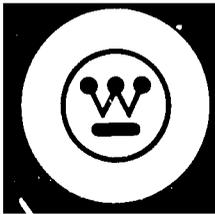


# CONTRACEPTIVE PREVALENCE SURVEY

PN-AAP-186

ISN 33177



## COLOMBIA

SUMMARY REPORT

WESTINGHOUSE HEALTH SYSTEMS

MINISTERIO DE SALUD DE COLOMBIA

CORPORACION CENTRO REGIONAL DE POBLACION

OCTOBER 1979

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This report reviews the major findings from the national Contraceptive Prevalence Survey (CPS) conducted by the Corporación Centro Regional de Población (CCRP) in Colombia between October and December 1978. The survey is a part of the ongoing worldwide CPS project designed to institutionalize the monitoring of levels of contraceptive awareness, availability and use in order to provide an improved data base for the management and evaluation of family planning programs. The CPS project is being administered by Westinghouse Health Systems under a technical support contract with the Office of Population, Bureau for Development Support, U.S. International Development Cooperation Agency (Contract No. AID-pha-C-1194).

Comments, requests for additional copies of this document or questions concerning other Contraceptive Prevalence Surveys should be addressed to: Contraceptive Prevalence Survey Project, Westinghouse Health Systems, P.O. Box 866, Columbia, Maryland 21044, U.S.A. (Telex Number 87775).

Additional information concerning this survey or family planning activities in Colombia can be obtained from: Corporación Centro Regional de Población, Area de Evaluación, Apartado Postal 24846, Bogotá, Colombia.

# I. INTRODUCTION

## The Setting

Colombia is located on the Northwestern coast of South America. Its area of 1,138,914 square kilometers supports an estimated population (1978) of 25 million. Ninety-five percent of these people live on less than one-half of this area — in the mountainous regions which form the Andean Chain in Northwestern Colombia. By excluding the remaining 5% of the population and the 'National Territories' which they occupy, the country can be divided into five regions (see Figure 1), each with unique geographic, climatic and cultural characteristics.

**The Atlantic Region:** Comprised of the six low-lying provinces (departamentos) on the Atlantic coast, this semi-arid region supports irrigated agriculture and livestock ranching. Approximately 4.5 million people or 18% of the national population live here.

**The Central Region:** This region includes the six moun-

tainous provinces which border the left bank of the Magdalena River — Colombia's principal river. Various forms of agriculture are practiced within the variety of mountain climates. This region contains 7 million people, almost 27% of the national population.

**The Eastern Region:** This region includes five mountainous provinces with grand valleys, plains and plateaus. It has a variety of climates and a population of 5 million people (20% of the national total).

**The Pacific Region:** These four provinces have a rainy, tropical climate and large fertile agricultural valleys. Four and one-half million persons live here.

**Bogotá:** This large urban center constitutes a single region. The demographic characteristics of its 4.5 million people are very different from Colombia's other regions.

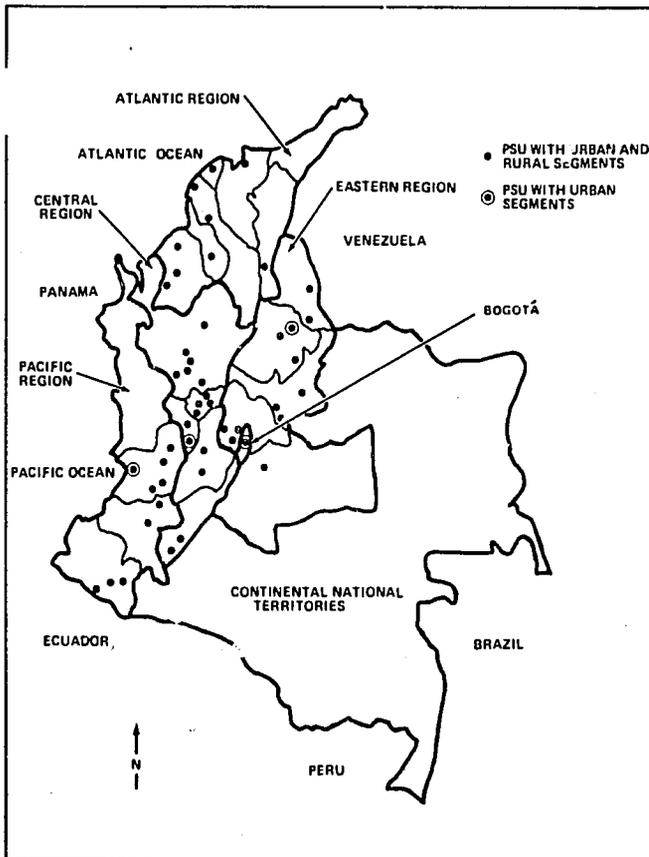


FIGURE 1. Distribution of Sample Points by Region

TABLE 1. Average Annual Growth Rates

Period	%
1950-55	3.2
1955-60	3.2
1960-65	3.1
1965-70	2.8
1970-75	2.3
1975-79	2.1

Source: "Country Demographic Profile: Colombia," U.S. Bureau of the Census, Wash., D.C., October, 1979, Table 1, p. 5.

During the last 40 years Colombia experienced rapid population growth, which reached an annual rate of 3.2% during the 1950's and early 1960's. This high growth rate was caused by continued high fertility levels during a period of decline in mortality rates — especially the infant mortality rate. The decline in the growth rate (see Table 1), which began in 1965, appears to be the result of large decreases in fertility (see Table 2) as well as a significant volume of out-migration.

As in most Latin American countries, there exists a strong migratory current from the rural areas to the cities. In 1938 the urbanized population represented 31% of the national total; in 1978 this proportion had increased to 64% (Table 2).

