the children who were reported to have had diarrhea, 86 percent were reported to have been treated for their recent episode. Of the children treated, only 9 percent were treated with oral rehydration solutions (ORS) made from packets or from ingredients found in the home. Nearly three-fourths of the children were treated with various popular pharmaceutical products which are relatively ineffective in treating diarrhea. In light of the fact that diarrhea appears to be a major health problem among young children in Guatemala, especially in the Interior, the addition of an ORS program as part of the MCH program is vital.

Primary Immunization Levels

Finally, findings of the survey indicate low to moderate levels of completed primary immmunization among children less than 5 years of age. Primary immunization levels ranged from a high of 58 percent for BCG vaccine to a low of 33 percent for Polio and DPT vaccine. The comparable level for measles vaccine was 53 percent. Immunization levels were similar among Ladino children living in the Department of Guatemala and in the Interior and lowest among Indian children. Almost all children who had received a completed series of primary immunization were vaccinated by age 2 with the percentage of children vaccinated leveling off thereafter. The survey data suggest that children who are vaccinated are vaccinated later than recommended schedules. The data further suggest that routine vaccination services and mass campaigns have not adequately provided immunization services for children less than years of age in Guatemala, especially for Indian children.

I. INTRODUCTION

The 1983 Family Planning and Maternal/Child Health survey was conducted principally to provide the first estimates of prevalence of use of contraception and source of contraception in Guatemala since a similar survey was conducted in 1978 (Asociacion Pro-Bienestar de la Familia, 1980). Since 1978, evaluations of family planning programs in Guatemala have been carried out principally through analysis of data on new clients and revisit clients and counts of contraceptives issued to and/or distributed by public sector programs. The 1983 survey, as did the 1978 survey, also includes estimates of use of contraception among women who obtain their methods from the private sector, data which program service statistics cannot provide.

Due to the lack of population-based data on maternal and child health (MCH) services in the country, the 1983 survey was also designed to cover a wide range of MCH topics to measure program impact. These topics include the use of prenatal, post-partum, and well-baby services, breast-feeding prevalence and duration, levels of immunization, and the prevalence of diarrhea among children less than 5 years of age and the treatment they received, if any.

Other modules included data on fertility, planning status of last pregnancy reasons for non-use of contraception, desire to use contraception in the future, and attitudes toward surgical contraception. Estimates are made of the percentage of women in need of family planning services (at risk of an unplanned pregnancy). The questionnaire also included a module on family planning information, education, and communication. The findings of this module will be the subject of a separate report.

As in 1978, the 1983 survey was conducted by the Asociacion Pro-Bienestar de la Familia (APROFAM), the International Planned Parenthood Federation (IPPF) affiliate in Guatemala, with the technical assistance of the Division of Reproductive Health, Centers for Disease Control (CDC), Atlanta, Georgia, U.S.A. Fieldwork was conducted during the months of September-December 1983. Some followup interviews were conducted during the month of January and the first half of February 1984. After completion of fieldwork, coding, keypunching, and initial editing were conducted in Guatemala by the Instituto de Nutricion de Centro America y Panama (INCAP). Analysis and report-writing took place both at the Centers for Disease Control and at APROFAM in Guatemala. The survey was supported by the U.S. Agency for International Development (AID).

II. SURVEY METHODOLOGY

Sampling Design

The 1983 survey was a multistage area probability survey with a two-stage selection: Selection of census sectors and selection of households within census sectors. The 1981 census was used as the sampling frame and was kindly provided by the Guatemalan Direccion General de Estadistica (DGE). The DGE also provided the maps necessary for field work. In the first stage, a systematic sample with a random start was utilized to select census sectors with probability proportional to the number of households in each sector. Within chosen census sectors, clusters of households were randomly selected for interview. There were two strata or "domains", the Departament of Guatemala and all other departments, referred to in this report as the "Interior." However, the Department of Peten was excluded because its population represents only 1 percent of the total population of the country; if it were to have been included, the costs of the survey would have increased considerably because of the Department's low population density and poor road infrastructure. In the Interior, respondents were classified into two ethnic groups--the Ladinos and the Indians, or the indigenous population. Ethnic membership was defined primarily by social and cultural factors, such as the language spoken in the home and the type of clothing used, especially by women (van den Berghe, 1968).

In the Department of Guatemala and in Ladino areas in the Interior, clusters of 20 and 25 households, respectively, were randomly selected for interview. Normally, 25 households would have also been selected for interview in indigenous areas, but clusters of 30 households were selected instead to

compensate for some areas in which it would be impossible to interview selected households because of the political situation. As it turned out, it was not possible to visit eight rural indigenous sectors, or 240 households. No substitutions were made for these eight sectors and they are classified as households with no interview. For this reason, in any comparisons made in this report between results of the 1983 and 1978 surveys, the eight interview sectors included in the same areas in 1978 have been deleted.

In order to conduct the survey in indigenous areas, it was necessary to translate the Spanish questionnaire into five Indian dialects: Quiche, Kackchiquel, Keckchi, Mam, and Pocomchi. Each translation was verified, and bilingual interviewers from each area were selected and trained to administer the questionnaires.

The probabilities of selection were not equal for the two strata. The Department of Guatemala was oversampled and constituted 31 percent of the total sample, whereas it represents approximately 22 percent of the total population of the country. Conversely, the Interior was undersampled and represents 69 percent of the total sample, but 78 percent of the total population of the country. In addition, since only one woman per household was selected for interview, each respondent's probability of selection was inversely proportional to the number of eligible women in the household. Thus, to make estimates of proportions and means included in this report weighting factors have been applied to account for these unequal probabilities. The weighting factors were based on a 1981 census listing of the number of households in the Department of Guatemala and the rest of the country, combined with survey data on the number of women per household. In the tables that follow, percentages are based on the weighted number of observations, but the unweighted numbers of cases are shown.

For the country, the variable "current use of contraception" for married women 15-44 years of age has an estimated sampling error of 2.0 percent within a 95 percent confidence interval, including the estimated design effect. Based on the unweighted numbers of cases, the sampling error for each strata ranges from 1.7 to 4.3 percent with a confidence interval of 95 percent.

Even though only one woman was selected with equal probability to respond to the entire questionnaire, information on age, marital status, education, and fertility was collected for all women in the household between the ages of 15 and 44. In addition, the immunization status and the prevalence of diarrhea during the week prior to the interview was obtained on all children less than 5 years of age living in sampled households.

As shown in Table 2-1, 3,796 (79.5 percent) of the 4,775 households in the sample contained, or may have contained, at least one woman age 15-44. The proportion of households in which women eligible to be respondents were identified was essentially the same for the Department of Guatemala and the Interior. As mentioned earlier, the main difference between the Department of Guatemala and the Interior is that it was not possible to interview 24(households in rural, indigenous areas of the Interior because of the political situation; this number of households represents 7.4 percent of sample households in the Interior. The bottom panel of Table 2-1 shows that complete interviews were obtained in 95 percent of those households (excluding the eight sectors not visited) that had or may have had eligible respondents, for a total of 3,670 interviews. Interview completion rates ranged from 8: percent in the Department of Guatemala to 98 percent in the Interior Overall, the refusal rate was 2.7 percent, with the refusal rate higher in the Department of Guatemala (almost all refusals occurred in Guatemala City) than in the Interior.

There was a total of 4,185 children less than 5 years of age included in the survey for whom information on their immunization status and experience with diarrhea during the week prior to interview was obtained.

Comparison With Other Data Sources

There are two bodies of data with which to compare the results of the 1983 survey--the 1978 survey and the 1981 Guatemala Census. Comparisons between the results of these data sets can be used to (1) help evaluate the reliability of survey data on residence, age, and marital status distributions, and (2) detect recent changes in these distributions.

Of the two bodies of data with which to compare the results of the 1983 survey, the 1981 census should be the most appropriate since the census results are more recent than the 1978 survey results. However, the 1981 census results have two limitations: (1) Unpublished census data reported by the Direccion General de Estadistica reveal an under-enumeration in the 1981 census of approximately 27 percent when compared with estimates of the population for June 1982 (Direccion General de Estadistica, 1982 y 1983); and (2) As of June 1984, the census results had not been disaggregated by ethnic group. If the under-enumeration was consistent across the board, comparison of population distributions reported in the 1981 census with the 1983 survey would not present any problems. However, if for example, Indians living in the Interior were under-enumerated, the results of the census would be biased toward Ladinos thus making any comparison with the 1983 survey results problematic. Finally, because the census results have not been disaggregated by ethnic group, it is not possible to compare the survey results by ethnic group for women living in the Interior with the census results.

Table 2-2 compares the 1983 survey results on the distribution of women age 15-44 by residence and ethnicity with the 1978 survey (Asociacion Pro-Bienestar de la Familia, 1980) and the 1981 census results (Direccion General de Estadistica, 1983). The 1983 survey results correspond closely with those of the 1978 survey results when the eight sectors that were not visited in the 1983 survey are excluded from the 1978 survey results. However, the 1981 census found a somewhat higher percentage of women 15-44 living in the Department of Guatemala than the other two data sources. This could reflect under-enumeration by the census of the population living in the Interior.

The age distributions of 15-44 year-old women are extremely similar in the two surveys and the 1981 census (Table 2-3). This similarity supports the representativeness of the 1983 survey.

Table 2-4 shows that the proportion of women reported to be currently married (in union) is similar in the 1981 census and the 1983 survey, but generally lower in every age group in the 1981 census. A possible explanation for the difference is that there may have been an underreporting of women currently married in the census since much of this information does not come directly from the women themselves.

In summary, comparisons of residence, age, and marital status from the survey with other data suggest that the survey accurately represents the population.

Internal Data Checks

Several internal checks of data quality were performed. These included: verifying if the correct woman was interviewed in the household; comparing reports of children ever born, age, etc., in the household questionnaire with the same in the individual form; quantifying heaping in the age-reporting of the women and in the reported duration of breast-feeding of the last child; examining the sex ratio of the last live born child and the mortality risk of that child; and examining the mean number of children ever born by single years of woman's age. Each of these will be described in turn. Except for the first check, all tabulations are for currently married women (n=2,709).

If there was more than one eligible woman in a sample household, the interviewer was instructed to use a predesigned random table to determine which woman to interview. A check showed that for the 814 households with two or more eligible women, in seven cases (0.2 percent of all interviews) the woman interviewed was not the appropriate woman, indicating very accurate selection of respondents.

Comparisons of reports of marital status, age, live births, and living children in the household questionnaire with the same information in the individual questionnaire showed that disagreements are quite small. The percentages of women with inconsistent reports were 1.1, 1.4, 1.3, and 0.6 for the four variables, respectively. In all cases, data appearing in the individual questionnaire were analyzed for the report since these data were provided by the interviewee herself (although it is possible that the household data is less affected by non-response).

The distribution of the women by single year of age (Figure 1) show very little heaping overall. Nevertheless, there is evidence of heaping on ages 35 and 40, particularly in the Ladino population of the Interior, and on age 23 (birth year 1960) in the Department of Guatemala and Indian populations. With regard to retrospective duration of breast-feeding of the last child, heaping predominates. Consider the reported durations of 6, 12, 18, 24, 30, 36, and 48 months as a proportion of all reported durations. If there were no heaping and with a smooth underlying distribution, one would expect this proportion to be near 7/48 = .146. However, the proportions for the Department of Guatemala, Interior Ladinos, and Indians were .37, .43, and .67, respectively. From the breast-feeding current status data, there is no indication of a cultural norm for stopping breast-feeding at the heaped durations. Thus, estimates of breast-feeding duration in this report are based on current status data rather than retrospective data.

Table 2-5 shows sex ratios of last live births and the proportion of these surviving to the date of the survey for the three groups of women, by number of years since the birth. It is known that the sex ratio at birth varies only between 102 and 107; deviations from this range not due to sampling variability would indicate differential omission of births by sex. With regard to mortality, we would have two expectations for the proportions of live births which had died before the survey: First, that male and female mortality would be of a similar order of magnitude in the same population; and second, that the proportion alive at the time of the survey would be less for births which occurred in an earlier period than for recent births. From Table 2-5, it is evident that there were problems in the reporting of births in the

Department of Guatemala and for Interior Indians. In the latter population, female births appear to be missed consistently. In the Department of Guatemala, the pattern is more complex; relative to male births, female births are in excess in the 0-23 month interval, and the reverse is true for last births beyond 2 years. Female mortality is very low relative to male mortality in both intervals. For births occurring in the 12 months before the survey (data not shown), the sex ratio is only 82 ($p<.10$ when compared to a sex ratio of 105) and no deaths of female births in this period were reported. These findings for the Department of Guatemala apparently reflect a misplacement of births in time, which is differential by sex, and some missing of female births. Considering only the 24 months before the survey and total births--used for fertility rate calculations later in this report--the misplacement of male and female births could counterbalance each other so there may only be a slight underestimation in the Department of Guatemala due to the missing female births which died. For Interior Indians the estimated minimum omission for this interval is 5 percent.

An analysis of the mean number of children ever born (CEB) by single years of mother's age can provide more insight on missing births. Figure 2, shows CEB by age and residence. It is seen that for the Department of Guatemala women reporting age 35 and for Indian women reporting age 30 or 40, the mean CEB is below its expected value. Either these are women of considerably younger ages who choose an older heaped age, or, the more likely explanation, these women have both heaped age and omitted births. Since the breakdown of all live born children by sex was not asked, it is impossible to test this more explicitly However, comparison of the sex ratio of the last live born child for women wh

reported an age of 30, 35 or 40 versus other women reveals a difference (though not statistically significant) in sex ratios (Table 2-6). It appears that women with heaped ages report too few male births relative to female births in the past year while women of other ages report too few female births relative to male births. Given the pattern in Figure 2, it is very probable then that the former group of women has considerable omissions of births of both sexes.

In summary, heaping of ages is minor in all three groups of women though women with rounded ages appear to have had a greater omission of births. Among last births, females, particularly those who died before the survey, were missed disproportionately relative to males for women of the Department of Guatemala and Interior Indians. From this it is deduced that a certain proportion of last births were missed in the two population groups and possibly more in the number of reported children ever born. Also from these quality checks, there was no evidence of omission of births reported by Interior Ladino women.

III. DEMOGRAPHIC ANALYSIS

In this chapter estimates of fertility rates for women selected as respondents in the 1983 survey are discussed. These estimates are compared with estimates from the 1978 survey and from the 1981 census. In addition, breast-feeding and post-partum amenorrhea and their effects on fertility are discussed.

Fertility Rates

Table 3-1 shows differentials in the number of children ever-born by age of the respondents and residence. Focusing first on the 1983 survey data, as expected, mean parity was higher for Indian women than for Ladino women. On the average, Indian women had more children (7.5) than Interior Ladino women (6.1) and women living in the Department of Guatemala (4.7).

Comparing mean parity of women in the 1983 survey with that of women in the 1978 survey, we observe a slight decrease in mean number of children born alive, from 3.0 in 1978 to 2.8 in 1983. The largest decrease occurred among Interior Ladino women. Overall, no decrease occurred among Indian women. Data on parity from the 1981 Census follow closely the patterns in the surveys, but imply slightly lower levels of fertility than the 1983 survey.

Period fertility estimates based on respondents in the 1978 and 1983 surveys are presented in Table 3-2. The estimated Crude Birth Rate (CBR) of 43.8 in the 1983 survey compares well with the 1981 vital statistics rate of 41.. (Direccion General de Estadistica, 1983). The vital statistics rate would be approximately 43.5 if a 5 percent underregistration adjustment was introduced. As the top panel of the table shows, fertility is estimated to be

slightly lower in 1983 than it was in 1978 for all measures shown. However, all of the decrease appears to be accounted for by Interior Ladino women. Estimated fertility rates were somewhat higher in the Department of Guatemala and among Indian women in 1983 than they were in 1978. However, given the level of precision of fertility estimates in a survey of this size, it is best not to conclude that fertility actually did increase; the difference is within expected sampling error. In the case of Indian women, the main conclusion should probably be that both surveys indicate very high rates of fertility (Anderson, et al, 1980).

Breast-feeding and Post-partum Amenorrhea

Breast-feeding is an important element in child health and also affects fertility through its impact on the length of the post-partum anovulatory period (McCann, et al, 1981). Overall, 94 percent of women who reported a live birth within 24 months of interview said they breast-fed their last child. A higher percentage of Indian women (97 percent) reported breastfeeding their last child than Interior Ladino women (93 percent) and women living in the Department of Guatemala (92 percent). Mean duration of breast-feeding was 18 months with mean duration among Indian women of 2[illegible] months and women living in the Department of Guatemala of 14 months (Table 3-3). Interior Ladino women breast-fed about 15 months on the average. Mean duration of breast-feeding is negatively associated with education and positively associated with age, which is similar to patterns found elsewhere in Latin America (Anderson, et al, 1983).

Post-partum amenorrhea, shown in the right hand panel of Table 3-3, averages about 12 months. Post-partum amenorrhea is highest among Indian women (16.6 months), which is consistent with their longer mean duration of breast-feeding, followed by Interior Ladino women (10.5 months), and women living in the Department of Guatemala (7.6 months).

Table 3-4 compares duration of breast-feeding of respondents in the 1978 survey with those in the 1983 survey. In order to examine trends, the mean durations were estimated excluding durations of more than 18 months to ensure comparability between the surveys. Thus, the values in Table 3-4 are somewhat lower than in Table 3-3. Estimates tend to be slightly higher in 1983, but the differences are small, less than 1 month overall. Those who had at least a primary education had an increase from 6.6 to 10.8 months, according to the table, and there is a decrease from 13.1 to 11.5 months for women 15-24 years of age. The data do not suggest that there is a trend toward shorter durations of breastfeeding.

Returning to an analysis of 1983 data, Table 3-5 shows that supplementa feeding of infants in Guatemala is initiated fairly early after birth. For example, 49 percent of infants 4 to 6 months of age received supplementa feedings or were not being breast-fed at all, with this percentage increasin to 76 percent when the children are 7-9 months of age. By the time childre are 1 year of age, 100 percent receive supplemental milk and/or food. Whe supplemental milk is given to children, powdered milk is the milk of choice 80 percent of mothers said this is the type of milk they gave to thei children. Another 19 percent said they gave their children cow or goat milk.

Of the mothers who gave powdered milk to their children, 47 percent obtained the milk from a pharmacy, 30 percent from a store or supermarket, and 11 percent from a MOH health center or post.

Estimated Mortality Rates

Table 3-6 presents indirect estimates of child mortality rates for the 1978 and 1983 surveys. Estimates of the probability of dying between birth and age 2, 3, and 5 years were estimated for the major residence/ethnic categories using standard demographic techniques. Data from the surveys are consistent with relatively high levels of mortality. For example, the rates shown in Table 3-6 for the total 1983 sample are roughly consistent with an infant mortality rate of 95 per 1,000 live births and an expectation of life of about 55 years. Estimates from both surveys display a highly consistent pattern with mortality increasing from the Department of Guatemala, to Interior Ladinos, to Interior Indians. Although the rates for 1983 tend to be slightly lower than those for 1978, it is probably best not to conclude that there is a trend, but rather that both surveys indicate about the same level and the same pattern of differences.

IV. HISTORY OF SPONTANEOUS AND INDUCED ABORTION

All respondents were asked whether they had ever had an abortion, either spontaneous or induced. If they had, they were then asked how many they had undergone and whether their last or only abortion was spontaneous or induced.

As shown in Table 4-1, 13 percent of women reported they had had at least one spontaneous or induced abortion. Sixteen percent of women living in the Department of Guatemala reported an abortion compared to 14 percent of Interior Ladino women and 9 percent of Indian women. The proportion of women reporting an abortion increases with age and is higher for married women and women with less than a primary education. The proportion of women in 1983 reporting at least one abortion is 2 percentage points higher than the proportion of women reporting an abortion in the 1978 survey (Asociacion Pro-Bienestar de la Familia, 1980).

It should be noted that women in this survey probably underreported their abortion experience. While 13 percent of women reported having an abortion, spontaneous or induced, at some time in their lives, the number of abortions reported was only 6 percent of all reported pregnancies. This is relatively low compared to estimates of pregnancies terminating in spontaneous abortion alone, which has been found to range from 10 percent to 25 percent in prospective studies (Anderson, 1979). The percentage of pregnancies reported as ending in abortion was 9 percent for the Department of Guatemala, 6 percent for Interior Ladino women, and 4 percent for Indian women. Thus underreporting of abortions may be greater among Indian women than among Ladino women.

Of the women reporting a history of abortion, 14 percent said their last abortion was induced (Table 4-2). It should be noted that a slightly higher percentage of Indian women than Ladino women reported that their last abortion was induced. With respect to age, the data suggest that women at the extremes of their childbearing years are more likely to report an induced abortion than women in their peak childbearing years. However, given the difficulty in obtaining data on abortion, these data should be viewed with some caution. As shown in Table 4-3, nearly one-third of women with a history of abortion reported two or more abortions. Women with no formal education were more likely to report two or more abortions than women who had attended school (data not shown).

All women with a history of abortion were asked if they had any complications following their most recent abortion that required medical attention. Nearly two-thirds reported that they had received medical attention following their last abortion, and 40 percent were hospitalized (Table 4-4). Medical attention and hospitalization varies significantly by residence, suggesting that women living in the Department of Guatemala may have greater access to medical attention in the event that complications occur following abortion than women living in the Interior, especially Indian women. Overall, of women who sought medical attention following their most recent abortion, the MOH was the primary source of treatment (Table 4-5). Among Indian women, about 50 percent were either treated in their homes or in the home of a midwife, which further illustrates the poor access (cultural or physical) Indian women have to medical care.

V. PLANNING STATUS OF PREGNANCIES AND CURRENT PREGNANCY INTENTIONS

All women who reported at least one pregnancy within the last 5 years were asked a sequence of questions about whether they wanted to become pregnant at the time of their most recent conception and, if they had not, whether they had ever wanted to have any more children at the time of that pregnancy. On the basis of these questions, each woman's last pregnancy was classified as either "planned," "mistimed," "unwanted," or "of unknown status." Planned pregnancies were defined as those that were desired and did not occur before they were intended. Mistimed pregnancies were those that were wanted but at some time in the future. Those pregnancies that were in excess of the total desired number were classified as unwanted. The remainder were classified as unknown because of insufficient data about reproductive intentions. These four categories are mutually exclusive and exhaustive. Mistimed and unwanted pregnancies comprise the category "unplanned pregnancies." This typology conforms to that of the published analysis of the National Fertility Surveys in the United States (Westoff, 1976).

