

Analysis of a Family Planning Program in Guatemala

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GUATEMALA, with 35 percent of the population of the Central American countries, is the second largest and most populous of the C.A. republics. According to the 1964 census, the population of this nation was 4,284,473; the 1969 population was estimated at 5,126,000. The rate of population growth in Guatemala approximates 3 percent a year. It is the only one of the Central American countries with an appreciable proportion of Indians, totaling about 50 percent of its population.

The leading morning newspaper of Guatemala, *Prensa Libre*, has consistently taken the editorial position that Guatemala's rate of population growth is a serious obstacle to economic development and that family planning is essential for the future well-being of the country. On the other hand, the leading evening daily, *El Imparcial*, has just as consistently taken the position that family planning is unnecessary and could conceivably prove harmful owing to the low population density of the country—about 102 people per square mile. The climate of the country has never been particularly propitious for a large-scale family planning program.

The hierarchy of the Roman Catholic Church in Guatemala remained silent on the issue until

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Pope Paul VI made public his now famous encyclical, "Humanae Vitae." Then the Archbishop of Guatemala publicly manifested his support of the Pope's position on artificial contraception and urged the faithful to follow his dictates.

Although some cabinet members of the present government of Guatemala have publicly expressed concern over la explosión demográfica, none have openly supported family planning. The Family Welfare Association of Guatemala, a private organization interested in providing family planning services to women of the lower income groups, had to wait 2 years before the previous government of the country legally approved the association's charter and bylaws.

Despite these factors, the Ministry of Public Health agreed to allow the provision of contraceptive services and supplies in 20 of its health centers during the second half of 1967. The municipios, political and geographic units similar to counties in the United States, in which these health centers are located (see chart) differ markedly from one another in many respects, such as size and ethnic composition (table 1).

Each health center physician was allowed a minimum of 4 hours per week to devote exclusively to family planning. He was to receive Q2 (1 quetzal=US\$1) for each new patient cared for up to a total of 30 new patients for any given month. Since the clinical history was to be taken by a graduate nurse, it seemed reasonable to

expect that the health center physician could examine and care for a minimum of three or four patients per hour, or 48 to 64 patients a month.

There were reasons to anticipate that the family planning program would reach a considerable number of women in the childbearing ages. A knowledge, attitude, and practice survey in Guatemala City in 1967 by the University of San Carlos School of Medicine revealed that 40.8 percent of the 1,348 women, married or living in consensual union, who were interviewed were practicing some method of birth control at the time of the study, and an additional 40.1 percent had used some method of contraception in the past. (1).

Effectiveness of the new program was expected to vary from one community to another. In view of the relationship of education and urbanization with fertility, as reported elsewhere in Latin America (2-5), those involved in planning and implementing the program expected greater interest in family planning in the communities with more urban characteristics, particularly Escuintla and Puerto Barrios, as well as in those with higher degrees of literacy. The limited interest of the Indian population in other health programs led to the belief that

there would be less interest in areas with a high percentage of Indians in the population.

Within a few months after the program was initiated, far fewer women were receiving contraceptive services than had been anticipated. No single health center was providing services to as many as 30 women a month, and a few health centers were providing services to as few as four or five women a month.

There was marked disparity in the degree of success of the family planning program in the participating municipios at the end of 1 year. The following tabulation lists the 20 health centers in order of effectiveness in family planning and the percentage of women between 15 and 50 years of age who were initial acceptors of the contraceptive services.

Table 1. Some characteristics of 20 municipios with family planning services in 1967

Municipio	Population	Percent urban	Percent Indian	Percent illiterate
Malacatán.....	4, 237	17	46	69
Salamá.....	4, 439	24	23	72
Cuilapa.....	4, 001	29	3	57
San Marcos.....	6, 611	53	17	44
Sololá.....	4, 897	18	17	83
Chimaltenango.....	9, 278	59	54	60
Zacapa.....	11, 230	37	2	59
Chiquimula.....	14, 693	41	13	61
El Progreso.....	3, 374	35	3	54
Jalapa.....	10, 309	26	23	64
San Pedro Carchá.....	3, 874	6	97	95
Retalhuleu.....	14, 702	39	19	55
Tiquisate.....	9, 682	15	6	60
Antigua.....	13, 907	62	7	29
Mazatenango.....	19, 535	60	30	49
Huehuetenango.....	10, 171	40	2	46
Coatepeque.....	14, 373	33	33	56
Totonicopán.....	8, 254	17	91	74
Puerto Barrios.....	22, 252	69	1	38
Escuintla.....	24, 981	46	8	53

SOURCE: Family Welfare Association of Guatemala, August 1968.

