PONTIFICIA UNIVERSIDADE CATOLICA DE CAMPINAS
(Pontifical Catholic University of Campinas)

SAO PAULO STATE CONTRACEPTIVE PREVALENCE SURVEY
PESMI/PUCC/78

Final Report
June, 1979

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ACKNOWLEDGMENTS

The Maternal-Child Health Department of the Pontifical Catholic University of Campinas (PUCC) wishes to thank Dr. Amaro da Costa Monteiro, Technical Director, National Office, and Dr. Joao Otavio Felicio, Director, Sao Paulo Office, of the Brazilian Institute of Geography and Statistics (IBGE), for making available the sampling frames and map reproductions used in this survey; Maria Conceicao Resende Pignatari, Coordinator of the Nursing Faculty, PUCC, who selected the supervisors and interviewers from the third-year nursing class that participated in the survey field work; and Prof. Angelo Garcia Costa, the field work Coordinator.

We also want to extend our recognition to the scientific-technical collaboration provided by Dr. Alfredo Goldsmith, Chief, Pan-American Division and Dr. Barbara Janowitz, Economist of the International Fertility Research Program (IFRP), North Carolina (USA), and to Dr. Leo Morris, Chief, Family Planning Program Evaluation Branch and Dr. John Anderson, Demographer of the Center for Disease Control (CDC), Atlanta, Georgia (USA). Mr. Richard Monteith of CDC participated in the interviewer training, and Mr. Alan Parnell of the IFRP provided valuable assistance in data processing.

We are grateful to the Magnificent Rector of the University, Prof. Dr. Benedito Jose Barreto Fonseca, who approved and provided stimulus for the realization of this study, as well as Prof. Dr. Walter Leser, D.D., Secretary of Health for the State of Sao Paulo, for his support and confidence, and Dr. Max Pfeffer, D.D., Secretary of Culture and Technology for the State of Sao Paulo for his interest and support.

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I. INTRODUCTION

The Brazilian Government has recently recognized the problems of maternal and child health associated with unplanned pregnancies as well as the effect of rapid population growth in such areas as education, health, agricultural production and employment (press conference of President Ernesto Geisel, Mexico City, January 18, 1978). The Federal Government has recently made the decision to offer family planning services on a voluntary basis to couples who have full access to information on family planning methods. Services will be offered through an expanded program of maternal and child health with an initial objective to provide services to some 53,607 women in a "high risk" category during a period of four years.

Considering this decision of the Federal Government and the lack of data concerning women of childbearing age in the state of Sao Paulo, the Catholic University of Campinas, Sao Paulo (PUCC) sponsored a statewide survey under the auspices of the Faculty of Medical Sciences to obtain information on which to base future program and policy decisions related to the provision of family planning and other maternal health services. This project, entitled PESMI/PUCC/78, had the following objectives:

1. To estimate fertility levels in three strata throughout the State (the Municipio of Sao Paulo, other urban areas and rural areas) since birth registration is not complete throughout the State.
2. To describe levels of knowledge about contraceptives and past and current use of contraceptives in each stratum by age group, education level and marital status.

3. To estimate the proportion of women who have had unplanned pregnancies.

4. To define the percentage and characteristics of the population of women aged 15 to 44 who are in need of family planning services. To be counted as "in need of family planning services," a woman had to be sexually active, fecund, not currently desiring pregnancy and either using ineffective means or not using contraception for reasons unrelated to being pregnant or infertile.

5. To describe the method and source of contraception for women currently using contraception. For women not currently using contraception, to find out why not.

6. For nonusers who want to space or limit the number of children they desire, to determine what method of contraception is preferable and their knowledge of availability of sources of these services.

7. To determine what proportion of women who do not want any more children would consider surgical contraception as a permanent method of limiting fertility, as well as what proportion of women would use contraceptives distributed through a community-based distribution program.

8. To determine the proportion of women with a history of abortion, including the percentage who needed medical care or hospitalization or both following abortion.

The initial plans for the survey were made in February 1978 in collaboration with technical consultants from the Center for Disease Control and the International Fertility Research Program. Contacts were made with the Brazilian Institute of Geography and Statistics (IBGE), who provided the

sampling frame as well as the Nursing Faculty and Preventive Medicine Faculty of the Medical School, PUCC, who provided students to work as interviewers for the survey. The questionnaire was pretested in June so that the final version would be ready for field work, which began in July 1978 and was completed by the end of September.

A report in Portuguese describing the survey results was released by the Catholic University of Campinas in January 1979, only four months following the completion of field work (Nakamura et al, 1979). This report is basically a translation of the Portuguese report but is somewhat different in that a few more detailed tables are included that were not available in January 1979, women aged 15 to 44 are the principal group analyzed rather than women aged 15 to 49, and two sections have been added: Characteristics of Women in Need of Family Planning Services and Policy Implications.

Before discussing the survey methodology in the next section of this report, we would like to emphasize that the data presented in this report are for the State of Sao Paulo and should not be extrapolated to any other area in Brazil. Sao Paulo State is the most developed state in Brazil, has the highest per capita income and possesses a good highway and communication network. For those not familiar with the wide range of development among the states of Brazil, we feel that it is worthwhile making this point and cautioning the reader that all estimates in this report refer to the State of Sao Paulo only.

II. SURVEY METHODOLOGY

The 1978 Sao Paulo Survey was a multistage area probability survey with a two-stage selection: selection of census sectors and selection of households within census sectors. 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 census sector. Within selected census sectors, clusters of 12 households were selected for interview in urban areas, and clusters of 21 households were selected for interview in rural areas.

The statewide survey included three strata: the municipio (county) of Sao Paulo, other urban areas and rural areas. Census sectors were defined as urban or rural in accordance with the municipal law in effect as of September 1970. This administrative definition classified areas as urban if they corresponded to cities (county seats) or vilas (district seats). Rural areas would be all those outside those areas defined as urban.

Sampling probabilities were not equal in the three strata. For example, urban areas outside the municipio of Sao Paulo were undersampled and constituted 33% of the total sample whereas they contained 51% of the statewide population. In contrast, rural areas were oversampled and constituted 33% of the total sample but only 15% of the state population. Oversampling of rural areas was necessary to have adequate numbers in that stratum for analysis purposes. 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 respondents in a household. Thus, to make estimates of proportions and means,

weighting factors have been applied to account for these unequal probabilities. In the tables that follow, percentages are based on the weighted number of observations and the unweighted number of cases are shown. For the total state, the variable "current use of contraception" has an estimated sampling error of 2% within a 95% confidence interval, including an estimated design effect. In each stratum, the same variable has an estimated sampling error of 4%.

The interview status of household and individual respondents by strata is shown in Table 1 for the 4188 households included in the survey. In the 4188 households, there were 3166 possible respondents between 15 and 49 years of age. The number of possible respondents includes those households with refusals or no contact after three visits so that the completion rate should be considered a minimum rate, as some of these households may not have had an eligible respondent. Interviews were completed for 2803 women, or 88.5% of the total number of possible respondents (or 97% of identified respondents). Interview completion rates range from 80% in the municipio of Sao Paulo to 96% in the rural areas. As expected, refusals were higher in the municipio of Sao Paulo, and there was a greater proportion of vacant households in rural areas, especially those coffee-growing areas affected by the freeze several years ago.

Table 2 indicates that the characteristics (age group and marital status) of women in the survey correspond very closely to those published recently by the Brazilian Institute of Geography and Statistics from a household survey conducted in 1976 (IBGE, 1978b). As shown in Table 3, there is some difference in the distribution of births by age of mother in the year prior to each of the two surveys. The Contraceptive Prevalence

Survey in Sao Paulo has a lower percentage of births in the 15- to 19-year-old age group, which may indicate that incomplete interviews may have included more mobile younger women who are more likely to be missed in a household survey of this type. Regardless of this difference, which could also reflect recent fertility decline in younger age groups or sampling variation, correspondence between the two surveys is, in general, quite close.

III. DEMOGRAPHIC BACKGROUND

An analysis of the 1970 Demographic Census in Brazil showed a crude rate of natural increase of 2.8% per year with an estimated crude birth-rate of 38.5 per 1000 and crude death rate of 10.2 per 1000 (Huguet, 1973). This high rate of natural increase may be viewed against a background of declining mortality and fertility rates that have remained relatively high as shown in Table 4. Nevertheless, even with the recent decline in the crude death rate, the estimate of infant mortality in Brazil is still high, about 108 per 1000 live births. For the northeast region, the infant mortality rate reached 147 per 1000 compared with 84 per 1000 for the State of Sao Paulo (Rodriguez, 1977). Also, as can be seen in Table 4, the estimate of the crude birthrate for the State of Sao Paulo is 20% less than that estimated for Brazil (29.5 per 1000 versus 37.4 per 1000). This difference is apparently long-standing. In 1970, the total fertility rate for Sao Paulo had declined to 3.8 per woman compared with 5.3 per woman for all of Brazil (Oechsli and Adlakha, 1975).

Since there are serious problems with underregistration of vital events in Brazil, the demographic rates mentioned above are estimated from census data (IBGE, 1970). These rates can also be estimated from sample surveys. The National Household Survey, conducted by the Brazilian Institute of Geography and Statistics (IBGE) in 1976, which prinicipally collects data for unemployment but also collects information on fertility, showed that the total fertility rate for the State of Sao Paulo declined to 2.8 children per woman, or a 26% decrease since 1970 (IBGE, 1978b). As will be shown in this report, this decrease is inversely correlated with the increase in the use of more effective contraception in Sao Paulo during the 1970s. Even with this decline in overall fertility, the urban/rural

differential in the State still exists with an estimated total fertility rate for urban areas estimated at 2.5 per woman compared with 4.2 per woman in rural areas.

The Sao Paulo Contraceptive Prevalence Survey has confirmed the decline in fertility in the State of Sao Paulo as shown in the 1976 household survey with a continuing difference between urban and rural areas. Period fertility measures, calculated from results of the Prevalence Survey, indicate that the crude birthrate for the State has declined to an estimated 24 per 1000 with a level of 20 in the municipio of Sao Paulo, 24 in other urban areas, and 30 in rural areas (Table 5). As shown in Table 6, women aged 45 to 49 have had 4.6 live births on the average as compared with 4.3 children for women residing in urban areas and 6.5 for women in rural areas--a difference of 2.2 children born alive. The household survey conducted by IBGE two years earlier found similar differences between urban and rural areas with a difference of 2.6 children per woman.

Comparing fertility in the most recent year with cumulative fertility can indicate whether there have been recent trends in fertility. The technique used is to compare the observed distribution of the mean number of children born alive by age with the distribution that would be produced if fertility rates in the previous year were held constant (Potter et al, 1976). This method uses a technique borrowed from the Brass method of fertility estimation (United Nations, 1976). Using this technique, cumulative fertility is found to be higher than current fertility in every age and residence category (Table 7). Because children ever born measures tend to have a downward memory bias that increases with age, one would expect, all things being equal, that the ratios of observed to expected children

born alive would decline toward the upper end of the age distribution. Instead, the highest ratios tend to be at the oldest age groups.