Based on these definitions, 86 percent of respondents' most recent pregnancies were reported as planned, 5 percent as mistimed, and 7 percent as unwanted (Table 5-1). Only 2 percent of pregnancies could not be classified. About 1 percent of recent pregnancies could thus be considered unplanned.

There was little reported difference in proportions who planned their most recent pregnancies between married Ladino women living in the Department of Guatemala and in the Interior; 83 percent stated that their last pregnancy was

planned. This compares with 90 percent of Indian women who said their last pregnancy was planned. It should be noted that among women living in the Interior, both Ladinos and Indians, who reported that their last pregnancies were unplanned, a higher proportion said their pregnancies were unwanted rather than mistimed. In contrast, women living in the Department of Guatemala were more likely to state that their unplanned pregnancy was mistimed.

The proportion of pregnancies that were reported as unwanted increased with both age and number of living children. Mistimed pregnancies were relatively more important for younger women. There was a negative association between unwanted pregnancies and education with women not completing primary school reporting about twice as many wanted unpregnancies.

Is this right? Confusing sentence

In Table 5-2, the 1983 data on planning status of last pregnancy are compared with similar data from the 1978 survey. In 1983, a higher proportion of respondents reported that their last pregnancies were planned than respondents in the 1978 survey, 86 percent versus 80 percent. The largest increase in planned pregnancies occurred in the Department of Guatemala followed by Ladino women living in the Interior. As will be seen in Chapter 7, use of contraceptives by these women also increased from 1978 to 1983. Planned pregnancies among Indian women remained virtually unchanged in 1983 compared to 1978.

All women who reported their last pregnancy as unplanned were asked if they were contracepting at the time they got pregnant and, if not, why not. Table

5-3 lists the reasons given for not using. Seventy-five percent of women reported that they were not contracepting. Of these women, 26 percent reported that they lacked knowledge of contraception; half of these women were Indian women. Another 16 percent said they knew they were taking a chance ("descuido") of becoming pregnant by not using contraception but still had unprotected sexual relations. Also, 10 percent of the women were not using at the time they got pregnant because of negative rumors they had heard about contraceptives, while 9 percent reported that they were afraid of the side effects of family planning methods. Women who reported the first four reasons listed might have been willing to use contraception if they were provided with appropriate information.

Another factor related to planning status is the timing of first birth relative to time of first entrance into marital union. In the survey, women were asked the date of their first live birth as well as date of first union. Only information on first births is known, so if more than one premarital conception occurred to a woman, only one would be apparent. For this reason, and the possible misreporting of birth dates to conceal premarital pregnancies, actual premarital conception rates are almost certain to be somewhat higher than our figures imply. On the other hand, confusion between date of first union and date of legal marriage works in the opposite direction

As shown in Table 5-4, 30 percent of women married no more than 5 years before interview reported that their first birth occurred either prior to marriage (union) or in the first 7 months following marriage (union). This total proportion was higher among women living in the Department of Guatemala (4

percent) than for Interior Ladino women (23 percent) and Indian women (28 percent). The premarital conception rate for women with at least a primary education was about 60 percent higher than for women with less than a primary education. Of the women with premarital conceptions, 58 percent were 15-19 years of age at time of marriage and an additional 26 percent were 20-24 years of age.

Table 5-5 shows current pregnancy intentions of married women. Overall, 56 percent stated that they did not desire to get pregnant at the time of the survey, while 23 percent desired to become pregnant at that time. Another 15 percent were currently pregnant. As expected, proportions of women not desiring pregnancy tended to increase with age, parity, and number of living children. While there was a strong negative relationship between the proportion of women currently pregnant and age, no strong and consistent associations existed with respect to residence, education, and work status. It is evident that married women with no children have strong pressures to have a child (about 90 percent are pregnant or desire a pregnancy).

The results of this chapter illustrate various dimensions of the need, as measured by the survey, for family planning in Guatemala. Unplanned pregnancies accounted for 12 percent of most recent pregnancies among married women, with about 58 percent of the unplanned pregnancies resulting in unwanted rather than mistimed births. Premarital pregnancy seems to be a common phenomenon, especially in the Department of Guatemala. In a later chapter, these and other survey results will be used to define the number and characteristics of women in need of family planning services.

VI. KNOWLEDGE OF CONTRACEPTIVE METHODS

All women age 15-44 were asked if they knew of different contraceptive methods available in Guatemala. Specifically, respondents were asked, "Have you ever heard of (Method X)?" Then, all local and popular names of each method was read by the interviewer. In this chapter, their responses are analyzed.

Table 6-1 is an analysis of respondents' knowledge of at least one effective contraceptive method, by age and residence. Based on a recent study on contraceptive efficacy (Vaughn, et al, 1980), we included male and female sterilization, oral contraceptives, IUD's, injectables, condoms, vaginal methods, diaphragms, rhythm, and the Billings method in the analysis; withdrawal was excluded. We observe that over 90 percent of Ladino women living in the Department of Guatemala and in the Interior have knowledge of at least one effective method, and that knowledge is consistently high for all age groups. In contrast, only 52 percent of Indian women know of at least one effective method. Stated another way, 48 percent of Indian women do not have knowledge of even one method of contraception.

Table 6-2 shows wide variation in knowledge of individual methods. The method most widely known is oral contraceptives (78 percent) while the least known method is the Billings method (5 percent). The second most known method is female sterilization (70 percent), followed by injectables (59 percent), the IUD (54 percent), and male sterilization (47 percent).

Although knowledge of individual methods is, in general, lower in Guatemala than it was in Panama in 1979 (Monteith, et al, 1981) and in Honduras in 1981 (Suazo, et al, 1983), it is encouraging to note that the best known methods in Guatemala are the modern, highly efficacious methods. If Indian women are excluded from the analysis, knowledge of individual methods increases by 1 to 16 percentage points, depending on type of method.

As Table 6-2 also shows, knowledge of individual methods varies by residence of the respondents. In general, women living in the Department of Guatemala have the greatest knowledge of individual methods while Interior Indians have the least knowledge. Very little difference in knowledge exists between Ladinos living in the Department of Guatemala and in the Interior, which suggests that both subgroups have similar exposure to family planning information. On the other hand, the relative low levels of knowledge of methods among Indians indicate the need to develop special communication strategies for this group in order to increase their knowledge of contraception (Bertrand, et al, 1979).

Knowledge of methods does not vary significantly by age (Table 6-3). As expected, young women age 15-19 have the least knowledge of contraceptive methods, although their knowledge compares favorably with that of women age 20-24. We also observe that very little difference in knowledge exists among women 20 years of age or older. It should be noted that knowledge of some reversible methods such as IUD's, injectables, condoms, and vaginal methods is relatively low among women 15-24 years of age; these are among the methods that one would expect young women to use if they want to postpone or space their pregnancies. As the next chapter will show, use of these methods is relatively low.

Table 6-4 shows that knowledge of individual contraceptive methods is postively related with education of the respondent; that is, women with a higher level of education have greater knowledge of methods than women with less education. Women with no education are primarily Indian women. Of the women who reported receiving no education, only 8 percent can read, suggesting that written materials may not be the medium to use to increase knowledge of family planning and contraception among these women. We also observe in Table 6-4 that educated women not only have greater knowledge of methods in general, they also have greater knowledge of reversible methods, suggesting the potential for greater use of these methods among these women than among women with little or no formal education.

Given the low literacy rate in Guatemala, radio may be the appropriate medium to increase awareness of family planning and individual contraceptive methods (Pineda, et al, 1983). In general, 78 percent of women 15-44 years of age said they have a radio in their households or have access to one. Responses ranged from 65 percent for Indian women to 82 percent and 86 percent, respectively, for Ladinos living in the Interior and in the Department of Guatemala. In contrast, only 38 percent of women said they had access to a television set, with only 8 percent of Indians reporting that they had access. Other means of promoting family planning appear to be limited in their coverage. For example, only 15 percent of the women reported that they had attended a presentaton on family planning while only 22 percent said they had discussed family planning with a doctor or nurse.

VII. CURRENT USE OF CONTRACEPTION

This chapter covers current contraceptive use and the variables associated with use, including residence, age, education, and number of living children. The results presented here focus on the level of use found among currently married (in union) women age 15-44.

Results of the 1983 survey indicate that one-fourth of married women age 15-44 were using contraceptive methods (excludes douche and herbs) at the time of the survey (Table 7-1). The most prevalent method was female sterilization (10 percent) which, together with male sterilization (vasectomy), accounted for about 45 percent of all contraceptive use. The second most used method, oral contraceptives, had a relatively low prevalence of 5 percent followed by rhythm, the IUD, condoms, and other methods such as injectables and vaginal methods. Although the use of vasectomy accounts for slightly less than 1 percent of use, Guatemala is the first country in Latin America to record a level of use of male sterilization even this high (Huezo, 1982).

The Department of Guatemala had the highest prevalence rate with almost half of married women as current users compared to 29 percent for Interior Ladinos and less than 5 percent for Interior Indians. The Department of Guatemala had a somewhat higher level of use of female sterilization (15.6 percent) than the Interior Ladinos (13.5 percent), while only 2 percent of Indian women reported sterilization as their current method. Only in the Department of Guatemala was the IUD an important method. This may be related to the availability of personnel trained to insert IUDs in the capital city. In general, however, use of all methods is relatively low.

Comparing the results of the 1983 survey with those of the 1978 survey, we observe that contraceptive use among married women increased by 6 percentage points, from 19.2 percent in 1978 to 25.0 percent in 1983 (Table 7-2)*. The greatest increase in usage occurred in the Department of Guatemala followed closely by Interior Ladinos. There was very little increase among Interior Indians, the group with the lowest usage. As Table 7-3 shows, for the country as a whole, most of the increase in prevalence between surveys was in the use of surgical contraception which accounted for 75 percent of the increase. It should be noted that no decrease in average age of married users occurred between surveys; it was 31 years for both surveys. However, the average number of children per user decreased slightly, from 3.5 in 1978 to 3.3 in 1983. Encouragingly, the average age and number of living children of married users of nonpermanent methods decreased from 29.2 to 28.7 and from 3.1 to 2.7, respectively, between surveys.

Contraceptive use varied by age, reaching a peak among married women 30-3[illegible] years of age (Table 7-4). Use was lowest for married women 15-24 of whom a relatively large proportion are either currently pregnant or desiring a pregnancy. As age increases, sterilization accounts for an increasing proportion of total use. For women age 25-29, sterilization, both female

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*The 1978 survey report indicated a prevalence rate of 18 percent. The 19 percent rate reported here reflects the deletion of eight interview sectors from the 1978 survey so that results could be comparable with the 1983 survey (see Methodology).

and male, accounts for almost one-third of contraceptive use. For women in age groups 30-34 and 35-39, the percent using sterilization jumps to 55 percent and 65 percent, respectively. The use of oral contraceptives and IUD's, although relatively low, increases with age up to ages 25-29 but declines thereafter so that peak usage of these methods at ages 25-29 is 2 to 3.5 times higher than among women 40-44.

These findings indicate that Guatemalan women who use a method depend on surgical sterilization to prevent births after the peak reproductive ages. The data also indicate the need to promote the use of reversible methods among young married women who may not have completed their families and who are interested in spacing their children.

Data on contraceptive use according to number of living children support this view. Women with no living children and women with one living child have lower levels of contraceptive use, 4 percent and 20 percent respectively, than women who have two to five living children (Table 7-5). In contrast, in 1979, Panamanian women with no living children or with one living child were contracepting at a rate of 17 percent and 51 percent, respectively (Monteith, et al, 1981). The low contraceptive use among these women may be explained, in part, by the high proportion of women in these groups who said they were pregnant or desired pregnancy. It should be noted that slightly less than 21 percent of women with 6 or more living children are currently contracepting. These women are older, primarily 35 to 44 years of age, and probably went through their peak reproductive ages when family planning was not popular or well known, which still may be the case for them.

As Table 7-5 also shows, sterilization begins to be the most important method among women with three living children. In contrast, women with one or two living children make greater use of reversible methods, such as orals and rhythm. However, the prevalence of use of reversible methods is relatively low, which supports our earlier suggestion of the need to promote child-spacing among women who have not completed their families. The data in this and the previous table show that contraceptive use is not high among young women with few children and increases, with sterilization as the method of choice as age and family size increase.

Finally, Table 7-5 shows one woman (0.6 percent) with no living children who is surgically sterilized. This woman was 35 years old at the time of the survey and had 10 pregnancies and 6 live births. None of her children has survived, with the last child dying 10 months after birth. She was 27 years old when she was sterilized. According to this woman, she elected surgical contraception because of complications associated with childbirth.

As mentioned above, contraceptive use is low among young, married women with few children. An analysis of data not shown reveals that on the average ever users of contraception (current users and nonusers who have used in the past) first initiate the use of contraception when they are 24.5 years of age, have 2.4 living children, and are married 5.4 years. It should be noted that only 4.6 percent initiated contraception before marriage. In general, average age at marriage is 18 years in Guatemala, according to the survey data. Indian women tend to marry earlier (17 years of age) than Ladinos living in the Interior (18) and women in the Department of Guatemala (19). Thus, if premarital counselling on child spacing was to be made available in Guatemala

it should be directed primarily at women 17 to 19 years of age. A relatively high proportion of ever-users reported that their first method of contraception was one of the more effective methods, such as oral contraceptives (48 percent), sterilization (14 percent) and IUD's (9 percent). The proportion of current users reporting that their first method was sterilization was 21 percent, lending support to our observation that sterilization is the method of choice for some women when they decide to limit their childbearing.

Current use of contraception is strongly related to education (Table 7-6). Women who had at least a primary educaton were about 5 times more likely to use contraception than women with no formal education and twice as likely as those who have an incomplete primary education. We observe that sterilization is the most prevalent method among all educational levels. However, women who had at least a primary education are almost 3 times more likely to use sterilization than women with no formal education. It is noteworthy that women with at least a primary education use reversible methods from 5 to 17 times more often than women with no formal education and from 2 to 6 times more often than women with less than a primary education.

As Table 7-7 shows, the prevalence of use of contraceptives is higher for women who are gainfully employed outside of the household (37 percent) than for women working out of their homes (30 percent) and housewives (22 percent). The use of sterilization does not vary as much by work status, although working women are more likely to be sterilized than housewives.

When age, education, work status, or number of living children are controlled, the percentage of women contracepting in the Department of Guatemala is still higher than the proportion contracepting in the Interior (Table 7-8). In general, Ladino women living in the Interior display the same tendencies in use as women living in the Department of Guatemala, i.e., a positive association between use and education, but at a much lower level of use. For Indian women, as reported previously by Chen (Chen, et al, 1983), there is little association between use and these socioeconomic and demographic variables.

In general, contraceptive use increases with education when age, work status and number of living children are controlled, although this relationship is weak for women with no living children, again reflecting the pressures to have a child soon after marriage, independent of socioeconomic status (Table 7-9). An analysis of data not shown indicates there is no apparent association between current use and work status when age and number of living children are controlled.

The denominator in Table 7-10 is different from that used in previous tables on contraceptive use; it includes only currently married women age 15-44 who had been pregnant at least once within 5 years of interview (83 percent of married women in the survey). The intent of the table is to show contraceptive use levels by planning status of last pregnancy. The most important finding is that only 25 percent of women who stated that their last pregnancy was unwanted were using contraception at the time of the survey. An analysis of data not shown here reveals that only 5 percent of Indian women

whose last pregnancies were unwanted were using contraceptive compared to 28 percent for Interior Ladino women and 42 percent for women living in the Department of Guatemala. Table 7-10 also shows that 20 percent of women whose last pregnancies were planned were contracepting, indicating further that contraceptive use for the purpose of child-spacing is low in Guatemala. As will be discussed in detail later, overall, thirty-one percent of nonusers were not using because they lacked knowledge of contraception. Among Indian women, 56 percent gave this response. Other important reasons for nonuse were negative rumors about contraception and fear of side effects (26 percent) and husband's opposition (11 percent).

Finally, the data in Table 7-11 place contraceptive prevalence in Guatemala in a regional perspective by comparing the 1983 Guatemala results with recent survey results from other countries in the region. As the table shows, contraceptive prevalence in Costa Rica and Panama, the two countries with the highest prevalence in the region, is approximately 2.5 times that of Guatemala. We observe that Guatemala's prevalence is similar to that of neighboring Honduras but would be higher (35 percent) if only Ladinos were considered. In Panama, Dominican Republic, El Salvador, and Guatemala, the most prevalent method is sterilization while oral contraceptives are the most prevalent method in Costa Rica, Mexico, and Honduras. We observe, however, that sterilization and oral contraceptives are the two most prevalent methods in every country shown.

VIII. SOURCE OF CONTRACEPTION

This chapter discusses sources of contraception, time to reach those sources, and the impact of time to source on use of contraception.

As shown in Table 8-1, the Ministry of Health (MOH) is the primary source of contraception in Guatemala, supplying 28 percent of all users. The MOH is followed closely by the Asociacion Pro-Bienestar de la Familia (APROFAM), the International Planned Parenthood Federation (IPPF) affiliate in Guatemala, as a principal source, if one combines the figures for their clinic program (22 percent) and their CBD program (3 percent), for a combined total of 25 percent. It should be mentioned that APROFAM provides contraceptive logistical support to the Ministry of Health in 11 of 22 departments of the country. Other important sources of contraception in the country include private physicians/clinics (12 percent), pharmacies (9 percent) and the Instituto Guatemalteco de Seguro Social (IGSS), which supplies 6 percent of users in the country (and 13 percent in the Department of Guatemala) who are beneficiaries of the Social Security system. In the Interior of the country the MOH is the principal provider of family planning services while APROFAM is the major provider in the Department of Guatemala, where use of contraceptio is the highest.

An analysis of source of contraception by method shows that most femal sterilization users utilized the MOH (46 percent) as their source of surgica contraception (Table 8-2). However, this may be an overstatement of the MOH' activities in this area since MOH officials readily admit that the MOH doe not have a sterilization program. Apparently many sterilized women may hav

confused APROFAM as an entity of the MOH since for many years the national family planning program has been advertised as a joint MOH-APROFAM effort, and APROFAM physicians work in MOH hospital facilities. For example, 30 percent of sterilizations in the Department of Guatemala were stated to have been performed in an MOH facility. The only MOH facility in the department that performs sterilizations is Roosevelt Hospital and the procedures are performed by APROFAM physicians. In addition, since 1978 the overall increase in sterilization parallels the increase in sterilizations reported to be performed by APROFAM. This confusion could have also affected other method/source relationships. It should be noted that APROFAM has been promoting vasectomy and is now the primary source of vasectomies in the country.

Table 8-2 also shows that APROFAM is the primary source of oral contraceptives in the country, supplying 35 percent of all orals users: 22 percent through its clinic program and 13 percent through its community-based distribution (CBD) program. Other major providers of orals are the MOH (27 percent) and pharmacies (23 percent). APROFAM is also the principal source of IUD's (4(percent) followed by private physicians (25 percent) and the MOH (2: percent). Only for condom users, who represent 5 percent of all users, are pharmacies the main source of supply.

For some methods, source of contraception has changed dramatically since 197 (Table 8-3). For example, the percentage of oral users who gave the APROFA CBD program as a source was thirteen times greater in 1983. Similarly, th percentage of all users who use orals and IUD's in APROFAM's clinic progra

approximately doubled during the interim. In general, other providers of contraception in the country were serving the same percentage of total users in 1983 as they were in 1978, or showed a percentage decrease in users.

As expected, the estimated time required to reach a source of contraception for women currently using contraception was less for users living in the Department of Guatemala than for Interior Ladino women and Indian women (Table 8-4). As shown in Table 8-5, average time-to-source of contraception for current users is 33 minutes for women living in the Department of Guatemala compared with 66 minutes for Interior Ladino women and 73 minutes for Indian women. In general, nonusers who know of a source of contraception live about the same distance in time from a source (47 minutes) as do users (49 minutes). However, the higher average time-to-source for all users is influenced by time-to-source for users of permanent methods, which is twice that of users of nonpermanent methods. For users of non-permanent methods, average time is 33 minutes. This finding suggests that nonpermanent methods are more accessible in Guatemala than sterilization services, which are concentrated in the big cities. The fact that Indian nonusers live relatively closer to a source of contraception than Indian users supports Chen's observation that improving accessibility of family planning services in Indian areas may not be a significant factor in the acceptance of contraception by some Indian women.

Finally, all women age 15-44 were asked whether the Government of Guatemala should provide family planning services or not. As shown in Table 8-6, 8[illegible] percent of the women responded that the Government should provide family

planning services. Only 55 percent of Interior Indians felt that the Government should provide these services. However, fully one-third of Indian respondents could not give a positive or negative answer, indicating their ambivalence, their lack of knowledge of contraceptive methods, or that they are not accustomed to receiving any Government health services. This suggests that family planning outlets established in indigenous areas may enjoy only limited success in attracting new users, if these outlets only increase physical accessibility to contraceptive services without other promotional efforts.

IX. REASONS FOR NONUSE OF CONTRACEPTION AND DESIRE TO USE IN THE FUTURE

In this survey, nonusers were asked the reasons why they were not using contraception. This chapter covers the reasons given by respondents and the relationship between the characteristics of nonusers and desire to use contraception. For women who want to use a method, the preferred source and method are discussed. The last section of this chapter addresses women's interest in community-based distribution programs.

Women not currently using contraception represent most of the potential for expanding family planning program coverage in Guatemala. Of married women not currently using contraception at the time of the survey, 62 percent were not using any method for reasons related to pregnancy, subfecundity, or lack of sexual activity (Table 9-1). Thus, in general, 38 percent of nonusers could be considered candidates for adopting contraception at the time of the survey. This percentage drops to 31 percent for Ladino women but increases to 48 percent for Indian women. It should be noted that a sizeable proportion of the 62 percent of nonusers who are not immediate candidates for use are potential high priority target women following their current pregnancy and/or post-partum period.

Among indigenous women who gave reasons unrelated to pregnancy, the major reason for nonuse was that they had no knowledge of contraception or did not know where to obtain family planning services; 23 percent gave this reason. This is consistent with our finding in Chapter 6 that 48 percent of Indian women did not have knowledge of any method of contraception. Among Ladinos

the most mentioned reason for nonuse was fear of contraception or fear of side effects. Overall, only 4 percent gave religious reasons for nonuse.

