A REVIEW OF ADULT EDUCATIONAL HEALTH NEEDS IN VENEZUELA AND THE POSSIBLE USE OF INSTRUCTIONAL RADIO, TELEVISION, MULTI-MEDIA AND METHODS TO HELP MEET THE DEFINED NEEDS

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ABSTRACT

A REVIEW OF ADULT EDUCATIONAL HEALTH NEEDS IN VENEZUELA AND THE POSSIBLE USE OF INSTRUCTIONAL RADIO, TELEVISION, MULTI-MEDIA AND METHODS TO HELP MEET THE DEFINED NEEDS

By

Jose Fontan-Pueyo

The study focuses on the application of radio and television and other media to help solve the needs of Venezuelan adult population, and selects population explosion as an example to show how the systems proposed will work with other available resources to help solve those needs.

The study presents the job of mass media in helping solve this particular problem of population explosion, as a vehicle to spread information and a sense of social rightness about the practice of birth control in order to gain social support of the community for the Family Planning Program.

In terms of media to be used, the study proposes for the first year, the use of audiovisual materials such as charts, filmstrips, slides, and recordings covering vital health program information; for the second year, the

use of audiovisual materials and radio; and for the third year, the use of radio, audiovisual materials, and television.

Different types of mass media forums are presented: radio, television, and "radiophonic" (radio) schools of Latin America and their effectiveness in diffusing knowledge and changing attitudes.

The present situation of the Venezuelan Broadcasting Systems, and the actual regulations for the establishment of educational radio and television stations, their maximum and minimum possible power and frequencies are included.

The study presents a program designed to be used by the proposed radio and television systems as a part of the total communication program on family planning. The program consists of a filmstrip, radio, and television scripts for the first unit to be presented with follow-up materials and related methods for other units of the program.

These are the most relevant recommendations of the study:

1. To establish a pilot project for the use of media in a restricted basis for the first three years.

2. To use existing facilities and services, and/or establish an audiovisual center to provide educational materials related to birth control instruction.

3. To establish radio broadcasting stations covering the population of the Family Planning Centers of the pilot project area. The use of radio is recommended in two broad areas: General information and instructional education. Instructional radio lessons will be broadcast to:

a. "Radiophonic" schools

b. Home-based audiences

4. To establish television stations covering the population of the Family Planning Centers of the pilot project area. The use of television for general information and education. Educational television lessons will be directed to:

a. Television schools

b. Home-based audiences

5. Extension of the television and radio systems to other parts of the country, after their second year of operations, and if the results of the evaluation research indicates the need of doing so. Television should be used mainly in urban areas where electricity and television sets are available, and radio in rural areas of the country where electrical power is less available and transitor radio receivers are much more common than television sets.

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CHAPTER I

INTRODUCTION

The underdeveloped countries of Latin America are faced with many social problems. These major social problems are in such areas as health, agriculture, community development aspects, better distribution and use of water, housing, nutrition, and education.

In the area of education, illiteracy is becoming increasingly grave. About 50 million people in Latin America, 15 years old and over, are illiterate, and taking into account that the average adult population is of third grade education, the whole picture shows that Latin America is an uneducated society.

The illiteracy index has dropped for the Latin American region by 2 percent from 1950, that is, from 20 percent to 18 percent, but the number of absolute illiterates has increased by 10 percent, or five million additional illiterates. Out of the total Latin American population of 48 million pupils between 7 and 14 years old, only about 33 million are registered in elementary schools. And yet, according to statistics, only about 20 percent of these will complete their elementary school education.

Considering that the present annual growth is 3 percent, the Latin American population will be doubled in 25 years. Thus the illiteracy problem will become increasingly depressing. On the other hand, of the 200 million people, only 0.8 percent of the adult population, that is, 1,607,102 were registered in elementary adult education in 1962.

In Venezuela alone, the percentage of illiteracy was 17 percent for those 14 years old and over, and only 9 percent in the total population of 8,722,212 million in 1962. Thus, the whole picture seems to indicate that with the present actual system of education, it will be difficult to eradicate illiteracy in the region during the present century.[1]

The heads of the American States during their meeting at Punta del Este, Uruguay, in 1967, recognized that education should be in a high priority in the policy of development of Latin American countries. Although they were aware that there has been improvement in education during the last 10 years in their countries, they also admitted that they need to increase the efficiency of national efforts for education, and that their national systems of education should fit the economic, social, and

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[1]Felix Adam, Educacion de Adultos (Caracas, Venezuela: Oficina de Educacion de Adultos, Ministerio de Educacion, n.d.).

cultural needs of their countrymen. In accordance with those beliefs, they issued a resolution urging the improvement of the planning and administration of educational systems in order to increase the level of education, and to give priorities to those activities related to the economic, social, and cultural development. So, they agreed to orient and restructure their educational systems in order to achieve, among other things, the security and enlargement of the programs of adult education.[2]

The heads of the American States also recognized in the same meeting that the improvement of health conditions among their people is basic for the social and economic development of Latin America. And for primary objectives they have the following: to eradicate disease among their population; to supply water and sanitary services to urban and rural areas of population of low income; to improve nutrition in poor areas, to increase programs of children's care and family orientation methods.

There is need for another kind of education in addition to the effort to eliminate illiteracy in Venezuela, according to George W. Hill. This education should be in every practical aspect of agriculture, in the improvement and care of the peasant's home. It should be focused on

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[2]Union Panamericana, Reunion de Jefes de Estado Americanos, Punta del Este, Uruguay, 1967 (Washington, D.C.: Secretaria General de la Organizacion de los Estados Americanos, 1967).

the improvement of their standard of living. There is a need to teach Venezuelan peasants pediatric care aimed at reducing the infant mortality rate; cardiac care and tumor detection, to combat the country's first and second largest cause of death; dental care; nutrition; infectious diseases, and malaria eradication campaigns to prevent fresh outbreaks in parts disinfected; environmental sanitation, better housing and sanitary facilities, and better distribution of water; saving and buying goods; community development aspects; and organization of cooperatives in rural and urban areas.[3]

The Inter American Committee on the Alliance for Progress (CIAP), Subcommittee on Venezuela, in its study report recommended that in order to alleviate the social problems of the country it should propose a series of goals and policies to be pursued by the public sector and to be included in the National Plan for 1965-68.[4]

In the health section, the Plan aims to set up programs to achieve a series of specific targets, all of them

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[3]George W. Hill, et al., "La Vida Rural en Venezuela," Revista Venezolana de Sanidad y Asistencia Social, 24 (January-February, 1959), No. 1 and 2.

[4]Inter American Committee on the Alliance for Progress (CIAP), Subcommittee on Venezuela, Domestic Efforts and Needs, External Financing for the Development of Venezuela (Washington, D.C.: Pan American Union, 1967).

aimed to improve the living conditions of the population. The Plan sets the following goals:

1. In the field of environmental sanitation, construction of aqueducts, sewerage, and sanitary services, and the elimination of environmental factors that cause diseases.
2. In housing, programs for meeting needs in urban and rural areas by both the public and private sectors.
3. In nutrition, creation of nutritional programs, especially pre-school, and dental and pediatric care programs.
4. Provide for the construction of hospitals and medical buildings, and medical schools for more adequate supply of personnel and equipment materials.
5. In education, the Plan calls for reducing the level of absenteeism in elementary schools, and aims for an adult literacy campaign in order to lower the illiteracy rate of the population aged 14 and over.[5]

These goals are similar to the goals of the Ministry of Health and Social Assistance (SAS), and the Ministry of Agriculture and Livestock (MAC), the Ministry of Education,

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[5]CORDIPLAN, Plan de la Nacion 1965-1968 (Caracas: Oficina Central de Coordinacion y Planificacion, 1967), pp. 11-23.

and other institutions and organizations of the Federal Government of Venezuela, and their programs for rural and urban areas of adult population of the country.

The effort made by Latin American countries to improve education among their people has not adequately come to grips with the problem. There certainly has been increasing enrollment in school pupils, number of classrooms, and teachers, but that improvement has been diminished by the fast increasing rate of population growth, by the high level of school dropouts, and by budget limitations.

So far, the effort made to reduce the illiteracy problem of Latin American adult population has been inefficient. According to Adam, one cause of the failure of the adult education is the fact that it is not an integrated system, that is, a system that covers all levels of education and one that emphasizes education for the development of the country offering all kinds of opportunities to satisfy the needs of the adult population. Many times, adult education has been something synonymous with literacy teaching, ignoring vital needs of the students, giving them education against their interest and against the socio-economic realities of their countries.[6]

A sincere effort to solve the problem of Latin American adult education has been made by the radio schools.

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[6]Adam, op. cit., p. 7.

The fundamental purpose of the radio schools in Latin America is basic education to reduce illiteracy in rural areas. The Sutatenza Radio Schools of Colombia, have disseminated to many Latin American countries information about radiophonic (radio) schools and how they can be made to work among their respective people. The idea of radiophonic teaching has been caught in Latin American countries, and today every one of them can boast of its own radio schools.

Some Latin American countries, like Peru,[7] have found that television appears to be achieving its best results in providing fundamental education to a number of adolescents who have dropped out of high school at an early age and who have become domestic servants.

In view of the experience of the use of radio and television not only in Latin America, but also in other countries of the world, as will be shown later in this study, and knowing their effectiveness as well as their weaknesses, the present study will focus on the use of radio and television in cooperation with other available resources to help solve the identified needs of the Venezuelan adult population.

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[7]Jack Lyle, et al., "La Telescuela Popular Americana de Arequipa, Peru." New Educational Media in Action: Case Studies for Planners--II. Paris: UNESCO, 1969.

Purpose of the Study

This study will be focused on the application of radio and television and other media to meet the needs of the Venezuelan adult population. It will propose an instructional radio and educational television and multimedia system to help solve, with other resources available in the country, the Venezuelan adult population needs.

An example of a health problem, namely population explosion, will be presented to illustrate how the media systems proposed can be used with other available health resources of the country to help solve this particular problem of population explosion.

Objectives

The objectives of the present study will be to show:

That the instructional media systems proposed can help educate the adult population of Venezuela by providing them with related good information;

That the population explosion problem and other health needs can be improved by the dissemination of sound information through the instructional radio and educational television systems proposed;

That other related needs of adult Venezuelans can also be improved by using the same communication systems;

That population explosion constitutes one of the most important and urgent problems of the adult population of Venezuela, that should be solved by all available means;

And thus, the population explosion problem will be presented as an example to illustrate how the media systems proposed can be used with other available health resources of the country to help solve this particular problem of population explosion, and by the same token, other needs of the Venezuelan adult population.

This study will show:

Why the solution of population explosion and other health needs are so important for improvement of the physical, moral, and mental health of the adult population of the country;

Why many adult people are victims of these problems due to lack of relevant information;

Why the systems proposed can become a meaningful instrument to help solve such problems; and

Why, by the same reason, the same proposed systems will also be useful to help solve other related needs of the Venezuelan adult population.

The study will also show:

Some available health resources of the country and how the systems porposed can cooperate with those resources on the solution of population explosion problem and other needs of the adult population.

Means of feedback, such as questionnaires, quizzes, evaluation sheets, mail, short-wave radio, telephone, and

other devices will be proposed to assure the educational impact of the systems proposed.

An important point to be taken into consideration in the design and broadcast of health education programs is the central control of the educational health materials exercised by the Ministry of Health and Social Assistance (SAS), which will produce programs that will be centrally relayed under the close supervision of the Ministry of Health and Social Assistance (SAS).

This study will also show that the same system or combination of systems can help solve other related needs of the Venezuelan adult population.

The aim of this study is not to review all needs of the adult population of Venezuela. It will examine population explosion as an example of a health need and propose a program of operational procedures in order to show how proposed programs using instructional media can help solve the population explosion problem as well as other related needs of the Venezuelan adult population.

It is hoped that the study would indicate basic considerations and necessary procedures to successfully comprise communication programs about:

1. Specific target audiences
2. Definition of audiences
3. Definition of objectives and learning situations

4. Appropriate ways and means in adopting communication programs, and
5. Evaluation programs.

CHAPTER II

POPULATION EXPLOSION, HEALTH NEEDS, AND AVAILABLE RESOURCES TO SOLVE THEM

There are many health problems in Venezuela. A study of the health problems of the Venezuelan adult population reveals that there are five main areas of special concern. These areas are: environmental sanitation, infectious diseases, nutrition, population explosion, and the many causes of mortality. It is not the aim of the present study to explain in detail each and every one of the five areas, but because it is understood that such information might be useful, a review of these health problems is to be found in a special section of Appendix A.

For purposes of this study, however, one health related area, namely population explosion, has been selected. This chapter analyzes the population explosion situation in Venezuela and presents evidence that there exists such a problem, and that indeed, it is grave in its health and social consequences. The chapter also presents available health resources and ways such resources are used by the government and other private agencies to solve such health problems.

The available resources of the country are not enough to solve population explosion and other health problems, and thus, the use of the media systems is proposed to help solve these health needs.

The present study does not basically intend to analyze population explosion and its consequences especially upon health, but it uses the population explosion problem to illustrate how the media systems proposed can work with the health resources in the solution of the population explosion problem. The same general principles presented for the solution of population explosion problem can be applied in the treatment of other health and social needs of the Venezuelan adult population.

Population Explosion

The last two censuses taken in Venezuela show the following population information: Census VIII taken November 26, 1950: 5,034,838 population--Census IX taken February 26, 1961: 7,523,999 population, and the population projection estimated in June 30 of the years shown on Table 1.

In 1963 Venezuela had a raw rate of increase of 43.4 per 1,000 which represents an annual rate of population increase of 3.6 per cent, and 3.5 for the whole period 1963-1967.[1]

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[1]United Nations, Demographic Yearbook 1968, p. 106.

TABLE 1.--Projection of the urban and rural population for 1961, 1965, 1970, 1975.*

Year	Total Population	Urban**		Rural***	
		Total	%	Total	%
1961	7,523,999	5,078,624	67.5	2,445,375	32.5
1965	8,722,212	6,240,544	71.55	2,481,668	28.45
1970	10,398,907	7,874,763	75.73	2,524,144	24.27
1975	12,433,970	9,866,623	79.35	2,567,347	20.65

*Venezuela, Ministerio de Fomento, Oficina de Analisis Demografico, Proyeccion de la Poblacion Urbana y Rural de Venezuela Y de sus Ciudades mas Importantes, Caracas, 1964, p. 20.

**Urban: centers of more than 1,000 population.

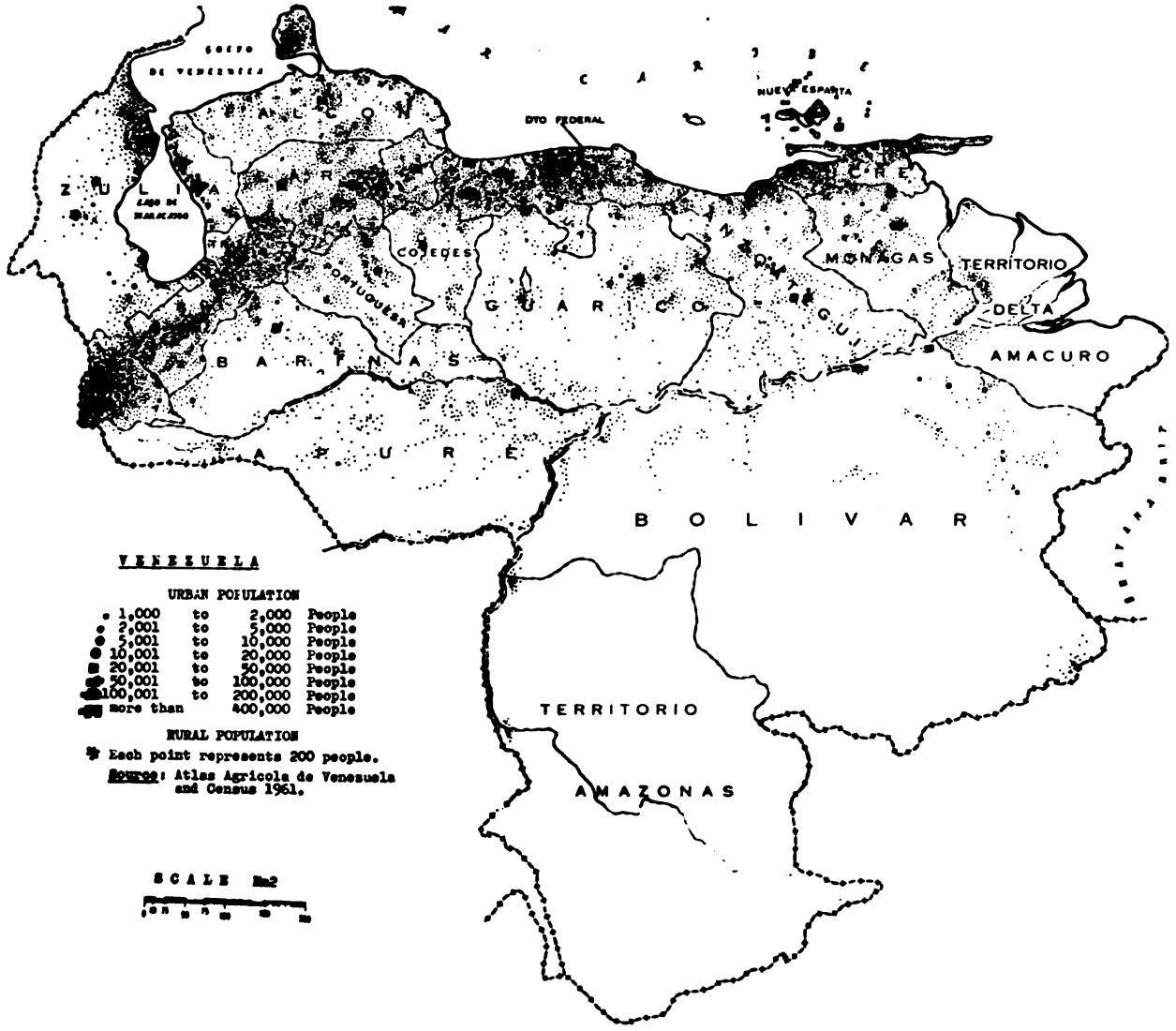
***Rural: centers under 1,000 population.

The population is distributed in the following areas of the country: along the North Coast and the Andean mountains which is 19.6 per cent of the area of the country live 78.0 per cent of the Venezuelan population; and in the Central Plains and in the South Guayana Region which is 80.4 per cent of the total area of the country live only 22.2 per cent of the total population[2] (Figure I, p. 15).

An important factor related to health needs is the dispersion of the population. This population dispersion is characterized in Venezuela by people living isolated or in centers of less than 1,000 population. In 1961, such

[2]Levi Marrero, Venezuela y sus Recursos, Cultural Venezolana S.A., Caracas, 1964, p. 241.

Figure 1.--Urban and Rural Population Distribution of Venezuela.



dispersed population comprised about 1/4 of the total population according to Tables 2 and 3.

TABLE 2.--Centers and rural population, 1961.*

Groups	Centers	Population	%
Dispersed		97,256	1.3
Less than 50 Popul.	11,101	287,242	3.8
From 50 to 99	5,497	390,512	5.2
From 100 to 199	4,157	583,607	7.7
From 200 to 499	2,372	696,880	9.3
From 500 to 999	567	389,878	5.2
TOTAL	23,697	2,445,375	32.5

*Venezuela, Ministerio de Fomento, Direccion Nacional de Estadistica y Censos Nacionales, IX Censo Nacional de Poblacion, Caracas, 1962, p. 11.

TABLE 3.--Centers and urban population, 1961.*

Groups	Centers	Population	%
From 1,000 to 1,999	217	287,902	3.8
2,000 to 2,499	39	85,434	1.2
2,500 to 4,999	103	365,716	4.9
5,000 to 9,999	51	352,600	4.7
10,000 to 19,999	33	437,749	5.8
20,000 to 49,999	24	765,386	10.2
50,000 to 99,999	11	762,879	10.1
100,000 to 199,999	3	498,645	6.6
200,000 to 499,999	1	421,166	5.6
500,000 and more	1	1,101,147	14.6
TOTAL	483	5,078,624	67.5

*Venezuela, Ministerio de Fomento, Direccion Nacional de Estadistica y Censos Nacionales, IX Censo Nacional de Poblacion, Caracas, 1962, p. 12.

The urbanism phenomenon, that is, the fast growth of urban population from the rural population is a universal phenomenon, but in Venezuela the rate of growth is greater than the world average. In 1936, about 65 per cent of the total population of the country were living in rural areas, in 1961 about 32.5, and in 1970 about 24.27 per cent (Table 1). See Table 4.

TABLE 4.--Migration from rural to urban areas.*

1950-1961	792,000 Population
1961-1970	805,000 Population (estimated)

*Julio Paez Celis, "Explosion Demografica en el Caso de Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September, 1966, p. 521.

As a result of the population increase and rural migration to urban areas, several cities have doubled their population during the last ten years with serious slum problems without appropriate health services as shown in Table 5.