The comparison, then, reflects real declines. The change is apparent even in rural areas. Although fertility differences exist between urban and rural areas, all areas seem to have experienced fertility decline. A more detailed analysis of fertility data from this survey shows that the fertility differences observed, such as those between urban and rural residents, are probably due to differences in contraceptive use and nuptiality patterns (Anderson, 1979). Other factors affecting fertility, such as the prevalence of spontaneous or induced abortion and breast-feeding patterns, were distributed in such a way that they would work to diminish existing fertility differences rather than to increase these differences.

IV. CURRENT USE OF CONTRACEPTION

Survey results show that 63.9% of currently married women aged 15 to 44 are using contraceptives in the State of Sao Paulo (see Table 8). The differences among the three geographic strata are small with the use of contraception greatest in the urban areas of the interior of the State (66.0%), followed by the Municipio of Sao Paulo (63.4%) and rural areas in the interior of the State (58.6%). Variations among the three areas in choice of method are also small with the exception of greater use of condoms and rhythm in urban areas and greater use of withdrawal in rural areas. Throughout each area, the most prevalent method used is oral contraception. For the State as a whole, 27.8% of women are using oral contraceptives followed by sterilization (16.1%), withdrawal (7.3%), condoms (6.6%) and rhythm (5.2%).

In the Municipio of Sao Paulo, the high level of contraceptive use does not appear to be a recent phenomenon. A previous study carried out in 1965 (Rodrigues, 1971) demonstrated that 66% of married women were using contraception. At first glance, it would appear that currently married women in Sao Paulo are even less protected now against pregnancy than they were more than ten years ago. However, the women currently using contraception in 1978 are generally using more effective methods than women in 1965. In 1965, only 25% of married women were using the most effective methods of contraception (sterilization, 7%; oral contraceptives, 6%; condoms, 12%). In 1978, the proportion of currently married women currently using the most effective methods had doubled to 51.8% (sterilization, 13.9%; oral contraceptives, 30.0%; condoms, 6.9%; IUDs, 1.0%). Correspondingly, less effective methods, such as withdrawal and rhythm, are currently

used to a lesser extent by contracepting women. Data from these two surveys indicate that contraceptive use to prevent unplanned pregnancy is not a new phenomenon in the Municipio of Sao Paulo, but there has been significant substitution of more effective for less effective methods in preventing unplanned pregnancy.

For comparison with data from surveys in other Latin American countries, we have presented the proportion of women aged 15 to 44 currently using contraception for selected denominators in Table 9. As the denominator is refined from all women to "exposed" currently married women, the denominator is more restrictive and, of course, the proportion of women contracepting increases. Forty-two percent of all women in the State of Sao Paulo were currently contracepting, and this figure rises to 61% for all ever-married women and 64% for currently married women, as was indicated in Table 8. When subfecund and currently pregnant women (those not currently exposed to pregnancy) are excluded, 73% of married women are contracepting.

Table 10 shows contraceptive use by age group for the entire State. The percentage of married women currently using contraception increases until 35 to 39 years of age when a peak prevalence of 72.2% is reached. Oral contraceptives are the most prevalent method until 30 to 34 years of age. The percentage of women using sterilization increases rapidly after 29 years of age and is the most prevalent method for women aged 35 years and older. These results suggest that as women complete their childbearing, a great many change from nonpermanent methods, such as the pill, which are used to space children, to permanent methods, such as sterilization, to limit childbearing once desired family size is reached.

Again, we can use data from the survey conducted in 1965 in the Municipio of Sao Paulo for comparison purposes. As in the 1978 Survey, the percentage of women using sterilization as a contraceptive method in 1965 increased until it reached a maximum in the age group 35 to 39 years of age. Although trends by age are similar in both surveys, an important difference is that the level of use was much lower in 1965 than in 1978 (Berquo and Oya, 1979). In the 35- to 39-year-old age group, which represents the age group with greatest use of sterilization in both surveys, only 10.7% of married women had used surgical contraception in 1965 as compared with 27.4% in 1978, which is 2.6 times greater than the percentage in 1965.

As might be expected, the percentage of women using contraception increases with educational level (see Table 11). For women with less than a primary education, 60% are contracepting compared with 65% with a primary education and 68% with a secondary education. Although the trend of greater use with more education is consistent, the differentials are much less than those seen in Latin American countries where the crude birthrate is greater than 35 per 1000. There are no clear-cut differences by method used, except that women with a secondary education use withdrawal to a lesser extent and condoms and rhythm to a greater extent than women with less than a secondary education. Whereas, in 1978, there is no significant difference in use of surgical contraception by education, data available from the 1965 Sao Paulo Study show that, at that time, the percentage of women with a secondary education using sterilization was almost twice as great as for women with less than a secondary education (10.2% versus 5.5%). For all educational groups, the use of sterilization in 1965 was much less than in 1978.

Although there is no wide variation in use of contraception by geographic area or by educational background, household income does appear to be associated with current contraceptive use. Table 12 shows use of contraception by method and monthly household income (based on multiples of minimum salaries). Whereas over 69% of women in households with at least an income of four minimum salaries are using contraception, only 47% and 57% of women living in households with less than one or between one and two minimum salaries, respectively, are using contraception. The choice of method also appears to be associated with monthly family income. The use of surgical contraception increases as does income, but the use of withdrawal generally decreases with an increase in monthly income. In fact, almost one third of currently contracepting women with the lowest monthly household income were using withdrawal. Beginning with a monthly household income of at least two minimum salaries, more than 50% of women were using the most effective methods of contraception, either oral contraceptives, sterilization or condoms, whereas only 30% of women with the lowest monthly household income were using the most effective methods.

Of all women interviewed, 22% were employed, but the table below shows there are no significant differences in current use of contraception by employment status. Although not shown here, the distribution of methods was also very similar by employment status, and education appears to be a factor associated with contraceptive use regardless of whether or not a woman was working.

Percent Currently Using Contraception
By Employment and Education

	Primary Incomplete	Primary Complete	Secondary
Works	61.0	66.3	70.0
Does not work	61.1	66.7	68.6

Table 13 shows that almost all sterilizations were tubal ligations (92.8%) and the great majority were postpartum (76.1%). Table 14 gives a demographic profile of women using female sterilization by age group and by number of living children. The great majority of women with sterilizations were older than 30 years of age; only 16% were younger than 30 years of age. However, 70% of all women with sterilizations had two to four children and fewer than 25% had five or more children.

Women not currently using contraception were asked why they were not using contraception. As shown in Table 15, the results do not vary greatly by geographic area, so we will discuss only the left-hand column for the total State. More than half of the women (53.7%) were not using contraception for reasons directly related to pregnancy; that is, they desired a pregnancy, were currently pregnant, or were postpartum. Another 10% of the women were either menopausal or subfecund. Thus, only about one third of all women were not using contraception because of reasons that were not associated with pregnancy, subfecundity or sexual activity. Only 1.3% of women gave religious reasons for nonuse of contraception.

V. SOURCE OF CONTRACEPTION

Current users of contraception were asked where they had obtained their contraceptive methods. Table 16 shows source of contraception by geographic residence. These data on source of contraception must be interpreted in the context that there is no official family planning program, either federal or state, in Sao Paulo, and BEMFAM, the IPPF affiliate, has only five clinics in the entire State. The most important source of contraception in all parts of the State is the private pharmacy (61.2% of current users statewide), followed by private physicians (16.1%), INPS (11.8%) and state and local health facilities (7.4%). State and local health facilities appear to be a more important source of contraception than INPS for women in rural areas.

The source of contraception by method of contraception is perhaps more revealing and is shown in Table 17. As may be expected, the pharmacy is almost the exclusive source of contraception for pill and condom users. For users of surgical contraception, there were three important sources roughly equally distributed: INPS (36%), private physicians (35%) and state or municipal hospitals (23%).

VI. HISTORY OF SPONTANEOUS AND INDUCED ABORTIONS

Previous studies conducted in the municipio of Sao Paulo and in Rio de Janeiro estimated that between 9% and 11% of the ever-married women had had at least one induced abortion (Milanesi, 1970; Hutchinson, 1964). The Milanesi study in Sao Paulo showed that 18% of pregnancies terminated in abortion with an estimate that one third of them were induced abortions.

A high percentage of ever-married women (between 22% and 24%) in the 1978 Sao Paulo Survey reported that they had had at least one spontaneous or induced abortion. As shown in Table 19, the proportion of women with a history of abortion was not significantly different in each of the three regions of the State. If the abortions were principally spontaneous, one might expect that the proportion of women with a history of abortion would be higher in rural areas where fertility has been shown to be higher, since the more pregnancies a woman has, the more likely she has had a spontaneous abortion. Since there is no significant difference between urban and rural areas, one may infer that a higher proportion of the abortions in urban areas is induced as compared with rural areas.

Respondents with a history of abortion were asked if their most recent abortion was spontaneous or induced. Only 13% of women with a history of abortion stated that their most recent abortion was an induced abortion. However, the reported level of induced abortions was twice as high in urban areas compared with the rural area. Sixteen percent of abortions in the Municipio of Sao Paulo were reported as induced, compared with 13.5% in other urban areas and 7.0% in rural areas. Even with the urban-rural differential in reported induced abortions, underreporting or reporting induced abortions as spontaneous is suspected as the 1965 study by Milanesi

showed one third of all abortions to be induced abortions. On the other hand, if some portion of the decline from 33% to 16% (% induced abortions of all abortions in the municipio of Sao Paulo) is real, we may hypothesize that the increased use of effective contraception has contributed toward less reliance on induced abortion as a fertility control method. Even with underreporting, the total level of reported abortions and the differential reporting of induced abortions by geographic residence point toward a more frequent use of induced abortion in the urban areas.

The percentage of currently married women with abortion history (spontaneous or induced) is presented in Table 19, by educational background. In all geographic areas, a greater proportion of women with a history of abortion have less than a secondary education. In the 1965 study, Milanesi did not find any significant differences by educational background in the proportion of women with induced abortion. If this is still true in 1978, a greater proportion of abortions for women with less education would be spontaneous. Also, since women with less education have a greater number of pregnancies, they would be at risk more often to have more spontaneous abortions.

All women with a history of abortion were asked, for their last abortion, if they had any complications requiring medical attention and if they spent at least one night in a hospital or clinic because of these complications. Forty-three percent of women had complications necessitating medical attention, and 36%, or 83% of those receiving medical attention, were hospitalized. There were no significant differences by geographic area. Even though the abortions are not characterized as either spontaneous or induced, the fact that a high proportion of women with some type of abortion needed medical attention documents the anecdotal reports of abortion

as a public health problem. Also, previous studies in Brazil were based only on abortions that resulted in hospitalization. Without any knowledge of how many abortions were occurring in the community, the extent of the medical complications resulting from abortion could not be determined. The data from the 1978 Contraceptive Prevalence Survey document the proportion of women with abortion that needed hospitalization. Although it is quite possible that women may tend to underreport abortions in a household survey interview or may tend to report only those abortions with subsequent complications, we have no way of knowing what the level of omission might be (Barreto Fonseca, 1970). However, even if the data on abortions reported here by women in Sao Paulo State is underreported, the magnitude of the abortion problem in the State of Sao Paulo is "at least" that found in the survey.