Turning to education, we observe that the proportion of women reporting a reason for nonuse related to pregnancy, subfecundity, or lack of sexual activity is highest for women who completed primary school (Table 9-2). Thus, the proportion of women who could be considered candidates for family planning at the time of this survey is highest among the group with the lowest level of education. Among these women, who are primarily Indian women, the major reason for nonuse is lack of knowledge of contraception or of a source of contraception.

Table 9-3 shows that the proportion of fecund nonusers who want to use a method was 34 percent. This proportion was highest among nonusers living in the Department of Guatemala (44 percent) and lowest among Indian nonusers (27 percent). The only other variable that was an important determinant of interest in using contraception was previous contraceptive use. It should be noted that only one-third of nonusers age 30-44 were interested in contracepting. We may conclude, then, that many older women, many of whom are at higher risk for maternal mortality, will continue to remain exposed to the risk of pregnancy. This has major implications for the need for educational programs for these women.

The right-hand panel of Table 9-3 shows that only 56 percent of nonusers who desire to use a method have knowledge of a source of contraceptives. However, consistent with the data on contraceptive knowledge, a higher proportion of Ladino women (70-76 percent) knew where to obtain contraceptives than did Indian women. Only 26 percent of these indigenous women knew of a source.

Table 9-4 shows the method of choice and the source mentioned for nonusers desiring to use a method. The most frequently desired methods were orals (27 percent), sterilization (18 percent), and injectables (14 percent). It should be noted that while orals was the method of choice among nonusers living in the Department of Guatemala and among Indian women, the method of choice among Interior Ladino nonusers was sterilization (24 percent). Nearly one-third of nonusers did not cite a method of choice but responded "Don't know". Almost 40 percent of Interior Indian women gave this response indicating their low knowledge of contraceptive methods and uncertainty about the suitability of different methods for meeting their own personal circumstances.

The Ministry of Health was cited as a potential source by 55 percent of nonusers while 25 percent cited APROFAM. While the MOH was the choice in the Interior, APROFAM was cited as a potential source by 62 percent of women living in the Department of Guatemala.

Finally, in this survey all fecund women 15-44 were asked if they would be interested in receiving family planning services from trained, nonmedical personnel in the community, i.e., from a community-based distribution (CBD) program. Of these women, 42 percent responded "yes" (Table 9-5). The variable "current use of contraceptives" was the only important determinant of interest in a CBD program. (It is interesting to note that a similar proportion of women living in the Department of Guatemala and Interior Indian women were interested in a CBD program. In all other analyses appearing in this report, these two groups have been dissimilar in their responses). Of the women who said they would be interested in receiving family planning

services through a CBD program, 41 percent would prefer to receive these services at a distributor's house while 35 percent would prefer household delivery (Table 9-6).

Women not interested in a CBD program were asked why they were not interested. The single most frequently given reason was "lack of confidence in nonmedical personnel"; 25 percent gave this reason (Table 9-7). This reason is closely related to another reason given by 11 percent of the women --"lack of confidence in methods distributed by nonmedical personnel". Thus, for 36 percent of the respondents "lack of confidence" in either nonmedical personnel and/or the methods they would distribute were important reasons for not being interested in CBD programs. Another 14 percent said they would prefer to receive their family planning services from a medical facility or pharmacy. While these three reasons were important for Ladino women living in the Department of Guatemala and in the Interior, they were less important for Indian women. For Indian women, lack of sexual activity, dislike of contraception, religious reasons, and lack of knowledge of contraception were important in explaining why they were not interested in a CBD program.

X. CHARACTERISTICS OF WOMEN IN NEED OF FAMILY PLANNING SERVICES

Using the survey data, certain segments of the population can be identified as having greater need of family planning services than others. A woman was characterized as "in need of services" (or "at risk of unplanned pregnancy") if she was not currently pregnant, stated that she did not currently desire to become pregnant, and she either (1) was using an ineffective method (douche or herbs), or (2) was not using any method for reasons not related to pregnancy, subfecundity, or sexual inactivity. Thus, the women defined here as "in need of services" are noncontracepting, fecund, sexually active women (regardless of marital status), who were not currently pregnant and did not desire to become pregnant at the time of the interview.

The percentage of women representing the extent of "unmet need for contraception" calculated using these definitions varies by the characteristics of the women, as shown in Table 10-1. Overall, about one woman in five was found to be "in need" of family planning services. In absolute terms, this represents approximately 330,000 women 15-44 years of age. The percentage in need of services is greater among Indian women (27 percent) than among Interior Ladino women (20 percent) or women living in the Department of Guatemala (16 percent). The proportion of women in need of services is highest among married (in union) women, women with no formal education, and among nonworking women. In addition, need increases with number of living children; about one-third of women with four or more children need services compared to 20 percent of women with one living child.

The 1983 survey results represent a 10 percentage point decrease in women in need of services in Guatemala compared with the 1978 survey results. In 1978, 31 percent of women were found to be in need of family planning services. The largest decrease occurred among Indian women, from 41 percent in 1978 to 27 percent in 1983, or a decrease of 14 percentage points. Among Interior Ladino women, a 10 percentage point decrease occurred, from 30 percent in 1978 to 20 percent in 1983. Among Ladino women living in the Department of Guatemala only a 1 percentage point decrease occurred. Overall, the decrease appears to be due mainly to an increase in 1983 of women who reported that they were currently pregnant. In 1978, only 11.7 percent reported that they were not using contraception due to pregnancy while in 1983 18.1 percent gave this response. This increase plus the observed increase in contraceptive use apparently accounts for the difference in percentage in need between the two surveys. Since fertility rates did not change significantly between 1978 and 1983, it is doubtful that the proportion pregnant at time of interview actually increased between the two surveys and the difference is probably due to more complete reporting at the time of the 1983 survey. Thus, the 1983 estimates may represent a more accurate level of need, rather than a decrease since 1978.

The percentages in Table 10-1 indicate the segments of the population in which the relative need for family planning services is greatest. In order to derive program goals, the women defined as being in need, i.e., the numerators in Table 10-1, have been distributed across the categories of women, as shown in Table 10-2. We observe in this table that 83 percent of women in need live in the Interior--46 percent are Ladino and 37 percent are Indian women.

(Although a larger percentage of Indian women were calculated to be in need of family planning services as shown in Table 10-1, because Interior Ladino women represent a larger proportion of the Guatemalan population than Indian women, they represent, in absolute terms, the largest group of women in need). We also observe that 86 percent of women in need are married. It is interesting to note that 9 percent of women in need have never been married, which may indicate that the development of services for these women may be appropriate at this time. As discussed in Chapter V, the premarital conception rate was 30 percent overall and 46 percent among women living in the Department of Guatemala. Eighty-two percent of women in need have less than a primary school education and, of these women, almost half received no formal education at all. (Of the women with less than a primary school education, only 47 percent reported that they can read.) In addition, 57 percent of the women have three or more living children, and more than three-fourths are unemployed.

Thus, to summarize this chapter, the survey data indicate that the family planning program of Guatemala should be oriented toward high parity, married, non-working women living in the Interior, both Ladino and Indian, who have less than a primary education. As the following chapter shows, a large proportion of Interior Ladino women are interested in surgical sterilization.

XI. STERILIZATION AND THE DEMAND FOR STERILIZATION

As discussed earlier, female sterilization is the most prevalent method in Guatemala with 10 percent of currently married women 15-44 reporting that they have been surgically sterilized. The proportion sterilized increases with age up to ages 35-39 and with number of living children up to three. For example, among women age 35-39 the percent using sterilization is 65 percent of total contraceptive use. Because the survey results show that the use of reversible methods is relatively low and that surgical sterilization is the overwhelming method of choice among married women after the peak reproductive ages, this chapter provides additional data on sterilization. Specifically, this chapter discusses characteristics of women with tubal ligations, timing of sterilization, interest in and information concerning sterilization among women who want to limit their families, reasons for lack of interest among uninterested women, and reasons for failure to follow through among interested and informed women.

Profile of Sterilized Women

The top panel of Table 11-1 shows that a disproportionate number of sterilizations occur among women living in the Department of Guatemala and Ladinos in the Interior. Thirty-one percent and 62 percent of all sterilizations in Guatemala are to women living in the Department of Guatemala and Ladinos in the Interior, respectively, although these women represent only 20 percent and 47 percent, respectively, of the total married survey population. In contrast, only 6.5 percent of all women sterilized are Indians, although Indian women represent approximately one-third of the survey population.

The average age of women with surgical sterilization was 29 years at the time they were sterilized and 34 years at the time of the survey. These averages compare with an average of 29 years for all married women 15-44 in the survey. Similarly, 53 percent of sterilized women had four or more living children at the time of the survey compared with 40 percent of the married survey population. Comparing mean number of living children, the data show that sterilized women have more children (4.0) on average than all married respondents (3.2). With regard to education, sterilized women have received more schooling than the currently married population in general. As shown in the bottom panel of Table 11-1, the rate of women being surgically sterilized has increased in recent years.

Table 11-1 also shows that 4 women (1.7 percent) were less than 20 years of age at time of their sterilizations. An analysis of their characteristics reveals that all were 19 years old when they were sterilized, 3 immediately post-partum following their last delivery. The number of pregnancies and living children of these women ranged from 2 to 4 and from 1 to 3, respectively. Three of the women were sterilized post-partum for reasons related to health; the fourth, who has 3 living children, said she chose not to have any more children for "economic reasons."

As shown in Table 11-2, of the women who had been sterilized, 32 percent had a tubal ligation concurrent with a Cesarean delivery, one-fifth were sterilized while hospitalized for a vaginal delivery, and the remaining 48 percent had interval sterilizations. Of these, over half were sterilized within 12 months of last delivery. As the table shows, women in their prime childbearing years are more likely to have a tubal ligation concurrent with Cesarean delivery than women at the extremes of their reproductive lives.

Demand for Sterilization

All fecund women who had at least one living child were asked if they wanted any more children (Table 11-3). Overall, 41 percent of the women said that they did not want any more children, with the percentage highest in the Department of Guatemala (51 percent) followed by Interior Ladinos (44 percent) and Interior Indians (31 percent). As one would expect, the percentage of women who do not want any more children increases with family size, with 50 percent or more of the women with three or more children reporting that they did not want any more children. Of the women who said that they did not want any more children, 80 percent said it was because of economic reasons (Table 11-4). The percent of women giving this response increases with number of living children up to three children and declines thereafter. Interestingly, nearly three-fifths of women with only one living child and who wanted no more gave this response.

It should be noted that the extent of desire for no additional children may be inflated by a "courtesy bias", i.e., some interviewed women may give responses that they feel will please the interviewer. There is no way to measure this bias, but even if it influenced half of these women, the true desire to limit family size would still be large.

All women who did not want any more children were then asked whether they were interested in having a tubal ligation. As shown in Table 11-5, 61 percent of the women said that they were interested in sterilization, with the percentage about the same among Interior Ladino women (68 percent) and women living in the Department of Guatemala (66 percent). It should be noted that 44 percen

of Indian women who want no more children expressed an interest in sterilization once this method was explained to them. Older women, especially women 40-44 years of age, were less likely to be interested in sterilization than younger women. Approximately two-thirds of women with three to five children had interest in sterilization while over half of women with one to two living children had interest in sterilization. There was little variation in interest in sterilization associated with education, work status and current contraceptive use.

Of women who did not want any more children and were interested in sterilization, 64 percent had knowledge of availability of services or information concerning these services (Table 11-6). The percentage of women living in the Department of Guatemala and Ladinos in the Interior with knowledge of where to obtain sterilization information and/or services was similar, 69 percent and 71 percent, respectively, while only 38 percent of Indian women had this knowledge. Knowledge concerning services was highest for women in their peak reproductive ages, 25-34 years of age, and lowest for women 35 years of age or older. Finally, there was a positive association between education and knowledge, and a corresponding negative association between number of living children and knowledge.

In general, 47 percent of the women who knew where to obtain sterilization information and/or services cited the Ministry of Health as their source, with 33 percent naming an MOH hospital and 15 percent citing an MOH health center or post (Table 11-7). Another 44 percent cited APROFAM. For women living in the Department of Guatemala, APROFAM was the principal source of information and/or services (76 percent) while the MOH was the primary source in the Interior.

All women who said that they did not want any more children and had interest in sterilization and knowledge concerning the availability of sterilization services were asked why they had not been sterilized (Table 11-8). Of these women, 13 percent said that they are "waiting until after their next pregnancy" to be sterilized. This response seems to be incongruous with these women's desire not to have any more children. However, a possible interpretation of this response is that these women may believe that tubal ligation is only possible immediately post-partum, and that they are unaware of the availability of interval sterilizations. An additional 12 percent said that their husbands were opposed. Twenty-one percent cited institutional barriers such as the operation was too expensive (11 percent) and physician refusal to perform the operation (10 percent). (It should be noted that APROFAM charges U.S. $10 to perform a tubal ligation and that the operation is currently available free-of-charge to women who can't afford it.) Approximately 9 percent of the respondents said they were afraid of the operation or dying from it while another 9 percent said it was inconvenient for them to obtain the operation, e.g., job and home responsibilities. These last two reasons were particularly important for Interior Indian women.

The data in Table 11-8 indicate that institutional barriers was a more important reason in the Department of Guatemala than in the Interior, while lack of information on interval sterilization was a more important reason in the Interior than in the Department of Guatemala. It should be noted that physician refusal to provide surgical contraception was positively associated with education while lack of information on interval sterilization was negatively associated with education (data not shown). As may be expected the percentage of women who said that cost was a barrier to obtaining surgery decreased with education.

Finally, all women who did not want any more children and said they were not interested in surgical contraception were asked the reason for their lack of interest. Overall, 44 percent of these women stated fear of the operation or fear of dying (Table 11-9). An additional 8 percent cited fear of side effects. Fear of the operation and/or side effects was greatest among Interior Indian women; 70 percent gave these reasons. Almost 11 percent of the women stated that they preferred a nonpermanent method. Of these women, 44 percent were currently using contraception, primarily rhythm (82 percent). Approximately 6 percent gave reasons that indicated they would get little benefit from being sterilized, i.e., approaching menopause. Religious reasons accounted for a relatively minor proportion, 3 percent.

The percentage of women who cited fear of the operation or fear of dying was negatively related to education (data not shown). In contrast, preference to use a nonpermanent method was positively related to education.

Results of this chapter indicate that a significant proportion of women who do not want any more children are interested in sterilization. Most of these women are Ladino either living in the Department of Guatemala or in the Interior. It should be emphasized, however, that 44 percent of Indian women also stated they were interested in sterilization. However, many of these women will not get sterilized for personal reasons (e.g., fear of surgery) and institutional barriers (e.g., cost and doctor refusal). If these institutional barriers were reduced and if fear of the operation were reduced, then almost certainly more women would use surgical contraception. In addition, increasing Indian women's knowledge of where they can obtain information concerning the operation may result in an increase in use of surgical contraception by these women.

XII. USE OF MATERNAL AND CHILD HEALTH SERVICES, AND THE PREVALENCE OF DIARRHEA AND ITS TREATMENT

This chapter covers use of maternal and child health (MCH) services, including prenatal, post-partum, and well-baby care. Factors influencing the use of these services are examined as well as the source of these services with respect to various socioeconomic factors. In addition, location and type of last delivery, Cesarean versus vaginal, is examined. The use of MCH services is also assessed in terms of its association with family planning. Finally, the prevalence of diarrhea 1 week prior to interview among children less than 5 years of age and the treatment they received is examined.

Environmental factors influence the health of mothers and children and the utilization of health services. In order to obtain information that would be useful as a background for viewing variations in maternal and child health services, individuals responding to the household questionnaire (N=4,297) were asked a series of questions about their living conditions. Fifty-five percent of households reported that they had a private source of piped water while 21 percent and 13 percent reported wells and public taps, respectively, as their source of drinking water. Other sources were less important. Piped water is, of course, more important in the Department of Guatemala (79 percent) than for Interior Ladinos (53 percent) and Indian families (39 percent). As expected, the percentage of households with electricity was much higher in the Department of Guatemala (90 percent) than for Interior Ladinos (56 percent and Indians (25 percent). Crowding appears to be common for Indian families as 68 percent reported living in one room households. On the average, Indian

households consisted of 1.6 rooms compared to 2.2 for Interior Ladinos and 2.8 rooms for families living in the Department of Guatemala. There was little variation by residence in the number of persons living in households, ranging from 6.1 persons per household in the Department of Guatemala to 6.6 persons in the Interior. It is obvious from these data that crowding may be a health factor in the Interior, particularly among Indian families. Average number of children less than 5 years of age living in the sample households was 0.9 in the Department of Guatemala, 1.1 in Interior Ladino households, and 1.2 in Indian households.

Prenatal Services

Married women age 15-44 who had at least one live birth within 5 years of interview were asked if they had a prenatal examination during their most recent pregnancy. Nearly two-thirds (62.3 percent) of the women responded that they had received such an examination (Table 12-1). The percentage receiving prenatal care was higher for women living in the Department of Guatemala (75 percent) than for Interior Ladino women (68 percent) and Interior Indian women (48 percent). From data not shown, the use of prenatal services is positively associated with education and is greater among women who are employed outside of the household than among unemployed women or women working out of their homes. In addition, location of delivery appears to be determinant of use of prenatal care. Women who eventually delivered in private or Social Security hospital, indicating higher socioeconomic status were more likely to seek prenatal care than women who delivered elsewhere. Approximately two-thirds of women who were 15-34 years of age at the time of their last delivery received prenatal care while from 50 to 58 percent of

women 35-44 utilized this service. This may indicate that young mothers are more likely to seek prenatal care for their earlier pregnancies than older women who have already experienced several pregnancies. On the other hand, the data may indicate a trend toward an increasing likelihood of receiving prenatal examinations.

In general, 45 percent of women received their prenatal care from MOH facilities: 37 percent from health centers and posts and 8 percent from MOH hospitals. Twenty-four percent of the women reported that they received prenatal care from midwives. According to the director of the MOH Division of Maternal-Child Health and Family Planning, 6,000 midwives have been trained by the MOH to provide prenatal and other MCH services, including family planning. For women living in the Department of Guatemala, the Social Security Institute and private physicians were the primary sources of prenatal care accounting for 60 percent of the care. The majority of women living in the Interior sought their prenatal care from the MOH and midwives.

As shown in the bottom panel of Table 12-1, only 50 percent of those women receiving prenatal care received their first prenatal checkup during the first 3 months of pregnancy. Ladino women living in the Department of Guatemala and in the Interior are similar with regard to the timing of their first prenatal visit; they tend to receive their first checkup relatively early. Indian women, however, tend to have their first exam relatively late during pregnancy. Finally, women who obtained prenatal care from a private physician were more likely to seek care during the first 3 months of pregnancy than were women who obtained care elsewhere (Table 12-2).

Place and Type of Last Live Birth

Table 12-3 shows place of last live birth for women who had a live birth within 5 years of interview. In general, 58 percent of women reported that their last child was delivered by a midwife. This percentage increases to 84 percent for Indian women while more than half of Interior Ladino women were also attended by a midwife. In the Department of Guatemala, the majority of women delivered in MOH (41 percent) and IGSS (30 percent) facilities.

The high proportion of women living in the Interior who are delivered by a midwife indicates that midwives could become key agents in promoting family planning and other health services, especially among Indian women. Although 6,000 midwives have been trained by the MOH in MCH and family planning, MOH officials state that they need improved supervision. Also, further in-service training and the establishment of an incentive program may change these traditional birth attendants in to more effective health and family planning agents.

Women whose last delivery was in a hospital were asked if their most recent birth was a vaginal or a Cesarean delivery (Table 12-4). Of all last deliveries occurring in a hospital, 17 percent were Cesarean. The Cesarean rate for all last births, regardless of place of delivery, was 5 percent. The percentage of women whose last hospital delivery was Cesarean was highest for women living in the Department of Guatemala, women with at least a primary school education, low parity women, and for women who were 40-44 years of age at the time of their last birth.

Table 12-5 shows rates of Cesarean delivery by residence and location of delivery for in-hospital births only. In general, a higher proportion of deliveries in private hospitals are Cesarean than in IGSS and MOH hospitals. In the Department of Guatemala, 32 percent of the deliveries in private hospitals are Cesarean deliveries compared to 19 percent in general. In addition, a higher proportion of deliveries in the Department of Guatemala are Cesarean than in the Interior. These rates compare with 1978 and 1979 rates of 20 percent, 13 percent, and 5 percent in selected hospitals in Costa Rica, Mexico, and Honduras, respectively (Janowitz, et al, 1982).

The data appearing in these last two tables imply, in general, that women of higher socioeconomic status, because they pay for their care in whole or in part, are more likely to have Cesarean deliveries than women of lower socioeconomic staus. The relatively high rate of Cesarean deliveries for Indian women (17 percent) suggests that high-risk pregnancies are referred to hospitals and higher complication rates associated with high parity for these women may indicate the use of this procedure.

Post-Partum Care

Only 26 percent of women who had at least one live birth in the last 5 years reported receiving a post-partum checkup following their last birth (Table 12-6). As with other MCH services, this proportion was higher among Ladinos living in the Department of Guatemala (52 percent) than among Interior Ladinos (22 percent) and Indian women (18 percent). The relatively low utilization of post-partum care by women compared to their relatively high utilization of prenatal services suggests that they view the latter as more important thar

the former service. This finding also suggest that post-partum services should not be the principal forum to promote family planning, especially in the Interior, because of low utilization rates of this service.

As may be expected, characteristics of women seeking post-partum care were similar to those using prenatal care. For example, use of this service was positively associated with education. In addition, location of last birth, a surrogate measure of socioeconomic status of women, was also a predictor of whether post-partum services would be used: paying patients and those covered by health insurance were more likely to use post-partum care than others.

As shown in the bottom panel of Table 12-6, three-fourths of those women receiving post-partum care received their checkup during the first month after delivery or earlier. This proportion was higher among Ladinos living in the Department of Guatemala than in the Interior. Since post-partum checkups are generally scheduled 4-6 weeks following delivery, women who reported receiving post-partum care less than 1 month after delivery may actually have received medical attention for complications. Twenty-six percent of Indian women who had received post-partum care reported receiving this care less than 30 days following delivery.

Well-Baby Care

Women with at least one live birth within 5 years of interview were asked if they had taken their last liveborn child for a well-baby checkup. As shown in Table 12-7, 42 percent of infants received well-baby care, indicating that this service may be more important to women than post-partum care but not as

important as prenatal care. However, the differential in the use of post-partum and well-baby care may be due to the fact that health providers in Guatemala do not always integrate these two services. The data suggest that some women would rather not be bothered with two trips to a health facility and that well-baby care is more important to them than post-partum care.