Table 6 shows that about half of the population is under 14 years old. In 1961, each person potentially active had to sustain 194 persons including himself. In the United States in 1950, the index was 155.[3] The economically active population in 1961 was about 47.7 per cent of the total population; 76.5 per cent were men and 18.0 per cent women.[4]

[3]L. A. Angulo-Arvelo, Jorge Arevalo, Julio Paez Celis and Jose B. Leon Q., "Composicion de la Poblacion Venezolana," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September, 1966, p. 485.

[4]IX Censo Nacional de Poblacion, Caracas, 1962.

TABLE 5.--Typical city expansions, 1950-1961;* and estimated in 1970 (in thousands).

City	1950	1961	Percentage Gain	1970 Population
Maracaibo	235	421	79.1	690
Cabimas	42	93	121.4	155
San Carlos del Z.	7	14	100.0	
San Cristobal	54	99	83.3	157
Barquisimeto	105	200	90.5	282
Valencia	89	164	84.3	225
Maracay	64	135	110.9	193
Caracas Met. Area	694	1,336	92.5	2,176
Acarigua	16	31	93.7	46
S. Juan de los M.	14	37	164.2	43
Puerto La Cruz	28	59	110.7	82
Maturin	25	54	116.0	97
Ciudad Bolivar	31	64	106.4	110

*John Friedman, "Economic Growth and Urban Structure in Venezuela," in Ekistics, Vol. 17, No. 102, May 1964, p. 320. And the estimated for 1970 is taken from Proyeccion de la Poblacion Urbana y Rural de Venezuela y sus Ciudades mas Importantes, Oficina de Analisis Demografico, Caracas, 1964, pp. 57-58.

About half of the female population are not married, but they have children. And this leads to grave consequences especially today when there is a low mortality rate. When a woman starts to reproduce at 15 years old, without the use of contraceptives, she can have an average of 12 children, but, taking into consideration that many of the women start

TABLE 6.--Population distribution by age and sex in 1961 and estimated June 30, 1970.*

Age	1961			1970		
	Male	Female	Total	Male	Female	Total
0- 4	639496	665,620	1,359,116	983,901	949,279	1,933,180
5- 9	587387	557,010	1,144,397	784,082	759,501	1,543,583
10-14	463426	447,646	911,072	646,513	620,897	1,267,410
15-19	356529	364,160	720,689	556,957	528,797	1,085,754
20-24	315322	306,904	622,226	431,034	420,792	851,826
25-29	287875	270,355	558,230	333,097	342,094	675,191
30-34	265970	244,708	510,678	299,463	289,854	589,317
35-39	214633	196,090	410,723	273,589	256,055	529,644
40-44	177782	158,190	335,972	248,045	228,899	476,944
45-49	153001	143,195	296,196	195,348	179,623	374,971
50-54	112010	109,291	221,301	159,756	144,964	304,720
55-59	88359	83,604	171,963	131,219	127,531	258,750
60-64	64883	73,248	138,131	90,111	89,610	179,721
65-69	38589	44,142	82,731	65,684	69,488	135,172
70-+	49170	79,732	128,902	78,859	113,865	192,724
TOTAL	3868432	3,743,895	7,612,327	5,277,658	5,121,249	10,398,907

*Venezuela, Direccion General de Estadistica y Censos Nacionales, Proyeccion de la Poblacion de Venezuela, Caracas, 1963, pp. 25-27.

TABLE 7.--Marriages and divorces by age, 1966.*

Age	Marriages		Divorces	
	Bridegroom	Bride	Husband	Wife
-15	27	2,851		
15-19	4,361	18,677	3	98
20-24	17,376	14,528	109	371
25-29	13,220	6,636	388	531
30-34	6,435	3,385	436	396
35-39	3,911	2,375	427	271
40-44	2,471	1,522	258	155
45-49	1,551	981	172	77
50-54	1,103	514	91	42
55-59	745	305	49	24
60- +	927	305	46	11
Unknown	2	23	274	277
TOTAL	52,102	52,102	2,353	2,353

*United Nations, Demographic Yearbook 1968, p. 518.

TABLE 8.--Marital status, 1961.*

Status	Male		Female	
	Number	%	Number	%
Singles	963,775	46.5	766,450	37.8
Married	695,725	33.5	689,650	34.0
Common-Law	368,625	17.8	412,250	20.4
Widowers	35,025	1.7	138,100	6.8
Divorced	9,950	0.5	19,975	1.0
Undiclared	28,525		25,225	
TOTAL	2,101,625	100.0	2,051,225	100.0

*IX Censo Nacional de Poblacion and Ministerio de Fomento, Memoria y Cuenta 1962, Caracas, Venezuela.

to reproduce at 12 and 13 years old, and with an expectation of a lifetime of 66.0, the situation is indeed critical.[5]

We may see from Table 8, that there is a difference between the numbers of couples living by common-law. The statistics showing the status of the females is more reliable than those showing the status of the males because according to some studies many men prefer to declare themselves as single, because of the social sanctions. Many widowers marry again after the death of their partners. There is correlation between local residence areas and level of instruction with respect to couples living by common-law, such situations are more frequent in rural areas and among people of low education.

The Venezuelan population is increasing at about 3.5 per cent annually. This is because the rate of birth is very high, about 42 per 1,000, and the rate of mortality is very low, about 7.0 per 1,000. The result has been a young population. See Table 9.

TABLE 9.--Number of born alive and rate per 1,000 population, 1961, 1964, 1965, 1966, 1967.*

Year	1961	1964	1965	1966	1967
Number	344,989	365,340	379,530	376,367	406,468
Rate	45.3	43.4	43.5	41.7	43.5

*United Nations, Demographic Yearbook, 1968, p. 336.

[5]Hernan Quijada, "Aspectos de la Psicologia Social en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September 1966, p. 579.

TABLE 10.--Number of births alive by the age of the mother, 1965, 1966.*

Age	1965	1966
less than 15	1,004	915
15-19	53,720	54,635
20-24	107,200	106,236
25-29	94,687	93,443
30-34	62,196	60,719
35-39	43,127	43,017
40-44	12,206	12,382
45-49	2,478	2,439
50 +	225	207
Unknown	2,617	2,374
TOTAL	379,530	376,367

*United Nations, Demographic Yearbook, 1968, p. 347.

TABLE 11.--Late foetal deaths and rate per 1,000 alive births, (28 weeks of gestation at least) 1963-67.*

Year	1963	1964	1965	1966	1967
Number	6,903	7,199	7,568	7,733	7,807
Rate	19.5	19.7	19.9	20.5	20.2

*United Nations, Demographic Yearbook, 1968, p. 357.

In the Maternity Concepcion Placios of Caracas, from 1959 to 1964 the foetal mortality was 53,000 out of 255,003 pregnant women attended. Out of 100 pregnancies, 78 children were born alive and 22 deaths. Outside the Caracas area, out of 84,577 pregnant women, 93 per cent were born alive and

TABLE 12.--Principal indexes of fecundity in Venezuela, 1963.*

Age	Fertile Women	Number of Births	Fertility Rate per 1,000
15-19	392,537	49,957	127.26
20-24	324,897	104,087	320.36
25-29	281,655	88,138	312.92
30-34	253,215	59,395	234.56
35-39	214,278	38,580	180.04
40-44	170,131	10,870	63.89
45-49	146,577	1,519	17.18
TOTAL	1,783,290	353,546	1,256.21

Total rate of fecundity: 6.28
Raw rate of reproduction: 3.08
Neat rate of reproduction: 2.74
Raw of general fecundity per 1,000 women: 198.25
Raw birth-rate: 43.4
Rate of increase: 3.6 per cent.

*Fayad Camel Vargas, "Natalidad y Fecundidad en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September, 1966, p. 409.

7 per cent dead. In 1964, there were 300 abortions for each 100 children born dead.[6]

We may see that fertile women of all ages contribute actively to the actual demographic expansion of the country.

From these data (Tables 13, 14) we may conclude that the rate of births decrease as the income of the population increases.

[6]Quijada, op. cit., p. 599.

TABLE 13.--Federal States per capita income 1958, and raw rate of births 1963.*

Income In Bs.**	Population	Births	Raw Rate of Births
Venezuela	8,143,629	353,546	43.6
-1000 (a)	2,076,106	100,056	48.2
1000-1499 (b)	663,753	33,034	49.8
1500-1999 (c)	1,277,848	59,129	46.3
2000-3999 (d)	746,666	31,878	42.7
4000-4999 (e)	3,379,256	129,456	38.3

*Fayad Camel Vargas, "Natalidad y Fecundidad en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September, 1966, p. 417.

**The Bolivar (Bs.) worth about $0.22.
(a) States: Lara, Merida, Nueva Esparta, Sucre, Tachira, Trujillo.
(b) Apure, Cojedes, Portuguesa, Yaracuy, Amazonas, Delta Amacuro.
(c) Barinas, Bolivar, Falcon, Guarico, Monagas.
(d) Aragua, Carabobo.
(3) Anzoategui, Zulia, Distrito Federal and Miranda.

TABLE 14.--Average of legitimate children per family by occupation of the father, 1963.*

Father's Occupation	Average Children Per Family
Professionals and Technicians	2.91
Managers, Administrators and Directives	3.75
Office Workers	2.86
Salesmen	2.90
Farmers and Hunters	5.24
Mine Workers	4.59
Drivers	4.12
Craftsmen and Factory Workers	3.80
Other Craftsmen and Working Men	4.17

*Fayad Camel Vargas, "Natalidad y Fecundidad en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, Caracas, September, 1966.

TABLE 15.--Percentage of legitimate and illegitimate live births, 1962, 1963.*

Year	Total	Legitime	Illegitime	% Illeg.
1962	341,324	158,693	182,631	53.5
1963	353,546	163,619	189,927	53.7

*United Nations, Demographic Yearbook, 1965, p. 524.

This table shows the precocity of the sexual life of the Venezuelan women and the low diffusion of anticonceptive practices among them.

A study in Apure State among 136 family groups[7] is shown in Table 16.

TABLE 16.--Interviews in relation to the number of fathers in each of the 136 group of families by age of women.

Number of fathers in each family	Age of Women								Total	
	20-29		30-39		40-49		50-59			
	No.	%	No.	%	No.	%	No.	%	No.	%
1	20	14.70	21	30.14	24	17.64	3	2.20	88	64.68
2	7	5.14	28	20.58	7	5.14	3	2.20	45	33.06
3			3	2.20					3	2.20
TOTAL	27	19.84	72	52.92	31	22.78	6	4.40	136	99.94

In many cases the interviewed females lied by reducing the number of fathers of their children. Polyandry is apparent in 33.06 of the cases and is clear in 2.20 per cent. If polyandry increases among 30 and 39 year olds, and since at

[7]Quijada, op. cit., p. 601.

present 64.68 per cent of the sample population is between 20 and 29 years old, the probability is that polyandry will increase.

The low mortality rate (Table 17) is influenced by the fact that the Venezuelan population is predominantly young (Table 18). This fact has influenced, at the same time, the high level rate of births (Table 9).

TABLE 17.--Deaths and death rates per 1,000 population, 1965-1969.

Year	1965	1966	1967	1968	1969*
Number	60,857	61,521	62,083	64,572	65,462
Rate	7.1	7.0	6.8	6.9	6.9

*Ministerio de Sanidad y Asistencia Social, Memoria y Guenta 1969, Caracas, 1970, p. 182.

The mortality rate of children under 5 years old accounts for 40.2 per cent of the total population. The mortality rate is higher for children of less than 1 year old, 28.1 per cent.

There is a clear margin for the increase of mortality rates for age groups of less than 45 years old if we compare these groups with those of the same age of the United States. A study of the causes of death among those groups will help to orient a sound health action to reduce the mortality rate among such groups.

From Tables 19 and 20 we may appreciate that the expectancy of life in general has increased during the last few years, which reflects better health conditions.

TABLE 18.--Mortality rate per age in Venezuela and in the United States, 1965.*

Age	Venezuela	United States
Less 1 Year	28.1	4.9
1 - 4	12.1	0.9
5 - 9	2.6	0.5
10 - 14	1.4	0.4
15 - 19	1.6	0.6
20 - 24	1.6	0.6
25 - 29	1.8	0.6
30 - 34	2.0	0.9
35 - 39	2.7	1.4
40 - 44	2.7	2.2
45 - 49	2.9	3.1
50 - 54	3.9	4.3
55 - 59	3.8	5.5
60 - 64	6.1	7.1
65 - 69	4.6	9.6
70 - +	22.2	53.7

*Pan American Union, America en Cifras 1967, Situation Demografica: Estudio y Movimiento de la Poblacion, Union Panamericana, Secretaria General de la OEA, Washington D.C., 1968, pp. 111, 105.

TABLE 19.--Life expectancy by age, 1961.*

Age	Expect.	Age	Expect.
0	66.41	45	30.34
5	68.75	50	26.25
10	66.34	55	22.52
15	61.76	60	18.86
20	57.02	65	15.85
25	52.38	70	13.03
30	47.84	75	10.55
35	43.33	80	8.16
40	38.88	85	6.49

*United Nations, Demographic Yearbook, 1968, pp. 436-37.

TABLE 20.--Life expectancy for different periods.*

1950-1951	1960-1962	1964	1967
58.0	66.1	65.8	66.0

*R. Bernieri, "La Situation de la Sante au Venezuela et quelques orientations pour l'action sanitaire," in Annales de la Societe belge de Medicine tropicale, Vol. 48, No. 3, 1968, p. 351.

Summary

One crucial aspect of the problem of population in Venezuela is the dispersion of population. About 1/4 of the total population live isolated in remote areas or in centers of less than 1,000 population. This fact makes the improvement of health needs by ordinary means increasingly difficult.

On the other hand, migration from rural to urban areas has caused the fast growth of urban population and has doubled the population of several cities during the last ten years. Serious slum problems have resulted.

The population explosion of Venezuela is due to different factors: the precocity of the sexual life of Venezuelan women who begin to reproduce in the early teens, who are either married, live in common-law marriages or are single. There is also a low diffusion of anticonceptive practices among the many low income people.

One result of this sexual activity and lack of contraceptive methods is the increasing number of illegitimate children, 53.7 per cent of the total 353,546 children born in the country in 1963. This fact, and the low mortality rate, about 7.0 per 1,000, has influenced the high level rate of births, 43.5 per 1,000, in 1967. Both factors have caused the Venezuelan population to be predominately young. About half of the total population is less than 14 years old, which has increased the burden of each person potentially active who had to sustain about 194 persons including himself in 1961.

Population Explosion and Family Planning

The present situation and future trends of population explosion and family planning in Venezuela are as follows.

Demographic Aspect

There are reasons to believe that the problem of population explosion which is grave in so many countries, has extreme gravity in Venezuela.

Although the several arguments exposed above prove that the demographic explosion of Venezuela is extremely grave, the historic trend of the Venezuelan family is showing marked inclination toward voluntary birth control. There are additional facts proving such inclination: urbanization, use of apartments, continuous increase of general level of life and education, knowledge of more effective techniques

TABLE 21.--Fecundity survey of Caracas metropolitan area, 1963.*

Method	Not Known	Not Used**	Have Been Used	In Use	No Answer
Douche	251	773	132	202	23
Sterilization	251	1,025	0	80	25
Diaphragm	700	592	27	33	29
Jelly	1,026	294	19	10	32
Oginnus	527	574	109	141	30
Condom	271	664	160	260	26
Withdrawal	479	571	110	193	28
Pill	1,305	37	12	4	23
Others	1,305	36	10	5	25

*Julio Paez Celis, op. cit., p. 523.

**Known, but not used.

to avoid pregnancy, feminine work, etc., which show the need and inclination to foment birth control.[8]

The trend and the convenience of birth control or family planning is positive. Those who believe State programs encouraging birth control will include: (1) help to control or diminish abortion, (2) help to increase the educational level of the people and reduce excesive population growth, (3) temper the attitudes of people to accept the appropriate action conducting to healthy family life supporting the birth control programs.[9]

Health and Medico-Social Aspect

Four fundamental functions constitute the modern family planning: contraception, fecundity promotion, detection of pathologic processes, and education.

Birth Control in Venezuela:

A. Population Attitude:

In Venezuela there exists voluntary birth control in increasing numbers.[10] That is proved by:

1. Differential Fecundity: A fecundity survey in Caracas Metropolitan Area conducted by the Demographic Analysis Office of the Direction of Census and Statistics of the

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[8]Julio Paez Celis, op. cit., pp. 522-26.

[9]Julio Paez Celis, op. cit., p. 524.

[10]L. A. Angulo-Arvelo, "Actitudes ante la Fecundidad en General y Particularmente en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, 31, 1966, p. 616.

Ministry of Development in collaboration with the Demographic Latin American Center, and from other studies, shows that the level of fecundity decreases as the cultural and economic level of population increases (Tables 14 and 22).

TABLE 22.--Average of pregnacies of women according to their grade of instruction, Venezuela 1963.*

Grade of Instruction	Average of Pregnancies
Without Studies	5.86
Primary Instruction Incomplete	4.62
Primary Instruction Complete	3.51
Secondary Instruction Incomplete	3.05
Secondary Instruction Complete	2.84
University	2.20

*L. A. Angulo-Arvelo, "Actitudes ante la Fecundidad en General y Particularmente en Venezuela," in Revista Venezolana de Sanidad y Asistencia Social, 31, 1966, p. 617.

2. Attitude of Women: The same survey shows that, between 40 and 70 per cent of women practice birth control, and that birth control is higher in high socio-economic classes than in lower classes. A study by Oscar Aguero among 1,021 patients from the Maternity Concepcion Palacios of Caracas, and 308 patients attending private clinics, shows that 90 per cent of private patients practice birth control, and from the Maternity Concepcion Palacios group with an average of 6.1 pregnancies, about 14.7 per cent practice birth control and 77.5 per cent "do not want to have more

children, they want to know about more efficient methods of birth control."[11]

Religious practices seem to have no relationship with attitude about birth control according to the following Table 23.

TABLE 23.--Use of anticonceptive methods among Catholic women according to their reception of communion, 1963.*

Reception Frequency of Communion	% Women Using Birth Control		
	Caracas	Bogota	Mexico
One or more times a month	56.7	39.9	34.8
Less than once a month	64.2	37.7	34.8
Never	54.8	49.7	39.5

*Miro-Rath, "Preliminary findings of comparative fertility surveys in three Latin American countries, Annex, Table 14," in Perez Ramirez, Gustavo, La Iglesia Catolica y La Planificacion Familiar, Asociacion Colombiana para el Estudio Cientifico de la Poblacion, Bogota, Colombia, 1965.

The bishops of Venezuela in a Pastoral Letter reject any kind of drastic imposition of birth control by the state. They explicitly condemn abortion, sterilization, and utilization of compulsive methods to impose birth control.

Speaking against illegitimate children, they recognize that "the state has the obligation to oppose uncontrolled and anarchical increase of illegitimate children." They also

[11]Angulo-Arvelo, op. cit., p. 619.

say that the state should see that the needy, especially Catholics, receive appropriate information and education about those methods permissible by the Christian doctrine. They conclude that, "in a pluralistic society like Venezuela, where there are non-Catholics and non-believers, the state institutions can give information about other birth control methods to those who are determined to use any other method according to their own conscience."[12]

3. Use of anticonceptives: Studies conducted by the Population Division of the Ministry of Health and Social Assistance (SAS) in collaboration with the Pharmacy Division, the Pharmacy Industry Chamber, and houses delivering pharmacy products of Venezuela, agree with the above findings and also prove that birth control practices show a definitive tendency in increase.[13]

4. Clandestine abortion: There exists an increasing attitude against unwanted pregnancies among Venezuelan population (Table 11), which also determines the existence of different kinds of antinatalistical attitudes.

B. Official Attitude:

Venezuela in 1964 reported to the United Nations that it "considered population increase, in general, as a positive

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[12]Pastoral Letter of the Catholic Bishops of Venezuela, La Religion, Caracas, November 23, 1969.

[13]Angulo-Arvelo, op. cit., pp. 619-22.

factor in economic development,"[14] early in 1965 established a Department of Population in the Ministry of Health and Social Assistance (SAS), early in 1966 held a large conference on population problems and public health, and in 1967 played a host and cosponsor for the Organization of American States Population Conference.[15]

There are two official dependencies which are engaged in population policy: The Venezuelan Family Planning Association (AVPF) from the Public Welfare Council of the Federal District, and the Population Division of the Ministry of Health and Social Assistance (SAS).

The philosophy of the Family Planning Services of the Venezuelan Family Planning Association (AVPF) is briefly the following: (1) The extension of the service to the population is purely free without compulsion by the Venezuelan Family Planning Association (AVPF) on them, (2) the services do not impose a method against a person's conscience, nor deny any one of those methods scientifically probed as efficient and innocous, (3) abortion and permanent sterilization are not within the domain of the Venezuelan Family Planning Association (AVPF), (4) it is a fundamental function of the Family

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[14]United Nations Economic and Social Council, Inquiry among governments on Problems resulting from the interaction of Economic Development and Population Changes, 64-26191, November, 1964.