VII. PLANNING STATUS OF PREGNANCIES AND CURRENT PREGNANCY INTENTION

Tables 21 and 22 include information on the planning status of pregnancies by residence and parity and by education, respectively. All ever pregnant women queried in the survey were asked a sequence of questions about whether they had wanted to become pregnant (most recent pregnancy) at the time of conception and, if they had not, whether they had wanted the child later or had wanted no more children. On the basis of these questions, each woman's last pregnancy was classified as either "planned," "mistimed," "unwanted" or "unknown." Planned pregnancies were defined as those that were desired and did not occur before they were intended; mistimed pregnancies were classified as those that were wanted, but at some time in the future; and those pregnancies that were in excess of the total desired number were defined as "unwanted." Fewer than 1% were classified as unknown because of insufficient data about reproductive intentions. These four categories are mutually exclusive and exhaustive. Planned and mistimed categories can be combined into "wanted pregnancies," and mistimed and unwanted births form the category "unplanned pregnancies." This usage conforms to that of the published analysis of the National Fertility Surveys in the United States (Westoff, 1976b).

In the State of Sao Paulo, 35% of last pregnancies were not planned; that is, they were either mistimed or unwanted (see Table 21). For women in rural areas, the rate of unplanned pregnancies was 41% compared with from 32% to 35% for women in urban areas. However, this difference between urban and rural areas disappears when last pregnancies are controlled for parity since the last pregnancy for women in rural areas is of higher parity on the average.

In the right-hand panel of the tables, the planning status of the last birth by parity is shown, demonstrating the increase in unwanted pregnancies as parity increases. For women with three live births, over one fifth of all pregnancies were unwanted, and almost 40% of last pregnancies to women with parity 4 or 5 were unwanted. If the woman's parity was 6 or greater, more than 50% were unwanted. In addition, 12% of women having their first pregnancy reported that their pregnancy was mistimed, probably indicating a premarital conception. Thus, even with relatively low fertility levels in Sao Paulo State, a serious family planning problem has been documented in terms of unplanned pregnancies.

Excluding those women with no previous pregnancy, the percentage of unplanned pregnancies (mistimed and unwanted grouped together) increases with parity, as shown below:

Parity	Last Pregnancy % Unplanned
1	11.1
2	29.0
3	39.1
4-5	51.0
6+	63.2

Again, it may be noted that more than half of the pregnancies to women with four or more children were unplanned. In fact, almost 40% of the pregnancies to women with three children were not planned.

As shown in Table 22, the planning status of the last pregnancy appears to be inversely correlated with the education of the mother. Whereas only 12.6% of women with a secondary education had had an unwanted pregnancy, 29.2% of women with an incomplete primary education reported

having had an unwanted pregnancy. The percentage of women with a complete primary education who reported having had an unwanted pregnancy fell between these two figures (21.8%). However, women with less education have had more previous children than women with more education, and the difference in percent unwanted disappears when controlled for parity. (Not shown in table.) Thus, women with less education, who have had more children on the average in all age groups, are more likely to report their last pregnancy as unwanted. Also, the data presented here relate only to last pregnancies, and differences would probably be even greater if all pregnancies were considered and not just the last pregnancy.

Contrary to the data on unwantedness, mistimed pregnancies do not appear to be related to education. However, when controlled for parity, there is a consistent negative association with education for women with parity 2 or greater. The greater proportion of mistimed pregnancies for women with less education indicates problems in spacing children.

In addition, the relationship between planning status and income was examined. Results indicated that this relationship was similar to that reported between education and planning status with no significant differences in unwanted pregnancies when controlled for parity, but there was an increase in the percentage of pregnancies reported as mistimed.

An important issue is how useful the question on planning status is in distinguishing mistimed from unwanted pregnancies. A simple way of checking for consistency is to compare the percentage of women wanting no more children by planning status of last pregnancy. For women who said that their last pregnancy was unwanted, the percentage of women who want no more children should be extremely high (approaching 100% since a few women

may change their minds), but it should be lower for women reporting their last pregnancy as mistimed. If the percentages were similar, this would indicate that women were unable to distinguish timing from number failures. The percentage of women reporting that they want no more children by planning status of last pregnancy is as follows (sterilized women are excluded):

Planned	57.4
Mistimed	72.3
Unwanted	92.9

The much higher percentage of women wanting no more children among women who reported their last pregnancy as unwanted as compared with women who reported their last pregnancy as mistimed indicates that in practice the question is helpful in distinguishing number from timing failures.

To our knowledge, there exists only one other study in Brazil with information on the planning status of pregnancies (Etges, 1975). In this survey in 1973, in three cities of Rio Grande do Sul (Porto Alegre, Sao Leopoldo and Caxias do Sul), more than 50% of last pregnancies were reported as unplanned. This rate is higher than that found in the urban areas of Sao Paulo. As found in Sao Paulo, the rate of unplanned pregnancies in these cities was higher among women with less education and lower monthly income.

Table 23 presents estimates of current pregnancy intention by residence and parity. For the entire State, 10.3% of married women are currently pregnant, and the proportion in urban areas (9.9%) was 16% less than that found in rural areas (11.8%). Thus, rural Sao Paulo State has a lower percentage of women using contraception, a higher fertility rate and a

higher percentage of women currently pregnant. Only 11.4% of women in the State said that, at the time of the survey, they desired a pregnancy. Seventy-seven percent of the women did not currently desire a pregnancy, resulting in an estimate that 86% of women who were not currently pregnant wanted to either space or limit their children at the time of the survey.

Table 23 also shows that the percentage of women currently pregnant diminishes rapidly until parity 2. Also, the proportion of women who desire a pregnancy falls rapidly after the first child. Of those women with one child, 19.3% desire another pregnancy, but only 4.6% of women with two children wanted another pregnancy at the time of the survey. Conversely, the percentage of women who did not want a pregnancy at the time of the survey increases with parity, with abrupt increases between parity 0 and 1 and parity 1 and 2.

VIII. DEMAND FOR STERILIZATION SERVICES

All women who had not been sterilized were asked if they had all the children that they wanted. Women who want no more children then constitute the group that might consider sterilization to limit their families. Of all currently married women, 61.1% do not want any more children. As might be expected, the percentage of women who want no more children increases with parity. Fully 75% with two live births, 86% with three, and almost 90% of those with four or more live births stated that they did not want more children.

The higher the household income, the less likely it is that a woman wants no additional children. However, this finding is related to the lower current parity of higher income women as compared with lower income women. Controlling for parity, the negative relationship between income and the desire for no additional children disappears. Of women with a household income under two minimum salaries, 43.4% have had fewer than three live births as compared with 56.5% of women with a household income of at least four minimum salaries.

The same phenomenon is true for the relationship between education and the desire for no additional children. Whereas an increase in education is associated with an increase in the percentage of women saying they want more children, as with the relationship between income and the desire for no additional children, controlling for parity eliminates this relationship. This comes as no surprise as education and household income are highly correlated.

Of all currently married women who did not want more children, 44.4% stated that they were interested in sterilization to limit their families. Table 24 shows how the percentage of women interested in sterilization is related to the planning status of their last pregnancy and to education. Women with more education are only slightly less interested in sterilization than women with less education, and there is no statistically significant difference when sampling error is considered. Forty-seven percent of women with less than primary schooling say they are interested in sterilization, as compared with 44% who have completed primary school and 42% who have some secondary schooling. The planning status of the last pregnancy appears to have a greater impact on interest in sterilization than does education. Only 40% of women whose last pregnancy was planned are interested in sterilization as compared with more than half of the women who had timing failures (52.8%) or number failures (50.7%).

However, the effect of planning status on interest in sterilization is seen to be dependent upon education when we control for this variable. Among women who have not completed primary school, there is a substantial difference in those interested in sterilization if the last pregnancy was unplanned (mistimed or unwanted) compared with those whose last pregnancy was planned (57% vs 38%). Among women with more education, either primary school completed or some secondary education, differences in planning status have less impact on interest in sterilization. Among women who have some secondary education, for example, those whose last pregnancy ended in a number failure (unwanted) are no more likely to be interested in sterilization than those whose last pregnancy was planned. Conversely, when education is controlled for planning status of last pregnancy, the more educated women are consistently less interested in sterilization when their

last pregnancy was unwanted. No trend by education can be seen for wanted pregnancies (planned and mistimed).

Table 25 shows how the percentage of women interested in sterilization varies by household income and planning status. Household income appears to have a stronger relationship to interest in sterilization than does education, especially for those women whose last pregnancy was unplanned (mistimed or unwanted). Among all women in households with incomes of at least four minimum salaries a month ($340), only 39% are interested in sterilization, whereas 52% of women in households with incomes of less than two minimum salaries a month ($170) are interested in sterilization. Among women with low incomes, moreover, planning status of last pregnancy appears to have a greater effect on interest in sterilization than for women with higher levels of income. Women living in households with incomes of less than two minimum salaries who have had number or timing failures are far more likely to be interested in sterilization than women who said their last pregnancy was planned. If household income is more than four minimum salaries, planning status makes little difference in terms of interest in sterilization. There is no significant difference between women who planned their last pregnancy and women whose last pregnancy was mistimed. Conversely, when income is controlled for planning status of last pregnancy, the women in households with higher incomes are consistently less interested in sterilization, with a greater difference seen when their last pregnancy was unplanned (mistimed or unwanted).

Table 26 shows that among women who are interested in sterilization, knowledge of where to obtain services or information is dependent upon education. Only half the women (51.5%) who have not completed primary school know where to get this information as compared with 86% of women with some

secondary education. Table 24 indicated that there was not a significant difference in interest in sterilization by education. However, it is clear from Table 26 that better educated women are more likely to have information concerning availability of services or knowledge of where to obtain such information. Lack of information is clearly an important barrier to the obtaining of sterilization, and the data indicate that many poorly educated women who are interested in sterilization may not receive sterilizations because of lack of information. If they are to receive the services they indicate they want, then they must be provided with more adequate information concerning available sources. If we were to assume that only interested women who had knowledge of availability of services actually obtained sterilizations, then actual sterilizations would be biased toward better educated women as follows (percent with knowledge of availability times percent interested in sterilization):

Less than primary education	24%
Primary education	32%
Secondary education	36%

Women not interested in sterilization were asked the reason they were not interested. Tables 27 and 28 show the distribution of reasons by education and household income, respectively. The two most important reasons, accounting for just under half the total, are preference for a temporary method of contraception and fear of surgery. Fully one quarter of the women say they prefer a temporary method of contraception, and Table 27 indicates this reason is more likely to be given by better educated as compared with less educated women. Fear of surgery is cited by almost as many women (24.0%), and women with less education are more likely to give this

as a reason for not being interested in surgery than women with more education. In fact, one third of women with incomplete primary education indicated fear of surgery as a reason for lack of interest in sterilization.

As indicated in Table 26, poorly educated women are more likely to have less information (or less accurate information) concerning sterilization. Whereas better educated women are probably more likely to obtain their information from books and magazines or physicians, women with less education probably get their information from friends and neighbors. Such information may be inaccurate and may account for the high percentage of women who say they fear surgery. If this fear is to be reduced, then women must be given better information about sterilization.

Table 28 indicates that women residing in households with higher incomes are less likely to be interested in sterilization than women with less household income (32% versus 13%) because they prefer to use a temporary method of contraception. Conversely, fear of surgery as a reason women are not interested in sterilization is inversely correlated with household income.