Municipio	Percent
1. Malacatán.....	19. 9
2. Salamá.....	19. 1
3. Cuilapa.....	15. 7
4. San Marcos.....	15. 5
5. Sololá.....	12. 7
6. Chimaltenango.....	9. 8
7. Zacapa.....	8. 7
8. Chiquimula.....	8. 5
9. El Progreso.....	8. 0
10. Jalapa.....	6. 3
11. San Pedro Carchá.....	6. 2
12. Retalhuleu.....	5. 6
13. Tiquisate.....	5. 0
14. Antigua.....	4. 8
15. Mazatenango.....	4. 7
16. Huehuetenango.....	4. 7
17. Coatepeque.....	4. 1
18. Totonicopán.....	3. 6
19. Puerto Barrios.....	1. 8
20. Escuintla.....	1. 4

One might well expect that the attitudes of local civil or religious authorities would influence the degree of acceptance of family planning. However, no instances of opposition by civil authorities were reported by the personnel of the health centers, and in only one community was active opposition by a priest encountered. This community, incidentally, enjoyed a well-above-average degree of acceptance, although it was not the most successful in reaching the greatest number of women in the childbearing ages.

Presumably, two factors exerted considerable influence on the degree of acceptance of family planning services; namely, the characteristics of the persons (of the health centers) offering the service and of those (of the communities) receiving the services. Because of his essential

role in this program as well as his prestige in Latin America (6, 7), the physician was regarded as a critical variable.

An attempt was made to gain some insight into the factors that created such a marked disparity in the degree of success of family planning in the different areas. Utilizing the formula

$$r = \frac{1 - 6(\sum d^2)}{N(N^2 - 1)}$$

correlations were obtained (table 2) between effectiveness in family planning (A) and five variables (B through F). For 20 observations, a correlation coefficient of 0.45 was significant at the 5 percent level with the formula.

A=Rank order of effectiveness in family planning services

B=Rank order of effectiveness in public health services

C=Rank order (ascending) of size of municipio

D=Rank order (ascending) of percentage of urban population

E=Rank order (descending) of percentage of literates in the municipio

F=Rank order (descending) of percentage of Indians in the municipio

Effectiveness in public health services (B)

is defined in terms of the percentage of people in the community that received prenatal care, postnatal care, school examinations, and general medical examinations during the year 1967. In contrast to what was expected by those who initiated the program, there was a low degree of correlation between effectiveness in family planning and ethnic composition (0.20) as well as degree of urbanization (0.28). The urban population (D) is defined as that residing in the cabecera municipal—roughly the equivalent of the county seat. This index probably supplies a reasonably accurate count of the people in the municipio, except in the very small communities, who are engaged in a nonagricultural pursuit of livelihood.

Contrary to what one might reasonably expect, effectiveness in family planning was negatively correlated with degree of literacy in the community (-0.55). This result may simply reflect the correlation of effectiveness of family planning with size, for illiteracy is more prevalent in smaller communities. A high degree of correlation existed between effectiveness in family planning and population size (smallness) of the municipio (0.72) and with efficiency in other public health services (0.81).

Table 2. Correlations between rank order of effectiveness in family planning (A) and rank order of five variables (B through F)

Municipio	A	B	C	D	E	F
Malacatán	1	8	4	3	16	5
Salamá	2	2	5	6	17	9
Cuilapa	3	5	3	8	10	17
San Marcos	4	3	7	16	3	11
Sololá	5	9	6	5	19	3
Chimaltenango	6	7	9	17	13	4
Zacapa	7	6	13	11	11	18
Chiquimula	8	13	16	14	14	12
El Progreso	9	1	1	10	7	16
Jalapa	10	10	12	7	15	8
San Pedro Carchá	11	4	2	1	20	1
Retalhuleu	12	16	17	12	8	10
Tiquisate	13	11	10	2	12	15
Antigua	14	12	14	19	1	14
Mazatenango	15	17	18	18	5	7
Huehuetenango	16	14	11	13	4	19
Coatepeque	17	18	15	9	9	6
Totonicopán	18	15	8	4	18	2
Puerto Barrios	19	19	19	20	2	20
Escuintla	20	20	20	15	6	13
Correlation coefficient	0.81	0.72	0.28	-0.55	0.20	

NOTE: See text (above) for explanation of A through F.