[15]Mayone J. Stycos, Human Fertility in Latin America: Sociological Perspectives (Ithaca, New York: Cornell University Press, 1968), p. 306.

Planning Services to exercise a broad educational role in order to promote its objectives and show its personal and family advantages. This educational work is not limited only to those who voluntarily avail of the services, but rather it should be projected to the community."[16]

The Venezuelan Family Planning Association (AVPF) was founded in 1963. The Population Division was established in 1965, and until 1967, its main activities were mainly promotional. Both institutions are working in close collaboration in 39 centers, in which 32 are running by the Venezuelan Family Planning Association (AVPF), and with an estimated of a total of 50 at the end of 1969.[17]

TABLE 24.--Methods of birth control in family planning centers of Venezuela, 1966-1969.*

Methods	Year			
	1966	1967	1968	1969
Intrauterine Devices	4,859	7,260	8,719	3,815
Medicines			2,146	4,190
Rhythm			1	20
Other Methods			213	317
TOTAL	4,859	7,260	12,079	13,342

*Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta 1969, pp. 193-94.

[16]Pablo Liendo Coll, Contenido de un Programa de Planificacion Familiar, Editorial Texto, Caracas, 1970, pp. 25-27.

[17]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta 1969, p. 192.

The results of this table show an increase in family planning methods in different centers of the country.

Other activities of the Population Division during 1969; were: (a) Demographic studies, (b) a two week course about medical demography at the School of Public Health for the post-grade students of Hygienic Medical Doctors, (c) in sexual education: some talks and short courses to a selected groups and in an experimental basis.

Health Resources

The World Health Organization defines health as "a state of perfect physical, mental, and social well being, and not only the lack of disease." It further states that "the highest level of health that can be reached is a fundamental right of every man, without distinction of race, religion, political creed or economic or social condition."[18]

The National Constitution of Venezuela, 1961, states that "all Venezuelans have the right of health protection," thus defining the responsibility of the Venezuelan state of protecting its nationals without any social, political, economic or geographic limitation.[19]

In order to guarantee health to the community, the Venezuelan state administers and financies functions of

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[18]Abigail Romero Medina, and others, III Congreso Venezolano de Sanidad Publica, "Orientaciones para un Plan Nacional de Salud," in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, June, 1966, p. 209.

[19]Venezuela, Constitucion Nacional, 1961.

medico-health actions through the Ministry of Health and Social Assistance (SAS), and such actions have resulted in health improvement of the country.

These health functions are divided by Gustavo Molina,[20] for didactic purposes are as follows:

I. Functions of Health Protection:
   1. Control and provision of water
   2. Control of insects, rodents, garbage, and animals
   3. Food control
   4. Elimination of excretories
   5. Sanitation of housing, industry, and other places
   6. Control of infectious diseases
   7. International health

II. Improvement Health Functions:
   1. Hygiene of mother and child
   2. Food and nutrition sanitation
   3. Hygienic work: prevention of work risks
   4. Mental health and general hygiene of adult

III. Functions of Health Restoration:
   1. Medical and primary-aid of the patient, general and special attention in medical buildings

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[20]Gustavo Molina, and Guillermo Adriansola, Principios de Administracion Sanitaria, San Juan de Puerto Rico, 1961.

2. Assistance to the aged and cripples
3. Rehabilitation
4. Pharmacy and odontology

In order to implement these health functions, the state has the following general and administrative activities:

1. Statistics: demographic, social and administrative
2. Laboratory: Diagnosis, production, control, and research
3. Education and publications
4. Infirmary
5. Social service
6. Formation of personnel in all types and levels
7. Legal: legislation and application of laws and regulations
8. Engineering and architectural work
9. Auxiliary services
10. Research of techniques and procedures
11. Coordination of functions and activities in all levels.

The national health programs are performed in Venezuela by institutions of the national, and state governments, and by some municipalities. The institutions are:

Ministry of Health and Social Assistance (SAS)
Venezuelan Institute of Social Security
Public Welfare Council of the Federal District
Social Directions of the States and Federal Districts

Army Health Services

Medical Services of other Ministries

National Institute of Sanitary Works (INOS)

Medical Services of other Municipalities.

The Ministry of Health and Social Assistance (SAS) performs integral health functions in cooperation with state governments and some municipalities; the other institutions have, in general, programs of restitutive medical attention. The National Institute of Sanitary Works (INOS) is an autonomous institute of the Ministry of Public Works, and deals with the construction and administration of aqueducts and sewerage systems for cities of 5,000 and more population.

There are, also, private institutions working in:

1. Medical and health services of iron and petroleum companies

TABLE 25.--Number of hospitals in Venezuela, 1969.*

Dependence	Hospitals	Beds
Ministry of Health and Social Assistance (SAS)	88	19,597
States	60	2,591
Social Security	17	1,677
Ministry of Defense	5	1,323
Municipalities	13	2,376
Charitable Foundations	8	759
Oil Industry	13	620
Private	129	2,908
TOTAL	333	31,851

*Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta 1969, Caracas, 1970, p. 138.

2. Private lucrative clinics

3. Private benefit clinics.[21]

Number of Rural Medical Centers (Medicaturas): 488 Number of Rural Medical Posts (Dispensarios): 939. In general, the "Medicaturas" have local resident medical doctor, who also attends to some of the "Dispensarios."[22]

TABLE 26.--Number of medical doctors and population per M.D. in federal dependencies, Venezuela, 1969.*

Dependence	No. of M.D.	%	No.of Pop. per M.D.
TOTAL VENEZUELA	9,114	100.00	1,101
Caracas Metrp. Area	4,204	46.13	544
States:			
Anzoategui	258	2.83	1,836
Apure	53	0.58	3,197
Aragua	242	2.65	1,715
Barinas	76	0.83	2,772
Bolivar	214	2.35	1,525
Carabobo	501	5.50	965
Cojedes	48	0.53	2,000
Falcon	199	2.18	1,872
Guarico	123	1.35	2,714
Lara	369	4.05	1,540
Merida	331	3.63	990
Miranda (Without Sucre District)	167	1.83	1,795
Monagas	162	1.78	1,904
Nueva Esparta	93	1.02	1,037
Portuguesa	113	1.24	2,575
Sucre	185	2.03	2,612
Tachira	258	2.84	1,978
Trujillo	214	2.36	1,757
Yaracuy	77	0.84	2,666
Zulia	1,194	13.10	1,134
T.F. Amazonas	16	0.17	795
T.F. Delta Amacuro	17	0.18	2,014

*Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1969, Caracas, 1970, p. 138.

[21]Romero Medina, op. cit., p. 211.

[22]Revista de Sanidad y Asistencia Social, 31, 1966, p.222.

The main characteristics of Venezuelan health public institutions are:

1. Technical, administrative, and budget autonomy
2. Lack of coordination of health actions at the recipient level
3. Great normative variability
4. Executive centralization
5. Poor connection and communication among different levels--central, regional, and local of each institution.[23]

Such a situation causes dispersion of efforts, duplicity of services, low efficiency, and frustration among health services people and the community recipient.

The policy of health and the need for planning such a policy in Venezuela is characterized by the following facts:

1. The national government of Venezuela performs an integral function in the protection of health with programs for the improvement, protection, and restoration of health;

2. The Ministry of Health and Social Assistance (SAS) exercises the direction of health services in the

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[23]Francisco Urdaneta, "La Organizacion y Funcionamiento de los Servicios Medicos en el Presente Quinguenio," paper presented at the Second Venezuelan Congress of Public Health, February-March, 1961.

nation, and is responsible for all health programs in cooperation with states and municipalities of the country;

3. There has been progress during the last few years, but there still exists a great percentage of diseases by certain infectious diseases like tuberculosis, gastroenteritis, helminthiasis, etc., that shows the existence of an inadequate environment and justify the need for continuing and increasing programs for environmental sanitation, health education, and immunization. On the other hand, the increasing importance of degenerative and mental diseases, accidents and violence creates new situations and the need for efficient methods. These health problems and their possible solutions cannot be taken into consideration apart from other economic and social problems.

The Heads of the American States in their meeting at Punta del Este, Uruguay, 1967, agreed that the improvement of health conditions is basic for the economic and social development of Latin America.[24] They said that, according to the needs of each country, the available scientific knowledge should be utilized for the following objectives:

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[24]Union Panamericana, Reunion de los Jefes de Estado Americanos, Punta del Este, Uruguay, 1967 (Washington, D.C.: Secretaria General de la Organizacion de los Estados Americanos, 1967), pp. 21-22.

a. Control and eradication of transmissible diseases

b. Improvement of programs for water supply, sewerage, and other essential services for the environmental sanitation of rural and urban areas, especially for those areas with low income population

c. Improvement of nutrition level in poor areas taking advantage of national and international cooperation

d. Improvement of mother-child programs, and education about integral family orientation

e. Formation of the professional, technical, administrative, and auxiliary personnel, and health research

f. Integration of the national health programs in the national economic development programs.

For this, the Heads of the American States decided:

a. To develop planning and execution of national plans aimed at the improvement of health

b. To mobilize internal and external resources for financing these plans, and

c. To ask the collaboration of the Pan American Union Health with governments of the region in preparing programs to acquire these objectives.[25]

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[25] Ibid., p. 22.

The Inter-American Economic and Social Council at Punta del Este, in matters of health planning, declared the need: To create planning and evaluation units in the Ministries of Health with representation before the national organizations of general planning for economic development and social progress in order to coordinate both programs.

So, the national government of Venezuela, answering these compromises, stimulated the creation of the Health Planning Office at the Ministry of Health and Social Assistance (SAS) which should work in collaboration with the Central Coordination and Planning Office of the Nation for the economic and social improvement of the country.

By Decree No. 492, December 30, 1958, the national government of Venezuela created the Central Coordination and Planning Office (CORDIPLAN) under the direct supervision of the office of the President of the Republic. CORDIPLAN's functions are to advise the national government in establishing plans for the economic and social improvement of the country.[26]

By Resolution No. 15, June 19, 1964, the Ministry of Health and Social Assistance (SAS) created the Sectorial Planning Unit (Unidad de Planificacion Sectorial), which functions are: to advice the Ministry of Health and Social

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[26]CORDIPLAN, Plan de la Nacion 1965-68 (Caracas: Oficina Central de Coordinacion y Planificacion, 1967), p. 11.

Assistance (SAS) in formulating all health plans which should be in close relationship and coordination with social and economic plans of the country.[27]

There have been difficulties in formulating a Health National Plan of short term by the Sectorial Planning Unit, especially because of the existence of other Ministry offices with similar functions like the: Planning Office of the Bureau of Malariology and Environmental Sanitation; Commission of Programs for Medical Health Buildings, MOP-SAS; Foment of Studies Commission; Research and Scholarships; and some functions of the Direction of Personnel and of the Direction of Administration. Other reasons are: That the country has no adequate instruments in health planning, and government administration is characterized by partial programs and without coordination.[28]

So, the present public health activities are formulated and executed in an institutional way without the establishment of priorities interrelated and without satisfactory coordination with social and economic development plans.[29]

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[27]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta 1969, p. 89.

[28]Revista Venezolana de Sanidad y Asistencia Social, 31, 1966, p. 304.

[29]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1969, pp. 89-90.

Thus, health national plans should be the responsibility of all health institutions as well as the national government's through executive and legislative powers.

Health Needs Priorities

In formulating different health needs and priorities we might look at the programs and goals of the five general Divisions of the Ministry of Health and Social Assistance (SAS) and combine them in some way with the objectives of the Plan of the Nation stated by CORDIPLAN.

The health objectives of the Plan of the Nation, 1965-68, are directed to obtain a significant improvement of the life conditions of the population.[30] And, in environmental sanitation, the Plan aims at providing water to 90 percent of the urban population in cities of more than 5,000 population and in establishing aqueducts for centers from 500 to 5,000 population, with a total of 8,468,000 people served in 1968; and sewerage services for 2,547,000 population at the end of 1968. In the construction sector, the plan aims for the construction of 240,000 housing units for lower income people with direct or indirect help from the state and other private institutions. The Plan also aims for the construction of hospitals, popular vacational and recreational centers, and other facilities for the improvement of life of the people. It also aims at the

[30]CORDIPLAN, Plan de la Nacion 1965-68, pp. 19-23.

construction of hospitals with an increase of 3,900 more beds for the period.

In view of the lack of a national health plan, and the ways the health needs are met by the health agencies of the country, it would be difficult to state a set of health needs priorities.

For purposes of the present study, we will take into consideration the health programs of the different departments of the Ministry of Health and Social Assistance (SAS), other health institutions, and the health objectives stated in the Plan of the Nation 1965-68 by CORDIPLAN. We will follow some kind of rationale approach in judging the priorities. We understand that by looking at the gravity of the problem and its need for a rapid solution, some criteria can be established by which educational media can play a bigger and better role in helping to solve the identified health needs of the adult population of Venezuela. These criteria include: (a) the number of people affected by the needs and the number reached by mass media, (b) the need for education as an integral ingredient for solving health needs, (c) the dispersion of population affected by health needs and percentage reached by mass media, and (d) the health needs and the need for a quick presentation of solutions to more people.

With these criteria in mind, we may divide health needs according to the following priorities:

1. Population Explosion and Family Planning
2. Environmental Sanitation:
   a. Use of water: aqueducts, sewerage and sanitary services
   b. Housing and industrial sanitation
   c. Rural endemic diseases: Chagas, Malaria, Aedes Agypti, etc.
3. Nutrition
4. Dental Care and Odontology problems
5. Pediatric care
6. Infectious and Venereal diseases
7. Alcoholism and drugs
8. Accidents and violent deaths
9. Hospital and Medical Buildings; coordination services
10. Medical Schools: personnel and materials
11. Heart diseases and cancer
12. Mental diseases.

The above priorities are also in agreement with programs recommended in the Plan of the Nation 1965-68 by CORDIPLAN[31] which expresses the opinion of the national government leaders, and with programs proposed by medical authorities of the country recommending certain guidelines for a health national plan.[32]

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[31] Ibid., pp. 363-390.

[32] Romero Medina, op. cit., pp. 205-237.

In order to cope with the above needs and priorities, an action plan has been recommended which in general guidelines are:

1. Population Explosion and Family Planning:[33]
   Present situation in Venezuela:
   a. Demographic and medical-social reasons
   b. Present activities, private and public attitudes,
   c. Sexual education.
2. Environmental Sanitation:
   CORDIPLAN:[34]
   a. Elimination of environmental factors that cause diseases
   b. Program of aqueducts and sewerage services
   c. Programs against Chagas, malaria and other endemic diseases;
3. Nutrition:
   Fomentation of nutrition programs, especially the pre-school programs,
4. Dental Care and Odontology:
   a. Fluoridation of some rural and urban aqueducts to prevent or cure the existing caries in about 95 percent of the population,
   b. Odontology needs of the community

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[33]Angulo-Arvelo, op. cit., pp. 607-644.

[34]CORDIPLAN, Plan de la Nacion 1965-68, pp. 364-370.

c. Educational aspect:

(1) professional and auxiliary personnel

(2) general population

5. Pediatric Care:

a. Increasing the quality and quantity of pre-natal control services

b. Use of existing hospital beds when they are not used for other services

c. Increase of premature-born services other than those existing in Caracas Maternity "Concepcion Palacios."

6. Infectious and venereal diseases:

Preventive programs, hygiene and vaccination

7. Alcoholism and Drugs:

Educational aspect: causes and effects

8. Accidents and violent deaths:

Traffic regulations, consequences of violence.

9. Hospitals and Medical Buildings; coordination services

CORDIPLAN aims for the need of:

a. Construction priorities: cost, medical services, geographic areas

b. Administrative personnel

c. Coordination of services

d. Social Security

10. Medical Schools:

    Educational facilities and graduate studies

    Teaching techniques

11. Cardiologic and Oncologic services:

    a. Construction of oncologic centers

    b. Formation of personnel in statistical data gathering about cancer

    c. Preventive programs

    d. Cardiology services and personnel improvement,

12. Mental Programs: emphasis on:

    a. Environmental health in coordination with all institutions working in that area

    b. Policy based on:

        (1) Extension of psychiatric care

        (2) Integration of family

        (3) Treatment to be done if possible in family environment

        (4) Increasing in the number of beds

        (5) Formation of personnel to treat such disease.

Preliminary Considerations

To cope with the above objectives and in harmony with the programs underlined by CORDIPLAN, we would propose the use of radio, television, and other media, as well as

interpersonal communication to help solve these identified and other related needs.

The systems proposed and aimed to help solve these needs in Venezuela will be composed of a wide radio and television system covering the nation geographically and reaching its adult population with its educational messages. Both instructional radio and educational television will be complemented with other educational materials, and/or substituted by other educational techniques like visits of community leaders, conferences in schools, clubs, etc., and workshops, special courses, etc.

There are many ways by which the proposed system could work to help solve population explosion. The following is one of them.

We would propose that the Family Planning program start as a pilot project in some cities of the country. These are some reasons in choosing this:

a. Slum areas of these cities are overcrowded and their living conditions are poor
b. Resources of medical and media personnel are more prevalent in cities than in other places in the country
c. Medical supply facilities are in abundance in these places, and access to them is easier for the intended users due to better communication facilities

d. The fact that there exists some positive activity in the identified need (about 39 centers in the cities).

Behavioral and social factors.--The cooperation of the public is essential, and interest in the project is connected with the educational level of people involved. Success will depend to a great extent on the attitude of the intellectuals and professionals of the country.

Administrative problems.--Education of the public. Education should be as a nationwide program and all available resources should be used to motivate the public in order to teach methods and guide them to birth control facilities.[35]

General functions of a basic Family Planning Program.--(a) Instrumental functions: provision of services and supplies, provision of information, and generation of social support; (b) Control functions: top leadership, peripheral supervision, and evaluation; (c) Supporting functions: training, financial support, and research.[36]

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[35]Bernard Berelson et al., Family Planning and Population Programs: A Review of World Developments (Chicago: University of Chicago Press, 1966), p. 301.

[36]Ibid., p. 333.

Informational and educational programs.--

1. Target Population: We would presume that people between 15 and 44 years of age are the target audience. According to estimates the population of this age group in Venezuela is about 4,208,656 people in 1970 (Table 6), of which, about 1,064,350 people are married or living in common-law marriage in 1961 (Table 8). One of the jobs of public information channels is to help the professionals in the field to reach this group.

2. Channels of Communication:

a. Mass media: In a sample survey taken in Korea in 1965 among couples under 44 years old indicated that almost 46 percent of the eligibles stated that they heard about the family planning program over the radio, and 25 percent read about it in newspapers, and 16 percent read about it in magazines.[37]

Other means of communication used in Korea were:

b. Two family planning movies and one short trailer, which was often attached to newsreels,

c. Public meetings, which included: showing of movies and distribution of literature and

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[37]Paul Hartman, "Informational and Educational Programs," in Family Planning and Population Programs: A Review of World Developments, ed. by Bernard Berelson (Chicago: University of Chicago Press, 1966), p. 347.

talks over the local radio amplifiers, there were also some audiovisual mobile units,

d. Special events, like Mothers' Day, Children's Day, songs, posters, etc.,

e. Workers in the field: They used equipment and supplies in their work, and also, they sought the cooperation of local news agencies and mass media,

f. Word-of-mouth: neighbors, friends, and relatives.

Results from an action-research project in one area of the city of Seoul show that about 45 percent of the total who visited one of the four family planning centers in the area stated that they had been influenced to do so by neighbors, friends or relatives; about 12 percent came as results of an invitation by radio; 5 percent by newspapers; and 1 percent by television.[38]

The Korean program also held meetings with key agencies and groups to keep them informed and change ideas; they distributed reference materials to newspapers, magazines, radio and television stations, and held news conferences to report development and progress.

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[38] Ibid., p. 349.

Operational Relationships Between the Systems Proposed and the Family Planning Programs

Educational media should be a component of a teaching and learning system which works best when all components of the system are integrated and balanced.

Family Planning programs consist mainly of three parts: (1) information, (2) action, (3) functional research-evaluation.

Assumptions: Family planning is mainly a problem of decision making by a man and his wife. Therefore, a program should be directed towards educating families in making decisions.

Initially the program should be one of intensive education of the adult population. So, one specific operational approach would consist of:

1. Development and promotion of a program of adult education in all areas related to the identified need
2. Preparation of materials
3. Preparation and training of personnel
4. Counseling and distribution of contraceptive supplies
5. Research on health problems and means of evaluation.

The function of mass media is more closely related to number one above than it is to the other points.

The job of mass media in this particular case would be to spread information and a sense of social rightness about the practice of birth control in order to develop the perception of social support within the community.

In terms of media to be used, we may divide the program into three steps: (1) First year: Use of audiovisual materials, (2) Second year: Use of audiovisual materials and radio, and (3) Third year: Extension of the family planning program to other areas of the country, and use of television.

First Year

This would be dedicated to the formation and training of personnel (Berelson, 1966).