The top panel of Table 12-7 also shows that women living in the Department of Guatemala are 3 times more likely than Indian women to utilize well-baby care and 1.7 times more likely than Interior Ladino women. Socioeconomic predictors of women using well-baby care for their infants are the same as those of women who utilize prenatal care.

Source of well-baby care generally corresponds to the table on source of prenatal care, although a higher percentage of women utilized MOH facilities for well-baby care than they did for prenatal care (Table 12-7). In addition, only 3 percent of women used midwives as a source of well-baby care compared with 24 percent who obtained prenatal care from midwives. As shown in the bottom panel of Table 12-7, of the infants that received well-baby care, more than 75 percent received this care during the first 2 months of life prior to the time of their first immunizations. The women who said their infants received well-baby care at less than 2 months of age may actually have sought medical attention for a sick baby.

Utilization of All Three Services

Tables 12-8 through 12-10 present the utilization of all three MCH servies we are examining--prenatal, post-partum, and well-baby care. Only 18 percent of

women who had at least one live birth within 5 years of interview said that they had used all three services (Table 12-8). In contrast, 28 percent reported that they used no MCH services. A higher percentage of women living in the Department of Guatemala used all three services (44 percent) compared with Interior Ladino women (16 percent) and Indian women (9 percent).

As might be expected, the percentage of women who used all three services was positively associated with education (Table 12-9). Younger women (15-34) were more likely to use all three services than older women (35-44) as were women who were employed outside of the household (data not shown). As shown in Table 12-10, women who last delivered in a private hospital or a Social Security hospital were 2.5 to 8.0 times more likely to use all three MCH services than women who delivered elsewhere.

Use of MCH Services and Contraception

Finally, women who received all three MCH services were more likely to report that they were currently contracepting than women who received only some or none of these services (Tables 12-11 and 12-12). As shown in Table 12-11 more than half of women who received all three services were contracepting at the time of the survey compared to only 7 percent who used no maternal and child health services. With the exception of women receiving post-partum and well-baby care only, female sterilization was the most used method among these women. As shown in Table 12-12, 20 percent of Indian women who delivered in an MOH facility were currently using contraception. Of these women, 7 percent were surgically sterilized, suggesting that high parity and/or complications associated with delivery may have influenced their decision or medical decision to be sterilized.

We cannot say that the use of MCH services influences the use of contraceptives, or vice versa. However, the fact that contraceptive use among nulliparous women is extremely low in Guatemala and increases with parity, suggests that women's first exposure to family planning may indeed be in an MCH setting, or a decision to use contraception may introduce women to other available MCH services. On the other hand, increase in parity may have simply been the key factor in the decision to use contraception.

Prevalence of Diarrhea and Its Treatment

In this survey, all children less than 5 years of age living in the sample households were identified. Questions regarding whether each child had had diarrhea during the week prior to interview were asked. If a child had had diarrhea, the person responding to the household questionnaire, who may not in all cases have been one of the parents of the child, was asked what treatment the child received for that episode of diarrhea.

The World Health Organization definition of diarrhea was used: three loose or watery stools for each of 2 consecutive days. It should be noted that it is possible that the reported prevalence of diarrhea may be exaggerated because of a definitional problem, whereby children who had some or chronic diarrhea, but did not meet the strict survey definition for acute diarrhea, were included as having had acute diarrhea.

Tables 12-13 shows that nearly 26 percent of children less than 5 years of age were reported to have had diarrhea during the week prior to interview. Thirty percent of Indian children recently had diarrhea compared with 25 percent of Interior Ladino children and 19 percent of children living in the Department

of Guatemala. Prevalence of diarrhea was highest for children 1 year of age or less (29 to 34 percent). After age 1, prevalence declines rapidly, down to 20 percent for 3 and 4 year-olds. Prevalence of diarrhea is somewhat lower for children less than 1 year of age than for 1 year-olds probably because of the presence of maternal antibodies in the former group and their relatively low exposure to foods other than breast milk, especially during the first months of life.

This survey focused just on a 1-week period during the months of September to December and a prevalence of diarrhea in Guatemala of 26 percent is relatively high for this time of year. According to the Pan American Health Organization, the peak season for diarrhea in Guatemala is June through August when localized surveillance activities have found prevalence of diarrhea over a 2-week period to be 30-35 percent (Mata, 1978). Thus, diarrhea is extremely common among young children in Guatemala. The fact that over a very short period of time so many children have diarrhea, especially during a time of year not generally considered to be the peak season for diarrhea, suggests that this is a serious health problem in the country.

There is a relatively strong relationship between the prevalence of diarrhea and various socioeconomic indicators. For example, children living in one room homes (crowding) and homes without electricity (low socioeconomic status) were more likely to have had diarrhea than children living in larger homes with electricity. There is also a positive association between the prevalence of diarrhea and the number of children less than 5 years of age living in the household. Source of drinking water also appears to be a factor associated

with diarrhea. Children whose source of drinking water is a private tap, either in the house or garden, were less likely to have had diarrhea than children who obtain their drinking water from other sources. However, it should be kept in mind that sources of water are not mutually exclusive.

For each child who reportedly had diarrhea in the week prior to interview, respondents were asked what was done about the illness. The objective was to see to what extent effective treatment was being used and likewise what was the extent of inappropriate treatment.

Of the children who were reported to have had diarrhea, 86 percent were reported to have been treated for their recent episode of diarrhea. Thus, 14 percent of the children were not treated. The likelihood of being treated did not vary significantly by demographic or socioeconomic variables.

As Table 12-14 shows, use of oral rehydration solutions (ORS), either prepared in the home from readily available ingredients or from packets, is minimal in Guatemala; only 8.8 percent of the respondents said that children in the household were treated with oral rehydration solutions made from packets (7.4 percent) or from ingredients found in the home (1.4 percent). In light of the fact that diarrhea is a major health problem among young children in Guatemala, especially in the Interior, this demonstrates that the addition of an ORS program as part of the Maternal and Child Health program is vital. Intravenous (IV) therapy, which is only available at high level health facilities, usually for the most seriously ill, was used in approximately 2 percent of episodes.

Oral rehydration solution (ORS) is an effective, low-cost, easy to prepare and administer means of preventing and treating dehydration due to diarrhea. ORS can either be prepared at home using readily available, inexpensive ingredients or by using already prepared ORS packets which are ready to be added to water. This low use of ORS, both home prepared and packets provided by health facilities, is consistent with the fact that there has been virtually no program in Guatemala to establish and promote ORS usage.

Nearly three-fourths of the children were treated with various popular pharmaceutical products and another seven percent were given hot or cold food, herbal preparations, or had food withheld. Guatemalan infectious disease experts who have reviewed the treatments reported by the interviewees feel that the majority of the treatments were either ineffective or deleterious. Some of the children receiving antiparasitic or antibacterial preparations may have had a medical evaluation to determine the correct antibiotic, but most probably obtained these antibiotics over the counter. Antibiotics are ineffective against viruses, the commonest cause of childhood diarrhea in Guatemala. Other children received preparations containing anticholinergics or kaolin which may provide minor symptomatic relief, but do nothing to treat dehydration, the most important complication of diarrheal diseases in Guatemala. As mentioned above, only 10.8% of children with a recent episode of diarrhea received oral or intravenous therapy to treat or prevent dehydration.

Differences in treatment between strata are relatively minor, except that Indians are more likely to use traditional treatments than Ladinos living in

the Interior or in the Department of Guatemala. Data not shown suggest that use of ORS is positively associated with socioeconomic status, but the association is not strong. In addition, children under 1 year of age were the most likely not to be treated and the least likely to receive ORS therapy, if treated.

XIII. IMMUNIZATION LEVELS

In the survey, we evaluated the immunization coverage of children less than 5 years of age. Questions were asked on the number of doses of vaccine received against poliomyelitis, diptheria-tetanus-pertussis (DPT), tuberculosis (BCG), and measles for each child living in sampled households. In addition, it was asked whether vaccinated children in the house had a vaccination certificate.

The Ministry of Health of Guatemala recommends two schemes in order to achieve complete primary immunization, as shown in the table below.* One scheme functions as a routine service through clinics, and the second functions through periodic mass campaigns.

Vaccine	No. of Doses	Age at First Dose		Interval	
		Clinics	Campaigns	Clinics	Can
BCG	1	Newborn, or during during first year of life	First year of life, or when child enters school	-	
Polio	3	3 months	3 months	Every 3 mos.	Eve
DTP	3	3 months	3 months	Every 3 mos.	Eve
Measles	1	9 months	9 or 15 months	-	

As shown in Table 13-1, levels of reported protection range from 33 percent tc percent for all four diseases. As expected, Indian children are the least lik to have received complete primary immunization. The immunization levels Ladino children living in the Interior are similar to those of Ladino chil living in the Department of Guatemala. It is noteworthy that a higher percent of Interior Ladino children than children living in the Department of Guatemal.

*The schemes were outlined by Dr. Otto Zeissig, Chief, Division of Epidemiolog Ministry of Health of Guatemala, June 1984.

are immunized against measles. This suggests that at least for some vaccines, mass vaccination campaigns in the Interior may be more effective in immunizing children than campaigns and routine services are in the Department of Guatemala.

Only 38 percent of all children had a vaccination certificate, with this proportion increasing to 43 percent for Interior Ladino children but decreasing to 37 percent for children living in the Department of Guatemala and to 31 percent for Indian children. In Table 13-2, the reported immunization status of children with and without certificates are compared. Children with certificates are from 1.6 to 2.2 times more likely to have complete primary immunization than children without certificates. It should be noted that the immunization levels of children without certificates may be understated because of problems related to recall or because the respondent, who may not have been the parent of the children in the household, may not have had accurate or up-to-date information on the immunization status of the children. On the other hand, one generally receives a certificate when first vaccinated so that the absence of a certificate may in fact indicate lack of immunization.

The survey revealed that almost all children who had received all primary immunizations were vaccinated by age 2 (Table 13-3). The largest increase in percent of children with complete immunization is from less than 1 year of age to 1 year of age. Although some increase is seen after 1 year of age, the percentage vaccinated levels off. It is also evident from Table 13-3 that children who are vaccinated are vaccinated later than the recommended schedules. This indicates that most children are put at unneccessary risk of vaccine-preventable childhood diseases.

Detailed data on the number of doses of each of the four vaccines received by children according to age and residence are shown in Tables 13-4 and 13-5. These tables further support previous discussion on the variation of coverage by residence and vaccine. The data show that routine services and mass campaigns have not adequately provided immunization services for children less than 5 years of age in Guatemala, especially for Indian children. Differences in coverage for the various vaccines may be explained in part by the number of doses required to achieve primary immunization for each vaccine and where and in what combination they can be administered.

Data in Table 13-6 place immunization levels in Guatemala in a regional perspective by comparing the Guatemala results with 1979 and 1981 survey results, respectively, from Panama (Huezo, et al, 1982) and Honduras (Suazo, et al, 1983). As the table shows, immunization levels in Guatemala and Honduras are similar. However, a higher percentage of Guatemalan children are immunized against tuberculosis (58 percent) than Honduran children (4[illegible] percent). Except for BCG, immunization levels in Panama are higher than those in Guatemala and Honduras, and compare favorably with those in the United States in 1978 (U.S. Public Health Service, 1979).

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Figure 1

Guatemala: Number of Married Women in the Survey, by Reported Age and Residence/Ethnic Grou
1983 Family Planning/Maternal—Child Health Survey

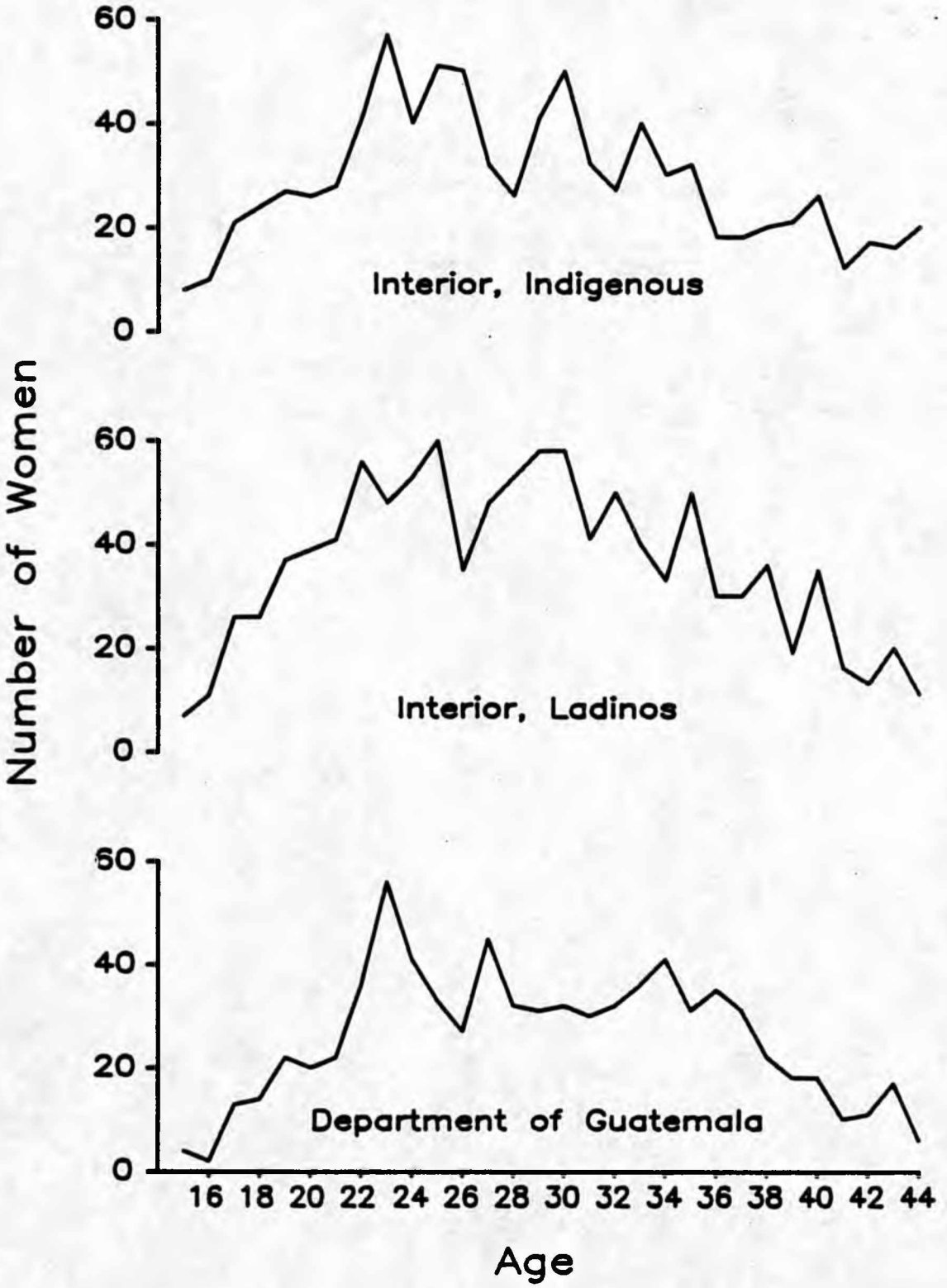

Figure 2
Guatemala: Mean Number of Reported Children Ever Born, by Single Year of Age for Married Women and Residence/Ethnic Group
1983 Family Planning/Maternal–Child Health Survey

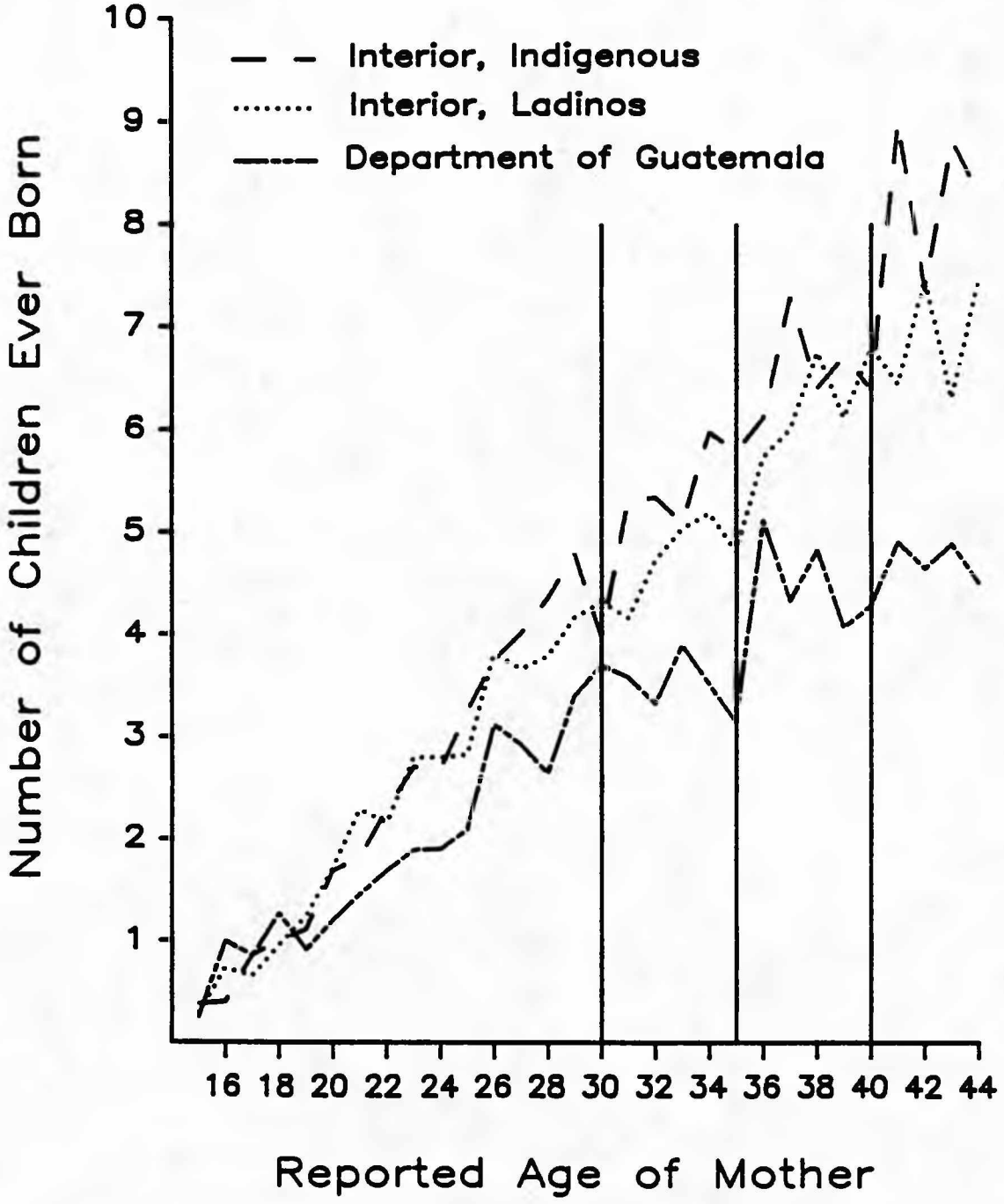

TABLE 2-1

Guatemala: Interview Status, by Residence
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence	
Household Selection	Total	Dept. of Guatemala	Interior
Eligible respondent identified	79.5	80.2	79.1
No eligible respondent	10.2	12.5	9.1
Vacant household	2.4	3.3	1.9
Total refusal	1.0	2.2	0.6
Resident not home	0.6	1.3	0.2
Sectors not visited*	5.0	0.0	7.4
Other	1.3	0.5	1.8
Total	100.0	100.0	100.0
Number of households	(4,775)	(1,500)	(3,275)
Individual Selection			
Completed interview	94.8	88.4	97.8
Eligible respondent not home	1.8	5.3	0.1
Eligible respondent refusal	1.4	2.1	1.1
Total refusal	1.3	2.6	0.7
Resident not home	0.7	1.6	0.3
Total	100.0	100.0	100.0
No. of possible respondents**	(3,874)	(1,256)	(2,618)

*Eight sectors were not visited for security reasons (see text).
**Included are households where women between 15-44 years of age have been identified as well as households with refusal or residents not at home that could have had a woman age 15-44.

TABLE 2-2

Guatemala: Percentage of Women 15-44,
by Residence and Ethnic Group
1978 and 1983 Family Planning/Maternal-Child Health Surveys
(Percent Distribution)

Residence/Ethnic Group	1978 Survey		1981 Census	1983 Survey
	All Sectors	1983 Sectors		
Department of Guatemala	20.8	22.0	26.0	22.6
Interior	79.2	78.0	74.0	77.3
Ladino	45.3	46.9	NA	48.0
Indigenous	33.9	31.1	NA	29.3
Total	100.0	100.0	100.0	100.0

NA = Not Available

TABLE 2-3

Guatemala: Percentage of Women 15-44, by Age Group and Residence/Ethnic Group
1978 and 1983 Family Planning/Maternal-Child Health Surveys and the 1981 Census
(Percent Distribution)

	1978 Survey				1981 Census			1983 Survey			
		Dept. of	Interior			Dept. of			Dept. of	Interior	
Age	Total	Guatemala	Ladino	Indigenous	Total	Guatemala	Interior	Total	Guatemala	Ladino	Indigenous
15-19	24.1	26.1	24.8	21.6	25.9	25.1	26.1	24.6	25.4	26.1	21.3
20-24	20.7	19.2	19.9	22.9	22.1	23.1	21.7	22.1	22.7	22.3	21.4
25-29	17.9	18.0	18.8	16.4	17.1	17.8	16.9	17.6	16.7	17.0	19.3
30-34	14.6	14.7	13.5	16.1	13.6	14.1	13.4	14.8	13.9	14.1	16.6
35-39	13.4	13.6	15.4	10.3	11.8	11.0	12.1	12.3	13.7	12.1	11.2
40-44	9.3	8.4	7.6	12.7	9.4	8.9	9.6	8.6	7.5	8.1	10.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2-4

Guatemala: Percentage of Women 15-44 Currently Married, by Age Group and Residence/Ethnic Group 1978 and 1983 Family Planning/Maternal-Child Health Surveys

	1978 Survey				1981 Census			1983 Survey			
		Dept. of	Interior			Dept. of			Dept. of	Interior	
Age Group	Total	Guatemala	Ladino	Indigenous	Total	Guatemala	Interior	Total	Guatemala	Ladino	Indigenous
15-19	32.6	16.7	31.3	48.3	26.1	13.5	30.4	28.3	18.7	27.6	38.5
20-24	70.6	59.1	69.7	78.5	64.8	49.3	70.6	66.8	61.6	63.7	76.3
25-29	83.3	73.8	84.3	88.7	79.7	70.0	83.3	80.9	73.8	82.3	83.6
30-34	88.4	79.8	88.5	93.9	83.7	76.4	86.4	87.6	84.9	89.4	86.7
35-39	86.0	81.8	87.8	85.7	83.9	76.7	86.2	83.6	79.6	84.4	85.8
40-44	81.6	79.6	80.6	83.5	80.5	74.1	82.5	82.5	79.7	80.1	87.3
15-44	69.4	58.5	69.1	77.5	63.7	53.0	67.4	66.3	59.8	64.9	73.5

TABLE 2-5

Guatemala: Number of Last Live Births, Sex Ratios at Birth, Proportions of Male and Female Births Reported to Have Died by the Survey Date, and Estimated Minimum Percent of Births Missed, by Period Before the Survey and Residence/Ethnic Group
1983 Family Planning Maternal/Child-Health Survey

Measure	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
All periods				
No. of last live births	2,541	715	1,015	811
Sex ratio	111	113	104	117
Proportion dying before survey				
Males	.051	.045	.039	.071
Females	.038	.015	.050	.043
0-23 months				
No. of last live births	1,391	307	549	535
Sex ratio	106	90	106	116
Proportion dying before survey				
Males	.046	.062	.032	.052
Females	.037	.012	.045	.044
24 months and above				
No. of last live births	1,151	408	467	276
Sex ratio	117	134*	102	121
Proportion dying before survey				
Males	.056	.034	.047	.106
Females	.034	.017	.056	.016

*Proportion male was significantly ($p<.05$) different from .512 corresponding to a sex ratio of 105.