If an education program were implemented to increase information about contraception, including information about surgical procedures, it might increase the number of women who are sterilized, particulary among the poorly educated and/or low-income women. The assumption is that if a woman were interested in sterilization and had information on how to receive this service, she would follow through and obtain a sterilization. Thus, the percentages shown in column 1 below would increase to those shown in column 2 if all women interested had information. The increase, as shown in column 3, would be more dramatic for those with less education.

	% Sterilized if Women With Interest and Information Were Sterilized	% Sterilized if all Women Interested Were Sterilized	Increase Column 2 Minus Column 1
Less than primary education	24	47	+23
Primary education	32	44	+12
Secondary education	36	42	+6

Secondly, a program providing information about surgical procedures and reducing fear of surgery would increase the use of sterilization even further among women who do not want additional children. If we assumed that all women citing fear as a reason for lack of interest in sterilization chose to be sterilized as a result of an educational campaign, then the percentage of women sterilized would vary with education as follows (number of women interested in sterilization plus number citing fear as reason for lack of interest/number of women who have all the children they want):

	% Sterilized if Women Currently Interested in Surgery Were Sterilized	% Sterilized if Women With Fear of Surgery Overcame Their Fear	Increase Column 2 Minus Column 1
Less than primary education	47	65	+18
Primary education	44	55	+11
Some secondary education	42	50	+8

A major campaign providing information about surgical procedures has the potential to increase to even a greater extent the percentage of women sterilized with the major effect concentrated among the poorly educated, as shown above.

Very few women indicate that the reason for lack of interest in sterilization is that "it costs too much." It may be that women either have no information concerning the price of sterilization or, if they do, that they do not think the price is unfair. Another factor is that low-income women may go to state or municipal hospitals where there are minimum costs associated with sterilization. Lastly, Tables 27 and 28 also demonstrate that religious reasons are not an important barrier to the use of sterilization as only 1.5% of the women give this reason.

IX. DESIRE TO USE CONTRACEPTION, KNOWLEDGE OF AVAILABILITY OF SERVICES AND ACCEPTANCE OF COMMUNITY-BASED SERVICES

The next group of tables is concerned with the desire to use contraception and knowledge of availability of services among women not currently using contraception or using less effective contraceptives. Table 29 shows that of women not currently contracepting, 44% are interested in using contraception. There is little variation by residence. Women who desire to use contraception are more likely to know where to obtain services than women who do not desire to use contraception. This is not surprising since it is expected that those interested in obtaining any kind of service may have spent more time acquiring information about sources of that service. But, among women who desire or do not desire to use a contraceptive method, women in urban areas are more likely to know where to get contraceptives than women in rural areas. In fact, women residing in rural areas who are interested in using contraceptives are no more likely to know where to obtain contraceptives than women living in urban areas who are not interested in using contraception. Table 30 indicates that nonusers who have used contraceptives in the past are more likely to want to use contraception and to be more knowledgeable about where to obtain supplies independent of residence or desire to use contraception.

Table 31 compares knowledge of availability of oral contraceptives, IUDs and condoms for women who either use less effective methods of contraception or do not use contraception. The data indicate that nonusers are most likely to know where to get orals, somewhat less likely to know where to get condoms and least likely to know where to obtain IUDs. Women in rural areas are less likely to know where to obtain any contraceptive. For those women using less effective methods, knowledge of where to get either

pills or condoms is very high--more than 80%--but only 27% know where an IUD may be obtained. It would thus appear that although there are no significant differences by residence in the desire to use contraceptives (Table 29), knowledge of where to obtain contraceptives of any kind is much lower in rural than in urban areas for nonusers. When nonusers, the majority of whom are not currently contracepting because of pregnancy-related factors--desire to be pregnant, currently pregnant or postpartum--want to begin or resume contracepting, the data in Table 31 imply that women in rural areas will find it more difficult to act on their desire. Without knowledge of where to obtain modern contraceptives, they will be forced to rely on less effective methods or no method.

The last group of tables in this section is concerned with possible interest in community-based distribution (CBD) programs, either in low-income urban areas or rural areas, and the factors influencing interest or lack of interest in such a program. A major variable affecting interest in a CBD program is residence; women in rural areas are more likely to say they are interested in such a program than women in urban areas (Table 32). One of the factors that may explain why residence is important in affecting interest is travel time to the place where contraceptives are purchased. Data in Table 33 for users of oral contraceptives as well as users of less effective methods or nonusers who said they know where to obtain orals show that it takes women in rural areas longer to reach the place where orals are or can be purchased. Over 90% of women living in the capital or other urban areas say that it takes or estimate that it would take them less than 30 minutes' travel time. However, less than two thirds of rural women travel for under 30 minutes. Rural women are also less likely to consider the source of supply to be convenient than are women in urban areas, but

differences here are smaller than for travel time. However, interpretation of convenience may be difficult as what is considered to be inconvenient by a woman in an urban area may be considered convenient by a woman in a rural area. Rural women may travel longer distances to make most purchases and may consequently be less likely to regard such travel as inconvenient. But the important question is the effect, if any, of greater travel time in affecting the interest in a CBD program. Table 34 indicates that travel time does make a difference in affecting interest in a CBD program. This is true whether a woman is currently using orals, using a less effective method or not currently contracepting.

The data therefore indicate that women in rural areas would be more interested in a CBD program because (1) they must travel greater distances to obtain supplies and (2) interest in a more accessible source of supply rises with an increase in time spent or expected to be spent to obtain supplies. It may be conjectured that more available supply points would increase the use of contraception, and since rural women must spend more time traveling, such a program would have a greater effect in increasing the use of orals in rural than in urban areas.

Women living in households with higher incomes are less likely to be interested in a CBD program than women living in households with lower incomes (Table 35). Only 36% of women with household incomes of $850 a month or more (ten times the minimum salary) are interested in a CBD program as compared with 61% of women with household incomes under $170 per month (twice the minimum salary). Why should household income have such a strong influence on interest in a CBD program? There are two possibilities. First, women with higher incomes can more easily afford contraceptives than women with lower incomes. Although prices of orals in a CBD

program were not discussed, respondents may have assumed that a CBD program would provide orals at lower prices than the pharmacy, and this would be more important to lower income women. (Very few women, however, give cost as a reason for not using contraception. It may be argued, however, that cost is still an important factor limiting the use of oral contraceptives since cost includes not only the purchase price but also costs associated with travel time, and evidence presented here indicates the importance of travel costs in influencing interest in a CBD program.) If such were the case, it is clear that the lower the household income, the more attractive a lower-priced product would appear. Second, it is not only distance that affects travel time but also method of transportation. (Though the survey did contain a question on method of transportation used, results from this question are difficult to interpret.) Women with higher incomes, for example, are more likely to have automobiles, and even if they live farther from a source of supply, might spend less time traveling than women who live closer to a supply point but who must rely on other methods of transportation.

Table 36 gives the reasons for lack of interest in a CBD program by education and 37 gives these reasons by family income. Almost 20% of the women say they prefer to make purchases at the pharmacy, and women with higher levels of education and family income are more likely to give this reason than women with less education and lower family income. Obviously, women with higher incomes can more easily afford contraceptives than women with lower incomes. As we have argued before, if women perceive the CBD program as subsidized, and/or women with higher incomes have access to more effective sources of transportation, they are less likely to be interested in a CBD program. In addition, women with higher levels of education may,

for social status reasons, prefer to deal with a pharmacist than with a local member of the community in acquiring a product that they consider to be very personal.

An equally important reason for noninterest in a CBD program is "prefers to use a method other than pills or condoms." There is some tendency for this reason to be given more frequently by women with more education and higher incomes. The most frequently used other method is sterilization, and this may indicate a greater interest in sterilization with increases in socioeconomic status. (These results are not directly comparable with those in Tables 24 and 25 since the base here is all currently married women aged 15 to 44 except those who have been sterilized. The base for Tables 24 and 25 is currently married women aged 15 to 44 who have not been sterilized and who have all the children they want. Therefore, though Tables 24 and 25 indicate that interest in sterilization decreases with increases in education and income, this does not contradict the results in Tables 36 and 37 since the bases for the calculations are different.)

The third most important reason is "lack of confidence in nonmedical personnel." There is no clear relationship between this response and either education or income. The next most important reason for lack of interest is "fear of side effects," but it is the most important reason among less educated and lower income women. Again, it may be concluded that women with lower levels of education or income have less accurate information concerning contraception than women in higher socioeconomic groups. Better information on the use of contraceptives and possible side effects may allay the fears of these women. It is important to provide women with complete and reliable information concerning contraception so

that they do not rely on information acquired from friends and neighbors in making choices concerning contraception.

X. CHARACTERISTICS OF WOMEN IN NEED OF FAMILY PLANNING SERVICES

As presented in Section IV (Table 9), 42.3% of all women aged 15 to 44 in the State of Sao Paulo are currently using contraception. For the estimated 5,528,000 women in this age group,* this percentage represents 2,338,000 women. Using results available from the survey, there are a number of possible ways to define the additional women still in need of family planning services. The method presented here results in an estimate of 475,400 women aged 15 to 44 in need of family planning services. A greater proportion of women in rural areas were classified as "in need of services" compared with women in urban areas, and in all areas of the State a greater proportion of low-income women were "in need of services." The large majority of women "in need of services" are currently married, older than age 30 and have three or more children.

A woman was characterized as "in need of services" (or "unmet need") if she was not currently pregnant and stated that she did not currently desire to become pregnant and she either (1) was using an ineffective method (douche, herbs) or (2) not using any method, for reasons not related to pregnancy, subfecundity or sexual activity. Thus, the women defined here as "in need of services" are noncontracepting fecund, sexually active women (regarldess of martial status), who were not currently pregnant and did not desire a pregnancy at the time of the interview.

The percent of women representing "unmet need" calculated using these definitions varies by characteristics of women as shown in Table 38. Overall, 8.6% of all women in the State, or 475,400 women, are in need of

*1978 estimate based on cohort-component projection of women aged 15 to 44 using 1976 published estimates as a baseline (IBGE: Anuario Estatistico de Brasil, 1977, Vol. 38, 1977).

family planning services with a higher percentage in need in rural areas. The proportion in need by age group increases with increasing age for the State as a whole and in urban areas. There is no clear-cut relationship with age group above age 30 for women in rural areas. Need is greatest among higher parity women. Almost one fourth of women with five or more children need services statewide. When we look at socioeconomic characteristics rather than demographic characteristics of women, the proportion of women in need of services is from three to four times higher in all strata for women with less than primary education as compared with those with more than primary education. Also, the proportion of women in need is inversely correlated to family income with approximately one out of every six or seven women living in households with an income less than two minimum salaries in need of services.