Medical Aspect of the Family Planning:

A. Professional Level:
    1. Workshops for:
        a. Hygienic medical doctors at the Public Health School of Caracas, and medical students of Caracas universities
        b. Medical school students at the Universities of Merida, Maracaibo, Valencia, Barquisimeto, and Oriente,
    2. Workshops at Family Planning centers already in operation in the country, and for the following personnel:

a. Medical doctors and pharmacy personnel

b. Nurses and paraprofessional personnel,

3. Workshops in capital cities of each state for:

a. Medical doctors of each city and pharmacists

b. Medical doctors and pharmacists of the state rural areas

c. Nurses and paraprofessional personnel of the city medical institutions

d. Nurses and paraprofessional personnel of the state rural areas.

B. Professionals in the field:

1. Workshops for: Training personnel directly involved in the program, like house visitors or motivational workers, and auxiliary personnel.

C. 1. Conferences: Using the above personnel, a more extensive program would be developed of conferences attended by leaders of the community like:

a. Government officials

b. Industrial and commercial directors

c. Military personnel

d. Religious groups

e. Political groups

f. Educational groups

g. Union workers

h. Radio and TV monitors and other media people.

D. Media Aspect:

1. Materials needed for workshops and conferences:
   a. Filmstrip projectors and material for them
   b. Slide projectors and slides
   c. Tape recordings and tapes
   d. Movie projectors and films (8mm and 16mm)
   e. Pamphlets and other printing materials
   f. Posters and boards
   g. Exhibit materials
2. Materials needed for workers in the field:
   a. Filmstrips, slides, charts, tapes, pamphlets and other printing materials, demonstration materials.
3. Material-content: All materials to be used should be revised or selected by the health authorities of divisions of Health, Education and Population of the Ministry of Health and Social Assistance (SAS).

Available resources of both divisions can be used for making of materials and distribution of audiovisual equipment.

Second Year

Besides all methods and techniques of the first year of operations, we would recommend the use of radio for two main purposes: promotional and general information, and

instructional education. We would also recommend other techniques like: home visits, group meetings, mother's courses, audiovisual mobile units, printing media, newspapers and magazines, and interpersonal communication, and sexual education in schools (Hartman, 1966). Mass media should work in close collaboration with all of them.

I. Radio:

The use of radio at this stage should be functional in two main aspects: promotional and general information, and instructional education.

1. The promotional and general information campaigns should be directed at the target population and in combination with other media, like articles in newspapers and magazines, posters, and other means of advertising about family planning. These promotional campaigns would be directed to:

A. General Public; and they will be in the form of:

1.) Short messages directed to encourage further inquiry on the part of the audience,

2.) Radio interviews with family planning workers and other authorities about different aspects of family planning programs and other aspects of sexual education, etc.,

3.) Shows or dramatic "novels" presenting different aspects related to family planning,

4.) Songs stressing the need of birth control,

5.) General information in the family planning area.

2. Instructional Radio

A. Special Audiences (Rogers, 1969):

1.) Radiophonic (radio) schools: We would not recommend the organization of a radiophonic school for the only purpose of solving this special need, because in addition to their great expense in time, personnel, and money, such a technique suffers the disadvantage of attracting only the most highly motivated. Group meetings, according to Puerto Rican and Jamacian experience,[39] should be employed only for opinion leaders in the community, for those most highly motivated, and for those already practicing contraception. So, radiophonic schools can serve to sustain and reinforce the motivation and behavior of those who started, and to form a small highly motivated elite which could stimulate others by means of the normal person to person channels of communication. Radiophonic schools formed to help solve other health needs we recommend also to be used to bring education to these particular group audiences.

Teachers and monitors at the point of reception should be well trained and informed in family planning area for discussions, and sometimes, when circumstances will permit, an expert in the family planning field will be brought in for further discussion after the radio lesson. Media aids like filmstrips and slides in those places with

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[39]Stycos, op. cit., pp. 95-97.

electrical power facilities, and charts and boards for places without electrical power, will be recommended for lessons and discussions.

We recommend the use of some means of feedback. We suggest correspondence between literate students and the radio source and tests or examinations for radio students. We also recommend that known and proven techniques of instruction for accentuating student interactions with subject matter be used extensively. Emphasis should be put on raising questions, stating issues, defining conflicts and controversies, requiring students to make judgments or inferences from demonstrations, etc., and send back to radio source their questions and answers by mail, telephone, or short-wave radio.

We would recommend that the themes treated in radio schools be about family planning, and related areas, like sexual education, child care, home economics, savings, and all aspects related to family environment.

2.) Home-based audiences: i.e., those who do not want or cannot meet in certain places to listen to radio lessons. In order to stimulate their learning, a visiting teacher supervising their progress will be recommended. Home visiting family planning professionals would be recommended for this job. Motivational techniques should be devised to make them listen to the radio. To foment radio listening, programs by word-of-mouth would be recommended.

3.) Courses for mothers: Development and promotion of a program of women's education and home development should include the following areas: (a) home sanitation, (b) child health, (c) maternity diseases, (d) family planning, (e) kitchen gardening, (f) saving, etc.

We recommend that this program be presented at the same gathering places of the radiophonic schools for those mothers able to assist, and use same radiophonic school facilities; and those who do not want or cannot assist at these gathering places, we should encourage them to listen to the programs in their homes by developing promotional campaigns directed to the general public.

For more effective use of audiovisual materials in both radiophonic schools and special courses for mothers, the monitor teacher will follow those techniques that best serve him, either showing a filmstrip or chart before each unit for a general introduction, or coordinated with broadcast program, or after the broadcast at a convenient time for detailed study.

Tape recordings of the broadcasts for review and reinforcement of the lessons at time suitable for some special students and as individualized instruction would be recommended.

II. Home Visits; to special couples or small groups:

An integral part of the family planning is carried out by professionals in the field who bring information,

help and supplies to the couples in their homes (Hartman, 1966). We would recommend that the workers use the following media: flip charts, flannel boards with illustrations, or filmstrips and slides, and demonstration models, and printing materials like pamphlets and leaflets.

They need adequate practical training in this area and media training should form an integral part of their general training.

Individualized instruction to some couples would be recommended.

III. Audiovisual Mobile Units:

Another information media that we would recommend will be the use of several audiovisual mobile units (Hartman, 1966).

Materials on these units will include films, filmstrips, records, printing materials, and birth control supplies.

The personnel taking the units from place to place in the area of birth control centers, besides driving, will operate the audiovisual material and be experts in the family planning field.

The main purpose of these units will be the dissemination of information and collaboration with other professionals in the field.

IV. Other Media:

The media proposed above would not be so effective in promoting and moving the people to use family planning practices if they do not operate in close collaboration with other informational and educational means (Berelson, 1966).

1). Family planning and the school curriculum: The possible contributions of the education system are based on the assumption that the population explosion is a long-ranged problem and that basic understandings and attitudes by the young are basic in the area of family planning. Attention should be oriented toward those goals of the education system which will support the objectives of family planning and those courses of action seem to be the most promising. One course of action would be to try to influence curriculum people giving priority to teacher-training institutions and particularly those institutions training elementary school teachers. Special programs like short courses or conferences on family planning for teachers held at strategic points in the country are some of the means in reaching them.

2). Posters in different locations, like public gatherings, recreational centers, factories, markets, transportation facilities, etc.

3.) Public announcements through loud speakers, clubs, churches, syndicates and unions, etc. can help to encourage people to hear radio.

4.) Personal letters mailed to members of different organizations.

Third Year

Besides all methods and techniques of the first and second years of operation we would recommend the use of television mainly for urban areas where there is electrical power and a number of sets are available (Schramm, 1969). Just as we recommend the use of the radio for promotional and general information, and for instructional education, so do we recommend the use of television.

I. Television:

In the promotional and general information area, television would be used in developing family planning campaigns directed to the target population and in combination with the radio, newspapers and magazines, and other means of communication already described. Programs directed to:

A. General Public:

1). Brief educational messages to encourage further inquiry on the part of the audience

2). Television interviews with authorities and professionals on family planning about different aspects of the program

3.) Films on family planning and sexual education

4.) Short educational dramatic presentations in areas related to family planning and other related areas like child education, home sanitation, etc.

5.) General information on family planning.

B. Special Audiences:

1). Television schools: For special groups of community leaders, for those already practicing contraception, and those most highly motivated.

Further discussion will be recommended with the teacher monitor after the lesson presentation on the theme presented. We recommend the use of some means of feedback. We suggest correspondence between literate students and television studio teacher; evaluation from the classroom teacher about the behavior and learning progress of students, tests and examinations for literate television students; special sections on TV-Guides for the classroom teacher to fill in about class progress and behavior, etc. We also recommend that known and proven techniques of instruction for accentuating student interactions with subject matter be used extensively. Emphasis can be put on raising questions, stating issues, defining conflicts and controversies, requiring students to make judgments or inferences from demonstrations, etc., and send back to the television station teacher their questions and answers by mail, telephone, or short-wave radio. Visits from the

television station teacher to the classrooms will also encourage feedback.

We also recommend that the themes treated by television be about family planning, and related areas, like sexual education, child care, home economics, savings, etc.

2). Home-based audiences: i.e., those who do not want or cannot meet in certain places to watch television lessons. In order to stimulate their learning, a visiting teacher supervising their progress will be recommended. Home visiting family planning professionals would be recommended for this job. Motivational techniques should be devised to make them watch television programs. To foment television watching, programs by word-of-mouth would be recommended.

We would recommend that during this third year of family planning program operations, the whole program be extended to other areas of the country besides the city centers already in operation.

The television program might be extended to other parts of the country during its second year of operation if the evaluation research indicates the need to do so.

Summary

This chapter has analyzed as an example of the health problem the population explosion problem in Venezuela and family planning activities in the country. Available health resources to solve the health needs of Venezuelan

adult population have been presented. Due to the lack of a national health plan, and for purposes of this study, a set of health priorities have been established, population explosion being the foremost priority of the country.

The available health resources, being inadequate to cope with health needs, and a proposed media system and how it can be used with the other health resources of the country to help solve the population explosion problem have been presented.

A program designed to be used by the proposed radio and television systems as a part of the total communication program on family planning will be presented in the next chapter.

CHAPTER III

FAMILY PLANNING PROGRAM

Family Planning is the control of human reproduction, the planning of conception in each circumstance, without leaving this important biological phenomenon to the irrational actuation of the sexual instinct.[1] So, family planning consists in delaying birth of children or in spacing pregnancies. In both cases, the interested parties should analyze if the born-to-be child will have an adequate biological protection, and if he will be able to develop his personality in a socio-educational process appropriate to human dignity.

There is a need for a national campaign in Venezuela to use all available communication media to form a consciousness of the problem. The campaign should create the conviction that to bear a child in circumstances which do not assure him minimum conditions for his development would constitute an enormous crime against the most elementary rights of the procreated child, and against the integrity of society.[2]

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[1]Pablo Liendo Coll, Contenido de un Programa de Planificacion Familiar (Caracas: Editorial Texto, 1970), p. 9.

[2]Ibid., pp. 94-95.

The primary objectives of the educational aspect of family planning for users are:[3]

(a) To utilize efficient methods of family planning

(b) To be persistent in the use of them, and

(c) To recommend family planning services to their friends

To implement their objectives, they should know:

(1) Personal and family advantages of family planning methods

(2) That such methods are harmless, but some of them may cause inconveniences or failures

(3) The need for periodical check ups

(4) The danger of clandestine abortions

(5) The inefficiency of home-made methods, and

(6) Personal advantages of detecting early pathological processes.

Thus, the educational role should prepare the users:

(a) To handle the elected methods with a minimum of visits to family planning services

(b) To know when they are in danger

(c) To utilize temporary substitutes.

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[3] Ibid, p. 51.

Proposed Units for an Educational Family Planning Program in Venezuela

Unit 1, Family Orientation:

1. Irresponsible parenthood: consequences for children
2. Difficulties in satisfying all needs of a large family with a low income
3. Difficulties of providing education to a large number of children
4. Desolation of neglected children
5. Moral and social problems of forsaken unmarried mothers
6. Economic problems of abandoned mothers
7. Working impossibilities of abandoned mothers, due to the need of taking care of their children
8. Open, forced, or hidden prostitution of abandoned mothers
9. The predicament of orphans
10. Dangers of pregnancies when they are against medical recommendation
11. Dangers of clandestine abortions
12. Advantages in detecting early pathological processes

Unit II, Family Planning:

1. Knowledge of minimum elements of anatomy and sexual physiology for the correct use of the elected method of birth control

2. Methods of birth control available by doctor's prescription: description and limitations
3. Methods of birth control obtainable without a doctor: description and limitations
4. Philosophy of Venezuelan Family Planning Services

Unit III, Consequences of Lack of Family Planning Services in Venezuela:

1. Social consequences
2. Educational consequences
3. Health consequences: physical and mental
4. Demographic consequences
5. Economic consequences
6. Religious implications

Unit IV, Sex Education:

1. Family planning and sexual education

Unit V, Nutrition--Consequences upon Health:

1. Nutritional problems in Venezuela
2. Nutritional needs of pre-school children

Unit VI, Home Education:

1. Home education and matrimonial counsel
2. Home sanitation
3. Kitchen gardening
4. Child care
5. Buying and saving
6. Participation in family planning services.

It would be beyond the scope of the present study to explain in detail the procedures to be recommended for each and every one of the themes listed above. In order to give a general idea about how the proposed systems will work with family planning programs, we will show an example: IRRESPONSIBLE PARENTHOOD: CONSEQUENCES FOR CHILDREN. The example will include a filmstrip, radio, and television scripts and a possible program with follow-up materials and related methods that could eventually be used as a part of a total communication program.

UNIT I, FAMILY ORIENTATION

SUBJECT: 1. IRRESPONSIBLE PARENTHOOD: CONSEQUENCES FOR CHILDREN

AUDIOVISUAL MATERIALS

I. Filmstrip

Title: "Introduction to Family Planning"

Idea: Irresponsible parenthood brings children into a physical and social environment of degrading conditions. Birth control is presented as one good means for achieving responsible parenthood.

Purposes: The intended audience in order to be responsible parents will be induced to:

(a) Make the people receptive to ideas about birth control

(b) protect the life of children already born.

Goal: To convince the audience that family planning services are the best answers for a responsible parenthood.

Audience: Adult population of Venezuela in small or big instruction groups, for workshops, conferences, audio-visual mobile units, radio schools, and special courses for mothers.

This filmstrip is intended for mixed audiences, but when used for women alone, emphasis should be put on those birth control methods more directly related to women. When the audience is composed of men only, methods of birth control more related to women should be presented with less detail.

Form and Methodology: Filmstrips are good visual aids to reinforce instruction. Their compactness, fixed sequence, easy handling for projection, and low cost for additional copies are some of their advantages in instruction (Wittich and Shuller, 1967).

This first filmstrip, "Introduction to Family Planning," will have two well-defined parts. The first as an introduction covering Unit I, No. 1, "Irresponsible parenthood: consequences for children," and the second part, covering the whole Unit II, pp. 73-74.

The pictures can be used for many purposes. The use of enlarged photographs, drawings, titles, and slides arranged and photographed in sequence with a suitable 35 mm.

single frame copy camera for production of filmstrips will be recommended (Kemp, 1963).

A complete printed and/or taped commentary will accompany each strip. The recorded narration will be accompanied by an audible signal to indicate frame changes--either with a tape or disk sound unit. Thus, it can be used for home-visiting instructions, for workshops, and conferences or radio programs. Music from Venezuelan composers will be used at the beginning and at the end of the filmstrip.

Individual and group discussions during and after the presentation will be recommended (Schwalbach, n.d.).

These programs will be tested with sample test audiences in urban and rural areas to measure their adaptable capabilities to different audiences in order to correct deficiencies and improve their educational impact.

Shots: The following photography shots will be used in covering the scenes to be described: Long Shot (LS), means that the subject is at a distance from the camera; Medium Shot (MS), when the camera covers the subject and nothing more; Close-up (CU), brings the camera in to concentrate on a feature of the subject.

Script

	Visual	Narration
1.	Main title: INTRODUCTION TO FAMILY PLANNING	Background music
2.	Credit title: Prepared by . . .	Music
3.	Credit title: With the cooperation of.	Music out.
4.	CU Father and mother kissing their happy baby.	There should be joy in children because they bring happiness and pride to a family.
5.	MS New born child.	The child is born naked, incapable of his own survival and development.
6.	MS Mother holding her baby, and his father looking at him.	He needs a family to help him survive, to protect him, and to develop his body and his mind.
7.	CU Baby in the same picture.	The child has the right to live, and his father and mother must take care of him until he is able to take care of himself.
8.	CU Dish of food and the word: FOOD.	His parents must provide him with food to grow up strong and healthy.
9.	MS Boy looking through a window.	He needs also shelter, a home to stay, to play, to live in.
10.	CU Medical doctor.	He needs health care, a baby should be brought to a doctor to be protected against diseases.
11.	CU Open book.	He also needs education to better prepare him for life.

12. CU Drawing of a heart.	But, above all, he needs to be loved. He should be loved, recognized, and helped by both his father and mother.
13. LS Drawing of a church and house.	The child also needs spiritual and moral guidance. The school and the church can provide education, but he should receive the most important part of his education at home.
14. CU Hands of man and woman interweaved.	These needs must be provided to a child by those who brought him into the world: by his father and mother.
15. MS Naked children in front of a miserable hut.	When a man has children in different homes and with different women, he cannot take care of them. Thus, there are so many children abandoned in Venezuela who live in miserable conditions.
16. CU A child.	More than half of the children born in Venezuela come from common-law marriages, where the father does not take care of them, and the mother cannot provide them with their basic needs: food, shelter, health care, and education.
17. CU Face of a child crying.	When the child is abandoned, he becomes sick, and may eventually die from lack of care.
18. MS Child sitting down on the ground near a hut and looking far away.	If he grows up, his physical health is poor, and his mental health suffers from lack of love and affection of his father and mother.
19. LS Child crying and looking far away.	Being abandoned and without affection, the child lives in despair and poverty.
20. MS Boy wandering in a city street.	Most of the time he becomes a juvenile delinquent. Our cities have many of them, children without fathers.

21. MS Children naked and playing in a slum.	Overcrowding and loose sex morals of city slums increase the number of abandoned mothers and new illegitimate children, issues of irresponsible fathers.
22. MS Pregnant woman holding a baby and four more naked children around her.	The abandoned mother becomes pregnant again and again, because she does not know methods of contraception, and the phenomenon is repeated creating each time a more desperate situation.
23. Title: PART II, FAMILY PLANNING SERVICES	To prevent this sad situation, family planning offers its services to those who want them.
24. MS Couple entering a family planning clinic.	Family planning services want to help build for you a happy and healthy family by preventing unwanted pregnancies.
25. MS Woman behind desk attending a couple.	Family planning offers you birth control services and other related services. These birth control services allow you to have children when you want them, and avoid pregnancy when you don't want it.
26. MS Woman talking to the telephone in front of a couple.	When other health services are needed we will send you to the right place to get them.
27. MS Doctor talking to a couple.	The methods of birth control offered at family planning services are harmless and do not interfere with your sexual life. Every method of birth control works differently.
28. CU Couple listening.	The doctor at the family planning clinic will help to select the birth control method that will work best for you to have children only when you want them.

29. MS Drawing of woman.	To understand how birth control works we should know how a woman becomes pregnant.
30. CU Drawing of man's reproduction organs.	But, first, let's see how the reproduction organs of a man work: the man's seeds called sperm are produced in his two sex glands called testicles and located in a sac-like thing called scrotum.
31. CU Drawing of several sperm cells.	There are millions of sperm cells in every teaspoon of male fluid. They have a head and tail, and move.
32. CU Drawing of woman's reproductive organs with sperm cells in the birth canal.	During sex relations the man's seeds pass from his sex organs into the woman's birth canal called vagina.
33. CU Same drawing with sperm into the womb.	And these seeds enter the womb also called uterus through a small opening called cervix.
34. CU Same drawing, and ovaries with eggs.	There are two ovaries, one at each side. Every month they release an egg into the tube that travels towards the womb.
35. CU Same drawning, an egg into the tube and sperm meets it.	If one sperm of the man meets the egg, both move into the womb, and the woman becomes pregnant.
36. CU Same drawing. Foetus into the womb.	And a child starts to grow into the mother's womb.
37. CU Drawing representing a wall between egg and sperm.	To prevent pregnancy the man's seeds must not meet the egg. There are many methods to stop them from meeting. All methods of birth control offered at family planning centers are designed to keep this from happening.

38. CU Open box display of methods of birth control.

There are different birth control methods that work differently. These are the ones offered at family planning services.

39. CU Open box of birth control pills.

These are birth control pills. They stop the ovary from forming eggs, so pregnancy cannot occur. They are very popular and millions of women in the world are taking the pill.

40. CU Calendar with marks on twenty days.

The doctor will prescribe the pill for the woman. He will explain that some pills must be taken every day for twenty days.

41. CU Calendar with marks on 21 days.

Some pills must be taken every day for twenty one days.

42. CU Calendar with marks on every day.

Others must be taken every day.

43. CU Open boxes of birth control pills.

A woman does not have to use anything else if she takes the pill. But, if she forgets one, she may become pregnant. The woman should have an internal examination from her doctor at least once a year.