Location of 20 health centers in Guatemala with family planning programs, 1967



The percentages of people in the municipio who received prenatal and postnatal care, school examinations, and general medical consultation were selected as the criteria of effectiveness in public health services because these activities are carried out exclusively by the physician (8). Hence it is reasonable to regard efficiency in public health services as closely related to efficiency of the physician; and, in view of the high correlation between effectiveness in family planning and effectiveness in other public health services, one is tempted to conclude that in Guatemala the physician is the key to success or failure of family planning programs in a given health center. While most administrative personnel of the program would probably agree that this is indeed true, one cannot make such a statement on the basis of the data available in this study.

The number of immunizations performed annually was not utilized as a measure of efficiency because this activity is frequently carried out by nurses. Other programs, such as venereal disease control and nutrition, were not included because they are not offered by all health centers.

Effectiveness both in family planning and in providing other public health services showed

a high degree of correlation with size (smallness) of the municipio (table 3). From the data available, one cannot conclude why family planning in Guatemala has had a higher degree of effectiveness in smaller communities than in larger, more urbanized ones.

Discussion

All physicians in the various health centers receive the same salaries, and all are permitted to engage in private practice. In the larger communities, particularly Puerto Barrios and Escuintla, more people earn enough to pay for medical services than in smaller communities. Therefore, it would not be surprising if physicians in the larger areas spent an appreciable amount of time in their private clinics. In the smaller communities, on the other hand, few people can afford to pay more than a token fee for medical services, and physicians would find little or no economic advantage in spending any appreciable time away from the health centers.

Possibly, a payment of Q2 for each new patient seen in the family planning program would not adequately compensate a physician in a large community for the time spent away from

Table 3. Health centers, by population size of municipio and effectiveness in public health services

Municipio	Population size, in ascending order	Effectiveness in services, in ascending order
El Progreso	1	1
San Pedro Carchá	2	4
Cuilapa	3	5
Malacatán	4	8
Salamá	5	2
Sololá	6	9
San Marcos	7	3
Totonicopán	8	15
Chimaltenango	9	7
Tiquisate	10	11
Huehuetenango	11	14
Jalapa	12	10
Zacapa	13	6
Antigua	14	12
Coatepeque	15	18
Chiquimula	16	13
Retalhuleu	17	16
Mazatenango	18	17
Puerto Barrios	19	19
Escuintla	20	20

NOTE: Correlation coefficient=0.88.

his private clinic. The same fee could be a genuine incentive in small towns like El Progreso and San Pedro Carchá.

Furthermore, in small communities the health center physician is frequently the only physician in the area. He is more prone to take an active part in community affairs involving the lower social classes than the physician in a larger community, and he probably would have a better relationship with his patients.

Summary

Effectiveness in a family planning program in 20 health centers in Guatemala in 1967 was highly correlated with effectiveness in other public health activities (0.81) and with population size (smallness) of the municipio (0.72).

A low degree of correlation existed between effectiveness in family planning and degree of urbanization of the municipio (0.28) and ethnic composition of the municipio (0.20). There was a negative correlation between effectiveness in family planning and literacy (-0.55).

Possible explanations for the correlation between effectiveness in family planning and size of municipio were offered. In larger communities, more people earn enough to pay for medical services than in smaller communities, and one might expect physicians in the larger areas to spend an appreciable amount of time in their private clinics. A payment the equivalent of US\$2 for each new patient seen in the family planning program would not adequately compensate a physician in a larger community,

whereas the same fee could be a genuine incentive in small towns. Furthermore, in small communities the health center physician, frequently the only physician in the area, is more prone to take an active part in community affairs involving the lower social classes, and he probably would have a better relationship with his patients than the physician in a larger community.

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Tearesheet Requests

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