The Colombian age structure still shows the effects of the high growth rates which occurred before 1973. In that year about 20% of the population was 10-14 years of age. In 1978, this group of women, aged 15-19, comprised the largest block of women in the fertile ages (15-49) — about 28% of the country total. A large number of young, fertile women (15-19) helps to explain the low proportion of women in union when compared with the levels for other countries.

**TABLE 2. Colombian Census and Selected Demographic Statistics**

Censal Year	Population (000)	Crude Birth Rate <sup>1</sup>	Crude Death Rate <sup>1</sup>	Inter-censal Growth	% Urban Population
1938	8,706	—	—	20.2*	31
1951	11,548	—	—	21.9	39
1964	17,434	46	13	31.9	52
1973	22,552	34	9	27.4	59
1976	25,673	31	8	21.0	64

\*Compared to the 1918 Census.

<sup>1</sup>Estimates: U.S. Bureau of the Census, Wash., D.C., October, 1979, "Country Demographic Profile: Colombia," Table 3, p. 7.

Source: CCRP-DANE Encuesta Nacional de Fecundidad, Colombia, 1976. "Resultados Censales," Ordoñez, La Fecundidad en Colombia.

## II. THE SURVEY

The Colombian Contraceptive Prevalence Survey (CCPS) interviewed a national sample of 3,791 women aged 15-49. The survey obtained information from those women on the following topics: a) demographic and socio-cultural characteristics, b) knowledge and use of contraceptive methods, c) perception of method availability and preference among sources of supply, and d) utilization levels of Maternal-Child Health

Services.<sup>1</sup> The most important information from this survey — the levels of birth control knowledge among the national population, past and present patterns of contraceptive use, as well as the knowledge of and utilization rates of the various sources of family planning supplies — are reported here. An analysis of these factors will help to clarify the relationships between contraceptive use and fertility levels, and contraceptive use and utilization of family planning sources in Colombia.

The sampling frame included all non-institutional persons residing in the provincial areas of the country.<sup>2</sup> A sub-sample was taken from the national 'Master Sample' developed previously by MINSALUD (Ministerio de Salud), from urban and rural maps used in the National Population Census of 1973.

In order to guarantee an adequate geographical representation and to limit the stratification in the Master Sample, the five regions of the country were divided into 12 subregions, which contained a total of 225 'strata'.

Six sub-samples were derived from this sampling frame — each of which contained 50 PSU's (primary sampling units) representing the entire country as well as the five regions. The 15 largest PSU's were included in each sub-sample and the remaining 35 PSU's were selected from the other strata.

<sup>1</sup>Information on Maternal-Child Health Service utilization rates was not included in this summary but can be found in the final CCPS report published by CCRP in 1979.

<sup>2</sup>This includes 95% of the total national population. Those living in the 'National Territories' were not sampled (see page 1).

**TABLE 3. Results from the Selection and Field Interview Phases — Contraceptive Prevalence Survey, 1978**

	Selected	Interviewed	Results			
			% <sup>1</sup>	Completion Rate % <sup>2</sup>	Non-Response % <sup>2</sup>	
TOTAL	4,090	3,791	100	92.7	299	7.3
REGION						
Atlantic	826	781	21	94.6	45	5.4
Eastern	778	772	19	92.9	56	7.1
Central	1,166	1,166	29	92.9	83	7.1
Pacific	736	688	18	93.5	48	6.5
Bogotá	584	517	14	88.7	67	11.3
AREA OF RESIDENCE						
Urban	2,799	2,611	69	93.3	188	6.7
Rural	1,291	1,180	31	91.4	111	8.6

<sup>1</sup>Percentage of distribution by region and area of residence.

<sup>2</sup>Percentages are based upon number of cases selected in each region and area of residence.

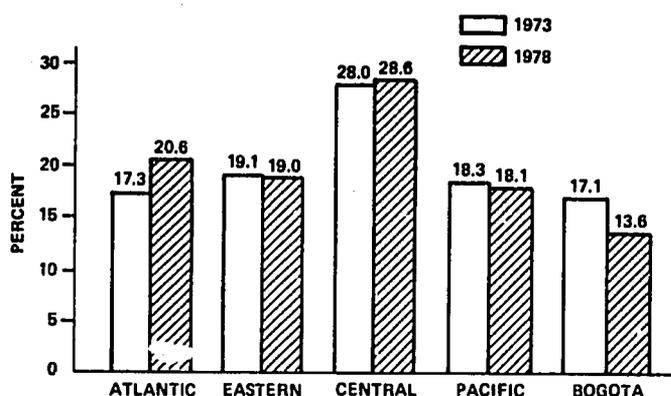


FIGURE 2. A Comparison of the Percentage of Respondents Interviewed in the 1978 CCPS by Region with the Percentage of Women Aged 15-49 by Region in the 1973 Census

Figure 1 locates these five regions and the sample points from which the national sample for the Contraceptive Prevalence Survey was taken.

Each sub-sample was composed of 1,000 urban and rural segments, each with an average of 20 houses. Finally, to obtain a 'self-weighting' sample of fertile-aged women, a sampling interval equivalent to the inverse of the probability of the selection of one fertile-aged woman was calculated for each segment. After listing the eligible women in the existing houses within each segment, 4090 individuals (one for each 1,242 women aged 15-49 in the national population) were selected for interview. The field work was done in October and December of 1978; all eligible women who had been absent during the initial period were followed up during the second week of January, 1979. The study employed six interview teams — each composed of a supervisor, a supervisor-driver, and four interviewers. The results are summarized in Table 3.