44. CU Different types of I.U.D.

Intrauterine devices, or I.U.D., are small plastic or metal shapes which the doctor places inside a woman's womb. They come in different shapes and they are one of the best and more popular methods of birth control especially in Venezuela.

45. CU Drawing of woman's reproductive organ and IUD in her womb.

They can remain inside for years without interferring with sexual relations. Some women may feel uncomfortable, but this is temporary and only during the adjustment period. If she wants to become pregnant, she should go to her doctor and he will simply remove the IUD.

46. CU Diaphragm.

Another method of birth control is the diaphragm. It is a thin sheet of soft rubber stretched over a metal ring in the form of a dome placed in the entrance of the womb preventing the sperm from entering the womb.

47. CU Drawing of the female reproductive organ with a diaphragm placed in the entrance of the womb.

It comes in different sizes. The doctor must tell the woman what type she needs. He will also teach how to put in the diaphragm. It does not interfere with your sex relations.

48. CU Condom.

The condom or rubber, is made to be placed over the male organ just before sex relations. It keeps the man's sperm from entering the birth canal. It is safe, reliable, and can be bought without doctor's prescription.

49. CU Cream, jelly and vaginal foam containers with their applicators.

These are special creams, jellies, and vaginal foams. They are made of harmless chemicals which stop the moving action of sperm.

50. CU Drawing of woman's reproductive organ and applicatorful entering the vagina.

An applicatorful is put into the vagina no more than one hour before sexual relations. A woman must use another applicatorful before each sexual act.

51.	CU Word: DOUCH crossed-out.	It is not necessary for a woman to douch after using vaginal birth control methods. Doctors agree that douching is not an effective birth control method.
52.	CU Calendar with some bold numbers signifying the menstrual period.	The rhythm or safe period method depends upon not having sex relations during the fertile time. It is based on the fact that a woman can become pregnant only during that part of her menstrual cycle when the egg is released from the ovary. To follow this method, a woman must keep carefully records of her menstrual periods during eight to 12 months.
53.	CU Word: WITHDRAWAL	In the withdrawal method the man withdraws his sexual organ just before it "comes," so none of his sperm can go into the vagina. This method is not completely reliable.
54.	MS Scientist in a laboratory looking at an experimental tube.	There are other methods now under study, like injections, more pills, and new devices.
55.	CU A child between his father and mother.	If you want a baby, stop using birth control methods. To have a baby when you want one, and when you can give him the love and care that he needs, is a wonderful experience for both of you, his mother and father.
56.	CU Words: FAMILY PLANNING SERVICES.	Family planning services will help you plan a pregnancy when both of you are ready to welcome a child; when you can provide for all things that he needs in order to survive, to be protected, and to develop his body and his mind as a happy human being.
57.	Words: END.	Music.

Follow-up Materials
and Methods

The whole Family Planning Program will be covered by four filmstrips.

1. "Introduction to Family Planning" as above.
2. "Unwanted Mothers" covering Unit I, numbers 2 to 12 of the proposed Family Planning Program, page 73.
3. "Sociology and Birth Control" covering Units III, IV, and V, p. 74.
4. "My Happy Family" covering Unit VI of the Program, p. 74.

Form and Methodology: The filmstrips "Unwanted Mothers," "Sociology and Birth Control," and "My Happy Family" will include 40 color reproductions each, which will illustrate the themes of each Unit indicated on pages 73-74. These filmstrips will present birth control practice as a socially acceptable and personally beneficial behavior, taken for granted as a part of good and wise life by people. They will present birth control practice as a logical and desirable solution to the problems exposed, and they will conclude with an invitation to visit Family Planning Services for orientation and help.

They will follow the form and methodology already described in the filmstrip, "Introduction to Family Planning" on pages 76-77.

A careful revision will be recommended, from time to time, to cope with the up-to-date birth control developments.

Some suggestions: for effective use of filmstrips in home visit instructions, workshops, conferences, and radio lessons (Schwalbach, n.d.).

1. Visiting family planning professionals should show their own favorable interest and attitude by providing stimulating environment for listening and viewing the presentation.
2. They should check the equipment in advance to be sure that the materials are ready.
3. Use the filmstrips in the best way they can serve. So, they might:
   a. Show a filmstrip before each unit without sound and as a general introduction
   b. Show the frames coordinated with narration
   c. Show the frames for detailed study after the coordinated frames and narration have been presented.

And above all, try to follow the pace of your audience as close as you can.

II. Radio

Title: "Responsible Parenthood Builds Happy Families"

Goal: The final goal of the radio lesson is that the intended audience use the family planning services as a means to a happy family life.

Objectives: The audience, after the completion of the program, should be able and determined to:

a. Make people perceptive to ideas about birth control

b. Protect the life of children already born.

Audience: Adult population attending radiophonic schools, courses for mothers, and home radio programs.

Form and Methodology: The script will be written in "straight talk" style (Hilliard, 1967). This is the first of the lessons to be presented, and it corresponds to Unit I, No. 1, "Irresponsible Parenthood: Consequences for Children," p. 73. The presentation of the lesson will be coordinated with the filmstrip "Introduction to Family Planning," frames 1 to 27, and 55, 56, pages 78-80, and 84.

The general pattern of the presentation will be as follows:

Before the Program: Class leader or monitor teacher should prepare the audience for the program (Rogers, 1969). He should take care of the physical learning environment, and the teaching materials like filmstrip projectors and accessories. He should motivate the students for the program (Schramm, 1969) asking questions such as these:

How many children do you think an ideal family should have? Are there some abandoned children in your neighborhood? Who has the obligation to support the child when he is born: his father, his mother? Both? How? What does he need? What do you think about birth control?, etc. Then, if he feels it necessary, he can present the filmstrip "Introduction to Family Planning," frames 1 to 27, and 55, 56, for general information (Schwalbach, n.d.).

During the Program: The monitor teacher should listen to the radio lesson with the students and to attend to the proper functioning of the filmstrip projector, and follow the pace of the radio teacher in presenting the appropriate strip. He should be alert to the reactions of the students, and foment their oral answers to the questions of the radio teacher (Rogers, 1969; Schramm, 1969).

After the Program: The monitor teacher should discuss the ideas presented in the lesson with the students (Rogers, 1969), present the filmstrip at a slow pace, if he thinks it necessary, and encourage students' comments on the presentation (Schramm, 1969).

For students who are illiterate, and when the adequate media are available, questions and answers from students with radio teacher by way of short-wave radio and/or telephone will be recommended.

The monitor teacher should ask literate students to answer in written form the following questions: Was the

lesson clear to me? What are the basic needs of a new-born child? What size should the ideal family be? When do I intend to go to the family planning services for help? Other remarks.

These lessons are prepared to be presented by radio, but they can also be presented by phonograph and/or tape recorder in order to control the sound, and to work in combination with the slides proposed.

Script

Musical theme

Announcer: "The . . . radio station presents: LET'S MEET TOGETHER, by Robert X, M.D."

Medical doctor: "Good evening, dear friends.

(1)[4] Tonight, we are going to talk about something that concerns all of us: Responsible Parenthood Builds a Happy Family.
(2-3) (Music)

(4) Of course, you say, we all want to be good parents, don't we? Well, let's see. Certainly, we all know how a child comes into the world, and when he comes his family is happy and proud of him. He's my son, we say, he's my blood, just like me.

(5) But, we must remember that all children come to the world naked. They cannot survive, they cannot do anything without help, but cry.

(6) What does it mean? In order to survive, the child needs a family to protect him from

---

[4]Numbers in parentheses represent the corresponding frame of the filmstrip presented in coordination with the lesson.

danger, to help him grow up strong, happy, and socially adjusted.

(7) All of us agree that the child has the right to live. But, he cannot take care of himself. His parents gave him life, they also have the obligation to take care of him until he can take care of himself.

(8) What does the child need in order to grow up strong and healthy? Food, of course. If his parents don't give him food, he cannot continue to live.

(9) What else does he need? He cannot live in the street, so he needs shelter, a place to live in, to stay, to play.

(10) And when the child becomes sick, his parents have the obligation to bring him to the doctor, because he also needs health care, to be protected against disease.

(11) But, life has become more complex. Today, we have to know many things, to do many things in order to survive. How can a child be prepared for a better life? By providing him with good education.

(12) There are other needs more important for a child. He needs to be loved and recognized by his parents. How can a father love his son if a father does not recognize him as his son?

(13) There are many misguided children these days with so much confusion going on. Since they are inexperienced in life, they need spiritual and moral guidance. While they go to the church and to the school, and receive good advice there, what they get there is not enough. They should receive the most guidance from home.

(14) 'There is no place like home, and nobody like my own family,' we always say. Because, we feel secure at home. We have food, shelter, and love. But, there are many children in Venezuela who are not happy at home, because they do not have adequate food, shelter, and loving care. They do not know who their fathers are.

(15) There are many children in Venezuela who live in sadness and sorrow, whose souls are sad, and whose bodies are sick. Innocent children who suffer hunger in their stomachs, sickness in their bodies, and sadness in their souls. Children abandoned by their own fathers.

(16) They are children from irregular, momentary unions, where their fathers do not take care of them, and their mothers cannot provide them with their basic needs: food, shelter, health care, and education. Children without love and moral guidance.

(17) Children abandoned by their fathers, and who when they become sick their mother cannot provide appropriate attention, because she has no time, no money to take care of them.

(18) The abandoned child cannot grow up in good health because of lack of appropriate care, and thus, his body becomes weak and his mind disturbed. The child needs the love of his mother and the strength of his father, because to him, his mother represents tenderness and to him, his father means strength and goodwill, firmness and reason.

(19) The abandoned child suffers from an inferiority complex before his friends. The society rejects him because he is not legitimate. The black mark of being illegitimate will haunt him for the rest of his life. He will live in despair for a crime that he never committed.

(20) Hundreds of abandoned children roam the streets of our cities asking for money in order to eat. They meet other children in the same sad conditions, and due to the lack of moral principles, and crippled by their sad conditions they become juvenile delinquents.

(Music)

(21) Overcrowding and loose sex morals of our city slums increase the number of abandoned mothers and more illegitimate children, issues of irresponsible fathers.

(22) The abandoned mother becomes pregnant again and again, because she does not know efficient methods of how to prevent pregnancy, and the phenomenon is repeated, creating each time a more desperate situation.

(23) Certainly, you don't want to have more children than you can support. You don't want to be a mother or father if you know that your child is not going to be happy. Sometimes, a man says: 'Sure, it is true, I want to be a responsible parent, but how can it be done? A man is a man. There is no other way to avoid it, as far as I know.'

(24) Yes. There is a way to prevent this sad situation. There is a service called Family Planning that offers its help in building a happy and healthy family by preventing unwanted pregnancies and without interferring in your sexual life. Many people like you come every day to their services and they are happy to do so.

(25) Family Planning Services offers you not only birth control, but other related services.

(26) So you can have children when you want them, and avoid pregnancies when you don't want them.

(27) The methods of birth control offered at family planning services are harmless. But, they work in different ways. So, these family planning services have doctors who will help you select the birth control method that will work best for you to have children only when you want to.

(55) To have a child when you want one, and when you can give him all the love and care that he needs, is a wonderful experience for both of you, his father and mother.

(56) Family Planning Services makes it possible for you to plan a pregnancy when you know that your child will be born into a home where he will be welcome, when he has responsible parents who can provide him all that he needs: food, shelter, health care,

education, love and moral guidance. A child needs all these things to survive, to be protected, and to develop his body and mind as a happy human being. Come! Join the thousands of people like you and me who, every day, go to the Family Planning Services across the nation! Thank you. I'll see you tomorrow."

Announcer: "Thank you Dr. X for your talk."

(Musical theme).

Announcer: "LET'S MEET TOGETHER comes to you each day at this time, from your . . . Radiophonic Station . . . "

Follow-up Materials

The radio lessons will be presented in combination with the four filmstrips specified on page 85 (Skornia, 1965). Each theme listed on pages 73-74 is in principle intended to be presented as a separate radio lesson as a possible theme-guide to be included in a family planning program. Some of the themes, nevertheless, might be treated in a more extensive manner.

The success of the pilot programs might indicate that more radio programs related to all aspects of health improvements should be produced.

Methodology: It is recommended that the procedures before, during, and after the radio presentation follow the pattern of the one already explained on pages 87-89.

Before the Program: The monitor teacher should prepare the mental set of the students for the lesson (Schramm, 1969). He should take care that the physical

environment be adequate for learning, that the teaching materials like filmstrip projector and accessories be ready for the presentation. He should motivate the students for the program with questions related to the theme to be treated. And, if he feels it necessary, he may take a preview of the frames to be studied that day.

During the Program: The monitor teacher should listen to the radio program with the students, attend to the proper functioning of the filmstrip projector, and follow the pace of the radio teacher in presenting the appropriate strip. He should also be sensitive to the reactions of the students, and foment their oral answers to the radio teacher's questions (Schramm, 1969; Schwalbach, n.d.).

After the Program: The monitor teacher should discuss ideas presented in the lesson with the students (Schramm, 1969). He should go over the strips of the corresponding filmstrip at slow pace, if he things necessary, for further explanations, and encourage students' comments to the presentation (Schwalbach, n.d.). The literate students should write the answers (Rogers, 1969) to such questions as the following: Was the lesson clear to me? What were the basic ideas exposed in the lesson? How would I solve the problem presented? Why is birth control the best solution to the problem exposed? When

did I go or when am I going to go to the Family Planning Services for help? Other remarks?

In case of illiterate students the use of short-wave radio and/or telephone for questions and answers of the students with the radio station teacher will be recommended (Carpenter and Greenhill, 1965).

Types of Scripts: Most of the subjects for the lessons will be written in a "straight talk" form. Nevertheless, some radio scripts will be written in other script types, like "interviews" with doctors, important personalities in the area, and workers in the family planning field. There will also be scripts in form of "panel or round table discussions"; "actuality broadcasts," like description of visits to clinics of birth control; "demonstrations," like child care and home improvement programs; and "dramatizations," treating themes related to abandoned mothers and children (Hilliard, 1967).

A very effective way of presenting scripts is by presenting different cases and/or situations of daily life and discussions between the students and the class monitor, or between students and the radio studio teacher by short-wave radio or telephone. The students might have very interesting questions, and the teachers will have very enlightening clarifying answers.

Means of Feedback: Where short-wave radio and telephone are available, they will be used as feedback

devices to measure students' improvements before and after the programs.

Radio monitor teachers will encourage literate adult radio students to write back to the radio station their questions and answers for further explanations (Schramm, 1969).

The radio station should send the literate students two evaluation sheets (Schramm, 1969). One, at the beginning of Unit I, and the other, at the end of the Family Planning Program. The first will serve to diagnose knowledge of the students before the program, and the second to evaluate his achievement after the program on family planning has been completed. They will be in test form.

Two separate evaluation sheets will be recommended for the monitor teachers (Schramm, 1969). The first, at the end of Unit I, to see the progress and reactions of the students through the eyes of the classroom teacher; and the second, at the end of the Family Planning Program, for an overall evaluation of the complete program and the student improvement before the eyes of the monitor teacher.

For home-based audiences, home visits of the family planning professionals and some monitor teachers from the radiophonic schools will be recommended.

Other means of evaluation feedback will be a study research about the increase or decrease of births from the

participating population in the radio program in a lapse of 10 months.

One important consideration is to assure coordination and cooperation of services and materials from the health centers with the information and education programs of the radio system proposed (Schramm, 1969).

Educational Messages: Brief educational messages to the public as part of the general promotion will be broadcast:

> The Family Planning Services helps each family to have only those children that it can support and will help to keep your family in the right size.
>
> Three hundred thousand children are abandoned in Venezuela! Family Planning is working to solve this problem. Support Family Planning!
>
> The Family Planning is the service that helps you to plan the children of tomorrow; so visit Family Planning Services!
>
> Family Planning helps you to have only those children that you want; hence support Family Planning!
>
> Do you want a happy family, a happy country without abandoned children? Family Planning is providing its services for this goal!
>
> We plan our business, our trips, our entertainments, why don't we plan the size of our family? Family Planning helps you to plan your family!

III. Television

Title: "Irresponsible Parenthood and Its Consequences Upon Children."

Audience: Adult population attending television schools, courses for mothers, and home-based television audiences of Venezuela.

Goal: The final goal is that the audience use birth control methods; that the audience approach Family Planning Services as the best solution to avoid irresponsible parenthood. The immediate goal is to present a clear picture of the problem and its consequences.

Objectives: The intended audience after presentation of the program should be able and be determined to:

a. Protect the life of children already born
b. Make people receptive to the ideas about birth control
c. Go to the Family Planning Services for help.

Form and Methodology: The script will be presented in a "documentary" style (Hilliard, 1967). Slides and films will be used.

This is the first of the lessons to be presented, and it corresponds to Unit I, No. 1, "Irresponsible Parenthood: Consequences for Children," p. 73.

The classroom teacher or monitor at the receiving point should follow similar procedures stated for radio lessons on pages 87-89.

Before the Television Presentation: The class teacher should prepare his students by taking care of the physical and mental learning environment (Schramm, 1969).

He should display interest and enthusiasm in the lesson. He should motivate the students by explaining something related to the theme to be presented, with such methods as introducing the personality of the television teacher to the students, asking questions related to the presentation (Schramm, 1969; Gay-Lord, n.d.).

During the Presentation: The monitor teacher should take active part in the program by listening with his students, and attending to the appropriated functioning of the television set. He should also pay attention to reactions of the students, and encourage them to answer the questions of the television teacher (Schramm, 1969).

After the Program: The monitor teacher should discuss with the students those areas of the lesson presented which need reinforcement, clarification, or expansion, and encourage students to give some comments about the presentation (Rogers, 1969). After the discussion, the monitor teacher will ask the students for a written answer to such questions as: Can a child grow up physically well in an overcrowded "rancho" or hut? Can a child with many brothers and sisters go to school? Can a mother support all children that she might have? How many children should a happy family have? When should a boy be put to work in order to help his mother? Who should support the family? Where should the parents go to have only the babies they want?

The information and education programs of the television system proposed should work in combination and cooperation with the services and materials from the health centers (Schramm, 1969).

Script

Video	Audio
CU Doctor in class behind his desk.	I am Dr. Robert X, and this is your Family Orientation Program. Today, we will talk about one of the most important problems of our country:
CU Title: THE UNHAPPY CONSEQUENCES FOR CHILDREN OF AN IRRESPONSIBLE PARENTHOOD.	The unhappy consequences for children of an irresponsible parenthood.
Dissolve. MS Doctor in playground of an elementary school. Children playing in the background.	This is Andres Bello Elementary School in Caracas, capital of Venezuela. Our country with 10 million people is one of the youngest and fastest growing nations in the world. Venezuela, with 3.5 annual rate of population increase, about half of the population is under 14 years old. More than half of the children born in the country are illegitimate.
Dissolve. LS Different views of slums surrounding Caracas city.	The fast growth of urban population at expenses of rural centers has increased in Venezuela at a greater rate than the world average. In 1936, about 65 percent of the total population of the country were living in rural areas, today, only about 24 percent of the people remain in rural Venezuela.

MS Doctor in a slum. The camera shows different aspects of the slum focusing on garbage and dirtiness.

About a million people have emigrated from rural to urban areas during the last decade alone. The results: overcrowding belts of misery surround Caracas and other cities of the country. This is Caracas' notorious slum, "La Charneca." Its inhabitants left this miserable dwelling place down to the city to overthrow the dictatorial regime of Marcos Perez Jimenez in 1957, hoping for a better life. But, La Charneca remains the same.

CU Huts, garbage.

The same misery, the same unhealthy huts, and more overcrowding.

CU Doctor.

They came here from all regions of the country. From the eastern part of the nation as far as Carupano and Margarita island; from Maracaibo and the mountains of the far west, in the Tachira state. "Why did they come here?" We asked a pregnant woman mother of six:

CU Pregnant woman at the door of her hut.

"We came here from Tachira state. We had three children. Life was hard over there. We sold our 'rancho' or hut and everything. We thought Caracas would be better. I became pregnant and my 'common-law husband' ran away with another woman. A man came, he said he was going to help me. All of them run away, and I have six babies and a coming one. I can't work. I don't know what to do."

CU Doctor walking to another "rancho."

The same story once again. Meanwhile, thousands of children with temporary fathers are brought into the

world and abandoned to their fate in these overcrowded city belts of misery and degradation. Let's see how these huts look like inside, and who are their habitants:

CU Inside a hut with six children.

-"How old are you"?
-"I am eight years old, and these are my brothers: Juan, Pedro, Freddy, Luisa, and Coromoto, the baby. My mom went to work and I am taking care of them."
-"Where is your father"?
-"He's living with another woman. He only comes here once in a while."

Dissolve.

LS Doctor traveling in a car. The car is presented in different points of a road; up the Bolivar mountain, on the Andean highland, in a valley, and on grassy plains with cowboys watching hundreds of cows. The camera shows several huts.

Venezuela is a land of all seasons: the winter of perennial snows 5,000 meters above sea level, on Bolivar mountain; the fall in the Andean highlands with almost no vegetation and its frozen nights; the spring of its valleys, and the hot summer of the never-ending plains of "Los Llanos."