Table 38 indicates the segments of the population in which need of family planning services is the greatest. How can this information be used to derive program goals? If the pool of women that has been defined as "unmet need" (ie, the numerators of the percentages in need as shown in Table 38) is distributed across categories of women as shown in Table 39, it can be seen where program targets should lie. First of all, we see that the 475,400 women estimated to be in need of services are distributed approximately as the population is distributed throughout the State. Thus, about one third of the women in need, or 155,000 women, reside in the municipio of Sao Paulo; 239,000 women in other urban areas are in need of services, and 81,000 women in rural areas are in need of services. Almost all women in need are older than age 25, probably reflecting the later age at marriage in Sao Paulo as compared with other developing areas in Latin America. When we look at the percentage distribution of women in need by

marital status, 85.7% in need by our definition are currently married, and 7.7% were previously married. Never married women represent 6.6% of women in need of services, almost exclusively in urban areas. Almost two thirds of the women in need have three or more children, but lower parity women are also important, representing just over one third of women in need of services. Statewide, and in all geographic strata, most women in need of services have less than a primary education, and among women with known household family income, approximately one third live in households with an income that is less than four minimum salaries. If the State Health Department wants to provide information and services to prevent unplanned pregnancies among those women not currently using contraception, it must concentrate on rural areas and low-income women who have lack of access to services because of geographic, informational and/or economic reasons.

In summary, 2,338,000 women have been estimated as users of contraception and another 475,400 women have been categorized as representing "unmet need" or in need of services. Of the 475,400 needing to be served, over half, or 259,000 women, are low-income (households earning less than four minimum salaries monthly). These numbers represent only one way of calculating the size of the family planning problem in Sao Paulo State, but they are indicative of the general magnitude of the problem that needs to be met.

XI. SUMMARY AND POLICY IMPLICATIONS

We observe in Table 40 that the percentage of married women aged 15 to 44 using contraceptives in the State of Sao Paulo is relatively high. In the comparison between the State of Sao Paulo and other countries of the Western Hemisphere in which similar studies have been carried out, only the United States has a level of contraceptive use that is higher. Comparing Sao Paulo with the United States, even the distribution of methods used is similar with the exception of the greater use of IUDs in the United States.

This high percentage (64%) of contraceptive use in Sao Paulo is compatible with a crude birthrate of between 17 and 22 per 1000 according to one regression model (Nortman and Hofstatter, 1976), depending on demographic factors such as distribution of married women by age group and migration. The crude birthrate estimate for Sao Paulo, from data collected in this survey, is 24 per 1000. This figure is less than the 1970 estimate for Sao Paulo (29 per 1000) and much less than the estimate for all of Brazil in 1970 (37 per 1000). Other data from this survey and from the 1976 Brazilian Household Survey support the conclusion that there has been a real decline in fertility since 1970.

However, even with this high rate of contraceptive use in the State of Sao Paulo, there are still 475,000 women who are estimated to be in need of services. Of these women in need of services, over half, or 295,000, are low-income women. Many women lack information about contraception, both about the methods themselves and about sources at which these methods may be obtained. Other women cannot afford to purchase contraceptives or find it difficult to reach places where contraceptives may be obtained. Women facing these problems are most likely to be concentrated among the poorly

educated and/or in families with low household income. For example, only 47% of women in households with family income equal to or less than one minimum salary are using contraception compared with 69% of women in families with more than four minimum salaries.

Of the women who are not contracepting, 44% desire to use some method of contraception, but many women do not know where to obtain supplies. In rural areas, for example, only 60% of women interested in using contraception know where to obtain contraceptives. Thus, even though women in rural areas are just as likely to say they are interested in using contraception as women in the capital or other urban areas, actual use is likely to be less because of lack of information.

For all women, 35% of last pregnancies in the State were not planned, and for women with three or more pregnancies, more than 50% were not planned. Since women with lower levels of education have more reported pregnancies, they are more likely to report their last pregnancy as unplanned. Thus, 43% of women with less than a primary education reported their last pregnancy as unplanned in comparison with only 24% of last pregnancies of women with a secondary education.

Though women with lower incomes, and to a lesser extent lower education, are more likely to be interested in sterilization than women of higher socioeconomic status, they are less able to implement their desires since they are less likely to have information concerning available sources. While 86% of women with a secondary education know where to obtain information regarding sterilization, only 52% of women with less than a primary education know where to obtain information. Therefore,

women with lower levels of education are likely to obtain what information they have concerning sterilization from hearsay and rumors.

Interest in community-based availability of contraception is greater for women in rural areas and for women with lower incomes. Travel time for women in rural areas to a place where they can purchase contraceptives is longer than for women in urban areas. Respondents may expect such a program to be subsidized, and low-priced supplies would be a more important factor for low-income women. In addition, women with higher incomes tend to live in urban areas where there is better access to pharmacies. Moreover, women with higher incomes in nonurban settings have better access to more effective methods of transportation and therefore may not consider long distances a deterrent to purchasing contraceptives. Fear of side effects of contraceptives appears to limit interest in a CBD program, particularly among women with low levels of education.

What may be concluded regarding possible policy decisions from the above discussion concerning Sao Paulo's family planning needs?

1. Lack of reliable information concerning surgical procedures and side effects, which appear to affect the use of sterilization and orals, respectively, appears to be an important factor in limiting use of these methods. It would appear far more reasonable for women to be given an accurate picture of any problems associated with contraception rather than letting them rely on obtaining information from uninformed, or poorly informed, sources. Therefore, the State Health Department and/or private family planning groups should implement an education program.

2. Lack of information on source of contraception is a factor limiting use among women who are interested in using contraception. Women must be informed as to where they can obtain contraceptives if they are to contracept. They can do so if a program is set up to tell women where they can get contraceptive services. These services should be added to existing MCH clinics now operated by the State Health Department.

3. There is evidence indicating a need for subsidized contraceptive services if effective contraceptive use is to be increased among women with low incomes. Low use of orals among poorer women coupled with a greater interest in a CBD program among the poor indicated that the provision of low-cost oral contraceptives would increase their use. As an alternative or in addition to a CBD program in low-income urban areas, a subsidized commercial sales program should be considered. In addition, the current low utilization of sterilization services is surprising since there is greater interest in sterilization among lower income women as compared with women with higher incomes. Barriers, both economic and regulatory, to accessibility of safe surgical sources should be removed.

4. Data from the survey show that a CBD program would increase the use of oral contraceptives, particularly among rural women who must travel greater distances to obtain supplies. Therefore, in rural areas where there is a limited health infrastructure, a nonclinic-based program has to be considered.

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TABLE 1

Interview Status by Strata
São Paulo Contraceptive Prevalence Survey, 1978

Household Selection:	Total State	São Paulo Municipio	Other Urban Areas	Rural Areas
Total Households:				
Number	4188	1440	1320	1428
Percent	100.0	100.0	100.0	100.0
Eligible Respondent Identified	68.6	63.6	72.3	71.0
No Eligible Respondent Identified	17.8	18.7	19.4	15.8
Vacant Households	6.6	4.9	2.7	10.7
Refusal	3.5	6.0	3.3	1.3
No Contact After 3 Visits	3.2	6.3	2.0	1.1
Other	0.3	0.4	0.4	0.1
Individual Selection:				
Total Possible Respondents*				
Number	3166	1094	1024	1048
Percent	100.0	100.0	100.0	100.0
Complete Interview	88.5	80.1	90.2	95.7
No Contact After 3 Visits	4.2	8.3	2.5	1.5
Total Refusal	4.7	8.0	4.2	1.7
Respondent Refusal	2.2	3.3	2.4	0.8
Respondent Not at Home	0.4	0.4	0.6	0.3

*Includes households with identified eligible respondent plus households with total refusal or no contact which may have had an eligible respondent

TABLE 2

Percent Distribution of Women 15-49 Years of Age by Age and Marital Status
São Paulo State, Brazil: 1978 Contraceptive Prevalence Survey
and 1976 Household Survey

Age Group	1978 Survey				1976 Survey*		
	Total	São Paulo Município	Other Urban Areas	Rural Areas	Total	Urban	Rural
15-19	21.1	22.1	20.2	22.0	20.9	20.4	24.0
20-24	18.2	17.9	18.3	19.1	19.8	19.9	19.2
25-29	15.0	15.0	15.3	13.9	16.1	16.1	15.8
30-34	13.6	13.7	13.5	13.6	12.8	12.9	11.7
35-39	11.5	11.4	11.6	11.5	11.5	11.4	11.7
40-44	10.7	11.4	10.5	9.8	10.2	10.3	9.5
45-49	9.8	8.5	10.6	9.6	8.8	8.9	8.1
Unknown	0.1	0.0	0.0	0.5	--	--	--
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Marital Status							
Married	57.1	54.4	58.6	66.1	53.6	52.4	62.2
Consensual Union	2.8	2.9	2.5	3.5	3.8	3.6	4.8
Sep/Wid/Div	4.2	3.4	5.1	2.4	5.2	5.5	3.3
Never Married	35.8	39.0	35.8	27.8	37.4	38.6	29.7
Unknown	0.1	0.3	0.0	0.2	--	--	--
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*IBGE: Pesquisa Nacional por Amostra de Domicílios (PNAD)-1976-Região II, São Paulo-julho de 1978

TABLE 3

Percent Distribution of Births in Most Recent Year by Age Group and Residence, São Paulo State, Brazil: 1978 Contraceptive Prevalence Survey and 1976 Household Survey

Age Group	1978 Survey: Births, 1977-1978 Total	São Paulo Município	Other Urban Areas	Rural Areas
15-19	6.3	5.1	5.3	10.5
20-24	30.0	26.5	30.1	34.9
25-29	29.2	31.6	31.9	18.6
30-34	19.8	22.4	19.5	16.9
35-39	11.2	9.2	11.5	13.4
40-44	2.6	4.1	0.9	4.7
45-49	1.0	1.0	0.9	1.2
	100.0	100.0	100.0	100.0
No. of Births	(383)	(98)	(113)	(172)

Age Group	1976 Survey: Births, 1975-1976* Total	Urban	Rural
15-19	10.8	10.3	12.6
20-24	31.6	30.8	35.0
25-29	27.8	29.4	21.1
30-34	16.5	17.4	13.0
35-39	8.6	7.8	12.0
40-44	4.4	4.0	6.2
45-49	0.3	0.3	0.0
	100.0	100.0	100.0

*IBGE: Pesquisa Nacional por Amostra de Domicílio-1976, Região II-São Paulo, julho de 1978

TABLE 4

Crude Birth Rate (CBR) Estimates, 1940-1970 and Estimate of Total Fertility Rate (TFR), 1970, Brazil and São Paulo State

Year	Crude Birth Rate	
	Brazil	São Paulo State
1940-45	44.8	36.7
1945-50	46.3	39.7
1950-55	41.2	-
1955-60	40.3	-
1960-65	39.8	32.1
1965-70	37.4	29.5
1970-TFR	5.3	3.8

Source: F.W. Oechsli and A. Adlakha, "Modernization and Natality in Brazil: Temporal and Regional Variations, 1940-1970". Trabalho não publicado, 1975.