Over 92% of the women selected were located and interviewed. The urban-rural distribution (69% and 31% respectively) deviated only one point from the 70-30% split of the 'Advanced Sample of the 1973 Census.' Regionally, non-response rates ranged from 5.4% (Atlantic) to 7.1% (Eastern and Central), with the exception of Bogotá's high figure of 11.3%. This higher non-response rate was due to the problems involved in locating and interviewing women in this urban area.

Figure 2 shows the regional representation of the 1973 Census and the 1978 Contraceptive Prevalence Survey. Com-

pared to the 1973 Census, the CCPS under-sampled Bogotá by 3.5% and over-sampled the Atlantic Region by 3.3%.

### III. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

As background for the following discussions and in order to facilitate comparability of the CCPS results with those from previous surveys and the 1973 Census, a brief analysis of the following respondent characteristics is included: age, educational level, marital status, and employment status by region and urban-rural residence.

#### Age and Marital Status

Table 4 shows the similarity in age structure between the CCPS respondents and those who participated in the 1973 Census and the 1976 World Fertility Survey. In fact, there are only slight differences between the age distribution of the CCPS sample and the WFS and Census figures.

TABLE 4. Percentage Distribution of Women of Reproductive Age, by Age Groups for 1973, 1976, 1978

Age Groups	Census 1973	WFS 1976	CPS 1978
15-19	25.6	26.5	25.5
20-24	19.2	19.5	18.5
25-29	14.6	15.1	15.0
30-34	11.8	11.1	12.0
35-39	11.6	10.8	10.6
40-44	9.4	8.8	8.8
45-49	7.8	7.6	7.2

Sources: Colombian Census, 1973; National Fertility Survey, 1976; Colombian Contraceptive Prevalence Survey, 1978.

Thirty-eight percent of the sample respondents were married and another 17% live in consensual unions. For most analysis, these two groups (55% of the total) were classified as "in union." An additional 39% of the sample reported themselves as single and 6% were either divorced, separated, or widowed.

Marital status patterns differed by area of residence. In urban areas the proportion of women presently in union (married or in consensual union) was 51%, while this figure approached 65% in the rural areas (see Figure 3).

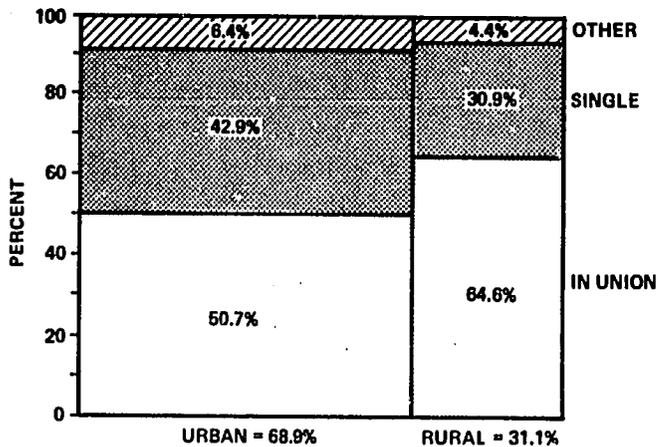


FIGURE 3. Percentage of Respondents by Marital Status and Area of Residence

Regionally, the proportion of married women (approximately 50%) was lowest in Bogotá — which was 100% urban — and the Central region, whose female population was 69% urban.

#### Education and Employment

In general, educational levels were lowest among older women. The proportion of illiterate women in the CCPS sample increased with age and was higher among rural women in all age groups. The illiteracy rate for all urban respondents was 7%, but among rural women this figure increased to 26%. This imbalance was also observed in the highest educational category (some secondary education or more): 46% of the urban women were in this category compared to only 8% of the rural women (see Figure 4).

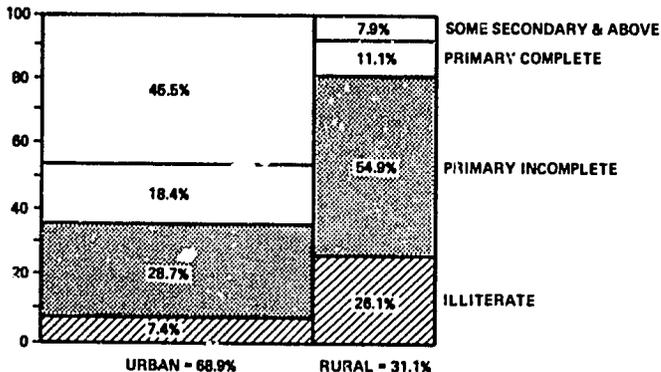


FIGURE 4. Percentages of Respondents by Educational Level and Area of Residence

Regionally, the highest levels of illiteracy occurred in the Atlantic (21%) and Pacific (16%) Regions. Bogotá had the lowest rate (7%) followed by the Central Region (10%).

An employed woman was defined as one who, in addition to her domestic duties, had an occupation for which she received wages during 1978. Thirty-five percent of the women in the CCPS sample had worked either in a permanent or temporary position, while the 1973 Census reported that only 25% of fertile-aged women worked. The employment rate among urban women was much higher; 38% of them had worked outside the home, principally in full-time positions. Only 28% of the rural women had been employed during 1978, and most of these jobs were temporary — either seasonal agricultural employment or marketing the products from the family farm.

#### Risk of Pregnancy<sup>3</sup> and Number of Children

More than half of the women in the CCPS sample were not 'exposed' to the risk of pregnancy at the time of the interview (see Table 5). Another 10% were in the 'medium risk' category.