TABLE 2-6

Guatemala: Sex Ratios of Last Live Births
for Women With Reported Ages of 30, 35, and 40
and for Women With Other Reported Ages
1983 Family Planning/Maternal-Child Health Survey

Reported Age	Number of Births	Sex Ratio
30, 35, 40	322	101
All other ages	2,220	112

TABLE 3-1

Guatemala: Mean Number of Children Born Alive,
by Age and by Residence/Ethnic Group
1978 and 1983 Family Planning/Maternal-Child Health Surveys

	1978 Survey				1981 Census			1983 Survey			
		Dept. of	Interior			Dept. of			Dept. of	Interior	
Age Group	Total	Guatemala	Ladino	Indigenous	Total	Guatemala	Interior	Total	Guatemala	Ladino	Indigenous
15-19	0.3	0.2	0.4	0.5	0.3	0.2	0.3	0.3	0.2	0.3	0.3
20-24	1.7	1.1	1.8	1.9	1.5	1.0	1.7	1.6	1.1	1.6	1.9
25-29	3.2	2.4	3.4	3.5	2.9	2.1	3.2	3.1	2.4	3.2	3.5
30-34	4.6	3.6	4.8	5.1	4.1	3.0	4.5	4.2	3.4	4.4	4.5
35-39	5.5	4.0	6.2	5.4	5.2	3.9	5.6	5.3	4.0	5.5	6.1
40-44	6.6	5.8	7.3	6.3	5.9	4.6	6.3	6.3	4.7	6.1	7.5
15-44	3.0	2.2	3.2	3.3	2.6	1.9	2.9	2.8	2.1	2.8	3.3

TABLE 3-2

Guatemala: Estimates of Fertility Rates,
by Residence and Ethnic Group
1978 and 1983 Family Planning/Maternal-Child Health Surveys

	Survey	
	1978	1983
Total		
GFR	212	206
TFR	6.1	5.8
CBR	45.1	43.8
Department of Guatemala		
GFR	145	156
TFR	4.1	4.2
CBR	35.4	37.9
Interior, Ladino		
GFR	22o	201
TFR	6.5	5.5
CBR	45.0	40.0
Interior, Indigenous		
GFR	234	251
TFR	6.7	7.2
CBR	47.8	51.2

TABLE 3-3

Guatemala: Estimates of Mean Durations of Breast-feeding and Post-partum Amenorrhea, by Residence/Ethnic Group, Education, and Age 1983 Family Planning/Maternal-Child Health Survey

	Mean Duration (Months)*	
	Breast-feeding	Post-partum Amenorrhea
Total	18.0	12.2
Residence/Ethnic Group		
Department of Guatemala	13.8	7.6
Interior, Ladino	15.5	10.5
Interior, Indigenous	23.1	16.6
Education		
None	21.9	15.5
Primary incomplete	16.2	10.9
>Primary complete	11.7	7.1
Age		
15-24	16.7	11.5
25-34	17.7	12.6
35-44	22.2	13.6

*Estimated by using 24 month prevalence/incidence method.

TABLE 3-4

Guatemala: Estimates of Mean Duration of Breast-feeding in 1978 and 1983, by Residence/Ethnic Group, Education, and Age 1978 and 1983 Family Planning/Maternal-Child Health Surveys

	Adjusted Mean Duration (Months)*	
	1978 Survey	1983 Survey
Total	13.8	14.5
Residence/Ethnic Group		
Department of Guatemala	10.6	11.2
Interior, Ladino	13.0	13.4
Interior, Indigenous	16.5	17.3
Education		
None	15.3	16.5
Primary incomplete	13.9	13.8
>Primary complete	6.6	10.8
Age		
15-24	13.1	11.5
25-34	14.1	14.1
35-44	14.9	15.6

*Includes only durations up to 18 months for comparability between surveys.

TABLE 3-5

Guatemala: Type of Infant Feeding by Duration Since Birth, for Last Children Born in the 24 Months Before Interview
1983 Family Planning/Maternal-Child Health Survey

Months Since Birth	Not Breast-feeding	Breast-feeding					Nu
		Breast-feeding Only	Plus Milk	Plus Other Food	Plus Both	Total	(Un
1-3	9.6	75.4	10.7	3.8	0.5	100.0	
4-6	13.6	51.3	12.8	16.3	6.0	100.0	
7-9	14.9	23.7	3.1	48.8	9.5	100.0	
10-12	29.1	7.7	0.0	47.6	15.6	100.0	
13-15	27.0	0.0	0.0	49.2	23.8	100.0	
16-18	43.7	0.0	0.0	41.5	14.7	100.0	
19-21	51.5	0.0	0.0	41.7	6.8	100.0	
22-24	62.1	0.0	0.0	27.7	10.3	100.0	

TABLE 3-6

Guatemala: Indirect Estimates of Child Mortality and Probability of Dying, by Selected Ages and Residence and Ethnic Group 1978 and 1983 Family Planning/Maternal-Child Health Services

Residence/Ethnic Group and Age	Probability of Dying Before Selected Age* Survey	
	1978	1983
Total		
2	.112	.107
3	.144	.135
5	.146	.139
Department of Guatemala		
2	.054	.085
3	.105	.096
5	.114	.103
Interior, Ladino		
2	.114	.116
3	.158	.122
5	.145	.128
Interior, Indigenous		
2	.123	.113
3	.142	.170
5	.160	.172

*Estimated with the Brass method using Trussell multipliers.

TABLE 4-1

Guatemala: Percentage of Women Age 15-44
Who Reported At Least One Abortion, Spontaneous or
Induced, by Selected Characteristics and Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total		Residence/Ethnic Group: Dept. of Guatamala		Interior: Ladino		Interior: Indi
Total	13.1	(3,670)	15.8	(1,110)	14.3	(1,471)	9.2
Age							
15-19	2.0	(715)	1.3	(206)	2.4	(311)	1.9
20-24	8.2	(798)	11.8	(247)	7.5	(319)	6.5
25-29	14.3	(737)	20.5	(214)	14.1	(292)	10.3
30-34	19.3	(640)	23.7	(198)	24.3	(245)	9.7
35-39	23.2	(482)	23.1	(167)	28.1	(189)	14.4
40-44	30.1	(298)	38.1	(78)	33.0	(115)	21.6
Education							
None	14.3	(1,438)	22.7	(216)	19.5	(442)	9.2
Primary incomplete	14.3	(1,185)	17.0	(360)	15.2	(567)	9.6
>Primary complete	10.4	(1,047)	12.8	(534)	9.1	(462)	7.2
Marital Status							
Married/in union	18.0	(2,709)	22.9	(768)	20.2	(1,080)	11.9
Sep/div/widow	13.2	(278)	20.0	(105)	12.6	(105)	6.1
Never married	0.1	(683)	0.2	(237)	0.0	(286)	0.4
Work Status							
Not working	12.7	(2,623)	15.2	(710)	13.5	(1,130)	9.6
Working in home	12.2	(555)	14.2	(198)	15.2	(174)	7.5
Working outside	16.1	(492)	18.7	(202)	18.5	(167)	9.4

Note: Figures in parentheses are unweighted numbers of cases.

TABLE 4-2

Guatemala: All Women Age 15-44 Who Reported At Least One Abortion, Spontaneous or Induced, by Selected Characteristics and Type of Last Abortion 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Selected Characteristics	Type of Abortion			Total	No. of (Unwei
	Spontaneous	Induced	Not Stated		
Total	85.3	13.7	1.0	100.0	(5
Residence/Ethnic Group					
Dept. of Guatemala	87.1	12.5	0.4	100.0	(1
Interior, Ladino	85.0	13.8	1.1	100.0	(2
Interior, Indigenous	83.4	15.0	1.6	100.0	(2
Age					
15-19	**	**	**	**	(
20-24	84.7	15.3	0.0	100.0	(
25-29	85.1	11.7	3.1	100.0	(
30-34	89.5	10.0	0.5	100.0	(
35-39	91.3	8.7	0.0	100.0	(
40-44	78.3	20.0	1.7	100.0	
Marital Status					
Married/in union	86.2	12.7	1.1	100.0	(
Sep/div/widow	74.6	25.4	0.0	100.0	
Never married	**	**	**	**	
Education					
None	86.2	12.2	1.6	100.0	(
Primary incomplete	82.7	16.1	1.1	100.0	(
≥Primary complete	87.2	12.8	0.0	100.0	(

**Less than 25 cases.

TABLE 4-3

Guatemala: Women Age 15-44 Who Reported At Least One Abortion, Spontaneous or Induced, by Number of Abortions and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Number of Abortions	Total	Guatemala	Ladino	Indigenous
1	67.5	68.5	68.4	63.9
2	23.0	22.6	22.5	24.7
3	6.2	6.9	6.7	4.0
4+	3.3	2.0	2.3	7.4
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(521)	(194)	(227)	(100)

TABLE 4-4

Guatemala: Percent of Women Age 15-44
Who Received Medical Attention for Complications
and Percent Who Were Hospitalized Following Their Most
Recent Abortion, Spontaneous or Induced, by Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey

Residence/Ethnic Group	% Receiving Medical Attention	Percent Hospitalized	No. of Cases* (Unweighted)
Total	63.4	40.5	(521)
Dept. of Guatemala	80.2	64.1	(194)
Interior, Ladino	60.6	39.1	(227)
Interior, Indigenous	48.2	12.9	(100)

*Includes only women reporting any abortions.

TABLE 4-5

Guatemala: Place of Treatment for Women Age 15-44 Receiving Medical Treatment Following Most Recent Abortion, by Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Place of Treatment	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
MOH Hospital	43.3	40.7	50.8	24.7
MOH Center/Post	4.3	3.0	3.1	11.0
Private clinic/hospital	16.6	17.6	17.4	11.7
IGSS	11.4	28.6	3.1	0.0
Residence	16.3	6.0	20.4	25.7
Midwife's home	6.9	2.5	4.4	24.7
Other	1.1	1.5	0.6	2.0
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(341)	(157)	(135)	(49)

TABLE 5-1

Guatemala: Planning Status of Last Pregnancy, by Selected Characteristics: Currently Married Women Age 15-44 Who Had Been Pregnant Within the Last 5 Years
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Selected Characteristics	Planned	Mistimed	Unwanted	Unknown	Total	No. of (Unwei
Total	86.0	4.9	7.0	2.1	100.0	(
Residence/Ethnic Group						
Department of Guatemala	83.2	8.3	7.3	1.1	100.0	
Interior, Ladino	83.6	6.4	8.7	1.3	100.0	
Interior, Indigenous	90.5	1.3	4.7	3.5	100.0	
Age						
15-19	94.5	2.9	0.4	2.2	100.0	
20-24	89.7	6.5	2.1	1.7	100.0	
25-29	83.7	6.5	7.0	2.8	100.0	
30-34	88.6	2.7	7.4	1.3	100.0	
35-39	78.7	5.3	14.0	2.0	100.0	
40-44	73.3	2.6	21.2	2.8	100.0	
No. of Living Children						
0	96.4	0.0	0.0	3.6	100.0	
1	97.0	1.5	0.2	1.3	100.0	
2	89.0	7.3	2.4	1.2	100.0	
3	86.0	6.1	5.9	2.0	100.0	
4-5	81.5	6.3	9.5	2.7	100.0	
6+	74.1	3.8	19.6	2.6	100.0	
Education						
None	85.9	3.7	7.7	2.7	100.0	(
Primary incomplete	84.1	6.0	8.0	1.9	100.0	
>Primary complete	89.2	6.0	4.0	0.8	100.0	
Work Status						
Not working	86.1	5.0	6.8	2.0	100.0	(
Working in house	85.1	4.7	7.7	2.5	100.0	
Working outside	85.9	4.6	7.8	1.7	100.0	

TABLE 5-2

Guatemala: Planning Status of Last Pregnancy, by Residence/Ethnic Group: Currently Married Women Age 15-44 Who Had Been Pregnant Within 5 Years of Interview 1978 and 1983 Family Planning/Maternal-Child Health Surveys (Percent Distribution)

	Residence/Ethnic Group							
	Total		Dept. of Guatemala		Interior			
					Ladino		Indigenous	
Planning Status	1978	1983	1978	1983	1978	1983	1978	1983
Planned	79.6	86.0	71.7	83.2	74.5	83.6	89.9	90.5
Mistimed	7.8	4.9	10.8	8.3	9.5	6.4	4.0	1.3
Unwanted	12.2	7.0	17.2	7.3	15.5	8.7	5.5	4.7
Unknown	0.4	2.1	0.2	1.1	0.4	1.3	0.6	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(1,507)	(2,272)	(373)	(588)	(631)	(903)	(503)	(781)

TABLE 5-3

Guatemala: Reasons Not Using Contraception At Time of Last Pregnancy: Currently Married Women Age 15-44 Who Reported Their Last Pregnancy* As Mistimed or Unwanted 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Reason Not Using	Total	Planning Status of Last Pregnancy	
		Mistimed	Unwanted
Lack of knowledge of contraception	26.1	21.4	29.0
Fatalistic ("Descuido")	15.9	18.9	14.1
Negative rumors about contraception	10.0	7.2	11.7
Fear of side effects	9.4	8.0	10.3
Husband opposed	8.3	4.3	10.8
"Didn't like/want"	5.6	6.9	4.8
Post partum/breastfeeding	5.5	6.9	4.7
Religious reasons	4.1	9.3	0.8
Thought they were subfecund	2.4	4.1	1.3
Couldn't afford	2.0	2.8	1.5
Other/unknown	10.7	10.1	11.1
Total	100.0	100.0	100.0
No. of cases (unweighted)	(202)	(80)	(122)

*Within 5 years of interview.

TABLE 5-4

Guatemala: Percent of First Births That Were Premaritally Conceived*, by Selected Characteristics: Ever Married Women 15-44 Who Were First Married No More Than 5 Years Prior to Interview
1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Time of First Birth: Before Marriage	Time of First Birth: First 7 Months of Marriage	Total Premarital Conceptions	No. of Cases** (Unweighted)
Total	6.9	23.0	29.9	(527)
Residence/Ethnic Group				
Dept. of Guatemala	8.9	37.1	46.0	(181)
Interior, Ladino	4.7	17.9	22.6	(210)
Interior, Indigenous	9.1	18.9	28.0	(136)
Education				
None	7.7	17.2	24.9	(165)
Primary incomplete	7.8	17.0	24.8	(185)
>Primary complete	5.3	33.8	39.1	(177)

*By date of first birth relative to date of first marriage.
**Excludes 10 women for whom year of first marriage is unknown.

TABLE 5-5

Guatemala: Current Pregnancy Intention of Currently Married Women Age 15-44, by Selected Characteristics
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Selected Characteristics	Currently Pregnant	Currently Not Pregnant			Total	No. o (Unwe
		Desire Pregnancy	Don't Desire Pregnancy	Don't Know or Unknown		
Total	15.2	23.5	55.6	5.8	100.0	(
Residence/Ethnic Group						
Department of Guatemala	13.9	18.2	66.0	1.9	100.0	
Interior, Ladino	15.2	24.5	58.5	1.8	100.0	(
Interior, Indigenous	15.9	25.2	44.9	13.9	100.0	
Age						
15-19	30.8	36.0	29.4	3.8	100.0	
20-24	19.9	27.9	46.5	5.7	100.0	
25-29	14.3	24.1	56.3	5.3	100.0	
30-34	13.0	22.0	58.3	6.6	100.0	
35-39	10.4	18.3	64.1	7.3	100.0	
40-44	2.8	10.4	81.6	5.2	100.0	
No. of Living Children						
0	46.0	44.3	7.4	2.3	100.0	
1	19.0	39.6	36.5	4.9	100.0	
2	13.9	24.9	55.6	5.5	100.0	
3	10.0	18.2	63.8	8.0	100.0	
4-5	12.5	14.8	66.5	6.2	100.0	
6+	9.6	14.8	70.1	5.5	100.0	
Education						
None	15.7	25.0	50.2	9.1	100.0	(
Primary incomplete	16.0	22.9	57.0	4.0	100.0	
≥ Primary complete	13.0	21.1	63.9	1.9	100.0	
Work Status						
Not working	15.9	24.1	54.3	5.7	100.0	(
Working in house	11.5	19.3	61.3	7.9	100.0	
Working outside	15.3	24.6	56.5	3.6	100.0	

TABLE 6-1

Guatemala: Percentage of Women Age 15-44 Who Have Knowledge of At Least One Effective Method of Contraception*, by Age and Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey

Age	Total		Residence/Ethnic Group: Dept. of Guatemala		Interior: Ladino		Interior: Indigenous	
Total	81.6	(3,670)	95.9	(1,110)	92.6	(1,471)	52.5	(1,089)
15-19	76.1	(715)	94.3	(206)	84.4	(311)	42.7	(198)
20-24	82.8	(798)	93.6	(247)	94.7	(319)	53.8	(232)
25-29	84.5	(737)	97.3	(214)	96.9	(292)	58.0	(231)
30-34	82.2	(640)	97.3	(198)	95.9	(245)	53.5	(197)
35-39	85.3	(482)	98.1	(167)	96.0	(189)	53.9	(126)
40-44	81.9	(298)	99.1	(78)	93.6	(115)	56.9	(105)

*Excludes withdrawal.
Note: Figures in parentheses are unweighted numbers of cases.

TABLE 6-2

Guatemala: Percentage of All Women Aged 15-44 with Knowledge of Contraceptive Methods, by Residence/Ethnic Group
1983 Family Planning/Maternal-Child Heath Survey

		Residence/Ethnic Group		
		Dept. of	Interior	
Contraceptive Method	Total	Guatemala	Ladino	Indigenous
Oral contraceptives	78.0	94.0	89.1	47.7
Female sterilization	69.8	87.1	84.1	33.2
Injection	58.8	75.6	71.7	24.8
IUD	53.6	79.1	65.5	14.7
Male Sterilization	46.6	64.3	56.3	17.2
Condom	38.4	63.8	45.1	7.9
Vaginal methods	37.9	62.2	44.8	8.0
Rhythm	29.4	50.0	34.5	5.3
Withdrawal	13.6	26.3	13.9	3.2
Diaphragm	12.5	22.9	13.5	3.0
Billings method	5.4	8.7	5.9	2.0
No. of Cases (Unweighted)	(3,670)	(1,110)	(1,471)	(1,089)

TABLE 6-3

Guatemala: Percentage of All Women Aged 15-44 With Knowledge of Contraceptive Methods, by Age
1983 Family Planning/Maternal-Child Health Survey

Contraceptive Method	Total	Age					
		15-19	20-24	25-29	30-34	35-39	40-44
Oral contraceptives	78.0	70.7	79.8	80.8	79.8	82.4	79.6
Female sterilization	69.8	64.4	68.6	72.6	72.8	75.3	69.8
Injection	58.8	48.1	57.4	64.7	65.0	65.2	61.1
IUD	53.6	37.7	56.6	59.1	59.7	63.5	56.0
Male Sterilization	46.6	36.6	49.1	50.4	49.1	52.5	48.5
Condom	38.4	25.0	38.8	45.2	43.0	46.2	42.7
Vaginal methods	37.9	26.7	37.1	46.1	42.0	45.4	37.7
Rhythm	29.4	20.9	28.8	34.1	34.5	34.5	29.6
Withdrawal	13.6	8.2	15.5	16.3	15.7	14.0	14.1
Diaphragm	12.5	7.6	11.7	15.4	13.1	17.6	14.6
Billings method	5.4	2.2	5.0	7.1	7.0	7.7	6.0
No. of Cases (Unweighted)	(3,670)	(715)	(798)	(737)	(640)	(482)	(298)

TABLE 6-4

Guatemala: Percentage of All Women Aged 15-44 with Knowledge of Contraceptive Methods, by Education
1983 Family Planning/Maternal-Child Health Survey

		Education		
Contraceptive Method	Total	None	Primary Incomplete	≥Primary Complete
Oral contraceptives	78.0	63.3	81.0	93.1
Female sterilization	69.8	52.0	73.7	87.7
Injection	58.8	41.6	63.6	75.0
IUD	53.6	32.5	56.4	76.7
Male Sterilization	46.6	28.4	48.7	66.9
Condom	38.4	18.7	39.2	61.8
Vaginal methods	37.9	17.8	39.5	61.0
Rhythm	29.4	10.1	24.4	58.3
Withdrawal	13.6	5.2	10.6	27.0
Diaphragm	12.5	5.4	8.7	25.3
Billings method	5.4	2.8	3.9	10.1
No. of Cases (Unweighted)	(3,670)	(1,438)	(1,185)	(1,047)

TABLE 7-1

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Current Use and Method	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
Currently Using	25.0	49.0	28.8	4.6
Female sterilization	10.2	15.6	13.5	2.0
Orals	4.7	9.6	5.0	1.2
Rhythm	3.4	5.8	4.4	0.5
IUD	2.6	7.7	2.1	0.2
Condom	1.2	3.0	1.1	0.1
Male sterilization	0.9	1.9	0.9	0.1
Other methods*	2.0	5.4	1.7	0.4
Not Currently Using**	75.0	51.0	71.2	95.4
Total	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(2,709)	(768)	(1,080)	(861)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.
**Includes douche and other ineffective methods.