TABLE 5

Estimated Demographic Rates
By Residence, São Paulo State, Brazil
July 1977-June 1978

Residence	Crude Birth Rate	General Fertility Rate	Total Fertility Rate
Total State	23.9	96	2.8
São Paulo Municipio	20.1	82	2.5
Other Urban Areas	24.3	94	2.7
Rural Areas	30.3	142	4.2

TABLE 6

Mean Number of Children Born Alive by Age Group and Residence, São Paulo State, Brazil: 1978 Contraceptive Prevalence Survey and 1976 Household Survey

Age Group	1978 Survey*			
	Total	São Paulo Municipio	Other Urban Areas	Rural Areas
15-19	0.10	0.10	0.07	0.17
20-24	0.74	0.54	0.72	1.26
25-29	1.66	1.73	1.46	2.43
30-34	2.83	2.21	2.90	4.03
35-39	3.67	3.32	3.47	5.17
40-44	4.03	3.43	4.05	5.49
45-49	4.60	4.13	4.38	6.50

*Data for respondents

Age Group	1976 Survey*		
	Total	Urban	Rural
15-19	0.10	0.09	0.19
20-24	0.68	0.61	1.12
25-29	1.65	1.50	2.70
30-34	2.64	2.46	3.95
35-39	3.35	3.11	4.95
40-44	4.06	3.81	5.89
45-49	4.23	3.92	6.53

*IBGE: Pesquisa Nacional por Amostra de Domicílio-1976, Região II-São Paulo, julho de 1978

TABLE 7

Sao Paulo State, Brazil: Mean Number of Children Born Alive by Age Group and Residence: Observed (P_i) and Expected Given Birth Rates in the Previous Year (F_i), 1978 Survey*

Age Group	Total			Sao Paulo Municipio			Other Urban			Rural		
	P_i	F_i	P_i/F_i	P_i	F_i	P_i/F_i	P_i	F_i	P_i/F_i	P_i	F_i	P_i/F_i
15-19	.08	.05	1.58	.08	.0[illegible]	3.80	.05	.05	1.10	.15	.13	1.24
20-24	.71	.54	1.32	.53	.41	1.30	.69	.51	1.35	1.21	.96	1.26
25-29	1.55	1.34	1.16	1.49	1.11	1.35	1.41	1.28	1.10	2.32	2.05	1.13
30-34	2.78	2.09	1.33	2.34	1.74	1.36	2.80	2.06	1.36	3.84	2.93	1.31
35-39	3.52	2.57	1.37	3.17	2.10	1.50	3.35	2.53	1.32	5.04	3.65	1.38
40-44	3.77	2.77	1.36	3.22	2.29	1.40	3.78	2.67	1.42	5.32	4.09	1.30
45-49	4.16	2.84	1.47	3.60	2.38	1.51	3.96	2.71	1.46	6.31	4.23	1.49

*Based on data for all women in household

TABLE 8

Percent of Currently Married Women Aged 15-44* Currently Using Contraception by Residence and Method, Sao Paulo State, Brazil, 1978

Method	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
Currently Using:	*63.9*	*63.4*	*66.0*	*58.6*
Orals	*27.8*	*30.0*	*26.7*	*27.0*
Sterilization	*16.1*	*13.9*	*18.0*	*14.1*
Withdrawal	*7.3*	*5.9*	*7.3*	*10.5*
Condom	*6.6*	*6.9*	*7.3*	*3.3*
Rhythm	*5.2*	*4.5*	*6.2*	*3.2*
Other Methods**	*0.9*	*2.2*	*0.5*	*0.5*
Not Currently Using:	*36.1*	*36.6*	*34.0*	*41.4*
TOTAL***	*100.0*	*100.0*	*100.0*	*100.0*
Number of Cases (Unweighted)	1880	546	600	734

*In this and subsequent tables, those women in stable consensual unions are included as currently married.

**Includes IUD, diaphragm, foam, jelly, and vaginal tablets.

***In this and subsequent tables, the subtotals may not add to 100.0 due to rounding

TABLE 9

Percent of Women Aged 15-44 Currently Using Contraception for Selected Denominators
Sao Paulo State, Brazil, 1978

Denominator Used	Percent of Women
All Women	42.3
Ever Married Women	61.2
Currently Married Women	63.9
"Exposed" Currently Married Women*	73.1

*Excluding subfecund and currently pregnant women.

TABLE 10

Percent of Currently Married Women, Aged 15-49, Using Contraception by Age Group* and Method, Sao Paulo State, Brazil, 1978

Current Use & Method	Percent of Women by Age Group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Currently Using	42.9	60.8	62.7	69.0	72.2	59.3	50.3
Orals	35.4	41.2	35.9	27.4	20.2	11.4	7.0
Sterilization	0.9	2.7	9.5	20.8	27.8	20.8	25.0
Condom	0.7	6.2	7.8	5.1	7.2	7.8	3.5
Withdrawal	0.7	5.2	6.5	7.1	6.5	13.4	8.3
Rhythm	5.2	4.0	2.6	6.8	7.7	4.7	5.9
Other Methods	0.0	1.5	0.4	1.8	2.7	1.2	0.6
Not Currently Using	57.0	39.1	37.3	31.1	27.9	40.7	49.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	97	362	426	407	327	262	223

*Six women with unknown age are excluded

TABLE 11

Percent of Currently Married Women Aged 15-44 Using Contraception By Education* and Method, São Paulo State, Brazil, 1978

Current Use and Method	Primary Incomplete (0 - 3 years)	Primary Complete (4 years)	Secondary (5+ years)
Currently Using	59.6	64.8	67.9
Orals	24.6	30.9	28.3
Sterilization	18.6	14.3	14.9
Withdrawal	8.5	8.6	5.0
Condom	4.4	5.8	9.6
Rhythm	3.0	4.7	7.9
Other Methods	0.4	0.5	2.2
Not Currently Using	40.4	35.2	32.1
Number of cases (Unweighted)	822	548	510

* 2 women with unknown educational status are excluded

TABLE 12

Percent of Currently Married Women Aged 15-44 Using Contraception
by Monthly Family Income and Method
São Paulo State, Brazil, 1978

Current Use & Method	Monthly Family Income (Multiples of Minimum Salary)							
	<1	1-2	2-3	3-4	4-5	5-10	10+	Total*
Currently Using	47.4	57.4	68.4	65.2	69.1	69.5	66.9	63.9
Orals	18.3	28.9	33.3	36.2	31.7	23.7	19.3	27.8
Sterilization	6.4	11.0	17.4	11.7	16.9	21.8	22.2	16.1
Condom	5.4	4.1	4.5	5.4	6.8	8.3	10.8	6.6
Rhythm	2.2	3.6	4.5	2.8	4.1	7.2	9.7	5.2
Withdrawal	14.6	8.3	8.7	7.2	6.7	7.8	1.9	7.3
Other Method	0.5	0.5	0.0	1.9	2.9	0.7	3.0	0.9
Not Currently Using	52.6	42.6	31.6	34.8	30.9	30.5	33.1	36.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	137	416	262	218	122	279	169	1880*

*The total includes 277 women who either refused to answer the income question or did not know the family income.

NOTE: At the time of the survey, the minimum salary was Cr$1,540 a month (equivalent to U.S. $85.00 a month)

TABLE 13

Type of Female Sterilization by Timing of Operation, Currently Married Women Aged 15-44, São Paulo State, 1978

Type of Sterilization	Percent of Total		
	Post-Partum	Interval	Total
Tubal Ligation	72.2	20.6	92.8
Hysterectomy	3.9	3.3	7.2
TOTAL	76.1	23.9	100.0
			N=248

TABLE 14

Demographic Profile of Women Using Female Sterilization,
Sao Paulo State, Brazil, 1978

Age Group	Percent Distribution	No. of Living Children	Percent Distribution
15-19	*0.3*	0-1	*4.1*
20-24	*3.0*	2	*22.2*
25-29	*12.9*	3	*27.7*
30-34	*26.3*	4	*23.3*
35-39	*34.0*	5	*7.6*
40-44	*23.5*	6	*6.4*
		7+	*8.7*
TOTAL	*100.0*	TOTAL	*100.0*
	N=248		N=248

TABLE 15

Reasons Not Currently Using Contraception, by Residence:
Currently Married Women Aged 15-44
Sao Paulo State, Brazil, 1978
(Percent Distribution)

Reasons	Residence			
	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
Desires Pregnancy	19.0	18.0	21.1	15.6
Currently Pregnant	27.0	23.5	30.3	24.1
Postpartum, Breast-feeding	7.7	8.3	5.7	11.8
Menopause	1.3	3.2	0.4	0.3
Subfecund	9.1	10.1	9.6	5.3
Not Sexually Active	1.3	1.8	0.9	1.5
Fear of Side Effects	8.3	11.1	7.5	6.2
Fear of Contraception	3.5	4.1	2.2	5.9
"Does not want or does not like"	5.4	5.1	5.3	6.2
Other Personal Reasons	9.8	8.3	11.9	7.1
Religious Reasons	1.3	0.9	0.4	4.1
Other Reasons	3.5	2.4	2.2	7.3
Unknown	2.8	3.2	2.6	4.7
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	683	188	196	299

TABLE 16

Source of Contraception by Residence For Current Users of Contraception: Currently Married Women Aged 15-44, Sao Paulo State, Brazil, 1978
(Percent Distribution)

Source of Contraception	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
State & Local Health Facilities	7.4	7.2	6.3	12.6
INPS	11.8	8.2	15.3	7.1
Private Physicians	16.1	17.5	16.4	11.8
Pharmacy	61.2	62.6	59.5	64.4
BEMFAM	0.4	1.1	0.0	0.3
Other	1.5	2.7	0.5	2.4
Unknown	1.5	0.8	1.9	1.5
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	1192	360	403	429

TABLE 17

Source of Contraception for Current Users of Orals, Sterilization, and Condoms: Currently Married Women, Aged 15-44, Sao Paulo State, Brazil, 1978
(Percent Distribution)

Source of Contraception	Total	Orals	Sterilization	Condoms
State and Local Health Facilities	7.4	0.3	23.4	.0
INPS	11.8	1.3	36.0	.0
Private Physicians	16.1	7.3	34.8	.0
Pharmacy	61.2	90.2	0.0	97.0
BEMFAM	0.4	0.6	0.0	0.0
Other	1.5	0.3	0.3	0.0
Unknown	1.5	0.0	5.6	3.0
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	901	547	257	97

TABLE 18

Percent of Women 15-44 with at Least One Abortion, Spontaneous or Induced, by Marital Status and Residence, Sao Paulo State, Brazil, 1978

Marital Status	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
Married	*21.9*	*24.3*	*20.1*	*22.4*
Sep/Wid/Div	*24.3*	*20.6*	*24.1*	*35.0*
Never Married	*0.8*	*0.4*	*1.1*	*0.6*
TOTAL	*14.7*	*14.8*	*14.1*	*16.8*
Number of Cases (Unweighted)				
Married	1880	546	600	734
Sep/Wid/Div	84	26	40	18
Never Married	570	225	190	155
TOTAL	2534	797	830	907

TABLE 19

Percent of Currently Married Women Aged 15-44 with at Least One Abortion, Spontaneous or Induced, by Education and Residence, Sao Paulo State, Brazil, 1978

Education	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
Primary Incomplete	*27.5*	*31.5*	*25.4*	*25.0*
Primary Complete	*24.2*	*27.2*	*23.1*	*20.0*
Greater than Primary	*13.7*	*17.1*	*12.8*	*8.2*
TOTAL	*21.9*	*24.3*	*20.1*	*22.4*
Number of Cases (Unweighted)				
Primary Incomplete	822	139	183	500
Primary Complete	548	187	188	173
Greater than Primary	510	220	229	61
TOTAL	1880	546	600	734