TABLE 5. Percentage of Respondents by Marital Status and Their Exposure to Risk of Pregnancy

Marital Status	Not Exposed	Medium <sup>1</sup> Risk	High Risk
Married	10.2	51.4	71.2
Consensual Union	6.2	26.3	28.7
Single	73.9	13.9	—
Other	9.6	8.2	—
TOTAL	51.0	10.2	38.6
Number of Women	1937	387	1467

<sup>1</sup>The category 'medium risk' includes 13 women who were considered to be at a low risk.

Risk, as is obvious, was closely related to marital status—all of the high risk women (38.6%) were either married or in consensual union.

The average number of live births for women who had completed their reproductive period was about 8 children in

<sup>3</sup>The classifications of 'risk of pregnancy' are: "Without Risk" — Those women pregnant or without sexual relations in 1978; "Medium Risk" — Either women in a conjugal relationship who have physical-biological impediments to pregnancy or women without impediments who have only sporadic sexual relations; "High Risk" — Women without impediments who presently have a permanent conjugal relationship.

**TABLE 6. Selected Fertility Rates by Region**

Age Groups	Atlantic Region	Eastern Region	Central Region	Pacific Region	Bogotá	All Regions	Number of Cases
<b>AGE SPECIFIC FERTILITY RATES</b>							
15-19	88	73	42	53	41	59	1046
20-24	271	197	169	252	152	207	705
25-29	213	203	134	194	217	186	569
30-34	162	71	171	167	125	142	458
35-39	106	136	96	120	47	107	403
40-44	16	48	49	82	27	45	337
45-49	23	18	*	*	*	11	273
<b>GENERAL FERTILITY RATES</b>							
GFR	143	118	95	129	99	123	—
GFRS <sup>1</sup>	142	118	100	134	96	118	—
RATIO <sup>2</sup>	148	123	104	140	100	123	—
Number of Cases	781	722	1083	688	517		3791

\*Insufficient number of cases.

<sup>1</sup>GFRS: GFR standardized by age with the population of the sample prior to 1973 Census.

<sup>2</sup>The RATIO has as a denominator the GFR standardized for Bogotá and as numerator the standardized TFF of each region.

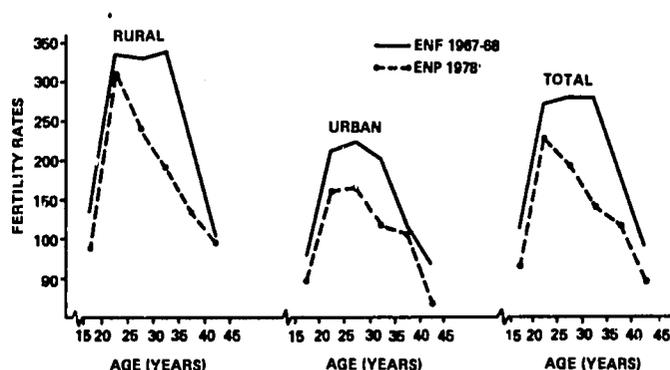
the Atlantic, Eastern and Central Regions; 7 in the Pacific; and 6 in Bogotá. These regional figures and the differences between them diminished among younger women and residents of urban areas, probably because family planning methods were more popular in the urban areas, especially in Bogotá. Parity differences among urban-rural residence was most notable among older women: upon completion of their reproductive period, those in rural areas had an average of two more children than those in the urban areas.

The average number of living children among women of a certain age group was not only the result of fertility differences but was also affected by variations in child mortality levels. For example, the high fertility levels in the rural areas of the Central Region among women aged 45-49 were offset by an elevated child mortality rate. This resulted in the lowest rural average of living children per women in the country. In general, the higher child mortality rate among rural children has narrowed the gap between rural and urban population growth rates. While rural women, on the average, gave birth to 2.6 more children than their urban counterparts (9.1 children as compared to 6.5), at the time of the survey, these same women had only 1.2 more living children (6.6 to 5.4).<sup>4</sup>

<sup>4</sup>Data from Table 4.7: Averages of Live Birth and Surviving Children by Region, Residential Zone, and Uzs, Colombian Contraceptive Prevalence Survey 1978, page 44.

### Fertility

The CCPS has confirmed that during the last 10 years fertility levels in Colombia have experienced a significant decline. In 1978 the total fertility rate was 3.8 compared to the 1968 figure of 6.0. A decline of 33% in 10 years is spectacular for a country of the size and development level of Colombia. In the rural areas, the most notable changes are seen among the older women, while those less than 25 years of age have maintained a fertility level similar to that of the previous period. These changes reveal the beginning of a fertility transition in



**FIGURE 5. Changes in the Age Specific Fertility Rates (per 1000 women) by Area of Residence**

<sup>1</sup>National Fertility Survey, 1969

rural Colombia. In the urban areas, the decline has been uniform for all age groups (Figure 5).

Although sample size constraints limit the generalizations one can make about subnational differentials in recent fertility, regional comparisons show that women from the Coastal areas had general fertility rates which were 36%-44% greater than women from the interior (see Table 6). The most significant regional decline in the fertility between 1968 and 1978 was found in the Central Region, where fertility in 1978 was equivalent to that in the capital city of Bogotá.

#### IV. KNOWLEDGE AND CONTRACEPTIVE USE

Family planning knowledge levels can be assessed by calculating the percentage of women who know at least one family planning method or the average number of methods known.

Ninety-four percent of the respondents knew at least one contraceptive method. There were differences in knowledge according to residential location (97% of the urban residents could name one method compared to only 89% of the rural women) and country region. While levels of knowledge among urban women varied little among Colombia's five regions, the rural levels decreased from East to West — from a high of 96% in the Atlantic Region, to a low of 75% in the Pacific Region (see Figure 6).