NOTE: In this and subsequent tables, subtotals may not add to totals due to rounding.

TABLE 7-2

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Residence/Ethnic Group 1978 and 1983 Family Planning/Maternal-Child Surveys

Survey	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
1978	19.2 (1,803)	40.5 (473)	21.8 (746)	4.1 (584)
1983	25.0 (2,709)	49.0 (768)	28.8 (1,080)	4.6 (861)

NOTE: Figures in parentheses are unweighted numbers of cases.

TABLE 7-3

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method 1978 and 1983 Family Planning/Maternal-Child Health Surveys (Percent Distribution)

Current Use and Method	Total 1978	Total 1983
Currently Using	19.2	25.0
Sterilization	6.7	11.1
Orals	5.7	4.7
Rhythm	2.7	3.4
IUD	1.4	2.6
Condoms	0.8	1.2
Other methods*	1.9	2.0
Not Currently Using**	80.9	75.0
Total	100.0	100.0
No. of cases (Unweighted)	(1,803)	(2,709)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.

**Includes douche and other ineffective methods.

TABLE 7-4

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method and Age Group
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Current Use and Method	Total	Age Group 15-19	20-24	25-29	30-34	35-39	40-44
Currently Using	25.0	9.3	15.8	29.6	32.3	31.3	28.4
Female Sterilization	10.2	0.0	2.4	8.1	16.3	18.6	17.5
Orals	4.7	3.7	5.3	7.1	4.2	3.6	2.1
Rhythm	3.4	1.5	2.9	4.8	5.0	2.2	2.5
IUD	2.6	1.7	2.1	3.8	2.6	3.0	1.8
Condom	1.2	0.0	1.2	1.9	1.7	0.8	0.6
Male Sterilization	0.9	0.0	0.0	1.2	1.4	1.9	0.4
Other methods*	2.0	2.4	1.9	2.7	1.1	1.2	3.5
Not Currently Using**	75.0	90.7	84.2	70.4	67.8	68.8	71.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(2,709)	(252)	(604)	(622)	(572)	(411)	(248)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.

**Includes douche and other ineffective methods.

TABLE 7-5

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method and Number of Living Children 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Current Use and Method	Total	Number of Living Children					
		0	1	2	3	4-5	6+
Currently Using	25.0	3.7	20.0	29.1	37.4	25.1	20.7
Female Sterilization	10.2	0.6	2.1	5.7	19.3	14.2	13.0
Orals	4.7	2.5	5.7	6.7	6.1	3.9	1.6
Rhythm	3.4	0.0	5.1	5.5	4.4	1.4	2.5
IUD	2.6	0.0	3.0	4.6	3.3	2.2	0.8
Condom	1.2	0.6	1.4	2.3	0.8	1.2	0.1
Male Sterilization	0.9	0.0	0.0	1.1	1.2	0.7	1.6
Other methods*	2.0	0.0	2.7	3.2	2.3	1.5	1.1
Not Currently Using**	75.0	96.3	80.0	70.9	62.7	74.9	79.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(2,709)	(168)	(425)	(589)	(480)	(649)	(398)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.

**Includes douche and other ineffective methods.

TABLE 7-6

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method and Education 1983 Family Planning/Maternal Child Health Survey (Percent Distribution)

Current Use and Method	Total	Education		
		None	Primary Incomplete	>Primary Complete
Currently Using	25.0	10.3	25.0	53.7
Female Sterilization	10.2	6.5	11.7	15.3
Orals	4.7	1.9	4.9	9.7
Rhythm	3.4	0.8	2.5	10.0
IUD	2.6	0.5	1.4	8.5
Condom	1.2	0.1	0.9	3.7
Male Sterilization	0.9	0.1	1.1	1.9
Other methods*	2.0	0.4	2.4	4.6
Not Currently Using**	75.0	89.7	75.0	46.4
Total	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(2,709)	(1,187)	(899)	(623)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.

**Includes douche and other ineffective methods.

TABLE 7-7

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Method and Work Status

1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Current Use and Method	Total	Work Status: Not Working	Working In Home	Working Outside
Currently Using	25.0	22.4	29.8	36.8
Female Sterilization	10.2	9.5	12.4	12.5
Orals	4.7	4.5	5.6	4.7
Rhythm	3.4	2.8	3.9	7.0
IUD	2.6	2.2	3.0	5.2
Condom	1.2	1.0	1.9	1.7
Male Sterilization	0.9	0.6	1.0	2.2
Other methods*	2.0	1.8	2.0	3.5
Not Currently Using**	75.0	77.7	70.3	63.2
Total	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(2,709)	(2,010)	(401)	(298)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.

**Includes douche and other ineffective methods.

TABLE 7-8

Guatemala: Percentage of Currently Married Women Age 15-44, Currently Using Contraception, by Selected Characteristics and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total		Residence/Ethnic Group: Dept. of Guatemala		Interior: Ladino		Interior: Indig
Total	25.0	(2,709)	49.0	(768)	28.8	(1,080)	4.6
Age							
15-19	9.3	(252)	18.7	(55)	12.8	(107)	0.(
20-24	15.8	(604)	34.5	(175)	16.8	(237)	1.'
25-29	29.6	(622)	57.2	(168)	31.9	(254)	10.(
30-34	32.2	(572)	53.8	(171)	42.8	(222)	3.
35-39	31.2	(411)	59.3	(137)	31.8	(165)	5.(
40-44	28.4	(248)	61.7	(62)	34.1	(95)	4.
Education							
None	10.3	(1,187)	28.3	(167)	15.5	(365)	3.
Primary incomplete	25.0	(899)	44.6	(266)	26.0	(447)	4.
≥ Primary complete	53.6	(623)	61.1	(335)	49.9	(268)	*
Work Status							
Not working	22.3	(2,010)	46.3	(524)	25.2	(844)	4.
Working in home	29.7	(401)	49.4	(133)	38.9	(128)	7.
Working outside	36.8	(298)	59.5	(111)	45.0	(108)	0.(
No. of Living Children							
0	3.7	(168)	5.6	(52)	5.6	(60)	0.(
1	20.0	(425)	35.1	(142)	22.2	(154)	4.
2	29.1	(589)	57.3	(207)	27.5	(233)	4.
3	37.3	(480)	62.5	(152)	45.3	(185)	7.
4-5	25.1	(649)	55.9	(155)	29.6	(266)	4.
6+	20.7	(398)	50.0	(60)	26.8	(182)	3.

**Less than 25 cases.

NOTE: Figures in parentheses are unweighted number of cases.

TABLE 7-9

Guatemala: Percentage of Currently Married Women Age 15-44 Currently Using Contraception, by Selected Characteristics and Education
1983 Family Planning/Maternal Child-Health Survey

Selected Characteristics	Total	Education		
		None	Primary Incomplete	>Pri Comp
Total	25.0 (2,709)	10.3 (1,187)	25.0 (899)	53.6
Age				
15-19	9.3 (252)	2.2 (95)	4.3 (100)	27.5
20-24	15.8 (604)	3.0 (240)	12.8 (224)	41.7
25-29	29.6 (622)	9.5 (244)	33.3 (204)	53.8
30-34	32.2 (572)	15.5 (261)	34.2 (179)	65.5
35-39	31.2 (411)	15.3 (206)	35.3 (120)	67.6
40-44	28.4 (248)	12.2 (141)	33.2 (72)	75.8
Work Status				
Not working	22.3 (2,010)	10.0 (893)	22.5 (686)	48.6
Working in home	29.7 (401)	12.4 (193)	32.9 (124)	64.5
Working outside	36.8 (298)	9.2 (101)	34.3 (89)	64.3
No. of Living Children				
0	3.7 (168)	2.6 (63)	3.3 (54)	5.5
1	20.0 (425)	3.0 (144)	11.7 (143)	44.8
2	29.1 (589)	9.0 (183)	20.8 (201)	55.8
3	37.3 (480)	15.9 (198)	40.2 (157)	69.5
4-5	25.1 (649)	11.3 (342)	28.6 (218)	68.7
6+	20.7 (398)	11.7 (257)	31.7 (126)	**

**Less than 25 cases.
NOTE: Figures in parentheses are unweighted number of cases.

TABLE 7-10

Guatemala: Percentage of Currently Married Women Age 15-44 Who Had Been Pregnant Within the Last 5 Years Who Are Currently Using Contraception, by Method and Planning Status of Last Pregnancy
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Current Use and Method	Total	Planning Status			
		Planned	Mistimed	Unwanted	Unknown
Currently Using	20.9	20.4	25.5	25.1	6.1
Female Sterilization	7.0	6.2	8.8	16.0	2.3
Orals	4.7	4.7	6.3	4.3	0.0
Rhythm	3.2	3.4	1.9	2.6	0.0
IUD	2.1	1.9	6.4	0.4	2.5
Condoms	1.0	1.1	0.5	0.0	0.0
Male Sterilization	0.8	0.8	0.0	1.1	0.0
Other methods*	2.1	2.3	1.6	0.7	1.3
Not Currently Using**	79.2	79.4	74.5	74.9	93.9
Total	100.0	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(2,272)	(1,954)	(116)	(155)	(47)

*Other methods include injectables, diaphragms, foam, jelly, tablets, and withdrawal.
**Includes douche and other ineffective methods.

TABLE 7-11

Percentage of Currently Married Women Aged 15-44 Currently Using Contraception, by Method; Countries With Survey Data Available Mexico, Central America, and Panama

Current Use and Method	Costa Rica (1981)*	Panama (1979)	Mexico (1982)*	Dominican Republic (1983)*	El Salvador (1978)	Honduras (1981)*	Gua (1
Currently Using	65.1	60.6	47.7	45.8	34.4	26.9	2
Orals	20.6	19.0	14.2	8.6	8.7	11.7	
Sterilization	17.8	29.7	13.7	27.5	18.0	8.2	1
IUD	5.7	3.7	6.6	3.8	3.3	2.4	
Condom	8.4	1.7	0.9	1.5	1.5	0.3	
Rhythm	6.2	2.9	3.8	1.1	1.7	1.6	
Other methods	6.5	3.6	8.5	3.3	1.2	2.7	
Not Currently Using	34.9	39.4	52.3	54.2	65.6	73.1	7
No. of married women in the sample	2,593	1,528	6,059	2,603	1,476	2,185	2,

*Women 15-49 years of age.

NOTE: Subtotals may not add to total due to rounding.

TABLE 8-1

Guatemala: Source of Contraception, by Residence/Ethnic Group, for Current Users of Contraception: Currently Married Women Age 15-44 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Source of Contraception	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
MOH facilities	28.5	15.0	35.3	57.1
IGSS	6.3	12.6	2.0	2.2
APROFAM	22.1	29.7	17.6	11.5
CBD/health promoter	3.0	2.8	3.1	4.4
Private physician/clinic	12.3	11.7	13.4	6.6
Pharmacy	9.5	10.6	9.8	0.0
Other source	1.5	1.5	1.3	2.2
Not applicable*	16.4	15.6	16.9	15.9
Unknown	0.5	0.4	0.6	0.0
Total	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(716)	(373)	(305)	(38)

*Includes those using rhythm and withdrawal.

TABLE 8-2

Guatemala: Source of Contraception, by Selected Methods, for Current Users of Contraception: Currently Married Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Source of Contraception	Selected Methods				
	Female Sterilization	Male Sterilization	Orals	IUD	Condom
MOH facilities	45.9	27.4	27.2	22.2	17.4
IGSS	12.8	0.0	2.0	5.5	1.8
APROFAM	23.5	60.5	22.1	45.8	15.7
CBD/health promoter	0.0	0.0	13.0	0.0	10.1
Private physician/clinic	17.3	12.1	8.0	24.9	12.9
Pharmacy	0.0	0.0	23.0	0.0	26.9
Other source	0.4	0.0	4.2	1.7	6.7
Not applicable*	0.0	0.0	0.0	0.0	0.0
Unknown	0.0	0.0	0.5	0.0	8.5
Total	100.0	100.0	100.0	100.0	100.0
Number of cases (Unweighted)	(266)	(25)	(145)	(89)	(37)

TABLE 8-3

Guatemala: Source of Contraception, by Selected Methods, for Current Users of Contraception: Currently Married Women Age 15-44
1978 and 1983 Family Planning/Maternal-Child Health Surveys
(Percent Distribution)

Source of Contraception	All Methods		Selected Methods						
			Sterilization		Orals		IUD		Co
	1978	1983	1978	1983	1978	1983	1978	1983	1978
MOH facilities	38.3	28.5	53.3	44.5	47.2	27.2	48.9	22.2	**
IGSS	5.5	6.3	13.8	11.8	2.0	2.0	0.0	5.5	**
APROFAM	11.9	22.1	17.4	26.4	9.2	22.1	25.2	45.8	**
CBD/health promoter	1.0	3.0	0.0	0.0	0.9	13.0	1.8	0.0	**
Private physician/ clinic	13.2	12.3	14.2	16.9	11.0	8.0	24.1	24.9	**
Pharmacy	13.1	9.5	0.0	0.0	27.2	23.0	0.0	0.0	**
Other source	0.0	1.5	0.0	0.4	0.0	4.2	0.0	1.7	**
Not applicable*	15.1	16.4	0.0	0.0	0.0	0.0	0.0	0.0	**
Unknown	2.0	0.5	1.3	0.0	2.5	0.5	0.0	0.0	**
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**
No. of cases (unweighted)	(397)	(716)	(134)	(291)	(117)	(145)	(38)	(89)	(16)

*Includes those using rhythm and withdrawal.
**Less than 25 cases.

TABLE 8-4

Guatemala: Time to Get to Source of Contraception,
by Current Contraceptive Use Status and Residence/Ethnic Group:
Currently Married Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Contraceptive Use Status and Residence/Ethnic Group	Total	Time to Source of Contraception				No. of Cases (Unweighted)
		1-15 Minutes	16-30 Minutes	31+ Minutes	Unknown	
All Women	100.0	32.0	29.1	37.1	1.8	(1,310)
Department of Guatemala	100.0	27.2	39.4	32.3	1.1	(533)
Interior, Ladino	100.0	35.4	24.5	38.1	2.0	(647)
Interior, Indigenous	100.0	26.0	27.1	44.3	2.6	(130)
Current Users*	100.0	31.1	28.3	37.7	2.9	(605)
Department of Guatemala	100.0	31.1	35.7	32.4	0.8	(321)
Interior, Ladino	100.0	33.4	22.3	40.3	4.0	(251)
Interior, Indigenous	100.0	10.5	32.1	49.5	7.9	(33)
Nonusers**	100.0	32.7	29.8	36.6	0.9	(705)
Department of Guatemala	100.0	21.5	44.8	32.2	1.5	(212)
Interior, Ladino	100.0	36.8	25.9	36.7	0.7	(396)
Interior, Indigenous	100.0	31.1	25.4	42.6	0.9	(97)

*Excludes women using rhythm and withdrawal.
**Includes nonusers who know of a source of contraception.

TABLE 8-5

Guatemala: Average Time (in Minutes) to Source of Contraception, by Current Contraceptive Use Status and Residence/Ethnic Group: Currently Married Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey

Contraceptive Use Status	Total		Residence/Ethnic Group: Dept. of Guatemala		Interior: Ladino		Interior: Indigenous	
All women	48.3	(1,290)	35.0	(527)	56.6	(635)	59.5	(12
Current Users*	49.1	(592)	33.2	(318)	65.9	(242)	72.9	(3
Nonpermanent methods	33.2	(304)	31.9	(190)	62.0	(98)	**	(1
Permanent methods	63.6	(288)	37.0	(128)	81.6	(144)	**	(1
Nonusers***	47.5	(698)	37.7	(209)	50.7	(393)	55.7	(9

*Excludes women using rhythm and withdrawal and those who do not know time to sourc
**Less than 25 cases.
***Includes nonusers who know of a source of contraception.

TABLE 8-6

Guatemala: Percent of Women Age 15-44
Who Believe that the Government of Guatemala
Should Provide Family Planning Services,
by Selected Characteristics
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Selected Characteristics	Government Provided Family Planning Services: Yes	No	Don't Know	Total	No. of Cases (Unweighted)
Total	79.7	4.7	15.5	100.0	(3,670)
Residence/Ethnic Group					
Dept. of Guatemala	92.4	1.8	5.7	100.0	(1,110)
Interior, Ladino	89.2	2.0	8.9	100.0	(1,471)
Interior, Indigenous	54.6	11.5	33.9	100.0	(1,089)
Age					
15-19	79.5	5.2	15.3	100.0	(715)
20-24	80.4	4.2	15.4	100.0	(798)
25-29	81.8	4.3	14.0	100.0	(737)
30-34	77.2	4.7	18.2	100.0	(640)
35-39	81.2	5.0	13.8	100.0	(482)
40-44	77.1	5.7	17.2	100.0	(298)
Education					
None	65.0	7.6	27.4	100.0	(1,438)
Primary, incomplete	82.8	4.4	12.8	100.0	(1,185)
>Primary complete	94.7	1.6	3.7	100.0	(1,047)
Marital Status					
Married, in union	78.8	4.9	16.3	100.0	(2,709)
Sep/div/widow	77.0	4.7	18.3	100.0	(278)
Never married	83.1	4.5	12.4	100.0	(683)
Work Status					
Not working	79.3	4.6	16.1	100.0	(2,623)
Working in home	77.9	6.3	15.8	100.0	(555)
Working outside	84.0	3.9	12.1	100.0	(492)
Current Contraceptive Use					
Currently using	94.6	1.1	4.3	100.0	(761)
Not using	76.5	5.5	18.0	100.0	(2,909)

Note: Figures in parentheses are unweighted numbers of cases.

TABLE 9-1

Guatemala: Reasons for Not Currently Using Contraception, by Residence/Ethnic Group: Currently Married Women Age 15-44 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Reasons for Nonuse	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
Reasons Related to Pregnancy, Fecundity, and Sexual Activity	**62.1**	**68.5**	**69.5**	**51.8**
Post-partum/breastfeeding	21.0	13.5	23.2	21.1
Currently pregnant	18.1	26.7	20.3	12.9
Menopause/subfecund	12.3	15.4	12.9	10.5
Desires pregnancy/more children	8.4	9.2	9.9	6.6
Not sexually active	2.3	3.7	3.2	0.7
Other Reasons	**37.9**	**31.5**	**30.4**	**48.2**
Lack of knowledge/source	12.6	5.0	5.0	23.3
Fear of contraception/side effects	7.9	7.9	9.3	6.4
Religious reasons	4.0	1.9	2.8	6.1
Husband won't permit	5.0	4.0	5.0	5.3
Can't afford	2.1	2.9	2.1	2.0
"Don't like/want"	1.9	3.1	0.3	3.2
Inconvenient to obtain	0.7	1.3	0.9	0.2
Other reasons	3.4	4.8	4.8	1.5
Unknown	0.3	0.6	0.2	0.2
Total	100.0	100.0	100.0	100.0
No. of cases (Unweighted)	(1,993)	(395)	(775)	(823)

TABLE 9-2

Guatemala: Reasons for Not Currently Using Contraception, by Education: Currently Married Women Age 15-44 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Reasons for Nonuse	Total	Education		
		None	Primary Incomplete	≥ Prima Comple
Reasons Related to Pregnancy Fecundity, and Sexual Activity	62.1	57.7	62.2	78.2
Post partum/breast-feeding	21.0	21.8	20.5	19.1
Currently pregnant	18.1	15.2	19.6	25.6
Menopause/subfecund	12.3	12.6	11.6	12.5
Desires pregnancy/more children	8.4	6.7	7.3	17.9
Not sexually active	2.3	1.4	3.2	3.1
Other Reasons	37.9	42.4	37.5	21.8
Lack of knowledge/source	12.6	17.7	8.9	2.5
Fear of contraception/side effects	7.9	7.2	9.4	6.5
Religious reasons	4.0	5.0	3.4	1.9
Husband won't permit	5.0	5.9	4.1	3.9
Can't afford	2.1	2.8	1.7	0.8
"Don't like/want"	1.9	1.7	2.6	0.9
Inconvenient to obtain	0.7	0.2	1.0	1.4
Other reasons	3.4	1.8	6.0	3.5
Unknown	0.3	0.1	0.5	0.4
Total	100.0	100.0	100.0	100.
No. of cases (Unweighted)	(1,993)	(1,063)	(659)	(27

TABLE 9-3

Guatemala: Percent of Nonusers* That Currently Desire to Use Contraception, and Knowledge of Availability, by Selected Characteristics: Currently Married Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Percent That Currently Desire to Use Contraception		Percent of Those Who Desire Who Know Where to Obtain Method	
Total	33.6	(1,389)	56.5	(479)
Residence/Ethnic Group				
Department of Guatemala	44.1	(232)	70.0	(104)
Interior, Ladino	37.4	(513)	76.4	(199)
Interior, Indigenous	27.4	(644)	25.6	(176)
Age				
15-19	28.2	(148)	38.2	(44)
20-24	34.1	(370)	66.5	(130)
25-29	37.3	(322)	52.7	(122)
30-34	32.7	(281)	57.0	(94)
35-39	32.6	(179)	56.6	(60)
40-44	33.3	(89)	54.1	(29)
Education				
None	31.4	(782)	41.1	(254)
Primary incomplete	36.7	(448)	68.4	(166)
≥Primary complete	35.1	(159)	83.6	(59)
Work Status				
Not working	34.3	(1,077)	57.1	(381)
Working in home	29.4	(196)	52.5	(62)
Working outside	33.2	(116)	55.7	(36)
No. of Living Children				
0	1.5	(68)	*	(1)
1	25.8	(242)	52.5	(62)
2	35.1	(278)	62.2	(97)
3	29.0	(220)	59.6	(69)
4-5	43.3	(348)	53.1	(151)
6+	40.2	(233)	57.1	(99)
Previous Contraceptive Use				
Has used	55.6	(196)	87.8	(104)
Never used	30.1	(1,193)	47.4	(375)

*Excludes nonusers who are currently pregnant, who are not currently sexually active, and nonusers who stated they cannot become pregnant for reasons related to subfecundity or menopause.

NOTE: Figures in parentheses are unweighted number of cases.