TABLE 20

Complications Following Most Recent Abortion,
For Women Aged 15-44 with History of Abortion,
By Residence: São Paulo State, Brazil

Residence	Number of Cases	Percent Receiving Medical Attention	Percent Hospitalized
Total State	429	*43.1*	*35.7*
São Paulo Municipio	136	*42.0*	*31.4*
Other Urban Areas	129	*42.9*	*38.7*
Rural Areas	164	*45.7*	*35.7*

TABLE 21

Planning Status of Last Pregnancy by Residence and Parity:
Currently Married Women Aged 15-44, Sao Paulo State, Brazil, 1978

	Residence				Parity					
Planning Status	Sao Paulo State	Sao Paulo Municipio	Other Urban Areas	Rural Areas	0	1	2	3	4-5	6+
Planned	64.8	67.7	65.0	58.5	86.7	88.9	70.8	60.4	48.5	36.8
Mistimed	13.2	12.4	12.2	18.0	12.0	7.6	19.8	16.6	12.1	5.7
Unwanted	21.7	19.2	22.8	23.2	1.3	3.5	9.2	22.5	38.9	57.5
Unknown	0.3	0.7	0.0	0.4	0.0	0.0	0.1	0.5	0.5	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	1736	498	545	692	63	347	437	351	333	205

TABLE 22

Planning Status of Last Pregnancy By Education:
Currently Married Women Aged 15-44
Sao Paulo State, Brazil, 1978
(Percent Distribution)

Planning Status	Total	Primary Incomplete	Primary Complete	Secondary
Planned	*64.8*	*56.9*	*63.5*	*75.6*
Mistimed	*13.2*	*13.7*	*14.0*	*11.8*
Unwanted	*21.7*	*29.2*	*21.8*	*12.6*
Unknown	*0.3*	*0.2*	*0.6*	*0.0*
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*
Number of Cases (Unweighted)	1736	787	505	444

TABLE 23

Current Pregnancy Intention by Residence and Parity,
Currently Married Women Aged 15-44
São Paulo State, Brazil, 1978
(Percent Distribution)

Pregnancy Intention	Residence				Parity				
	Total State	São Paulo Município	Other Urban Areas	Rural Areas	0	1	2	3	4+
Currently Pregnant	*10.3*	*9.4*	*10.4*	*11.8*	*27.3*	*13.9*	*7.5*	*4.7*	*6.9*
Desire Pregnancy:									
Yes	*11.4*	*10.3*	*12.7*	*8.7*	*38.5*	*19.3*	*4.6*	*6.0*	*3.8*
No	*76.9*	*78.8*	*76.0*	*76.1*	*33.9*	*64.9*	*85.6*	*88.0*	*88.4*
Don't know	*1.5*	*1.5*	*0.8*	*3.4*	*0.4*	*2.0*	*2.3*	*1.3*	*1.0*
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
No. of Women (Unweighted)	1880	546	600	734	198	348	442	351	541

TABLE 24

Percent of Currently Married Women Aged 15-44 Who Do Not Want More Children That Are Interested in Sterilization by Planning Status of Last Pregnancy and Education, Sao Paulo State, Brazil, 1978

Education	Planning Status of Last Pregnancy			
	Total	Planned	Mistimed	Unwanted
Primary Incomplete	*47.0*	*38.4*	*60.0*	*55.7*
Primary Complete	*44.0*	*41.4*	*44.5*	*48.6*
Secondary	*42.5*	*40.4*	*51.7*	*41.3*
TOTAL	*44.4*	*40.0*	*52.8*	*50.7*

NOTE: This table excludes women who already have surgical contraception.

Education	Number of Cases (Unweighted)			
	Total	Planned	Mistimed	Unwanted
Primary Incomplete	494	252	87	153
Primary Complete	287	172	43	70
Secondary	187	123	33	31
TOTAL*	968	547	163	254

*Includes 4 women with unknown planning status

TABLE 25

Percent of Currently Married Women Aged 15-44 Who Do Not Want More Children That Are Interested in Sterilization by Planning Status of Last Pregnancy and Monthly Family Income, Sao Paulo State, Brazil, 1978

Monthly Income* (Multiples of Minimum Salary)	Planning Status of Last Pregnancy			
	Total	Planned	Mistimed	Unwanted
<2	*52.4*	*43.2*	*65.0*	*59.0*
2-3	*48.1*	*41.9*	*61.5*	*51.9*
4 Plus	*39.4*	*38.1*	*34.0*	*44.8*
TOTAL	*44.4*	*40.0*	*52.8*	*50.7*

NOTE: This table excludes women who already have surgical contraception

	Number of Cases (Unweighted)			
	Total	Planned	Mistimed	Unwanted
<2	324	163	58	103
2-3	252	138	55	59
4 Plus	247	156	34	57
TOTAL**	968	547	163	254

*At the time of the survey, the minimum salary was CR $1,540 a month (equivalent to U.S. $85.00 a month)

**Includes 141 cases with unknown household income and 4 cases with unknown planning status

TABLE 26

Knowledge of Availability of Sterilization Services or Place With Information About Sterilization: Currently Married Women Aged 15-44 Who Don't Want More Children and Are Interested in Sterilization, Sao Paulo State, Brazil, 1978

Knowledge of Availability	Total	Primary Incomplete	Primary Complete	Secondary
Yes	*66.2*	*51.5*	*71.9*	*85.8*
No	*33.8*	*48.5*	*28.1*	*14.2*
Number of Cases (Unweighted)	449	239	128	82

NOTE: This table excludes women who already have surgical contraception.

TABLE 27

Reasons Not Interested in Sterilization by Education: Currently Married Women Aged 15-44 Who Do Not Want More Children, Sao Paulo State, Brazil, 1978 (Percent Distribution)

Reasons	Total	Education: Primary Incomplete	Education: Primary Complete	Education: Secondary
Prefers temporary method of contraception	25.3	18.4	27.9	32.0
Fear of Surgery	24.0	34.7	20.6	12.7
Menopause/Subfecund	10.1	9.0	9.5	12.6
Has heard about undesirable side effects	7.8	7.9	7.2	8.4
"Does not like or does not want"	6.9	4.1	7.2	10.7
Children may die in future	5.5	3.8	5.3	8.3
Costs too much	2.3	5.5	0.5	0.0
Religious Reasons	1.5	2.4	0.4	1.7
Other Reasons	12.8	11.6	18.7	10.4
Unknown	2.8	2.7	2.7	3.1
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	502	240	155	107

NOTE: This table excludes women who already have surgical contraception

TABLE 28

Reasons Not Interested in Sterilization by Household Income: Currently Married Women Aged 15-44 Who Do Not Want More Children, Sao Paulo State, Brazil, 1978 (Percent Distribution)

Reasons	Monthly Family Income* (Multiples of Minimum Salary) Total	< 2	2-3	4 +
Prefers temporary method of contraception	25.3	13.1	24.5	32.1
Fear of surgery	24.0	39.8	26.0	13.8
Menopause/Subfecund	10.1	7.4	8.5	15.0
Has heard about undesirable side effects	7.8	11.5	5.0	7.7
"Does not like or does not want"	6.9	4.8	6.8	7.0
Children may die in future	5.5	4.0	7.9	5.9
Costs too much	2.3	2.6	3.6	2.0
Religious Reasons	1.5	2.4	1.0	0.9
Other Reasons	12.8	11.6	13.5	14.3
Unknown	2.8	2.9	3.2	2.3
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	502**	147	125	147

*At the time of the survey, the minimum salary was CR $1,540 a month (equivalent to U.S. $85.00 a month)

**This total includes 83 cases with unknown household income.

NOTE: This table excludes women who already have surgical contraception

TABLE 29

Percentage of Non-Users That Desire to Use
A Contraceptive Method and Knowledge of
Availability of Contraception by Residence,
Currently Married Women Aged 15-44, Sao Paulo State, Brazil

Percentage of Non-Users -	Residence			
	Total State	Municipio of Sao Paulo	Other Urban Areas	Rural Areas
That desire to use a contraceptive method:	44.4 (682)	35.6 (188)	46.8 (195)	45.7 (299)
That desire to use a contraceptive method and know where to obtain it:	75.0 (298)	67.4 (75)	84.4 (89)	59.6 (134)
That do not desire to use a contraceptive method, but know where to obtain them:	52.8 (384)	54.9 (113)	58.9 (106)	33.0 (165)

NOTE: Unweighted number of cases shown in parenthesis

TABLE 30

Percentage of Non-Users That Desire to Use
A Contraceptive Method and Knowledge of
Availability of Contraception by Residence and Past Use of Contraception,
Currently Married Women Aged 15-44, São Paulo State, Brazil, 1978

Percentage of Non-Users	Residence			
	Total State	São Paulo Municipio	Other Urban Areas	Rural Areas
A. Past Users That desire to use a contraceptive method:	*51.8* (382)	*45.2* (124)	*55.0* (119)	*57.2* (139)
That desire to use a contraceptive method and know where to obtain it:	*81.7* (201)	*72.7* (56)	*88.9* (66)	*75.8* (79)
That do not desire to use a contraceptive method, but know where to obtain them:	*67.1* (181)	*60.0* (68)	*78.0* (53)	*51.5* (60)
B. Never Used Contraception That desire to use a contraceptive method:	*34.2* (300)	*28.2* (64)	*36.3* (76)	*35.7* (160)
That desire to use a contraceptive method and know where to obtain it:	*61.1* (97)	*50.0* (19)	*75.7* (23)	*36.9* (55)
That do not desire to use a contraceptive method, but know where to obtain them:	*38.5* (203)	*47.1* (45)	*41.5* (53)	*22.2* (105)

NOTE: Unweighted number of cases shown in parenthesis

TABLE 31

Percent of Currently Married Women Aged 15-44, with Knowledge of Where to Get Oral Contraceptives, IUDs, and Condoms: Non-users and Users of Less Effective Methods by Residence, Sao Paulo State, Brazil, 1978

Residence	Oral Contraceptives		IUDs		Condoms	
	Users of Less Effective Methods*	Non-Users	Users of Less Effective Methods*	Non-Users	Users of Less Effective Methods**	Non-Users
TOTAL State	*88.4*	*61.2*	*26.9*	*10.9*	*84.2*	*44.9*
Sao Paulo-Municipio	*89.1*	*59.4*	*26.0*	*11.5*	*84.5*	*39.6*
Other Urban Areas	*38.6*	*68.6*	*30.4*	*13.1*	*85.0*	*55.0*
Rural Areas	*85.4*	*44.0*	*8.7*	*3.8*	*78.5*	*27.4*

Residence	Number of Cases (Unweighted)		
	Users of Less Effective Methods (Pill and IUD)	Users of Less Effective Methods (Condom)	Non-users
TOTAL State	315	221	683
Sao Paulo-Municipio	101	63	188
Other Urban Areas	128	89	196
Rural Areas	86	69	299

*Currently using method other than pill, IUD, or sterilization
**Currently using method other than pill, IUD, sterilization or condom

TABLE 32

Interest in Community-Based Distribution (CBD) Program by Residence: Currently Married Women Aged 15-44, Sao Paulo State, Brazil, 1978