These are the "Llanos," the Plains of Venezuela. With its rivers and grassy plains where the never-tired "llanero," cowboy, watch the cows of his boss, his "amo," the lord of the land. The owner of cows and horsemen. The master of their women and wives. We asked Manolo, our chauffer: "Who live in these unhealthy huts?"

CU Manolo, while driving the car. The camera focuses alternately on the huts and on Manolo.

-"There are many families living in these 'ranchitos,' small huts in the 'hacienda.' Almost none of them are really families. Most of them are just common-law unions."
-"Does the 'amo' also live here?"

-"His family lives in the big house of the 'hacienda,' but he has many illegitimate children with his 'queridas,' mistresses living in these huts. He's a very rich man. He's the boss all across the land. Because of his health and power he appoints the mayor, and the chief of police, and even the judge in the nearby town. The only authority who is above him is the President of the Council of the District, but, who is also his illegitimate son."

Dissolve.
CU Doctor in front of Caracas' Children's General Hospital.

This is Caracas' Children's General Hospital. Medical care is paid by the state, and hundreds of children come here every day for medical care. Some of them undergo difficult surgeries; most of them are treated for avitaminosis and gastroenteritis. Many others, like this three-week old baby called Juan:

Dissolve. Inside a doctor's waiting room. Women and children are sitting and waiting for their turn.
CU Woman poorly dressed and holding a baby enters and goes to the receptionist desk:

-"Good morning. I want to see Dr. X, my son is very sick."

CU Receptionist

-"Dr. X is busy, right now. I am sorry, but you have to wait until I call you."

CU The woman holding her baby goes to a chair and sits down between a fat lady and a small girl.

-"Thank you."

MS The woman talks to the fat lady:

-"Excuse me, madam. I have to go to the drug store and pick up a prescription for Juan, my baby. He's only three weeks old and he's very sick. Would you like to do me a favor, and hold my baby until I'll be back with his prescription?"

CU Fat lady holding the baby:

-"Sure, it's a pleasure! I'll take care of him. He's beautiful and nice!"

CU The woman standing:

-"Thank you, so much, I'll be back as soon as I can."

CU Fat lady:

-"Don't worry. I'll take care of him!"

CU The woman kisses the baby and leaves:

-"Thanks, so much. Bye, my baby!"

Dissolve.
CU Fat lady alone in the room holding the baby. To the receptionist:

-"It has been more than an hour that the woman is gone. I think she's not coming back!"

Dissolve.
CU Doctor.

The woman never came back. The baby was abandoned by his own mother! Later on, the authorities of the hospital gave the child to a foster parent for his care.

The same story is repeated every day hundreds of times in all charity centers of our cities.

"What is the future of the abandoned child?" We ask Dr. X, president of the Venezuelan Council for Children, the governmental institution which takes care of the abandoned children: "How does the Venezuelan law protect the abandoned child?"

CU Doctor B:	-"Our Constitution guarantees the abandoned child his right to live under those conditions by which he can have appropriate physical, intellectual, and moral development. The state also guarantees him the right to know his parents, to be assisted and nourished until his complete development. The child is also protected from being exploited."
Dissolve. CU Doctor on the street. People passing by.	Venezuelan laws protecting under-aged children are well written, but almost never enforced. In order to be enforced properly, hundreds of Venezuelan Councils for Children should be built to receive more than three hundred thousand abandoned children.
CU Children asking for money in a corner of a Caracas street.	Hundreds of abandoned children, against the law, go begging for something to eat.
CU Children cleaning shoes in Caracas main square.	Children are forced to work when they should be in school.
MS Children walking through Caracas streets.	Children, who frequent bars and movies, who roam the streets of our cities, and without moral or spiritual guidance by those who brought them into the world, become juvenile delinquents.
Dissolve. CU Doctor in the same scene of the beginning behind his desk.	Thousands of innocent children and poor abandoned mothers are condemned every day to a miserable life due to the irresponsibility of so many men. The situation is grave, and needs rapid and drastic solution.

Slide title: FAMILY PLANNING SERVICES.	Family Planning Services will help you to alleviate this problem.
Slide: A child between his father and mother with happy faces.	Family Planning offers birth control services and other related services. These birth control services allow you to have children when you want them, and to avoid pregnancy when you don't want them. You can plan a pregnancy when you know that your child will be born into a home where he is welcome, when you can provide him with all care and love that he needs in order to survive, to develop his body and his mind as a happy human being.
Slide: Couple entering the door of a family planning clinic.	Come! Join the thousands of people like you and me, who go to the Family Planning Services across the nation every day! Thank you. Music.

Follow-up Materials

Each of the themes listed on pages 73-74 are, in principle, intended to be presented as a separate television lesson, and as an example of materials that can be used for a Family Planning Program. Some of the themes, nevertheless, might be treated in different sessions, according to the teacher's judgment.

The success of the pilot programs might indicate that more television programs should be produced related to all aspects of health improvements (Schramm, 1969).

Types of Television Scripts: Other types of television scripts will be recommended, besides the "documentary" type presented above. Among them there will be "interviews" with doctors, experts in ecology and other related fields, and workers in family planning services; "panel and round table discussions"; "actuality," like visits to clinics of birth control; "dramatizations," like themes related to abandoned mothers and children; and "demonstrations," like those programs related to home improvement and child care (Hilliard, 1967).

Methodology: Procedures concerning before, during, and after the television presentation will be recommended similar to those recommended for the television lesson explained on pages 98-100.

Before the Program: The monitor teacher should prepare his students physically and mentally for the lesson being presented. He should motivate students for the program with questions related to the theme to be treated, displaying interest and enthusiasm in the lesson, making the material ready to be used, etc. (Schramm, 1969; Smith, 1961; Gay-Lord, n.d.).

During the Program: The monitor teacher should attend to the appropriate functioning of the television set. Listening with students, encouraging them to answer the television teacher, and pay attention to their reactions (Schramm, 1969).

After the Program: The monitor teacher should discuss with the students those areas which need to be reinforced, clarified, or expanded, thereby encouraging students to present their own comments and suggestions to the program presented (Rogers, 1969; Schramm, 1969). This class period should be devoted to activities which will help students to understand the concepts presented, and draw their own conclusions, clarify misunderstandings, and encourage students to seek answers to questions through research and independent study (Schramm, 1969). The possible use of other audiovisual devices, like filmstrips on page 85, might be helpful in reinforcing learning activties, and/or provide for individual differences. Sometimes, it might be recommended that the literate students give written answers to questions related to the presentation (Rogers, 1969), and to be specified on the Teacher's Guide. The monitor teacher should draw some conclusions and follow-up activities as a person and as interpreting the opinion of the whole class. The main source for the follow-up activities will be indicated on the Teacher's Guide.

Means of Feedback: Television teachers and monitors should encourage adult literate television audience to write back to television studio teachers asking for further explanations to their questions (Schramm, 1969). In those places, like cities where telephones are available,

the use of telephone will be recommended as a more convenient and faster feedback device (Carpenter and Greenhill, 1965). The use of short-wave radio is also recommended for illiterate students so that they will ask questions directed to the television studio teacher. Also a program with television studio teacher answering the questions turned in by the students (Carpenter and Greenhill, 1965), could be employed.

Evaluation sheets will be recommended (Schramm, 1969) to literate students, and as a test, at the beginning and at the end of the program. The first, to diagnose their knowledge before the program starts; the second, to evaluate their improvement after the program has been completed.

Two separate evaluation sheets for the monitor teacher will be recommended (Schramm, 1969). The first, at the end of Unit I, to see the reaction to the program and progress of the students through the eyes of the teacher; the second, at the end of the program for an overall evaluation and further recommendations. Both evaluation sheets will be included in the Teacher's Guide.

Visiting family planning professionals as well as some monitor teachers will be recommended to supervise the progress of television home-based audiences, encouraging them to write or call television teachers for further explanations when they are needed.

Other means of evaluation feedback will be a study research about the increase or decrease of births from the participating population in the television programs.

Summary

A program designed to be used by the proposed radio and television systems as a part of the total communication program on family planning was presented. The program consists of a filmstrip, radio, and television scripts for the first unit to be presented with follow-up materials and related methods for other units of the program.

The media to be proposed and the possible ways to be used and the Federal requirements of Venezuelan Government will be discussed in the next chapter.

CHAPTER IV

COMMUNICATION CHANNELS

When we communicate we transfer ideas from a source to a receiver. In the process of communication we may distinguish four elements: source, message, channel, and receiver. The determination of the channel to be used by the communicator is an important function in order to affect the knowledge, attitudes, and behavior of the receiver in a desired way. The channel is defined as some kind of vehicle in which the source transmits the message to the receiver.[1]

Channels of communication may be grouped, according to Rogers,[2] in two broad categories: mass media (all electronic and printing channels), and interpersonal (word-of-mouth communication among people themselves). Both channels have their advantages and disadvantages. Interpersonal channels are useful to provide two-way

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[1]David K. Berlo, The Process of Communication: An Introduction to Theory and Practice (New York: Holt, Rinehart and Winston, 1964), p. 64.

[2]Everett M. Rogers, Modernization among Peasants: The Impact of Communication (New York: Holt, Rinehart and Winston, 1969), p. 124.

interaction and feedback, while for the spread of information quickly mass media channels are best suited.

Research results suggest that "mass media communication is more important in changing cognitions, than in increasing knowledge of ideas, whereas interpersonal communication is more likely to cause attitude change."[3]

Latin American radiophonic schools and study groups in Communist China are in essence a combination of mass media and group discussion. These experiences might confirm that the effect of mass media messages will be greater when they are combined with interpersonal communication in media forums, because communication channels used by the peasants are mainly interpersonal in nature with an increasing utilization of mass media as modernization comes through.

In addition to these formal media forums, Rogers distinguishes other groups that gather informally in places like coffee houses, taverns, or homes and not in groups created by an agent of change. These types of informal groups that gather to listen to mass media occur frequently among villagers in less developed countries where the number of media sets is in short supply.

Rogers categorizes channels in localite or cosmopolite according to their origin; so, thus, interpersonal localite channels are: neighbors, village council and

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[3] Ibid., p. 126.

relatives; interpersonal cosmopolite: extension agents, wandering storytellers and salesmen. Mass media channels localite are: village newspaper and wall posters; cosmopolite: radio, television, cinema and city newspapers.[4]

Results of a study conducted among peasants of the three Colombian villages of Pueblo Nuevo, San Rafael, and Cuatro Esquinas about the use of communication channels in the adoption of 2,4-D weed, showed that cosmopolite channels were more important in informing than persuading and for earlier rather than later adopters. Results of this study also suggest that perhaps the cosmopolite-localite channels classification has greater cross-cultural utility in explaining diffusion of an innovation than does the interpersonal-mass media categorization.[5]

By combining mass media and interpresonal channels more people can be reached and a greater number of those reached can be persuaded to utilize new ideas.[6] Radio forums are in essence organized small groups of people who meet regularly to listen to a mass media program and discuss its contents, that is, a combination of mass media and interpersonal channels.

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[4] Ibid., p. 132.

[5] Ibid., p. 133.

[6] Wilbur Schramm, Mass Media and National Development: The Role of Information in the Developing Countries (Stanford, California: Stanford University Press, 1964), pp. 127-144.

Rogers sustains the forum approach, because, he says the media forums are more related with the present pattern of values, attitudes, and social organization of life of the peasants; and feedback from the forums can result in better program content more appropriate for the audience. On the other hand, to rely on interpersonal communication from a change agent to reach millions of peasants would be a costly and endless process. Evidence from empirical research shows that such an approach has much promise.[7]

McNelly sustains that mass communications is most effective when combined with interpersonal and intergroup communication channels, but there are opportunities for direct mass media effects on information and attitude levels. "This position looks at mass media communications as a highly complex, multi-stage, multi-directional process, with possibilities for both indirect and direct effects of mass media messages."[8]

Types of Mass Media Forums

Radio Forums

According to Cassirer, adult education through group listening to mass media began with the use of radio in

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[7]Rogers, op. cit., p. 135.

[8]John T. McNelly, "Mass Communication and the Climate for Modernization in Latin America," Journal of Inter American Studies, VIII (1964), 345-357.

Great Britain, in 1928.[9] The basic idea of farm forums began in Canada in 1939, and later copied by such nations as Japan (1952), India (1957), Pakistan and Mali (1961), Nigeria (1962), Gana and Jordan (1964), and more recently by Costa Rica, Brazil and others.

The basic elements of radio forums are: planners help establish and service the forums; radio station sources send to forum leaders written material guides with information and discussion questions; regular radio programs broadcast to forum members gathered in a place to hear radio; group discussion of the broadcast, and feedback about decisions and clarifications of questions to the program broadcast.

The largest and more researchable radio forums began in India in 1956 with 144 radio rural forums on ten weeks trial around Poona, in Southwest India.[10] At the end of 1956 a total of 12,776 forums were reported with an enrollment of a quarter of a million villagers and a goal of 15,000 forums for March, 1966. The Indian radio forums meet twice a week in the evening. The radio programs broadcasted from an All India Radio Station last

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[9]Henry R. Cassirer, "Audience Participation, New Style," Public Opinion Quarterly, XXIII (1959), 529-536.

[10]Wilbur Schramm et al., New Educational Media in Action: Case Studies for Planners--I (Paris: UNESCO, 1969), pp. 107-133.

from thirty to forty minutes. The thirty minute discussions were led by the chairman. He encouraged the group to decide on some action. He sent unanswered questions back to the radio station for later treatment. In this way the forum is designed to bring action and discussion, and to maintain a two-way communication between the forum members and the station planners.

The basic lesson from the radio rural forums of India is that it is a promising and potent tool of national and community development.[11] But, these forums require continuing care from professional planners, the forum members dropout, and the radios break down.[12]

Radiophonic Schools in Latin America

The fundamental purpose of the radio schools in Latin America is basic education to reduce illiteracy in rural areas. The Latin American radio schools are simply an organized group of peasants led by a trained monitor who helps the students learn and encourages them to listen to radio lessons. They were initiated in Colombia by Father José Joaquín Salcedo in 1947. The Colombian Radio Sutatenza program claims to have 16,000 radio schools with some 130,000 students, 90 percent of whom are from rural

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[11] Ibid., p. 132.

[12] Rogers, op. cit., p. 143.

areas. Radio Sutatenza claims that 64 percent of all illiterates enrolled can read and write after a year's course.[13]

Martin gives a comparative description of the development of radio Sutatenza in Colombia. It includes an evaluative pilot study based on a statistically reliable sample of the two kinds of Radiophonic Schools of Sutatenza: the "Organized Schools" that send in statistics and whose auxiliary teachers attend meetings; and the "Audition Centers," schools which do not have direct contact with the radiophonic schools of Sutatenza. He presents information on school location and facilities, descriptive information on monitors and local assistants. The report presents 13 indices of the accomplishment of Radio Sutatenza. The results obtained by the radiophonic schools are very considerable in alphabetization, and even more so in raising the standard of living of peasants.

Father Vicent M. Primrose, in a study about Sutatenza schools, sets the objectives of her research in studying the educational program of radio schools, in evaluating its effectiveness in the lives of the peasants,

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[13] Ibid., p. 138.

Pierrer S. Martin, Muestra Piloto de las Escuelas Radiofónicas Rurales, Accion Cultural Popular, Escuelas Radiofónicas de Sutatenza, Colombia (Paris: UNESCO, 1951).

and in identifying aspects of the historic-cultural background which contribute to the degree of acceptance of this educational program by the peasants. Among her conclusions, she says that Radio Sutatenza educational programs are well received by the peasants of agricultural communities, but not so by those peasants who move to a big industrial society; living conditions have changed in the areas of housing, nutrition, agricultural techniques and recreational and social activities where radio classes are attended. Among its recommendations for further development of radio schools and its effectiveness, the study stresses the need of a socio-scientific study of the needs of the people in different areas; a better literacy material written on the level of the students; up-dating of pedagogical techniques for a mass communication program; more lay leaders to direct the schools; and better testing techniques.[15]

A group of U.S.A. researchers, headed by John A. Brodbeck, conducted a survey in El Salvador and Honduras radiophonic schools in 1963. They devoted most of their analysis and discussion to the El Salvador program.[16]

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[15]Vincent Marie Primrose, "A Study of the Effectiveness of the Educational Program of the Radiophonic Schools of Sutatenza on the Life of the Colombian Peasant Farmer" (unpublished Ph.D. dissertation, St. Louis University, 1965).

[16]John A. Brodbeck et al., Use of Radiophonic Teaching in Fundamental Education (Williamston, Mass.: The Public Opinion Research Center, Williams College, 1963).

Five hundred and twenty one students were interviewed in El Salvador Radiophonic Schools. Fifty-nine percent were able to read, of which 15 percent of the sample said they learned to read at the radiophonic schools. Most of the students said they had learned from the radio school more than they had expected. The Agriculture subject contributed to the satisfaction about radiophonic schools in a greater scale than reading and writing courses. Researchers attribute this to the fact that the length of the training period prior to interview was relatively short for most students. Rogers explains this by a face-saving misperception by adult villagers who do not want to admit that they learn literacy in classes, which they consider only for children. This emphasizes the importance of appropriate lesson content as a motivation for participation in adult literacy classes.[17]

The lack of facilities for training teachers was a major problem for school administrators. In general, the radiophonic system was considered an important contribution to community improvement considering the newness of the system in both countries. Reasons given by the students and administrators in regard to failure to enroll students and dropouts of the radio schools, were laziness,

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[17]Rogers, op. cit., p. 139.

indifference to becoming literate, and distance to the class.

A study prepared by Jack Lyle based on a research mission to Honduras in 1965 explains the organization, facilities, financial inputs and outputs of the Honduras Radiophonic Schools.[18] Of the total enrollment of 7,820 students in 1965, a total of 89 percent of the 3,370 students examined passed the tests. Several reservations must be made with regard to this result. First, literacy students upon entering school and repeating students could take the examination, and second, there may have been "cooperation" between students.

There have been some problems. The dispersion of the population in some areas made difficult the organization of groups large enough to support a radio school. The participants' hard life and poverty give little incentive to learn to read or to practice reading skills once acquired. Educational organizational problems usually include using less than desirable broadcasting times because commercial stations dictate the schedules. The appropriate use of frequencies on radio receivers was lacking because there were frequency problems, some sets had been tampered with, and because of increasing repair

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[18]Jack Lyle et al., "The Radio Schools of Honduras," in New Educational Media in Action: Case Studies for Planners--III (Paris: UNESCO, 1969), pp. 95-110.

costs. There was lack also of proper administrative and financial support. Some support was received from the Peace Corps, U.S. A.I.D., and the Federal Republic of Germany Church. However, the radio school staff felt that there were adequate resources in Honduras to support the schools adding the psychological advantage of being supported by the national society.

The study concludes that for many villages the schools have provided the means of organizing the peasants into cooperative efforts to improve their communities. The program cannot be considered as a measure for literacy teaching because the program has operated under too many handicaps.

The Ministry of Education and Health of Brazil has an educational broadcasting service which broadcasts literacy and educational programs.[19] The programs are more educational than instructional in nature and have a local flavor with the greatest concern of the type of audience, their customs and preferences.

The station also broadcasts courses in adult education. The students are regularly enrolled and do all the exercises at home, following the programs and sending their work to the station correction services. Experience

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[19]Fernando Tude de Souza, "Educational Broadcasting Services of Brazil," Fundamental Education Quarterly Bulletin, II, No. 2 (April, 1950).

showed that the best teaching technique for these courses at the intermediate level was that of a simulated classroom consisting of a teacher and two or three pupils.

There were also three types of rural programs: one for children, another for farmers and a third for housewives from rural areas. The station sent seeds, miniature tools for the children to plant gardens, books and pamphlets for housewives on food, cooking and fruit canning. Similar materials were sent to farmers on problems of animal-raising and planting seasons. Many loud-speakers in small rural communities relayed the programs to hundreds of listeners assembled as collective audiences in the local squares. About 70 percent of the total population of Brazil lives in rural areas and an estimated 55 percent of the country adult and young population are illiterate, which makes the value of radio teaching evident. So far, the results have been very encouraging.[20]

"Cruzada ABC" (crusade for literacy) centered at Recife, Brazil is a program which presently has over 200,000 adults enrolled each night of the week, and is aimed to have five million adult literates over the next five years.[21]

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[20] Ibid., p. 35.

[21] Rogers, op. cit., p. 139.

Television Forums

In some countries television has been used in the same way as radio as the mass media channel for their forums. An experimental "teleclub" program was sponsored by UNESCO for the French farmers in 1954. In 1958, UNESCO also organized television viewing groups in Italy. The not so encouraging results of Italian "Telescuela" were attributed to lack of group participation and passive viewing although it was considered highly successful as an experience in basic education.[22]

In some ways "telescuela" represents the ideal technical model. It does not, however, apply the technology effectively based on the geographically disposed population. The purpose of "It's never too late" program stimulated students' interest, providing visual aids to the classroom with some instructional materials. Such a program appears to have been successful in providing a means for people out of school to remedy inadequacies in their education at the primary level.[23]

La Telescuela Popular Americana of Arequipa, Peru (TEPA) was organized by a group of civic-church people who decided to do something by using television with

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[22]Cassirer, op. cit., pp. 529-536.