Knowledge levels increased with age and education and were also higher among ever-married women than among single women.

The sub-group of fertile-aged women who were not aware of family planning (5.6%) was composed primarily of rural women who were single, less than 25 years of age, and had less than a primary school education (see Table 7).

TABLE 7. Knowledge<sup>1</sup> of Family Planning Methods by Region and Socio-Demographic Characteristics

Characteristics	Urban Area	Rural Area	Total	Number of Women
<b>REGION</b>				
Atlantic	97.2	96.2	96.8	781
Eastern	97.7	88.8	91.2	722
Central	97.1	87.4	93.8	1083
Pacific	96.0	75.3	89.5	688
Bogotá	95.0	—	95.9	517
<b>EDUCATIONAL LEVEL</b>				
Does not know how to read	91.8	84.1	87.1	503
Knows how to read or prim. not completed	95.5	84.9	92.5	1397
Primary completed	95.8	85.5	93.6	612
Some secondary and above	98.8	95.7	98.6	1279
<b>AGE</b>				
15-19	92.6	76.2	87.5	1046
20-24	97.4	91.5	95.7	705
25-29	98.8	92.0	96.0	569
30-34	98.4	92.4	96.5	458
35-39	99.6	95.3	98.0	403
40-44	100.0	89.4	96.4	337
45-49	96.0	90.9	94.5	273
<b>MARITAL STATUS</b>				
Married	99.2	96.9	98.5	1442
Consensual Union	98.1	90.9	94.9	644
Single	94.2	73.7	89.2	1486
Other	97.6	88.4	96.0	219
<b>TOTAL</b>	<b>96.8</b>	<b>87.9</b>	<b>94.0</b>	<b>3791</b>

<sup>1</sup>The level of knowledge is based on the percentage of women in the sample who declared knowing or having heard of at least one method of family planning.

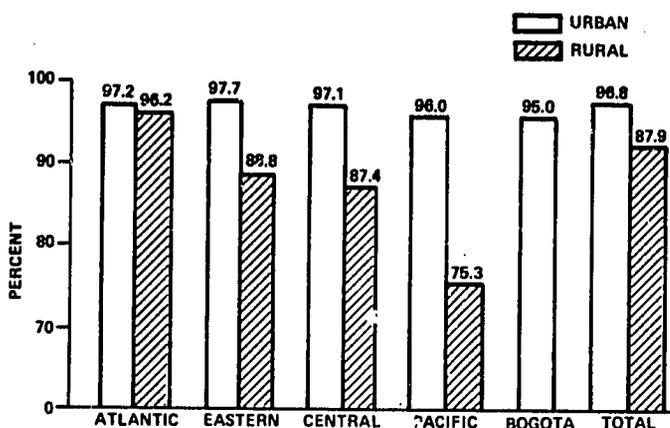


FIGURE 6. Knowledge of at Least One Family Planning Method by Area of Residence

The best known methods in both urban and rural areas were the 'modern' female methods: the pill (91%), female sterilization (72%) and the IUD (71%). Just 4% of the women knew only about traditional methods — rhythm, withdrawal and other 'folk' methods. Urban women had higher levels of knowledge of all methods when compared with rural women (Figure 7). This difference was most pronounced with respect to male methods (condoms, vasectomy and withdrawal), for which knowledge levels in urban areas were almost twice those in the rural areas.

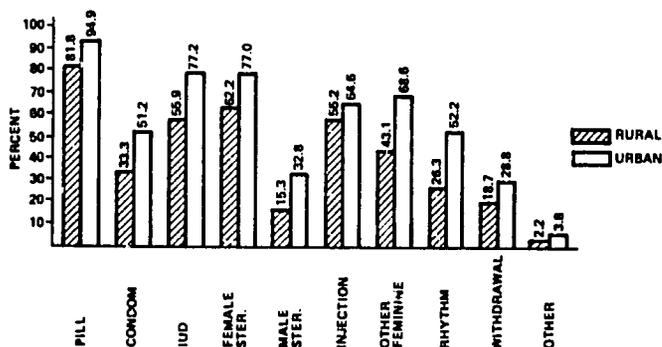


FIGURE 7. Knowledge of Specific Contraceptive Method by Area of Residence

Classification by number of methods known showed a difference of almost two methods between urban and rural women (5.5 and 3.9 methods respectively), and of 1.5 methods between women in union and those who were single.

Seventy percent of the respondents said their family planning information came from sources other than the two institutional programs — PROFAMILIA (Asociación Probienestar de la Familia Colombiana) and the Ministry of Health — which have specifically developed community-based educational activities. The principal channel was still interpersonal communication between the respondent and her friends and family; 50% of the women received their family planning information in this way. This information pattern was similar in all regions except in Bogotá, where over twice as many respondents (18.6%) received their information from public schools.

## V. AVAILABILITY AND SOURCES OF CONTRACEPTION

The knowledge of family planning sources was also measured in this survey. Eighty-three percent of the sample respondents were aware of both a contraceptive method and a source for its supply. This figure, however, does not necessarily imply first-hand knowledge or utilization of any source.

### Preferred Sources of Contraception

Each respondent who had knowledge of a modern contraceptive method was asked to indicate her actual or preferred source of supply. Users of each contraceptive method were asked to name their actual source of supply; others were required to identify the source they would use if they decided to adopt that method. As can be seen in Table 8, significant numbers of urban (22-40%) and rural (28-52%) women could not name sources for many of the methods they were not currently using. As usual, more urban women were aware of method sources than their rural counterparts.