Interest in CBD	Total State	Sao Paulo Municipio	Other Urban Areas	Rural Areas
Yes	*53.9*	*52.6*	*51.9*	*63.0*
No	*42.0*	*44.9*	*42.6*	*33.7*
Don't know	*4.1*	*2.5*	*5.5*	*3.3*
Number of Cases (Unweighted)	1616	479	502	635

NOTE: This table excludes women who already have surgical contraception

TABLE 33

Percent of Currently Married Women Aged 15-44, Who Live Less than 30 Minutes From a Source of Oral Contraceptives and Percent Who Consider the Nearest Source to be Convenient, by Residence, Sao Paulo State, Brazil, 1978

	Women Who Are 30 Minutes or Less from a Source of Orals					
	Currently Using Orals		Currently Using Other Methods*		Not Currently Using**	
Residence	%	(N)***	%	(N)	%	(N)
TOTAL State	*90.9*	(496)	*93.7*	(261)	*91.3*	(358)
Sao Paulo-Municipio	*95.0*	(153)	*96.3*	(85)	*94.4*	(114)
Other Urban Areas	*96.1*	(158)	*96.0*	(104)	*95.2*	(123)
Rural Areas	*63.0*	(185)	*61.2*	(72)	*66.3*	(120)

	Percent of Women Who Consider the Source to be Convenient					
	Currently Using Orals		Currently Using Other Methods*		Not Currently Using	
Residence	%	(N)	%	(N)	%	(N)
TOTAL State	*93.7*	(524)	*89.7*	(260)	*92.7*	(355)
Sao Paulo-Municipio	*95.7*	(161)	*91.0*	(87)	*90.1*	(109)
Other Urban Areas	*94.6*	(166)	*90.8*	(106)	*94.5*	(125)
Rural Areas	*85.6*	(197)	*81.5*	(67)	*89.1*	(121)

*Excludes women with surgical contraception
**Not currently using but have knowledge of availability of orals
***Number of unweighted cases in parentheses

NOTE: 66 women who did not know the time necessary to go to the source of orals and 42 who did not answer the convenience question are excluded from this table

TABLE 34

Percent of Currently Married Women, Aged 15-44 with Interest in CBD Program by Contraceptive Status and Time to Get to Source of Oral Contraceptives, Sao Paulo State, Brazil, 1978

Time (in minutes)	Currently Using Pills	Currently Using Other Methods*	Not Currently Using**
Less than 10'	*69.7*	*45.3*	*44.6*
10'-14'	*73.2*	*40.1*	*63.7*
15'-30'	*83.1*	*58.6*	*60.9*
More than 30'	*80.0*	*68.2*	*73.5*
TOTAL***	*72.9*	*48.8*	*51.6*

*Excludes women with surgical contraception
**Not currently using but have knowledge of availability of orals
***Includes women who do not know the time necessary to go to source of orals

Number of Cases (Unweighted)

Time (in minutes)	Currently Using Pills	Currently Using Other Methods	Not Currently Using
Less than 10"	231	147	175
10'-14'	52	20	45
15'-30'	120	49	74
More than 30'	80	31	50
Don't know	54	17	22
TOTAL	537	278	366

TABLE 35

Interest in Community-Based Distribution Program by Household Income: Currently Married Women, Aged 15-44 Sao Paulo State, Brazil, 1978

Interest in CBD	Monthly Household Income (Multiples of Minimum Salary)*				
	Total	<2	2-3	4-9	10+
Yes	55.3	61.1	62.2	51.2	35.8
No	40.4	33.3	33.8	43.9	62.5
Unknown	4.3	5.6	4.0	4.9	1.7
TOTAL	100.0	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	1616**	498	423	325	133

*At the time of the survey, the minimum salary was CR $1,540 a month (equivalent to U.S. $85.00 a month)

**This total includes 9 cases of "payment in kind" and 228 respondents who did not answer the household income question

TABLE 36

Reasons Not Interested in CBD Program by Education*
Currently Married Women Aged 15-44
Sao Paulo State, Brazil, 1978

Reason	Total	Primary Incomplete	Primary Complete	Secondary
Prefers to continue buying at the pharmacy	19.9	11.0	20.2	27.5
Prefers methods other than pill or condom	19.9	16.5	17.6	24.5
Lack of confidence in non-medical personnel	18.5	15.1	20.9	19.7
Fear of side effects	11.6	21.7	8.8	4.8
Menopause or sub-fecund	6.6	7.9	7.2	5.0
Wants more children or currently pregnant	5.4	5.0	4.4	6.4
"Does not want or does not like"	4.5	4.5	6.0	3.4
Other reasons	9.9	13.7	10.3	6.4
Unknown	3.7	4.5	4.6	2.2
TOTAL	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	679	281	192	206

TABLE 37

Reasons Not Interested in Community-Based Distribution Program by Household Income: Currently Married Women, Aged 15-44
Sao Paulo State, Brazil, 1978

Reason	Monthly Household Income (Multiples of Minimum Salary)*				
	TOTAL	<2	2-3	4-9	10+
Prefers to continue buying at the pharmacy	19.9	11.1	15.6	17.8	33.6
Prefers methods other than pills or condoms	19.9	9.7	15.0	23.5	19.5
Lack of confidence in non-medical personnel	18.5	18.0	24.4	22.9	12.0
Fear of side effects	11.6	22 9	10.8	10.5	4.3
Menopause/Subfecund	6.6	4.9	10.3	1.8	8.8
Wants more children or currently pregnant	5.4	4.9	5.2	3.5	7.4
"Does not want or does not like"	4.5	9.0	2.3	3.9	2.7
Other Reasons	9.9	11.2	13.6	12.5	9.3
Unknown	3.7	8.3	2.9	3.6	2.3
TOTAL	100.0	100.0	100.0	100.0	100.0
Number of Cases (Unweighted)	679**	171	159	155	77

*At the time of the survey, the minimum salary was CR $1,540 a month (equivalent to U.S. $85.00 a month)
**Total includes 117 respondents with household income unknown

TABLE 38

Percent of Women 15-44 in Need of Family Planning Services* by Age Group, Marital Status, Parity, Education, and Family Income by Residence
Sao Paulo State, Brazil, 1978

	Percent in Need				No. of Cases (Unweighted)			
	Total	Sao Paulo Municipio	Other Urban	Rural	Total	Sao Paulo Municipio	Other Urban	Rural
TOTAL	8.6	8.4	8.2	10.8	2534	797	830	907
Age Group								
15-19	1.3	0.7	1.7	1.9	406	144	118	144
20-24	3.8	2.3	3.6	7.7	515	149	162	204
25-29	8.6	9.8	7.7	9.7	490	158	170	162
30-34	11.5	11.0	10.3	17.2	462	141	160	161
35-39	14.0	15.2	12.8	16.2	360	104	121	135
40-44	19.5	22.2	17.8	19.6	301	101	99	101
Marital Status								
Currently Married	11.9	13.7	10.0	15.0	1880	546	600	734
Previously Married	17.2	2.9	24.1	--	84	26	40	18
Never Married	1.7	1.1	2.4	0.3	570	225	190	155
Parity								
0	1.6	1.4	1.9	1.1	758	283	266	209
1	8.1	3.4	10.5	11.1	375	126	133	116
2	11.2	15.6	7.9	10.4	463	159	138	166
3	13.0	12.2	13.4	13.2	365	117	122	126
4	13.7	21.5	10.8	12.4	216	53	76	87
5	23.7	24.3	23.9	22.4	137	28	41	68
6+	22.3	29.2	19.0	23.7	220	31	54	135
Education								
<Primary	14.5	16.0	13.5	14.9	965	178	222	565
Primary	10.2	12.4	10.1	5.1	683	223	236	224
>Primary	3.9	3.4	4.2	4.6	886	396	372	118
Family Income**								
<2	15.1	12.2	16.1	15.4	638	83	137	418
2-3	9.0	10.9	8.2	8.1	638	218	246	174
4+	6.3	6.2	6.4	6.9	776	347	329	100
Other/Unknown	7.5	8.7	6.4	7.8	482	149	118	215

*In need of services defined as women not currently pregnant and not currently desiring pregnancy who are using ineffective methods or are not using any method for reasons not related to pregnancy, subfecundity, or sexual activity

**In multiples of minimum salary

TABLE 39

Percent Distribution of Women 15-44 in Need of Family Planning Services*, by Age Group, Marital Status, Parity, Education, and Family Income by Residence, Sao Paulo State, Brazil, 1978

	Total	Sao Paulo Municipio	Other Urban	Rural
TOTAL	100.0	32.7	50.2	17.1
Age Group	100.0	32.7	50.2	17.1
15-19	3.5	0.7	2.1	0.7
20-24	8.6	1.7	4.2	2.7
25-29	16.5	5.8	8.4	2.3
30-34	20.7	6.5	10.0	4.1
35-39	22.0	7.2	11.1	3.7
40-44	28.8	10.9	14.3	3.6
Marital Status	100.0	32.7	50.2	17.1
Currently Married	85.7	30.7	38.0	17.0
Previously Married	7.7	0.3	7.4	0.0
Never Married	6.6	1.7	4.8	0.1
Parity	100.0	32.7	50.2	17.1
0	7.7	2.4	4.8	0.5
1	12.0	1.7	8.4	1.9
2	18.9	9.9	6.3	2.7
3	19.1	6.1	10.6	2.4
4	12.3	4.8	5.8	1.7
5	11.1	3.1	5.8	2.3
6+	18.8	4.8	8.4	5.6
Education	100.0	32.7	50.2	17.1
<Primary	47.5	13.0	20.6	13.9
Primary Grad.	32.0	12.6	17.4	2.0
>Primary	20.5	7.2	12.1	1.2
Family Income**	100.0	32.7	50.2	17.1
<2	27.1	4.1	13.2	9.8
2-3	27.5	10.6	14.3	2.7
4+	29.0	11.2	16.4	1.3
Other/Unknown	16.5	6.8	6.3	3.3

*In need of services defined as women not currently pregnant and not currently desiring pregnancy who are using ineffective methods or are not using any method for reasons not related to pregnancy, subfecundity, or sexual activity

**In multiples of minimum salary

TABLE 40

Percentage of Currently Married Women Aged 15-44 Using Contraception by Method: Sao Paulo, Paraguay, Panama, El Salvador and United States

Current Use And Method	Sao Paulo (1978)	Paraguay (1977)	Panama* (1976)	United States (1976)	El Salvador (1975)
Currently Using	63.9	25.7	53.9	67.8	21.8
Orals	27.8	10.1	17.0	22.3	7.4
Sterilization	16.1	2.9	21.6	19.3	9.8
IUD	0.4	3.4	3.7	6.1	2.0
Condom	6.6	1.8	1.2	7.2	0.6
Other Methods	13.0	7.4	10.4	12.9	2.0
Not Currently Using	36.1	74.3	46.1	32.2	78.2
TOTAL	100.0	100.0	100.0	100.0	100.0
Number of Women	1880	1208	2723	8611	1351

Source of data for other countries (see references):

Paraguay: (Morris, Anderson, Monteith, et al, 1978)

Panama : (Ministerio de Salud, 1978)

United States: (Ford, 1978)

El Salvador: (Morris, Rugamos, Mendoza, et al, 1979)

*Includes only women 20-49 years of age.