[23]Wilbur Schramm et al., The New Educational Media in Action: Case Studies for Planners--III (Paris: UNESCO, 1969), p. 39.

regard to the problem of a number of adolescents who had dropped out of high school at an early age and had become domestic servants in Arequipa city, Peru. Jack Lyle and others, in an International Institute for Educational Planning research mission to Peru in 1965, found that TEPA appears to be achieving its best results in providing fundamental education via television to those youngsters. This shows that it is meeting a real need and is achieving real results, although much of the progress is due to the extra help which these youngsters receive from training teachers about two hours each Saturday.

TEPA is working, according to the research mission, under a great number of disadvantages like lack of equipment and technical skill, others like lack in training and advice from some other centers of television research and development. TEPA has attempted to relieve a number of educational problems without consolidation of one series before another series of programs were undertaken, posing the question whether it is better to try a little in many problems or to concentrate on only one.[24]

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[24]Jack Lyle et al., "La Telescuela Popular Americana of Arequipa, Peru," in New Educational Media in Action: Case Studies for Planners-II (Paris: UNESCO, 1969).

Chinese Communist Study Groups

According to Hiniker,[25] about 60 percent of the adult Chinese population participates in study groups using newspapers and magazines among Communist Party members as a means of political indoctrination and promoting development effort among citizens in general. The study group consists in essence of a Communist leader who reads the printing material to a group of five to 30 members and maintains control of discussion forcing every member to take a position on the issue discussed. Such study groups are considered essential in the special communication campaigns of the Communist Party which suggests their great importance in the communication strategy of the Chinese Communist government.[26]

Effects of Media Forums

According to Rogers, all media forum programs utilize mass media, are small-sized groups, participate in discussion and seem to be effective in diffusing knowledge in informing and changing attitudes. The effectiveness of mass media with interpersonal communication in forums seems to depend upon: content of the program which should be

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[25]Paul Hiniker, "The Mass Media and Study Groups in Communist China," in Mass Communications and the Development of Nations (East Lansing: Michigan State University, International Communication Institute, 1966).

[26]Rogers, op. cit., p. 140.

relevant to the problems of peasants and at the same time, appropriate to their level. Visual aids can add effectiveness to learning; the discussion after the program emphasizes local application; feedback from audience reactions, interests, and clarifications of lessons to the radio station; careful organization, operation, and maintenance procedures; and include village opinion leaders as members of the forums to assure the spread of information to other members of the village.[27]

Venezuelan Broadcasting Regulations

The broadcasting systems of Venezuela are regulated by the "Ley de Telecomumicaciones" (Telecommunications Law), "El Reglamento de Radiodifusion" (The Broadcasting Rules and Regulations), and by other more specific Resolutions about broadcasting issued by the Ministry of Communications.

For the purposes of this study we will point out only those articles of the Broadcasting Rules and Regulations and other special Resolutions of the Ministry of Communications directly related to our interest. Information related to the federal requirements of the Venezuelan Broadcasting Regulations are to be found in a special section of Appendix B.

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[27] Ibid., pp. 140-144.

Educational Broadcasting Stations

All educational broadcasting stations of the country are governed by Resolution No. 1,622 from the Ministry of Communications which states that:[28]

For purposes of installation and functioning they are subjected to applicable resolutions of the actual Broadcasting Rules and Regulations, and to future regulations of the Ministry of Communications.[29]

The Educational Broadcasting Stations have as a goal to educate, to broadcast culture, and to disseminate useful information and provide good entertainment. Such stations will then broadcast philosophic, literary, historical and geographic works; scientific and technical publications, high quality international music, native Venezuelan music, and music from national composers; works for the improvement of education, and every thing that contributes to raise the morality of the Venezuelan people for their cultural, social, and individual improvement; those things that contribute to the improvement of human relations and to the promotion of peace and universal solidarity (2).

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[28]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones No. 1,622 Resolucion Relativa al Establecimiento de Emisoras Exclusivamente Culturales. Caracas, October 30, 1964.

[29]Of the Educational Broadcasting Stations Regulations. Numbers of subsequent articles cited will be given in the text.

They cannot broadcast political or religious themes fomenting dissent toward some sectors of the audience or against their particular convictions, or news and commercial advertising whatsoever (3 and 4).

The power of the Educational Broadcasting Stations will be permitted according to the needs and importance of the areas to be served by them (6).

Educational Broadcasting Stations are classified by power and frequencies as in the following table (5 and 7):

TABLE 27.--Classification of Educational Broadcasting Stations by power and frequencies.

Class	Power	Frequency Kc
Class "A"	Above 10 kilowatts	540 to 950
Class "B"	From 1 to 10 kilowatts	960 to 1,300
Class "C"	From 500 Watts to 1 Kilowatt	1,310 to 1,400
Class "D"	From 250 Watts to 500 Watts	1,460 to 1,600

Only Educational Broadcasting Stations class "D" can in certain cases operate with their transmission plants inside cities with antennas Marconi of 1/4 wave length, and as long as they do not interfere with other services (8).

All installations of Educational Broadcasting Stations must be made according to modern techniques and maintain their functioning characteristics according to the Recommendations of the Ministry of Communications and to the international requirements (CCIR), (9).

A Venezuelan broadcasting technician with a certificate from the Ministry of Communications will be responsible to the Ministry for the good functioning of the station (10).

Installation permits for Educational Broadcasting Stations will be extended only to Venezuelan citizens (11).

Educational Broadcasting Stations can not broadcast programs from commercial stations, but they can broadcast programs from a similar educational broadcasting station up to 50 percent of their total broadcasting time (12); they can not be transformed into a commercial station under any circumstances (13).

The Ministry of Communications can dictate complementary regulations to solve cases not included in the present resolution (14).

Radiophonic Schools of Venezuela

The Radiophonic Schools of Venezuela are an educational service from the Division of Adult Education of the Ministry of Education, and they are characterized by the rational utilization of radio as an informal educational instrument to serve the adult population of the country.[30]

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[30]Republica de Venezuela, Ministerio de Educacion. Direccion de Educacion Primaria y Normal. Division de Educacion de Adultos. Escuelas Radiofonicas. Cursos Radiales de Alfabetizacion y Mejoramiento Cultural. Caracas, 1970.

There are at the present time about 500 radiophonic schools. In their initial step they teach literacy and some courses of elementary education and their influence is limited to some rural areas. They broadcast from two radio stations located at San Fernando de Apure city, about 258 miles south of Caracas. One of the stations broadcasts on 120 meter band, frequency of 2,430 kilocycles and one kilowatt of power; the other one transmits on 60 meter band, frequency of 4,910 kilocycles with 10 kilowatts of power. That zone has been selected, according to radiophonic schools sources, because the geographic characteristics of the region assures considerable decrease of death audition areas.[31]

The national office of the radiophonic schools is centralized in Caracas, and it keeps direct contact with the stations by remote control. The planning of the programs is made in the central office by specialized personnel and the lessons are taped at the Audio Vusual Center of the Ministry of Education. The schools have at the present about 500 radio sets of fixed frequency operating in the same number of radio schools. Each school, according to the same sources, has assigned its own teacher properly trained for this, and the schools are controlled by the Ministry through the Regional Offices of Adult Education.

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[31] Ibid.

The present programming is restricted to literacy and some specific areas about subjects of the first academic year of the Popular Cultural Centers and Cultural Extension Centers.

The literacy program has the following goals, according to sources of the central office:[32] to contribute to teach literacy to many Venezuelans; to bring information to promote cultural improvement of the students in order to strengthen their national conscience, betterment of their health habits, and help their home and production.

Programs are broadcast from Monday to Friday 7:00 to 7:45 p.m., and they have three parts: (a) Introduction: educational and cultural slogans in combination with music; (b) Literacy lesson from the basic book "Abajo Cadenas" (Down with the Chains) from the Adult Education Division of the Ministry of Education, and the monitor teacher talks about one of these three aspects: health, production or civic education. Programs for these areas use material prepared by the Health Education Division of the Ministry of Health and Social Assistance (SAS).

Among other recommendations, and as a part of the literacy program, the monitor teacher should motivate students before radio programs, listen with the students to the radio, and take one hour work after the radio class

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[32] Ibid.

answering questions, helping students in written lessons, or in case the lesson is discontinued, they should talk about one of these three aspects: health, production, or civic education.

The monitor teacher should read the corresponding lesson and prepare the necessary auxiliary material to establish a better relationship between his job and the radio to guarantee the maximum educational results.

Radio lessons recommend along with the radio other auxiliary materials like blackboards and feltboards.

The Division of Health Education of the Ministry of Health and Social Assistance (SAS) developed a Child-welfare program in relation to the specific problem of health in rural areas of Venezuela. Such a program had two types of actions, one on a national scale and using as a basic material health letters written for the rural medical doctors of the country during one year; the other action was more restricted: directed to 15,671 students of the 427 radio schools of the country, 16 lessons, once a week, during three months. A person in each school was trained to use feltboards and charts especially prepared by the division for each lesson. The monitor teacher showed the charts at the same time with the radio and spent a certain amount of time helping students after each lesson. The campaign enlisted the collaboration and

TABLE 28.--Radiophonic schools of Venezuela: Students and schools by states.*

States	Students	Schools	Average Student per School
Anzoategui			
Apure	708	25	28.3
Aragua	129	5	25.8
Barinas	1,363	38	35.9
Bolivar	659	22	30.0
Carabobo	200	5	40
Cojedes	592	17	34.8
Falcon	120	5	24
Guarico	591	18	32.8
Lara	2,129	50	42.6
Merida	1,706	50	34.1
Miranda	1,281	31	41.3
Monagas	1,077	25	43.1
Nueva Esparta	30	1	30
Portuguesa	1,738	42	41.4
Sucre	57	2	28.5
Tachira	49	2	24.5
Trujillo	1,601	45	35.5
Yaracuy	1,472	40	36.8
Zulia			
T.F.Amazonas			
T.F.Delta Amacuro	44	2	22
Distrito Federal	125	2	62.5
Total	15,671	427	36.7

*Ministerio de Educacion Nacional, Memoria y Cuenta 1965, Vol. II Anuario Estadistico Table No. 239. Caracas, Venezuela.

advise of the local medical doctor in relation with the themes treated, according to Gonzalez Guerra.[33]

Although it is difficult to evaluate the positive aspect of these lessons, Gonzalez Guerra conceptualizes that the collaboration of radio in the campaign was a positive one.

Among the shortcomings of the radio lessons, he says that the audition was, sometimes, weak, that the radio cannot supply the teacher and it is directed to an invisible audience. An interesting point is that certain schools reacted violently against the use of charts showing a mother nursing her child, as an act against good taste. This emphasized the need for selection of appropriate materials without hurting the sensitivity of the audience. Among its advantages, he cites that radio is an excellent help for education, eliminates distances, and it can cast and form audiences in favor of health concepts.

Gonzalez Guerra looks with great optimism for the collaboration of the health programs with radio schools as a vehicle for a rational development of an integral

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[33]Miguel Gonzalez Guerra. "Educacion para la Salud en el Medio Rural Venezolano: Un Año de Labores" (unpublished Ph.D. dissertation, Central University of Venezuela, 1967), pp. 348-350.

program as a whole, in order to acquire the best results in health education of the Venezuelan adult population.[34]

Summary

Communication channels and different ways to influence people were presented. A review of the Rules and Regulations needed for the establishment of Educational Broadcasting Stations in Venezuela was also presented. Information related to the Federal requirements of the Venezuelan Broadcasting Regulations are to be found in a special section of Appendix B.

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[34] Ibid., pp. 354-356.

CHAPTER V

REVIEW AND RECOMMENDATIONS

This study has been focused on the application of radio and television and other media to help solve the needs of the Venezuelan adult population.

An instructional radio and educational television and multi-media system, together with other resources available in the country, has been proposed to help solve the Venezuelan adult population needs.

An example of a health need, namely population explosion, has been presented to illustrate how the media systems proposed will be used, with other available health resources of the country, to help solve this particular problem of population explosion, and by the same token, other needs of the Venezuelan adult population.

In this regard, in the area of population explosion, the study has presented the fact that 1/4 of the total population live isolated in remote areas of the country making the improvement of health conditions increasingly difficult. Migration from rural to urban areas has caused the fast growth of several cities with serious problems of slums without the most elementary health needs.

The population increase of the country has been presented as due to different factors: like the prolific childbearing of Venezuelan women, living either married, in common-law marriage or single, and the low diffusion of anticonceptive practices especially among low income people. One result of these facts has been the increasing number of illegitimate children. The high rate level of births and low mortality level has caused a predominantly young population--about half of the total population is under 14 years old, increasing the burden of persons potentially active to the maximum.

This study has presented the actual situation and its future trends of population explosion in Venezuela. The historic trend of the Venezuelan family is showing marked inclination toward voluntary birth control especially among upper-middle class people. The health and medico-social aspects of birth control have been presented. The attitude of the people toward birth control has been found to be positive, and religious practices seem to have no relationship with attitudes of women about birth control. The Catholic Church in Venezuela rejects abortion, sterilization, and utilization of compulsive methods to impose birth control, but admits that the state can give information about birth control methods to those who want to use them according to their own conscience.

The official attitude toward birth control is positive and there are now governmental agencies engaged in the population control policy. The functions of these institutions are, among others, to exercise a broad educational role in order to promote its objectives and show its personal and family advantages not only to those who voluntarily avail themselves of the services but also to the whole community.

The available health resources of the country have been presented in the study. The policy of health in Venezuela is characterized by the fact that the national government performs through its Ministry of Health and Social Assistance (SAS) an integral function in the protection of health, and that there has been progress in the improvement of health, but there still exists a great percentage of diseases due to many health problems. These health problems and their possible solutions cannot be taken into consideration apart from other economic and social problems.

Due to the lack of a national health plan, and for purposes of this study, a set of health priorities have been established, population explosion being identified as the first health priority of the country.

The study has shown that the cooperation of the public is essential in any family planning program, and interest in the project is connected with the educational

level of people involved. The study also presented the family planning program as one of intensive education of adult population in all areas related to the identified need.

The study presented the job of the mass media in this particular problem of population explosion as to spread information and a sense of social rightness about the perception of social support within the community in relation to birth control.

In terms of the media to be used, the study distinguished three main steps: during the first year, the use of audiovisual materials; the second year, the use of audiovisual materials and radio; and the third year, the use of radio and audiovisual materials and television.

Different communication channels used by people in the process of communication were analyzed in the study. By combining mass media and interpersonal channels more people can be reached and a greater number of those reached can be persuaded to utilize new ideas.

Different mass media formats were reviewed. Radio and television forums and radiophonic schools of Latin America and their effectiveness in diffusing knowledge in informing and changing attitudes were presented. The effectiveness of mass media in combination with interpersonal communication in forums seems to depend upon: (1) content of the program and its relevance to the

problems and intellectual level of the audience; (2) discussion after the program to emphasize local application; (3) feedback from audience reactions, interests, and clarification of lessons to the stations; (4) careful organization, operation and maintenance procedures; and (5) inclusion of opinion leaders as members in order to assure the spread of information to other members of the community. The use of audiovisual materials can add effectiveness to learning.

The present situation of the Venezuelan Broadcasting systems and their rules and regulations for existing stations for the establishment of a new system of radio and television were presented in the study. The actual regulations for the establishment of educational radio broadcasting and educational television stations, their maximum and minimum possible power and frequencies were included in the present study.

The Radiophonic Schools of the Ministry of Education of Venezuela are restricted to literacy teaching and some courses of elementary education and their influence is limited to some rural areas of the country. Their educational impact was directed to about 427 schools with about 15,671 students in 1965. The Radiophonic Schools recommend along with the radio lessons to use other auxiliary materials, like blackboards, feltboards, and flip charts.

The study presented a program designed to be used by the proposed systems as a part of the total communication program on family planning. The program consists of a filmstrip, radio, and television scripts for a program of the first unit to be presented: "Irresponsible Parenthood: Consequences for Children," with follow-up materials and related methods for other units of the program.

Recommendations

It has become apparent during the course of this study that one of the most crucial jobs of mass media is to spread information and a sense of social rightness about the perception of social support within the community in relation to birth control. The following recommendations are relevant to the study:

I. To establish a pilot project for the use of media in a restricted basis for the first three years.

II. To establish an audiovisual center or require service from existing centers to provide materials for the professionals in the field, especially materials for radiophonic schools, conferences, workshops, and home visit instructions on birth control.

The media center could operate in connection with the divisions of Education and Population of the Ministry of Health and Social Assistance (SAS) and in collaboration with Family Planning Services.

It is understood that all educational materials to be used by the media about health education should be revised and selected by health authorities, and in accordance with the regulations of the Ministry of Health and Social Assistance (SAS). Thus, the information and education programs of the television and radio systems proposed should work in combination and cooperation with the services and materials from the health centers.

III. The Family Planning professionals for their home visit instructions should have the following media: flip charts, small flannel boards, filmstrips and/or slides, films, demonstration models, and printing materials. They will be adequately trained in this area by the audiovisual center experts.

IV. Three audiovisual mobile units will be used to travel from place to place through the area of birth control centers. The main purpose of these units will be the dissemination of information, promotion for radio listening and television watching, and collaboration with other professionals in the field. Materials to be included in these units should be filmstrips, records, films, printing materials, and birth control supplies.

V. The establishment of six radio broadcasting stations covering the population of the 39 Family Planning Service Centers of the pilot project. The radio

stations will be installed in Caracas and Barquisimeto for the coverage of the northcentral section of the country, in Maracaibo for the coverage of the western section of the country, in Merida for the Andean region, in El Tigre for the southern part of the country, and in Porlamar covering the northeastern section of the country (see Appendix C).

The use of radio should be in two broad areas: promotional and general information, and instructional education.

A. Promotional and general information campaigns directed to the target population and in the form of:
   1. Short educational messages
   2. Interviews of people related to the subject program
   3. Radio shows about subjects related to the area of birth control
   4. General information in the family planning area.

B. Instructional radio: The use of radio in combination with audiovisual materials, like filmstrips and slides in those places with electrical power facilities, and charts and boards for places without electrical power. These should be directed to special audiences in:

1. Radiophonic schools: establishing radio school centers to operate in the 39 actual Family Planning Service Centers, that is, in the following cities: Caracas with (9) centers, Barquisimeto (3), Valencia (5), Puerto Cabello (3), Los Teques (2), Merida (2), Acarigua (1), Barinas (1), Caripito (1), Cumaná (1), El Tigre (1), La Guaira (1), Maracaibo (1), Maracay (1), Maturin (1), Porlamar (1), Puerto La Cruz (1), San Cristobal (1), Tinaquillo (1), Valle de la Pascua (1), and Valera (1) (see Appendix C). The function of these radiophonic schools is to instruct the adult population and develop a sense of rightness among them about family planning methods and related subjects.

   These schools should be equipped with short-wave radio transmitters and telephones for feedback and discussions between students and radio studio teacher.

   a. Monitor teachers should be trained to direct the radiophonic schools. They should have the following functions: to preside over the class and take care of the physical and mental learning environment of the students before, during, and

after the radio lesson; take care of audiovisual materials to be used during the class; discuss ideas presented in the lesson with students and encourage their comments.

b. Encourage means of feedback, like correspondence between literate students and the radio station, and by short-wave radio and telephone where such communication facilities are available.

The radio studio teacher should use known and proven techniques of instruction for fomenting reaction to the subject matter and encourage feedback from the students.

2. Courses for mothers: will consist of development of a program of women's education in those areas related with family planning programs. The same facilities of radiophonic schools might be used for these courses to mothers able to assist; and those who do not want or cannot assist a promotion program should encourage them to listen to the programs in their homes.
3. Home-based audiences: A visiting teacher should supervise their progress. Some monitor

teachers of the radiophonic schools and home visiting family planning professionals can be used for the job. Motivational techniques, mainly by word-of-mouth should be used to foment radio listening in places like clubs, schools, churches, family gatherings, etc., and by other media like posters in different locations, such as public gatherings, recreational centers, factories, markets, transportation facilities, etc.

For more effective use of audiovisual materials in both radiophonic schools and courses for mothers, the monitor teacher should follow those techniques that best serve him, either showing a filmstrip or chart before each unit for general introduction, or during the lesson in combination with the broadcast program, or after the broadcast at a convenient time for detailed study.

Tape recordings of the broadcast might be used for review and reinforcement of the lessons at more convenient times for some special students and as individualized instruction.

VI. The establishment of television stations covering the target population of the 39 Family Planning Service Centers of the pilot project. The studios of the main television station should be located in Caracas with repeater stations in La Guaira, Valencia,

Puerto Cabello, Barquisimeto, Curimagua (Falcon), Maracaibo, Trujillo, Merida, El Zumbador (Tachira), Barcelona, El Tigre, and Maturin (see Appendix C).