Levels of source knowledge are also related to method popularity. In both residential areas, sources for two of the best known and most used contraceptive methods — the pill and female sterilization — were among the best known. Sources for the IUD, however, were not known by a large percentage of both urban (31%) and rural (41%) women who were aware of the method, even though the IUD was the second most utilized contraceptive method in Colombia.

In certain cases, the supply sources preferred by Colombian women were not always the most accessible. Most respondents in both residential areas preferred to travel to drugstores to buy non-clinical methods — pill, condoms, injections or vaginal preparations. In the rural areas, women preferred a hospital setting for IUD insertions and male or female sterilization. Most urban women also preferred that female sterilization be done in hospitals. With this group, however,

**TABLE 8. Percentage Distribution of Women Interviewed by Method Known, According to Source and Area of Residence**

Source of Method	Pill	Con- dom	IUD	Sterili- zation	Vasec- tomy	Injec- tion	Vaginal Methods
<b>URBAN</b>							
Knows No Source	21.9	39.7	30.7	26.0	39.1	25.0	24.6
PROFAMILIA Clinic	5.2	3.9	22.6	23.1	21.3	7.5	5.8
PROFAMILIA Center	11.4	8.1	8.3	5.3	4.3	7.3	8.6
Health Care	5.6	1.7	6.9	2.0	1.1	3.1	2.8
Hospital	3.9	1.7	19.9	33.4	21.3	4.3	2.6
Drugstore	49.3	43.3	1.7	—	—	49.0	53.8
Social Security	0.6	0.3	1.7	2.0	2.0	0.7	0.7
Private Doctor	1.4	0.7	7.2	7.7	10.5	2.5	0.7
Other <sup>1</sup>	0.6	0.7	1.0	0.5	0.4	0.6	0.4
Total Women	1736	1189	1716	1882	854	1599	1517
<b>RURAL</b>							
Knows No Source	39.9	50.0	41.0	28.4	51.9	38.5	35.6
PROFAMILIA Clinic	2.5	0.8	6.9	9.1	0.4	1.7	2.0
PROFAMILIA Center	5.7	4.4	2.0	0.9	1.1	3.2	6.4
Health Center	12.4	5.8	9.2	3.6	1.7	6.4	4.4
Hospital	7.2	3.6	34.9	52.9	29.3	10.4	7.8
Drugstore	32.2	33.4	1.9	—	—	36.5	42.2
Social Security	0.4	—	0.3	0.7	1.1	—	—
Private Doctor	2.5	0.8	3.4	3.5	4.4	2.8	0.7
Other <sup>1</sup>	2.1	1.2	0.3	0.9	1.1	1.1	0.9
Total Women	752	362	590	690	181	628	450

<sup>1</sup>Includes Health Promoters.

Source: CCRP-MINSALUD, National Contraceptive Prevalence Survey on the Use of Contraceptives, 1978.

PROFAMILIA clinics were also popular sources for male sterilization and IUD insertion. This popularity of PROFAMILIA services among urban women mirrors this program's high visibility in Colombian cities.

Professional services are available in urban areas from either the Ministry of Health hospitals or the PROFAMILIA clinic system. Rural women, however, perceived professional care as existing primarily within this hospital network—which was located within urban centers and was, therefore, less accessible to most of them. The Ministry of Health centers and posts—the predominant public health facilities in the rural areas—were preferred less often by rural women for clinical contraceptive services. An improvement in the quality of contraceptive services available to rural women may encourage higher adoption rates of the effective methods among this group.

#### Actual Sources of Contraception

Among the users of family planning, the type and mix of methods chosen determine the demand for various types of service outlets. In Colombia, the users of methods which require periodic replenishment (pills, condom, injection and vaginal methods) frequently utilized the private network of drugstores found in both urban and rural areas. The adopters of more permanent methods (IUD, sterilization) which required professional intervention usually attended the central clinics of PROFAMILIA in the urban areas or, in the rural locations, used Ministry of Health facilities (see Table 9). In general, all those who were using a modern method, and 98% of those who had used a method, knew of some family planning source.

The most popular family planning source was the drugstore ("la droguería"), which was mentioned by 60% of the sample respondents. More than half of the pill users and three

**TABLE 9. Percentage<sup>1</sup> of Contraceptive Users by Supply Source of Use and Area of Residence**

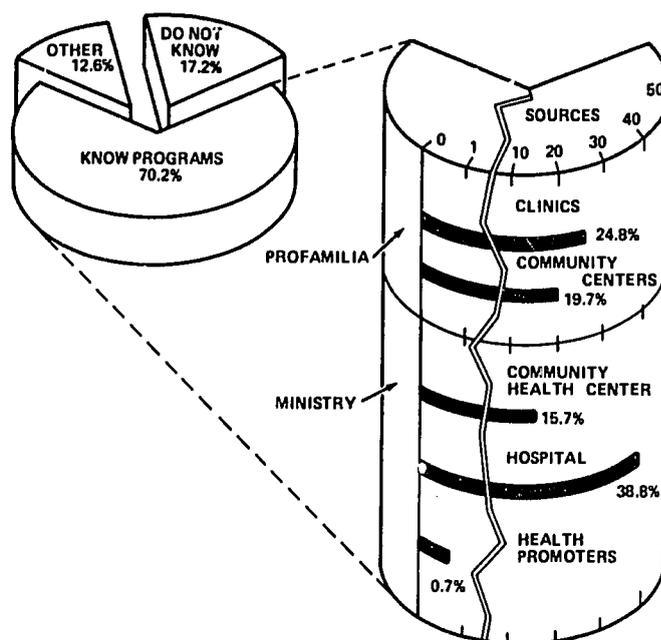
Method and Area	PROFAMILIA	Ministry of Health	Drugstore	Social Security	Private Doctor	Other
<b>METHOD</b>						
Pill	25.3	14.1	64.7	2.7	0.5	2.4
IUD	59.9	32.4	—	4.8	1.8	1.2
Sterilization	34.8	45.7	—	9.8	11.6	1.2
Other Modern Methods	11.3	1.9	74.5	1.9	1.9	8.5
<b>AREA</b>						
Urban	34.5	19.5	34.7	5.4	3.5	2.8
Rural	23.0	35.8	34.8	1.6	2.7	2.1
<b>TOTAL</b>	<b>31.9</b>	<b>22.9</b>	<b>34.7</b>	<b>4.5</b>	<b>3.3</b>	<b>2.6</b>