TABLE 9-4

Guatemala: Nonusers Who Currently Desire to Use a Method, by Method of Choice and Source Where Method Would be Obtained, by Residence/Ethnic Group: Currently Married Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Method of Choice	Total	Guatemala	Ladino	Indigenous
Orals	26.7	24.2	19.9	36.3
Sterilization	18.4	16.7	23.8	12.2
Injection	14.2	13.3	21.1	5.7
IUD	4.2	14.2	3.6	1.0
Other	4.1	3.3	5.9	2.1
Any method	1.4	0.0	0.4	3.1
Don't know	31.0	28.3	25.3	39.5
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(479)	(104)	(199)	(176)
Source Where Method Would be Obtained*				
MOH center/post	44.6	17.9	46.8	65.4
APROFAM	25.5	61.9	20.6	4.3
MOH hospital	10.1	5.9	10.1	14.6
Private hospital/clinic	7.8	4.8	10.2	2.0
Pharmacy	7.8	7.1	8.3	6.7
CBD distributor/ health promoter	2.9	1.2	2.9	4.7
Other	1.3	1.2	1.1	2.4
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(263)	(71)	(151)	(41)

*Excludes those who do not know where to obtain their method of choice.

TABLE 9-5

Guatemala: All Women Age 15-44* Who Have Interest in Receiving Family Planning Services From Trained Nonmedical Personnel in the Community, by Selected Characteristics 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Selected Characteristics	Percentage Interested				No. of Cases (Unweighted)
	Yes	No	Don't Know	Total	
Total	41.6	48.3	10.1	100.0	(3,140)
Residence/Ethnic Group					
Dept. of Guatemala	37.1	58.8	4.1	100.0	(911)
Interior, Ladino	47.7	44.9	7.4	100.0	(1,232)
Interior, Indigenous	35.6	45.8	18.6	100.0	(997)
Age					
15-19	38.1	50.4	11.5	100.0	(714)
20-24	43.1	48.1	8.7	100.0	(780)
25-29	45.2	46.5	8.3	100.0	(659)
30-34	43.1	45.6	11.3	100.0	(494)
35-39	39.9	48.4	11.7	100.0	(328)
40-44	40.7	49.6	9.7	100.0	(165)
Education					
None	41.3	42.3	16.4	100.0	(1,237)
Primary incomplete	41.1	50.0	8.9	100.0	(998)
>Primary complete	42.5	53.7	3.9	100.0	(905)
Marital Status					
Married, in union	45.0	44.7	10.3	100.0	(2,216)
Sep/div/widow	40.1	53.0	7.0	100.0	(243)
Never married	34.9	54.4	10.7	100.0	(681)
Work Status					
Not working	39.8	49.7	10.5	100.0	(2,274)
Working in home	44.0	46.3	9.7	100.0	(458)
Working outside	49.2	42.3	8.5	100.0	(408)
Current Use of Contraceptives					
Currently using	57.6	40.1	2.3	100.0	(445)
Not Using	39.5	49.3	11.2	100.0	(2,695)

*Excludes those whose current method is sterilization and subfecund women.

TABLE 9-6

Guatemala: Women age 15-44 Who Are Interested in Receiving Family Planning Services From Trained Nonmedical Personnel in the Community, by Preferred Source of Services and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey

Source of Services	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
Distributor's house	41.1	44.9	47.5	25.2
Household delivery by distributor	34.8	37.5	34.3	33.7
Health center/post	12.7	8.4	7.0	27.8
No preference	8.0	7.3	9.5	5.3
Don't know	3.4	1.8	1.7	8.0
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(1,307)	(353)	(594)	(360)

TABLE 9-7

Guatemala: Reasons Not Interested in Receiving Family Planning Services From Trained Nonmedical Personnel in the Community, by Residence/Ethnic Group: Women Age 15-44
1983 Family Planning/Maternal-Child Health Survey

Reason Not Interested	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
Lack of Confidence in nonmedical personnel	24.5	45.7	22.5	12.4
Prefers medical facility/ pharmacy	14.1	20.2	15.5	8.1
Lack of confidence in methods distributed by nonmedical personnel	11.4	14.1	11.2	9.8
Prefers clinic methods	1.4	0.4	2.9	0.3
Prefers natural methods	0.5	0.5	0.9	0.1
Not sexually active	9.4	3.5	10.0	12.7
Desires pregnancy/more children	2.1	0.4	1.3	4.4
Post partum/menopause/ subfecund	1.0	0.1	1.0	1.7
"Don't like/want"	8.2	3.3	8.2	11.7
Lacks knowledge of contraception	7.3	4.1	6.3	10.8
Religious reasons	7.1	2.5	4.7	13.3
Fear of side effects	3.1	0.7	3.7	4.1
Husband opposed	2.7	1.0	2.4	4.3
Other	6.0	3.3	8.0	5.5
Don't know	0.9	0.4	1.3	0.8
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(1,833)	(558)	(638)	(637)

TABLE 10-1

Guatemala: Percentage of Women Age 15-44 Who Are in Need of Family Planning Services*, by Selected Characteristics and Residence/Ethnic Grou 1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total		Residence/Ethnic Group: Dept. of Guatemala		Interior: Ladino		Interior: Indigen	
Total	21.1	(3,670)	15.6	(1,110)	20.1	(1,471)	27.0	(1
Age								
15-19	11.7	(715)	12.7	(206)	8.9	(311)	16.4	
20-24	26.3	(798)	19.6	(247)	27.9	(319)	28.9	
25-29	24.7	(737)	13.3	(214)	25.2	(292)	31.5	
30-34	23.0	(640)	16.9	(198)	20.3	(245)	30.7	
35-39	23.3	(482)	14.8	(167)	24.0	(189)	30.0	
40-44	21.0	(298)	17.8	(78)	17.9	(115)	27.0	
Marital Status								
Currently married/in union	27.3	(2,709)	18.0	(768)	27.0	(1,080)	33.7	
Sep/wid/divorced	12.9	(278)	18.7	(105)	14.4	(105)	2.6	
Never married	7.5	(683)	10.0	(237)	5.0	(286)	10.0	
Education								
None	27.2	(1,447)	26.0	(216)	24.5	(442)	29.2	
Primary incomplete	22.3	(1,185)	19.8	(360)	22.3	(567)	24.7	
≥ Primary complete	12.4	(1,038)	9.9	(534)	14.4	(462)	10.8	
No. of Living Children								
0	6.8	(839)	8.3	(283)	5.1	(351)	8.7	
1	19.1	(532)	18.7	(181)	23.3	(190)	13.5	
2	26.6	(659)	15.6	(245)	30.0	(253)	32.5	
3	22.8	(520)	19.7	(165)	18.8	(203)	31.7	
4-5	31.6	(698)	22.2	(173)	28.2	(284)	41.2	
6+	35.8	(422)	27.9	(63)	33.0	(190)	41.8	
Work Status								
Not working	22.6	(2,623)	16.9	(710)	21.3	(1,130)	28.9	
Working in home	18.9	(555)	13.1	(198)	18.7	(174)	23.6	
Working outside	15.6	(492)	14.0	(202)	13.2	(167)	21.3	

*Women are defined as in need of family planning services who are: not current pregnant, not currently desiring a pregnancy, and not using any contraceptive for reasons not related to pregnancy, subfecundity, or sexual activity.

NOTE: Figures in parentheses are number of unweighted cases.

TABLE 10-2

Guatemala: Women Age 15-44 Who Are in Need of Family Planning Services*, by Selected Characteristics and Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Selected Characteristics	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
Total (815 cases)**	100.0	16.7	45.7	37.5
Age				
15-19	13.7	3.5	5.3	4.9
20-24	27.5	4.8	14.2	8.6
25-29	20.6	2.4	9.7	8.5
30-34	16.1	2.5	6.5	7.1
35-39	13.6	2.2	6.8	4.7
40-44	8.5	1.4	3.3	3.8
Marital Status				
Currently married/in union	85.8	11.5	39.8	34.5
Sep/wid/divorced	5.2	2.0	2.9	0.2
Never married	9.0	3.2	3.0	2.8
Education				
None	48.4	4.8	15.5	28.1
Primary incomplete	33.5	6.3	18.7	8.5
≥ Primary complete	18.0	5.6	11.5	0.9
No. of Living Children				
0	9.6	3.1	3.6	2.9
1	12.9	3.1	7.0	2.8
2	19.4	3.2	10.0	6.1
3	13.4	2.5	5.4	5.5
4-5	25.1	3.3	10.4	11.4
6+	19.6	1.6	9.3	8.7
Work Status				
Not working	76.8	11.3	37.5	28.0
Work in home	13.1	2.5	4.9	5.8
Working outside	10.1	3.0	3.4	3.7

*Women are defined as in need of family planning services who are: not currently pregnant, not currently desiring a pregnancy, and not using any contraceptive method for reasons not related to pregnancy, subfecundity, or sexual activity.

**Unweighted number of women in sample who are in need of family planning services.

TABLE 11-1

Guatemala: Demographic Profile of Currently Married Women Age 15-44 Using Female Sterilization
1983 Family Planning/Maternal-Child Health Survey

Characteristics	Percent Distribution at Time of Sterilization	Percent Distribution at Time of Survey	Currently Married Survey Population
Total	100.0 (266)	100.0 (266)	100.0 (2,709)
Residence/Ethnic Group			
Dept. of Guatemala	-	31.2	20.4
Interior, Ladino	-	62.3	47.0
Interior, Indigenous	-	6.5	32.6
Age			
15-19	1.7	0.0	10.5
20-24	15.9	5.2	22.3
25-29	39.8	17.1	21.5
30-34	27.9	31.1	19.5
35-39	12.9	28.3	15.5
40-44	1.8	18.3	10.7
Mean Age	29.4	34.3	29.1
No. of Living Children			
0	-	0.4	6.6
1	-	3.3	16.2
2	-	11.5	20.6
3	-	31.9	16.9
4-5	-	32.2	23.3
6+	-	20.7	16.3
Mean No. of Living Children	-	4.0	3.2
Education			
None	-	27.6	43.7
Primary incomplete	-	38.7	33.7
>Primary complete	-	33.7	22.6
Year of Sterilization			
Before 1974	11.0	-	-
1974-1975	9.8	-	-
1986-1977	10.5	-	-
1978-1979	16.7	-	-
1980-1981	23.9	-	-
1982-1983	28.1	-	-

Note: Figures in parentheses are unweighted numbers of cases.

TABLE 11-2

Guatemala: Timing of Sterilization Relative to Date of Last Live Birth, by Selected Characteristics: Currently Married Women Age 15-44 Who Have Been Sterilized 1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total	Sterilization Relative to Year of Last Live Birth				No. of C (Unweig
		At Delivery		Within 12 Months of Delivery	More Than 12 Months After Delivery	
		Cesarean	Vaginal			
Total	100.0	32.5	19.4	27.7	20.4	(266
Residence/Ethnic Group						
Dept. of Guatemala	100.0	29.9	32.7	18.4	19.0	(114
Interior, Ladino	100.0	33.4	11.3	32.5	22.7	(136
Interior, Indigenous	**	**	**	**	**	(16
Education						
None	100.0	32.7	15.1	28.9	23.3	(74
Primary incomplete	100.0	31.9	12.7	32.6	22.8	(106
>Primary complete	100.0	33.0	30.7	21.1	15.2	(86
Age of Respondent at Time of Sterilization						
15-24	100.0	27.4	38.8	27.2	6.6	(4
25-29	100.0	37.9	9.4	33.0	19.7	(106
30-34	100.0	35.1	18.2	26.4	20.3	(85
35+	100.0	19.0	25.7	16.3	39.0	(34
Year of Sterilization						
<=1977	100.0	35.0	21.1	23.6	20.2	(7
1978-1979	100.0	41.0	17.7	11.8	29.4	(45
1980-1981	100.0	36.5	13.3	31.1	19.1	(7
1982-1983	100.0	21.2	23.7	38.7	16.3	(7

**Less than 25 cases.

TABLE 11-3

Guatemala: Percent of Currently Married, Fecund Women 15-44 Who Want No More Children*, by Selected Characteristics and Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total		Residence/Ethnic Group: Dept. of Guatemala		Interior: Ladino		Interior: Indigenous	
Total	40.6	(2,064)**	51.5	(541)	43.6	(800)	31.0	(723)
Age								
15-19	10.5	(174)	23.1	(41)	8.6	(75)	7.3	(58)
20-24	27.3	(538)	32.6	(149)	29.8	(213)	20.6	(176)
25-29	44.1	(532)	56.5	(140)	48.7	(208)	31.6	(184)
30-34	50.0	(426)	67.7	(115)	54.9	(151)	36.1	(160)
35-39	53.9	(269)	64.3	(67)	58.9	(111)	41.1	(91)
40-44	66.8	(125)	78.6	(29)	73.5	(42)	56.1	(54)
Education								
None	38.5	(943)	51.4	(120)	46.1	(267)	32.4	(556)
Primary incomplete	44.5	(673)	56.8	(193)	47.4	(329)	27.0	(151)
≥Primary complete	39.2	(448)	47.6	(228)	34.3	(204)	***	(16)
No. of Living Children								
1	7.6	(396)	11.6	(130)	7.6	(145)	4.3	(121)
2	35.3	(516)	49.5	(174)	33.9	(205)	25.1	(137)
3	49.6	(364)	79.6	(102)	54.3	(133)	28.9	(129)
4-5	55.0	(492)	77.3	(96)	63.4	(190)	39.0	(206)
6+	60.4	(296)	78.9	(39)	63.2	(127)	52.0	(130)
Work Status								
Not working	40.2	(1,554)	51.8	(379)	43.6	(635)	29.8	(540)
Working in home	42.7	(297)	51.3	(95)	46.9	(85)	34.4	(117)
Working outside	41.0	(213)	50.5	(67)	40.2	(80)	34.8	(66)
Contraceptive Use								
Currently using	53.3	(418)	56.0	(242)	46.5	(155)	***	(21)
Not using	37.8	(1,646)	47.9	(299)	42.9	(645)	29.3	(702)

*Excludes subfecund and sterilized women.
**Exludes 4 women with unknown information on whether they want more children.
***Less than 25 cases.

NOTE: Figures in parentheses are unweighted numbers of cases.

TABLE 11-4

Guatemala: Currently Married, Fecund Women Age 15-44
Who Want No More Children, by Reason For Not Wanting More Children
and Number of Living Children
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Reasons for Not Wanting More Children	Total	Number of Living Children				
		1	2	3	4-5	6+
Economic	80.0	60.5	79.4	88.4	83.5	71.7
Health of mother	4.8	14.5	5.6	2.4	3.6	6.0
Has desired number of children	4.5	3.4	3.0	3.6	2.5	9.6
Delivery complications	4.2	8.2	6.1	2.0	5.0	2.6
Advanced age of mother	2.3	0.0	0.5	0.0	0.8	8.1
Lacks time to care for more children	1.0	0.0	0.6	1.8	0.9	1.0
Other	3.3	13.5	4.8	1.8	3.7	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(873)	(39)	(196)	(186)	(274)	(178)

TABLE 11-5

Guatemala: Percent of Currently Married, Fecund Women Age 15-44 Who Want No More Children and Who Are Interested in Sterilization, by Selected Characteristics and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigen
Total	60.7 (873)	65.7 (298)	67.6 (352)	43.7 (2
Age				
15-19	** (24)	** (11)	** (8)	**
20-24	69.7 (153)	86.9 (56)	74.6 (62)	43.3 (
25-29	67.0 (246)	63.7 (85)	74.8 (104)	54.7 (
30-34	61.1 (220)	75.0 (80)	68.3 (83)	36.6 (
35-39	55.4 (146)	53.7 (43)	61.1 (65)	44.9 (
40-44	41.9 (84)	** (23)	50.4 (30)	41.7 (
Education				
None	55.2 (366)	61.1 (65)	69.2 (122)	43.0 (1
Primary incomplete	65.8 (303)	69.6 (110)	67.7 (153)	51.0 (
>Primary complete	62.9 (204)	64.5 (123)	64.6 (77)	**
No. of Living Children				
1	51.8 (39)	** (19)	** (14)	**
2	57.0 (196)	70.9 (94)	57.4 (69)	31.8 (
3	65.5 (186)	65.1 (81)	77.6 (69)	39.5 (
4-5	67.0 (274)	71.8 (74)	72.5 (123)	54.5 (
6+	52.5 (178)	43.9 (30)	62.3 (77)	41.7 (
Work Status				
Not working	58.5 (648)	64.9 (207)	65.0 (279)	39.9 (1
Working in home	69.3 (132)	68.4 (53)	83.1 (40)	54.5 (
Working outside	63.9 (93)	66.0 (38)	71.4 (33)	** (
Contraceptive Use				
Currently using	64.3 (237)	62.0 (145)	71.0 (74)	** (
Not using	59.5 (636)	69.2 (153)	66.7 (278)	43.4 (2

**Less than 25 cases.

NOTE: Figures in parenthese are unweighted numbers of cases.

TABLE 11-6

Guatemala: Percent of Currently Married, Fecund Women Age 15-44, Who Want No More Children, Who Are Interested in Sterilization, and Who Have Knowledge of Where to Obtain Sterilization Information and/or Services, by Selected Characteristics 1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Percent	
Total	64.3	(537)
Residence/Ethnic Group		
Department of Guatemala	69.1	(198)
Interior, Ladino	71.5	(243)
Interior, Indigenous	38.2	(96)
Age		
15-19	**	(12)
20-24	60.0	(112)
25-29	68.0	(163)
30-34	75.4	(136)
35-39	55.8	(80)
40-44	48.6	(34)
Education		
None	49.0	(203)
Primary incomplete	66.5	(202)
≥Primary Complete	88.8	(132)
No. of Living Children		
1	**	(20)
2	74.3	(116)
3	64.3	(124)
4-5	59.9	(182)
6+	61.4	(95)
Work Status		
Not working	63.9	(386)
Working in home	70.1	(93)
Work outside	58.5	(58)
Contraceptive Use		
Currently using	80.7	(153)
Not using	58.8	(384)

**Less than 25 cases.

NOTE: Figures in parentheses are unweighted numbers of cases.

TABLE 11-7

Guatemala: Currently Married, Fecund Women Age 15-44 Who Want No More Children, Who Are Interested in Sterilization, and Who Have Knowledge of Where to Obtain Sterilization Information and/or Services, by Source of Information/Services and Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Source of Information/Services	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigenous
APROFAM	43.7	76.3	35.4	8.6
MOH hospital	32.5	9.2	38.6	56.2
MOH center/post	15.0	5.3	17.0	28.1
Private hospital/clinic	5.8	2.6	7.4	4.8
IGSS	2.3	5.9	1.0	0.0
Other	0.8	0.7	0.5	2.4
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(348)	(139)	(174)	(35)

TABLE 11-8

Guatemala: Reason Never Sterilized, by Residence/Ethnic Group, for Currently Married, Fecund Women Age 15-44 Who Want No More Children, Who Are Interested in Sterilization, and Who Have Knowledge of Where to Obtain Sterilization Information and/or Services
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Reason Never Sterilized	Total	Guatemala	Ladino	Indige
Waiting until after next pregnancy	13.0	7.9	14.7	16
Husband opposed	12.0	13.8	12.9	2
Can't afford	10.6	9.2	11.4	1(
Physician refusal/institutional barriers	9.6	19.7	6.4	2
Fear of operation/dying	8.7	7.9	8.1	1:
Inconvenient/no time	8.6	7.9	8.0	1:
Considered operation but undecided	7.5	7.2	8.1	4
Needs to discuss with husband	5.5	5.3	5.3	7
Lacks sufficient knowledge of operation	3.4	3.3	2.2	1(
Currently pregnant	3.1	5.3	2.7	(
Fears pregnancy after operation	2.3	0.0	3.3	2
Prefers to use other method	2.0	1.3	2.7	(
Health reasons	1.6	4.6	0.5	(
Waiting for children to grow up	1.4	0.0	1.0	1
Other/unknown	10.7	6.6	12.7	1(
Total	100.0	100.0	100.0	10(
No. of cases (unweighted)	(348)	(139)	(174)	(.