<sup>1</sup>Rows may not add to 100% due to rounding.

of every four users of other modern non-clinical methods (condoms, vaginal methods and injections) obtained their supplies there, leaving few users to the institutional family planning services. PROFAMILIA, for example, serviced only 25% of all pill users and 11% of those who used other methods; MINSALUD's share was even lower: 14% of the pill users and 2% of the other-method users.

The same pattern did not occur among adopters of the IUD and female sterilization. Here institutional programs satisfied most of the demand. Among the respondents, 60% of the IUD insertions were done at PROFAMILIA clinics, and an additional 32% were completed by MINSALUD. While 20% of all female sterilizations were done by a private doctor or in a Social Security facility, 32% were performed by PROFAMILIA and 46% by MINSALUD. The MINSALUD figures should be taken with caution, however, since many women may have been attracted to the Ministry hospital network through promotional activities developed by PROFAMILIA while under contract with the government.

Figure 8 shows the distribution of knowledge of supply points according to the following categories: (a) "A Family Planning Source" (clinics and community health centers of PROFAMILIA; Ministry of Health centers and health posts, hospitals and promoters), (b) "Others," which includes those who only knew sources other than family planning programs (drugstores, private doctors and clinics, Social Security, and others), and (c) those who did not know any source of contraceptives. Nevertheless, it is difficult to isolate the influence of source of knowledge on actual use of service outlets. This is because the knowledge level is influenced, over time, by other sources of family planning information (friends, family or others) and by increases in the numbers of family planning outlets.



**FIGURE 8. Knowledge of Institutional and Other Contraceptive Sources**

NOTE: As each respondent could mention several sources, the percentages do not add up to 100.

Accessibility of family planning service locations was measured in terms of travel time between residence and source. Using this criterion, the drugstore was the most accessible supply point in the urban areas, followed by the Health Centers. In rural areas, the PROFAMILIA community posts were closest to most women, followed by the Ministry of

**TABLE 10. Percentage of Exposed Women Who Used Contraceptive Methods, by Region and by Area of Residence and Education**

Residence and Education	Atlantic Region	Eastern Region	Central Region	Pacific Region	Bogotá	Total	Women
<b>RURAL AREA</b>	38	39	32	29		35	658
Illiterate	34	22	15	20		25	199
Primary Incomplete	41	41	35	30		37	378
Primary Complete	50	50	38	71		49	49
Some Secondary and Above	30	80	38	2		32	32
<b>URBAN AREA</b>	56	60	63	63	67	62	1213
Illiterate	38	42	42	23	60	40	119
Primary Incomplete	51	57	62	68	69	61	458
Primary Complete	58	54	52	76	67	65	233
Some Secondary and Above	71	77	73	59	62	67	403
<b>TOTAL</b>	48	51	51	51	67	52	1871
Illiterate	35	28	26	21	60	31	318
Primary Incomplete	46	49	48	53	69	50	836
Primary Complete	55	53	54	75	77	62	282
Some Secondary and Above	65	77	70	58	62	66	435

Health centers and the drugstores. These findings agree with the spatial distribution of these family planning services within Colombia.

The low level of user participation in the institutional family planning programs (an overall rate of 40% for the Ministry of Health system and 25% for PROFAMILIA) may reflect the alarming absence of professional medical participation in the maintenance of many contraceptive methods. This could be explained by the ease with which most methods could be obtained from the private, commercial distribution network, when compared with the geographic difficulties of access to medical personnel. To reach the family planning clinics, it was necessary to invest more than an hour in travel and waiting time, on the average, in return for a consultation of 10 minutes or less.

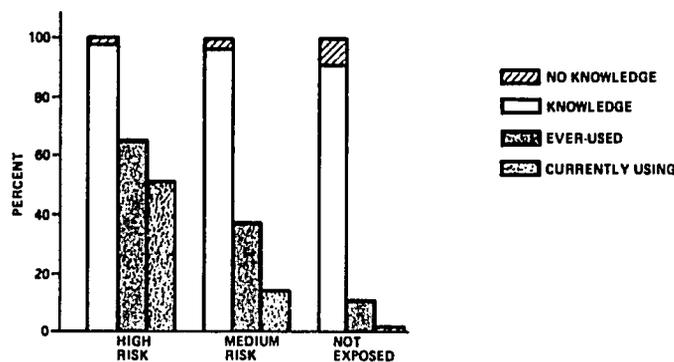
## VI. PREVALENCE

The prevalence rates of family planning use among the CCPS sample show the following patterns: 40% of the total sample had used a contraceptive method at one time, and 25% were using a method at the time of the interview. These levels of contraceptive use are more striking if the use levels are considered only for those women actually exposed to the risk of pregnancy (see Figure 9).

These figures show higher levels of contraceptive protec-

tion among women of medium or high risk of pregnancy — a group which comprised 49% of the CCPS sample. Sixty percent of this group were using or had ever-used a birth control method (only 43% of the women 'at risk' were presently using).

Use levels among medium and high risk urban women were higher in every region than among their rural counterparts. In addition, use levels were directly related to increasing education levels in both urban and rural areas (see Tables 10 and 11).



**FIGURE 9. Knowledge, Past Use, and Current Use of Contraceptive Methods by Risk of Pregnancy<sup>1</sup>**

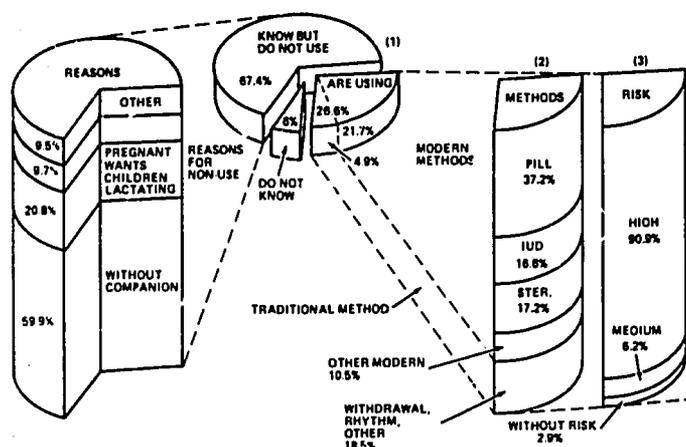
NOTE: The 'ever-used' category includes current users.

<sup>1</sup> For definitions of pregnancy risk, see footnote on page 4.

**TABLE 11. Percentage of Women Were Using a Contraceptive Method, According to Risk of Pregnancy<sup>1</sup>**

Area of Residence	Not Exposed	Medium Risk	High Risk
URBAN			
Current Use	1.7	24.6	71.6
RURAL			
Current Use	0.8	4.0	44.6
TOTAL			
Current Use	1.5	16.3	62.4

<sup>1</sup>The 13 low risk women were excluded.



**FIGURE 10. Percentage Distribution of the CCPS Sample by Use and Non-Use of Contraceptives by Selected Characteristics**

**TABLE 12. Percentage of Contraceptive Use Among Women Currently in Union, by Region and Method**

Method	Atlantic Region	Eastern Region	Central Region	Pacific Region	Bogotá	Total
USERS CURRENTLY IN UNION	39	45	46	45	62	46
METHODS						
All Methods	100	100	100	100	100	100
Pill	43	26	44	41	30	37
Condom	2	3	4	4	3	3
IUD	10	22	14	17	22	17
Sterilization	20	17	14	19	14	17
Injection and Vaginals	11	8	5	8	8	8
Rhythm	8	11	8	6	12	9
Withdrawal and Other	7	14	11	7	12	9

<sup>1</sup>Columns may not add to 100% due to rounding errors.

**Actual Use Among Women in Union**

As mentioned previously, 26% of the women in the CCPS sample were using a family planning method—97% of this sub-sample had either medium or high risk of exposure to pregnancy, and 95% were in union (see Figure 10).

Another 67% of the entire sample knew but did not use family planning for several reasons. Among these women, the reason most frequently cited (60%) was "lack of need" since the respondent was not presently in union (i.e., was not exposed to the risk of pregnancy). Another 31% felt that family planning was not necessary because they either desired another child or were sub-fecund, pregnant, or lactating. Only the remaining 10% were considered to be unprotected against

unwanted pregnancies (see Figure 10). 'Unmet need' increased to 29%, however, for women presently in union who did not desire more children but were still not using a contraceptive method.<sup>5</sup>

The pill was still the preferred method of contraception, with a use rate which was two and one-half times greater than either method which followed — the IUD or female sterilization. The users of traditional methods represented, however, 18.9% of the actual users. These less efficient methods were used by a quarter of the practicing women in the Eastern Region and in Bogotá.

<sup>5</sup>Source: Unpublished CCPS report written by Luis Hernando Ochoa and José Agustín Arias of CCPR, November, 1979.

The pattern contraceptive use in Colombia between 1969 and 1978 has experienced various quantitative (percentage of users) and qualitative (distribution of methods among users) changes.

In 1969<sup>6</sup> 33% of the women in union were using a contraceptive method; by 1978 this figure had risen to 46%. The predominant methods in 1969 were withdrawal, the pill and rhythm. In 1978 the pill was the most popular, followed by the IUD and female sterilization (see Table 12).

## CONCLUSIONS

The Colombian CPS is consistent with previous observations which have been made concerning the effects of family planning use on fertility levels, if it is remembered that the levels of family planning knowledge and use increased primarily in those groups which had the greater risk of exposure to pregnancy.

According to the CCPS, 94% of the sample knew at least one family planning method. The knowledge rate for urban

women (97%) was higher than that for rural women (89%). Most of those not aware of family planning (6%) were rural women, single, less than 25 years of age, with less than a primary school education.

Prevalence rates for the entire sample are as follows: 26% of the women were using a contraceptive method at the time of interview and 40% had used a method at one time. If prevalence rates were computed only for women in the medium and high risk of pregnancy categories (49% of the total sample), however, 43% were presently using, and 60% had ever used a birth control method.

Trends in the utilization of family planning supply sources indicate that users were inclined toward the use of the private network of drugstores and any other distribution system which required a minimum of travel effort.

The reductions in Colombian fertility levels over the past 10 years are impressive — from a total fertility rate of 6.0 in 1969 to a 1978 rate of 3.8 — and must be sustained if the Colombian growth rate is not to impede present efforts toward national development.

<sup>6</sup>Survey: General Results: 1969 National Fertility Survey, Table 190.