TABLE 11-9

Guatemala: Reasons Not Interested in Sterilization by Residence/Ethnic Group for Currently Married, Fecund Women Age 15-44 Who Want No More Children 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Reasons Not Interested in Sterilization	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indigen
Fear of operation/dying	43.7	16.5	36.7	65.3
Prefers to use other method	10.7	19.1	13.9	3.0
Fear of side effects	7.9	4.3	12.5	5.1
Approaching menopause	5.6	7.0	7.2	3.1
Husband opposed	4.7	6.1	4.5	4.2
Might want more children	4.2	13.0	3.0	0.7
Fears pregnancy after operation	3.3	3.5	6.4	0.0
"Doesn't want/like"	2.9	7.0	0.8	2.8
Lacks knowledge of operation	2.6	1.7	0.7	5.1
Religious reasons	2.6	5.2	3.0	0.7
Too young to think about it	1.6	7.8	0.0	0.0
Other reasons	10.3	8.7	11.3	10.0
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(336)	(100)	(109)	(127)

TABLE 12-1

Guatemala: Use of Prenatal Care, by Residence/Ethnic Group: Currently Married Women Age 15-44 Who Had A Live Birth Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Prenatal Care	Total	Guatemala	Ladino	Indigenous
Yes	62.3	75.1	68.3	48.3
No	37.7	24.9	31.7	51.7
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(2,145)	(538)	(855)	(752)
Source of Prenatal Care				
MOH center/post	37.1	23.1	41.3	40.4
MOH hospital	8.0	12.5	7.7	5.2
IGSS	10.2	35.4	4.1	1.9
Private hospital/clinic	19.9	25.0	23.7	9.1
Midwife	23.9	4.0	22.6	41.6
Other/unknown	0.8	0.0	0.6	1.8
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(1,349)	(406)	(590)	(353)
Month of Pregnancy When First Received Care				
< 3 months	50.4	56.9	55.6	36.1
4-6 months	38.1	34.2	35.3	46.2
7-9 months	11.2	8.7	9.1	16.9
Doesn't remember	0.3	0.2	0.0	0.7
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(1,349)	(406)	(590)	(353)

TABLE 12-2

Guatemala: Month of Pregnancy When First Received Prenatal Care, by Source of Prenatal Care: Currently Married Women Age 15-44 Who Had A Live Birth Within 5 Years of Interview 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

		Source of Prenatal Care					
Month of Pregnancy	Total	MOH Center/Post	MOH Hospital	IGSS	Private Hospital/ Clinic	Midwife	Other Unknown
<3 months	50.4	46.0	49.9	57.5	69.8	38.0	**
4-6 months	38.1	42.4	35.4	33.8	24.0	46.7	**
7-9 months	11.2	11.7	14.7	8.2	6.3	14.5	**
Unknown	0.3	0.0	0.0	0.4	0.0	0.9	**
Total	100.0	100.0	100.0	100.0	100.0	100.0	**
No. of cases (unweighted)	(1,349)	(489)	(116)	(175)	(264)	(294)	(11)

**Less than 25 cases

TABLE 12-3

Guatemala: Place of Last Live Birth, by Residence/Ethnic Group:
Currently Married Women Age 15-44 Who Had A Live Birth
Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Place of Last Birth	Total	Guatemala	Ladino	Indigenous
MOH facility	24.2	40.5	30.2	8.5
IGSS	6.3	30.2	2.0	0.0
Private hospital	4.1	10.6	4.5	0.3
At Home With Midwife	57.7	15.8	53.2	84.2
Other	7.7	2.8	10.1	6.9
Total	100.0	100.0	100.0	100.0
No. of Cases (unweighted)	(2,145)	(538)	(855)	(752)

TABLE 12-4

Guatemala: Type of Last Delivery, Vaginal or Cesarean, by Selected Characteristics: Currently Married Women Age 15-44 Whose Last Delivery Within 5 Years of Interview Was in a Hospital 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Selected Characteristics	Type of Delivery		Total	No. of Cases (Unweighted)
	Vaginal	Cesarean		
Total	82.9	17.1	100.0	(889)
Residence/Ethnic Group				
Dept. of Guatemala	81.2	18.8	100.0	(473)
Interior, Ladino	84.3	15.7	100.0	(340)
Interior, Indigenous	83.2	16.8	100.0	(76)
Education				
None	84.6	15.4	100.0	(173)
Primary incomplete	87.5	12.5	100.0	(324)
>Primary complete	78.6	21.4	100.0	(392)
Parity				
1	78.0	22.0	100.0	(207)
2	78.3	21.7	100.0	(228)
3	81.2	18.8	100.0	(152)
4-5	90.3	9.7	100.0	(176)
6+	91.0	8.9	100.0	(126)
Age of Mother At Last Birth				
<15	**	**	**	(4)
15-19	84.4	15.6	100.0	(120)
20-24	83.6	16.4	100.0	(266)
25-29	84.7	15.3	100.0	(259)
30-34	82.7	17.3	100.0	(174)
35-39	78.3	21.7	100.0	(60)
40-44	**	**	**	(6)
Year of Last Birth* **				
1978	**	**	**	**
1979	84.7	15.3	100.0	(88)
1980	85.3	14.7	100.0	(124)
1981	84.3	15.7	100.0	(174)
1982	79.6	20.4	100.0	(272)
1983	84.0	15.9	100.0	(219)

**Less than 25 cases.

***Excludes 3 women for whom year of last birth is unknown.

TABLE 12-5

Guatemala: Type of Last Delivery, Vaginal or Cesarean, by Location of Last Delivery and Residence/ Ethnic Group : Currently Married Women Age 15-44 Whose Last Delivery Within 5 Years of Interview Was in a Hospital 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Residence/Ethnic Group & Location of Delivery	Type of Delivery		Total	No. of Cases (Unweighted)
	Vaginal	Cesarean		
Total	82.9	17.1	100.0	(889)
MOH hospital	84.8	15.2	100.0	(591)
IGSS hospital	81.8	18.2	100.0	(194)
Private hospital	72.3	27.7	100.0	(104)
Dept. of Guatemala	81.2	18.8	100.0	(473)
MOH facility	83.6	16.4	100.0	(237)
IGSS hospital	82.4	17.6	100.0	(174)
Private hospital	68.0	32.0	100.0	(62)
Interior, Ladino	84.3	15.7	100.0	(340)
MOH facility	86.0	14.0	100.0	(281)
IGSS hospital	**	**	100.0	(20)
Private hospital	75.0	25.0	100.0	(39)
Interior, Indigenous	83.2	16.8	100.0	(76)
MOH facility	82.7	17.3	100.0	(73)
IGSS hospital	**	**	100.0	(0)
Private hospital	**	**	100.0	(3)

**Less than 25 cases.

TABLE 12-6

Guatemala: Use of Post-Partum Care, by Residence/Ethnic Group: Currently Married Women Age 15-44 Who Had A Live Birth Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Post-Partum Care	Total	Guatemala	Ladino	Indigenous
Yes	26.1	52.3	22.6	17.8
No	73.9	47.7	77.4	82.2
Total	100.0	100.0	100.0	100.0
No. of Cases (Unweighted)	(2,145)	(538)	(855)	(752)
Months After Delivery When First Received Post-Partum Care				
<1 month	13.0	9.0	8.4	26.3
1 month	61.8	72.5	63.7	43.2
2 months	11.9	11.1	15.3	7.3
3 months	5.5	3.3	5.1	9.3
4+ months	7.4	4.2	7.6	11.9
Unknown	0.5	0.0	0.0	2.0
Total	100.0	100.0	100.0	100.0
No. of Cases (Unweighted)	(611)	(277)	(202)	(132)

TABLE 12-7

Guatemala: Use of Well-Baby Care, by Residence/Ethnic Group: Currently Married Women Aged 15-44 Who Had a Live Birth Within 5 Years of Interview 1983 Family Planning/Maternal-Child Heath Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
Well-Baby Care	Total	Guatemala	Ladino	Indigenous
Yes	42.5	74.3	43.4	25.8
No	57.5	25.7	56.6	74.2
TOTAL	100.0	100.0	100.0	100.0
No. of Cases (Unweighted)	(2,145)	(538)	(855)	(752)
Source of Well-Baby Care				
MOH center/post	50.0	26.7	55.5	71.3
MOH hospital	11.1	11.4	12.5	7.9
IGSS	15.1	39.2	5.7	1.4
Private hospital/ clinic	20.1	21.5	24.5	8.5
Midwife	2.8	0.0	1.5	9.5
Other	0.8	1.3	0.2	1.5
TOTAL	100.0	100.0	100.0	100.0
No. of Cases (Unweighted)	(965)	(392)	(378)	(195)
Infant's Age at Well-Baby Care				
<1 month	6.4	8.4	5.9	4.7
1 month	50.8	57.3	44.9	54.7
2 months	22.1	22.9	25.4	13.8
3 months	7.9	6.5	8.9	7.9
4-5 months	11.9	4.4	13.7	18.5
Unknown	0.8	0.4	1.2	0.5
TOTAL	100.0	100.0	100.0	100.0
No. of Cases (Unweighted)	(965)	(392)	(378)	(195)

TABLE 12-8

Guatemala: Use of Maternal-Child Health Services, by Type of Services Used at Time of Last Pregnancy and Residence/Ethnic Group: Currently Married Women Age 15-44 Who Delivered Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Residence/Ethnic Group		
		Dept. of	Interior	
MCH Services	Total	Guatemala	Ladino	Indigenous
None	28.2	10.2	23.6	43.0
Prenatal only	23.5	10.9	28.4	23.3
Post partum only	1.2	1.3	1.0	1.4
Well-baby only	6.3	9.7	5.5	5.8
Prenatal and post-partum care	4.6	3.3	3.6	6.4
Prenatal and well-baby care	15.8	16.9	19.9	10.0
Post-partum and well-baby care	1.9	3.8	1.6	1.4
All three services	18.5	44.0	16.4	8.6
Total	100.0	100.0	100.0	100.0
Number of cases (unweighted)	(2,145)	(538)	(855)	(752)

TABLE 12-9

Guatemala: Use of Maternal-Child Health Services, by Type of Services Used at Time of Last Pregnancy and Education: Currently Married Women Age 15-44 Who Delivered Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Education		
MCH Services	Total	None	Primary Incomplete	>Primary Complete
None	28.2	40.4	23.7	7.1
Prenatal only	23.5	24.3	27.3	15.3
Post partum only	1.2	1.6	0.5	1.3
Well-baby only	6.3	6.5	7.1	4.6
Prenatal and post-partum care	4.6	4.6	4.7	4.2
Prenatal and well-baby care	15.8	12.3	17.1	22.1
Post-partum and well-baby care	1.9	1.8	2.0	2.1
All three services	18.5	8.5	17.5	43.4
Total	100.0	100.0	100.0	100.0
Number of cases (unweighted)	(2,145)	(1,003)	(706)	(436)

TABLE 12-10

Guatemala: Use of Maternal-Child Health Services, by Type of Services Used at Time of Last Pregnancy and Place of Last Live Birth: Currently Married Women Age 15-44 Who Delivered Within 5 Years of Interview
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

		Place of Last Live Birth				
MCH Services	Total	MOH	IGSS	Private Hospital	Midwife	Other
None	28.2	12.9	2.2	1.7	37.8	39.7
Prenatal only	23.5	22.0	3.5	4.2	28.7	16.2
Post partum only	1.2	2.0	0.0	0.0	1.2	0.5
Well-baby only	6.3	7.7	3.1	1.2	6.3	7.5
Prenatal and post-partum care	4.6	4.2	3.7	5.2	5.1	1.9
Prenatal and well-baby care	15.8	23.6	19.1	10.4	11.9	21.2
Post-partum and well-baby care	1.9	3.3	3.5	2.0	0.9	3.5
All three services	18.5	24.2	64.9	75.3	8.1	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases (unweighted)	(2,145)	(520)	(186)	(99)	(1,189)	(151)

TABLE 12-11

Guatemala: Percentage of Currently Married Women Age 15-44 With A Live Birth Within 5 Years of Interview Currently Using Contraception, by Use of Maternal and Child Health Services
1983 Family Planning/Maternal-Child Health Survey

MCH Services	% Currently Using	
None	7.5	(585)
Prenatal only	12.7	(471)
Post partum only	29.6	(27)
Well-baby only	17.5	(137)
Prenatal and post partum	25.8	(97)
Prenatal and well-baby	29.0	(341)
Post partum and well-baby	29.8	(47)
All three services	51.8	(440)

NOTE: Figures in parentheses are unweighted numbers of cases.

TABLE 12-12

Guatemala: Percentage of Currently Married Women Age 15-44 Who Had a Live Birth Within 5 Years of Interview Who Are Currently Using Contraception, by Use of Maternal and Child Health Services At Time of Last Delivery and Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey

Use of MCH Services	Total	Residence/Ethnic Group: Dept. of Guatemala	Interior: Ladino	Interior: Indigenous
Total	21.6 (2,145)	47.3 (538)	25.4 (855)	4.0 (752)
Prenatal				
Yes	30.5 (1,349)	54.4 (406)	29.1 (590)	5.6 (353)
No	11.3 (796)	25.8 (132)	17.3 (265)	2.6 (399)
Location of Delivery				
Private hospital	62.6 (99)	64.7 (57)	59.7 (39)	** (3)
IGSS	59.1 (186)	58.0 (169)	** (17)	** (0)
MOH facility	41.0 (520)	48.3 (208)	40.3 (252)	20.3 (60)
Midwife	8.7 (1,189)	13.9 (91)	16.0 (463)	2.6 (635)
Other	9.3 (151)	** (13)	8.4 (84)	1.7 (53)
Post-Partum				
Yes	43.0 (611)	62.9 (277)	45.5 (202)	10.1 (132)
No	14.0 (1,534)	30.2 (261)	19.5 (653)	2.7 (620)
Well-Baby				
Yes	37.8 (965)	55.6 (392)	34.6 (378)	6.7 (195)
No	11.6 (1,180)	23.2 (146)	18.3 (477)	3.1 (557)

**Less than 25 cases

NOTE: Figures in parentheses are unweighted numbers of cases.

TABLE 12-13

Guatemala: Percent of Children Less Than 5 Years of Age With Diarrhea During the Week Prior to Interview, by Selected Characteristics
1983 Family Planning/Maternal-Child Health Survey

Selected Characteristics	Percent	No. of Cases (Unweighted)
Total	25.6	(4,185)
Residence/Ethnic Group		
Department of Guatemala	19.4	(1,100)
Interior, Ladino	25.4	(1,706)
Interior, Indigenous	30.5	(1,379)
Age of Child		
<1 year	28.7	(837)
1 year	33.9	(846)
2 years	24.3	(784)
3 years	20.5	(843)
4 years	20.5	(875)
No. of Children <5 Years in Household		
1	22.2	(1,348)
2	26.6	(2,058)
3	28.0	(631)
4+	30.8	(148)
Source of Drinking Water		
Piped into house/yard	21.2	(1,998)
Public faucet	32.3	(602)
Well	26.4	(1,033)
Spring	30.9	(219)
River/lake	33.2	(212)
Other	35.1	(121)
No. of Rooms in Household		
1	28.8	(2,517)
2	23.4	(925)
3	20.1	(434)
4	20.4	(156)
5+	12.3	(153)
Electrification		
Yes	22.1	(1,961)
No	28.7	(2,223)
Unknown	**	(1)

**Less than 25 cases.

TABLE 12-14

Guatemala: Type of Treatment Given to Children With Recent Diarrhea, by Residence/Ethnic Group 1983 Family Planning/Maternal-Child Health Survey (Percent Distribution)

Type of Treatment	Total	Residence/Ethnic Group		
		Dept. of Guatemala	Interior	
			Ladino	Indgenous
ORS packets	7.4	7.8	6.6	8.2
Homemade solution	1.4	0.0	1.0	2.4
IV	1.8	3.7	0.7	2.3
Other pharmaceuticals*	70.7	74.9	78.5	60.1
Traditional treatments**	7.1	4.1	3.8	12.2
Other	2.9	1.7	3.3	2.9
Unknown	8.7	7.8	6.2	11.9
Total	100.0	100.0	100.0	100.0
No. of cases (unweighted)	(922)	(178)	(377)	(367)

*Includes Alka Seltzer, Sal Andrews, Santamicina, Agromicina, Yodoclorina, Kaopectate, Entero Beoformo, Entero Guanil, Padrax, Preferit, Colifac, Pantomicina, and Entero Lan.

**Includes fasting, hot or cold food, and herbal preparations.

TABLE 13-1

Guatemala: Percentage of Children Less than 5 Years of Age With Complete BCG, Polio, DPT, and Measles Immunization, by Residence/Ethnic Group
1983 Family Planning/Maternal-Child Health Survey

		Residence/Ethnic Group		
		Dept. of	Interior	
Immunization	Total	Guatemala	Ladino	Indigenous
BCG	57.8	66.8	63.1	43.7
Polio	33.4	43.6	38.2	19.2
DPT	33.0	43.0	37.9	18.9
Measles	53.0	48.8	60.4	45.7
No. of cases (unweighted)	(4,185)	(1,100)	(1,706)	(1,379)

TABLE 13-2

Guatemala: Percentage of Children Less Than 5 Years of Age With Reported Complete BCG, Polio, DPT, and Measles Immunization, by Presence of Vaccination Certificate 1983 Family Planning/Maternal-Child Health Survey

Immunization	Total	Presence of Certificate		
		Has Certificate	No Certificate	Unknown
BCG	57.8	77.9	47.2	15.7
Polio	33.4	50.9	23.9	3.5
DPT	33.0	51.2	23.0	2.8
Measles	53.0	74.2	42.1	4.8
No. of cases (unweighted)	(4,185)	(1,605)	(2,453)	(127)

TABLE 13-3

Guatemala: Percentage of Children Less than 5 Years of Age With Reported Complete BCG, Polio, DPT, and Measles Immunization, by Age of Child
1983 Family Planning/Maternal-Child Health Survey

Immunization	Total	Age of Child				
		<1	1	2	3	4
BCG	57.7	40.3	57.6	62.6	65.8	63.2
Polio	33.4	5.3	28.0	43.2	48.3	43.5
DPT	33.0	5.5	28.3	42.8	46.7	42.9
Measles	53.0	11.3	54.4	66.0	69.0	65.7
No. of cases (unweighted)	(4,185)	(837)	(846)	(784)	(843)	(875)

TABLE 13-4

Guatemala: Percentage of Children Less than 5 Years of Age Receiving Polio and DPT Immunization, by Residence/Ethnic Group, Age, and Number of Doses
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Residence/Ethnic Group & Age of Child	Total	Number of Doses of Polio Vaccine						Complet Immunizat
		0	1	2	3	Booster	Unknown	
Total	100.0	27.9	21.5	13.7	22.1	11.3	3.5	33.4
<1	100.0	53.8	29.5	9.6	5.2	0.1	1.9	5.3
1	100.0	23.6	24.0	21.5	23.9	4.0	2.9	27.9
2-4	10.0	20.5	17.9	12.4	27.4	17.6	4.2	45.0
Dept. of Guatemala	100.0	23.7	13.8	10.2	24.9	18.7	8.7	43.6
<1	100.0	49.5	20.3	11.4	14.0	0.0	4.8	14.0
1	100.0	21.6	11.9	11.3	39.2	9.1	7.0	48.3
2-4	100.0	15.9	12.3	9.5	23.5	28.2	10.6	51.7
Interior, Ladino	100.0	22.7	21.1	16.6	25.8	12.5	1.4	38.3
<1	100.0	50.7	33.8	12.2	2.7	0.3	0.3	3.0
1	100.0	17.5	25.5	28.0	24.1	3.3	1.7	27.4
2-4	100.0	14.8	15.3	14.3	34.2	19.7	1.7	53.9
Interior, Indigenous	100.0	38.4	27.9	12.1	15.0	4.2	2.4	19.2
<1	100.0	60.7	30.1	4.8	2.4	0.0	2.0	2.4
1	100.0	33.4	30.9	20.6	12.4	1.4	1.4	13.8
2-4	100.0	32.0	26.0	11.7	20.6	6.7	2.9	27.3

	Number of Doses of DPT Vaccine							Complet Immunizat
	Total	0	1	2	3	Booster	Unknown	
Total	100.0	29.8	20.3	13.0	22.0	11.0	3.9	33.0
<1	100.0	57.2	26.2	8.8	5.3	0.2	2.3	5.5
1	100.0	25.3	24.1	19.7	24.0	4.3	2.6	28.3
2-4	100.0	21.8	16.9	12.2	27.0	17.1	4.9	44.1
Dept. of Guatemala	100.0	26.0	12.2	9.8	24.3	18.7	9.1	43.0
<1	100.0	53.0	16.5	10.2	14.0	0.3	6.0	14.3
1	100.0	21.6	13.4	10.6	38.9	9.7	5.8	48.6
2-4	100.0	18.5	10.3	9.4	22.7	27.9	11.3	50.6
Interior, Ladino	100.0	23.6	20.9	15.7	26.0	11.8	2.0	37.8
<1	100.0	54.4	30.7	11.0	3.3	0.3	0.3	3.6
1	100.0	18.0	26.5	26.2	24.4	3.3	1.7	27.7
2-4	100.0	15.0	15.8	13.7	34.3	18.6	2.6	52.9
Interior, Indigenous	100.0	41.2	25.4	11.7	14.6	4.3	2.8	18.9
<1	100.0	63.8	26.9	4.8	2.1	0.0	2.4	2.1
1	100.0	37.8	28.9	17.8	12.4	1.7	1.4	14.1
2-4	100.0	34.1	23.5	12.2	20.0	6.8	3.4	26.8

*Three or more doses.

TABLE 13-5

Guatemala: Percentage of Children Less than 5 Years of Age Receiving Measles and BCG Immunization, by Residence/Ethnic Group, Age, and Number of Doses
1983 Family Planning/Maternal-Child Health Survey
(Percent Distribution)

Residence/Ethnic Group & Age of Child	Total	Number of Doses of Measles Vaccine				Complet Immunizat
		0	1	Booster	Unknown	
Total	100.0	43.2	46.6	6.4	3.8	53.0
<1	100.0	86.2	11.0	0.3	2.5	11.3
1	100.0	42.2	50.8	3.6	3.2	54.4
2-4	100.0	28.5	57.5	9.4	4.5	66.9
Dept. of Guatemala	100.0	42.5	38.7	10.1	8.7	48.8
<1	100.0	85.4	8.6	0.3	5.7	8.9
1	100.0	46.2	41.0	6.4	6.4	47.4
2-4	100.0	26.9	47.9	14.6	10.5	62.5
Interior, Ladino	100.0	37.7	54.5	5.9	1.9	60.4
<1	100.0	87.9	11.0	0.3	0.9	11.3
1	100.0	35.3	58.9	3.3	2.5	62.2
2-4	100.0	21.4	67.8	8.7	2.1	76.5
Interior, Indigenous	100.0	51.4	41.6	4.2	2.9	45.8
<1	100.0	84.6	12.7	0.3	2.4	13.0
1	100.0	49.1	47.2	1.8	1.8	49.0
2-4	100.0	40.0	50.1	6.5	3.4	56.6

	Total	Number of Doses of BCG Vaccine				Comple Immuniza
		0	1	Booster	Unknown	
Total	100.0	38.5	52.7	5.1	3.7	57.8
1	100.0	56.8	40.0	0.3	2.9	40.3
1	100.0	39.6	54.0	3.6	2.8	57.6
2-4	100.0	31.8	56.6	7.3	4.3	63.9
Dept. of Guatemala	100.0	24.5	58.9	7.9	8.8	66.8
<1	100.0	27.3	64.8	0.3	7.6	65.1
1	100.0	28.3	60.2	6.1	5.5	66.3
2-4	100.0	22.2	56.5	11.0	10.3	67.5
Interior, Ladino	100.0	35.2	58.1	5.0	1.7	63.1
<1	100.0	59.3	39.5	0.3	0.9	39.8
1	100.0	35.1	59.1	3.6	2.2	62.7
2-4	100.0	27.0	64.1	7.2	1.7	71.3
Interior, Indigenous	100.0	53.5	40.6	3.1	2.9	43.7
<1	100.0	73.7	23.6	0.3	2.4	23.8
1	100.0	53.9	42.6	1.7	1.8	44.3
2-4	100.0	45.9	46.1	4.7	3.4	51.1

*One or more doses.

TABLE 13-6

Guatemala: Percentage of Children Less Than 5 Years of Age* With Reported Complete BCG, Polio, DPT and Measles Immunization: Panama, Honduras, and Guatemala

Immunization	Panama (1979)*	Honduras (1981)	Guatemala (1983)
BCG	55.3	42.3	57.7
Polio	62.8	34.7	33.4
DPT	61.0	33.4	32.9
Measles	67.3	50.7	52.9
No. of cases (unweighted)	(2,399)	(1,953)	(4,190)

*Panama data include children less than 6 years of age.