Television will be used in the same manner as was done with the radio, for:

A. Promotional and general information campaigns directed to the target population in the form of: commercials, interviews, films, dramatic presentations, and general information on family planning.

B. Educational television: directed to special audiences in:

1. Television schools: For special groups of community leaders, for those already practicing birth control, and for those most highly motivated. The establishment of television schools to operate in the 39 Family Planning Service Centers, that is, in the same cities as above for radiophonic schools on page 144 (see Appendix C). These schools should be equipped with short-wave radio transmitters and telephones for better feedback and discussions between students and television studio teacher.

a. An especially trained teacher should preside over the television class and take

care of the mental and physical learning environment before, during, and after the lesson presentation; pay attention to reactions of students, and discuss and encourage their comments to the lesson presented.

b. Encourage means of feedback, like correspondence between literate students and television station teacher, short-wave radio and telephones where they are available. Evaluation sheets for literate students and monitor teachers should be used. Different tests and quizzes should be administered to literate students at the beginning and at the end of the program.

The television studio teacher should use instruction techniques to stimulate reaction of the students to the subject matter, and to encourage feedback. Visits of the television studio teacher to the classroom will serve promotional ends, and foment interaction and feedback.

2. Home-based audiences: Some monitor teachers of television schools and home visiting

family planning professionals can be used to supervise the progress of home-based audiences. Motivational techniques mainly by word-of-mouth should be used to make the people watch television in places, like schools, churches, etc.; and by other media, like posters; by newspapers and magazines; and in theaters and movie houses, etc.

VII. During the third year of the family planning program operation, and according to results of the evaluation research, the program by radio and audiovisual materials should be extended to other parts of the country. The television program should be extended to other parts of the country during its second year of operation, and if the evaluation research indicates the need of doing so. In order that both systems, radio and television, can work in close collaboration with and complement each other, television should be used mainly in urban areas where electricity and sets are more available, and the radio in isolated rural areas where electrical power is less available and transitor radio receivers are fairly common.

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APPENDICES

APPENDIX A

HEALTH NEEDS OF THE VENEZUELAN ADULT POPULATION

APPENDIX A

HEALTH NEEDS OF THE VENEZUELAN ADULT POPULATION

Causes of Death

The five single causes of death and the death rates per 1,000 population in 1968 and 1969 were as shown in Table 29.

TABLE 29.--The five first causes of death and death rates per 100,000 population, 1968, 1969.*

Causes of Death	1968		1969**	
	Deaths	Rate	Deaths	Rate
Heart Diseases	7,052	75.8	7,941	83.2
Cancer	5,265	56.6	5,252	55.0
Gastroenteritis	4,521	48.6	4,814	50.4
Accidents	4,473	48.1	4,665	48.8
Diseases of early infancy	4,244	45.6	4,499	47.1

*Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta 1969, Caracas, 1970, p. 183.

**Provisional data.

Despite many discrepancies in death registration and medical death certifications in Venezuela, the study of causes of death is very useful to determine the state of health of the country and to follow the changes that it may present.

This table presents the five most important causes of death in the country. Because of the method utilized to

indicate the principal causes of death, infectious diseases appear rarely in the first five places of any statistics.

TABLE 30.--Rates of death by five diseases in Venezuela and the United States, 1965, 1966.*

Country	Disease	Rate (per 100,000)	
		1965	1966
Venezuela	All infective and parasitic diseases	53.8	45.8
U.S.A.		9.2	-
Venezuela	Heart diseases	69.5	67.2
U.S.A.		368.2	-
Venezuela	Malignant neoplasms	55.2	55.0
U.S.A.		153.5	-
Venezuela	Accidents	48.6	48.0
U.S.A.		55.8	58.0
Venezuela	Gastroenteritis	45.8	44.2
U.S.A.		4.1	3.9

*World Health Statistics Report, 1968, pp. 24-29, 468-72, 588-91.

Infectious diseases produce an important level of disease incidence and mortality (Table 30).

The distribution of the Venezuelan age population does not justify the high level of mortality by heart diseases, this, however, can be explained by the fact that some infectious diseases, like Chagas disease, produce death by heart attacks, and by diagnostic inaccuracy, many deaths are registered as caused by heart diseases. On the other hand, some

doctors give the same cause of death by heart disease when they do not know the actual cause of death.[1]

The rate of deaths caused by gastroenteritis is also high and it has close relationship with the emvironmental sanitation. Motor vehicle and other accidents are also increasing every year.

TABLE 31.--Number and rate of maternal mortality per 1,000 children born alive as compared with that of the United States.*

Country	Number				Rate			
	1962	1963	1964	1965	1962	1963	1964	1965
Venezuela	368	335	361		1.1	0.9	1.0	
U.S.	1465	1466	1370	1188	0.4	0.4	0.3	0.3

*America en Cifras 1967, pp. 142-43.

Pregnancy and child-birth complications caused a relatively high rate of deaths as compared with those of the U.S.

Summary

Heart diseases appear as the greatest cause of registered deaths in the country. This may not be really the case, because of diagnostic inaccuracy, many deaths are registered as caused by heart diseases when they were really caused by other diseases.

Due to the limited methods utilized to indicate causes of death, infectious diseases rarely appear as great causes

[1]Bernieri, "La Situation de la . . . ," p. 354.

TABLE 32.--Mortality per infectious diseases, 1969, 1968.*

Causes of Death	1969**			1968		
	Mortal. Diag.	% gen. Mortal.	Rate per 100,000	Mortal. Diag.	% gen. Mortal.	Rate per 100,000
Tuberculosis	1,146	2.6	12.0	1,186	2.8	12.7
Dysenteries	523	1.2	5.5	565	1.3	6.1
Tetanus	402	0.9	4.2	436	1.0	4.7
Septicemia and Piemia	368	0.8	3.9	460	1.1	4.9
Chagas	362	0.8	3.8	406	1.0	4.4
Measles	306	0.7	3.2	565	1.3	6.1
Whooping cough	240	0.5	3.2	215	0.5	2.3
Helminthiasis	107	0.2	1.1	175	0.4	1.9
Syphilis	92	0.2	1.0	89	0.2	1.0
Hepatitis infectious	90	0.2	0.9	72	0.2	0.8
Encephalities	52	0.1	0.5	19	0.1	0.2
Diphtheria	15	0.0	0.2	26	0.1	0.3
Typhoid and paratyph.	12	0.0	0.1	14	0.0	0.2
Rage (human)	17	0.0	0.2	17	0.0	0.2
Malaria	1	0.0	0.0	3	0.0	0.0
Others	544	1.2	5.7	317	0.7	3.4
TOTAL	4,277	9.7	44.8	4,568	10.7	49.1

*Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1969, Caracas, 1970, p. 184.

**Provisional data.

of deaths. Deaths caused by infectious diseases and gastro-enteritis are high and have close relationship with the environmental sanitation. Such relationship demonstrates that it is not appropriate to the health needs of the people.

The expectancy of lifetime has increased during the last few years, from 58.0 years in 1950, to 66.0 in 1967.

Infectious Diseases

The number of deaths caused by infective and parasitic diseases in 1965 was 4,696 at a rate of 53.8 per 100,000.[2]

Tuberculosis

Mortality by this disease has diminished especially after the introduction of antibiotics, but it is still the greatest cause of death.

TABLE 33.--Tuberculosis; deaths and rate per 100,000 population 1964-1969.*

Year	1964	1965	1966	1968	1969
Number	1,236	1,348	1,307	1,146	1,186
Rate	14.6	15.5	14.5	12.0	12.7

*World Health Statistics Report, 1968.

Dysenteries

These diseases are primarily of fecal origin. Poor distribution of water and lack of health education take an

[2]World Health Statistics Report, 1968, pp. 24-28.

important role in their propagation. Another factor of propagation is the lack of nutrition. They constituted about 1.2 per cent of the total deaths in the country in 1969 (Table 32), and 5.5 per 100,000 population with 523 deaths.

Tetanus

Three hundred seven deaths out of a total 437 cases reported in 1964 were among the age group of less than one year old. In 1969 there were 402 deaths (Table 32).

Whooping cough

In 1966, 8,357 cases were reported and 65 deaths, and in 1967, 8,632 cases.[3] Persons vaccinated in 1964: 356,549, immunized: 65.0 per cent.[4] In 1969 there were 240 deaths and in 1968, 215 deaths (Table 32).

Measles

In 1964, this disease represented the fifth greatest cause of death for the group 1 to 4 years old. In 1967, about 43,366 cases were reported.[5] In 1969, there were 306 deaths (Table 32).

Trypanosomosis or Chagas Disease

The vector of this disease, "R. prolixus," is present in 92 per cent of the national territory in roofs, walls,

[3] Ibid., p. 126.

[4] Bernieri, "La Situation de la . . . ," p. 367.

[5] World Health Statistics Report, 1968, p. 523.

and furnitures of the housing "rancho" type (hut) in which live 4,387,344 inhabitants who are in danger of infection.[6]

The study of disease incidence was continued in 1968 and the data obtained do not alter the conclusion of two last investigations of 1964 and 1965 conducted among 7,000 people.[7]

TABLE 34.--Program for the control of R. Prolixus, 1969.

Areas	Estimated Population	%	Area in Km2	%
Venezuela	9,548,977	100.0	912,050	100.0
With R. Prolixus controlled	4,953,185	51.9	185,900	20.4
Parcial control of R. Prolixus	1,928,678	20.2	75,000	8.2
Control in project of R. Prolixus	2,667,114	27.9	651,150	71.4

Places and houses examined during 1968, were in the following states: Anzoategui, Aragua, Carabobo, Cojedes, Falcon, Guarico, Lara, Miranda, Monagas, Portuguesa, Sucre, Trujillo, Yaracuy and Federal District, and there was found to be 7.3 per cent of the places were positive to "S.crucy," and 16.4 per cent to "T.rangeli;" 3.4 per cent of the

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[6]Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, Caracas, Venezuela, 1969, p. 419.

[7]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1969, Caracas, 1970, p. 374.

houses examined were positive to "S.cruzi" and 9.5 per cent to "T.rangeli."[8]

Malaria

According to the XVI Report of the Pan American Organization of Health for 1967, the area eradicated of malaria in Venezuela embraces 519 municipalities with 472,242 Km2, living 6,463,210 population. The situation for September 1968[9] is shown on Table 35.

TABLE 35.--Area of eradicated malaria in Venezuela, 1968.

Area	Municipalities	Km2	Population
All country	657	912,050	9,307,107
Originally with malaria	545	600,000	6,932,983
On phase attack	31	138,741	387,882
Maintenance	514	461,258	6,545,101

During 1968, there were 4,258 cases of malaria from which 3,642 were local cases which originated in Venezuela; in 1967, 5,257 cases and 3,980 of which were local cases; in 1966, 5,481 cases and 2,532 were local. The incidence rate per 100,000 population was 0.5 for the whole country in 1968, of which 12.9 per cent for the area in phase of

[8]Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, Caracas, Venezuela 1969, p. 421.

[9]Ibid., p. 409.

attack. There were no deaths caused by malaria. In 1969, there were 6,366 cases reported and one death from malaria.

Aedes Aegypti or Yellow Fever

The virus of yellow fever is in activity in many regions of the country and in full activity in some forestal regions of the country: Guayana Region, South of Maracaibo Lake, and among the monkeys of the Orinoco-Amazonas regions. At the present, the eradication campaign of the Aedes Aegypti is centralized in an area among the states Tachira, Merida, Trujillo, Apure, Barinas and Zulia.

TABLE 36.--Synthesis of the plan for eradication of the Aedes Aegypti, 1967-1968.*

Places	Spray		Verification			
	1967	1968	1967		1968	
	Total	Total	Insp.	With A.A.	Insp.	With A.A.
States	10	3	12	11	1	1
Municipalit.	35	21	42	33	19	14
Places	85	68	109	71	76	31
Houses	35,495	75,243	79,319	2606	210,377	259
Transports	15,924	14,073	54,422	37	189,241	68
Tanks	2000,643	4399,383	795,035	4989	1019,825	538

*Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, Caracas, Venezuela 1969, p. 428.

A health education campaign is underway among school population and general public in Colon, Tachira State, and El Vigia, Merida State to eradicate the vector of Aedes

Aegypti in order to avoid mosquito hatchery cleaning the building sites.

Helminthiasis

Diseases of this group have a relative importance as a direct cause of death: 0.2 per cent of the 9.7 total per cent of all infectious diseases of the country in 1969 (Table 32). They, however, have an increasing importance for the improvement of the environmental sanitation in the country.

Syphilis

Although the percentage of deaths caused by this disease has decreased during the last years, the number of denounced cases is still high, and this constitutes a sign of the existence of a grave problem of health. The 112 cases of death in 1966 gave a rate of 1.3 per 100,000 population.[10]

Typhoid and Paratyphoid Fevers

In 1969, there were 12 cases of death and a rate of 0.1 per 100,000 population (Table 32). In 1966, there were 765 cases of death caused by influenza which represented a 8.6 per 100,000 population.[11]

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[10] Demographic Yearbook, 1967, p. 456.

[11] Ibid.

Diphtheria

In 1969, there were 15 cases of death and a rate of 0.2 per 100,000 population (Table 32). In 1966, there were 321 cases reported and 51 deaths. In 1967, 242 cases reported.[12]

Acute Poliomilities

There were 134 cases and 18 deaths in 1966. In 1967, there were 67 cases reported.[13]

Rabies

There has been an increase in cases of death. There were 6 cases in 1961; 21 in 1962; 25 in 1963; and 19 in 1964,[14] and 17 in 1969 (Table 32).

Summary

Infective and parasitic diseases have a high rate of deaths, tuberculosis being the foremost. Poor distribution of water, lack of health education, and lack of adequate nutrition are common factors of propagation of dysenteries and helminthiasis.

There is a significant improvement in the eradication of malaria, yellow fever, and Chagas disease, due to health

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[12] World Health Statistics Report 1968, pp. 12, 457.

[13] Ibid., p. 136.

[14] America en Cifras 1967, Situacion Demografica: Estudio y Movimiento de la Poblacion, p. 124.

campaigns organized by the authorities to eradicate such endemic diseases.

Environmental Sanitation

The Bureau of Malariology and Environmental Sanitation of the Ministry of Health and Social Assistance (SAS) has as its objectives the utilization of the health activities directed to control the morbid factors of the environment; and its goals are to improve health conditions of the environment in order to eradicate diseases, and to eliminate uncleanliness as a favorable agent of the sources of diseases.[15]

TABLE 37.--Mortality caused by some diseases due in part to poor environmental sanitation in rural and urban areas, 1961.*

Causes of Death	Mortality Rate per 100,000 Population	
	Rural Zone	Urban Zone
Gastroenteritis	148.0	70.0
Dysenteries	31.0	10.0
Helminthiases	12.0	4.0

*Bernieri, "La Situation de la . . . ," p. 372.

The results of this table seems to confirm the common opinion that there exists a relation between the conditions of the environment and the health of its population.

[15]Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion the Malariologia y Saneamineto Ambiental, p. 393.

The Social Subcommission of the Agrarian Reform of Venezuela in its report to the Ministry of Agriculture and Livestock reported that elemental measures for environmental sanitation in rural areas were the following: better supply of water, construction of housing and sanitaries, improved disposal of garbage, and housing domestic animals away from the people's living quarters and better handling of the animals.[16]

The people of rural Venezuela have been living in unhealthy housing conditions dispersed all over the country. Such dispersion makes the provision of better housing with elementary services and appropriate medical assistance more difficult. The planning of rural areas with all health facilities will decrease the transmission of diseases which will be reflected in the healthy indexes. Diarrhea, tuberculosis, gastroenteritis and other endemic diseases of the rural areas have been reduced in those areas improved by the National Housing Program.[17]

Health problems of a community are so inter-related that, a measure to the solution of one of them is intimately related with the other one. Evaluating the relative importance of the helminths, the most interesting factors are those affecting their transmission, so that the degree of

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[16]Ministerio de Agricultura y Cria, Reforma Agraria: Informe de la Subcomision Social, Caracas, Venezuela, 1959, p. 83.

[17]Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, p. 394.

helminthic infections will show the health level of a community. The intensity of the helminthiasis problem has decreased, but we can see less decrease in the general distribution. Time and effort will be necessary to change the way of life deeply rooted in the people. In 1968, 20,618 coproscopic exams with 816 positive cases of persons, which represents 4.0 per cent of infection were made. In 1967, about 29,357 exams resulted in 1,577 positive cases of persons, which represented 5.4 per cent of infection.[18]

In order to fight Ankylostomiasis, the Direction of Ankylostomiasis of the Ministry of Health and Social Assistance (SAS) performed the following activities in 1968.

TABLE 38.--Activities to fight Ankylostomiasis in 1968.*

Housing visits	275,646
Water-close construction	1,124
Latrines construction	19,366
Sanitary talks	6,678

*Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, p. 484.

In 28 years of activities, the Division constructed 412,821 water-closet and latrines. The Propaganda Services of the Division increased its activities during 1969 in order to form responsibility in the community, because the

[18]Ibid., p. 475.

Division understands that this kind of job will result in better control of helminthiasis.

Rural Aqueducts

The National Program of Rural Aqueducts is a part of the Division of Rural Aqueducts of the Ministry of Health and Social Assistance (SAS), and the construction of aqueducts for rural areas is a regular activity of the Division in the field of environmental sanitation. This kind of health action is directed to rural areas of less than 5,000 population and intends to achieve: the improvement of health through prevention of diseases of hydric origin and the reduction of the endemic levels of the diarrheic diseases; the improvement of health conditions of the rural environment; change of population habits offering personal and domestic facilities of hygiene; social development and raising the level of life of population in rural areas, and the incrementation of the development of the country.

In 1968, the Ministry constructed aqueducts for 250 localities of 108,123 population, and in 1967, 295 aqueducts for 177,074 population. The budget for aqueducts construction has been cut down to 60 per cent which represents a severe cut for the original goal of providing with water to one million persons in the next ten years.[19]

[19]Ministerio de Sanidad y Asistencia Social, Informe Anual para 1968, Direccion de Malariologia y Saneamiento Ambiental, p. 493.

TABLE 39.--Water supply for rural population, 1966.*

	Size of Population Centers				
	4,999 to 500	499 to 200 pop.	199 to 100 pop.	Less 100 pop.	Total pop.c.
Population	1,195,686	836,581	590,197	759,334	3,381,788
With equed.	1,075,786	568,000		44,500	1,688,286
Percentage Pop.served	90	39.8		5.9	49.9

*Bernieri, "La Situation de la . . . ," p. 373.

Housing

In 1966, the deficit of housing was estimated at 800,000 units of which 256,000 comprised the structural deficit plus the deficit caused by the demographic increase; the other 554,000 are those existing housing but considered unacceptable as a social housing. Because of the population increase, the need for housing is increasing about 3 per cent annually, which means that for 1981 there will be a need of 2 million housing units. Demographic increase and the migration of rural population to urban areas has aggravated the housing problem in urban areas. The low level of population coming to urban areas and their incapacity to produce rapid and satisfactory solutions has created a chaotic situation for housing under all phisical, social and economic aspects. About 44 per cent of the urban population live in this chaotic way.[20]

[20]Herminio Pedregal,"Poblacion y Vivienda" in Revista Venezolana de Sanidad y Asistencia Social, Vol. 31, No. 3, p. 531.

In 1965, to alleviate the situation in urban areas, five government agencies in four year program called for the construction of 156,000 units. So far, 64,703 units were completed in two years.[21]

According to the 1961 census, about 2,818,711 people (Tables 2 and 3), were living in 563,000 "ranchos," or shanties. The rural rancho consists of mudpacked walls, thatched roofs, and earthen floors. These ranchos are natural habitats for disease-carrying vectors, such as the "chipo" (Rhodius prolixus) which transmits Chagas disease, at the present the most serious endemic disease in rural Venezuela. Other diseases are diarrheic or caused by intestinal parasites and are also attributed to the unhealthy environment of the rancho. The last known answer to these problems is to provide hygienic housing and adequate water supply for the rural population.[22]

The Ministry of Health and Social Assistance (SAS) from 1959 to 1968 constructed 75,547 housings for a population of 445,727 and about 10,564 more houses were completed in 1968. A five year plan from 1969 to 1973 calls for construction of 74,000 more housing units.[23]

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[21] Venezuela Up-to-Date, Vol. 12, No. 3, Embassy of Venezuela, Washington D.C., Spring 1968, p. 24.

[22] Eric Carlson, and Arturo R. Ortiz, "Venezuela uses self-help in rural housing program," in The Journal of Housing, Vol. 20, No. 4, May 24, 1963.

[23] Cesar Quintana, "Experiences of the National Rural Housing Program in Venezuela," Information Document to United Nations VI Session, Committee on Housing Building and Planning, New York, September 1969, p. 25.

The Barrios or slum areas, are located in central or peripheral areas of the cities. They are formed by congested areas of physical decay with universal predominance of uncleanliness and housing heaping without order. They are populated by humble and poor people, workers and middle class employees, who live congestedly, with many forms of social disorganization and precarious life conditions of social, mental, and physical order. Although the physical conditions are poor, it seems that they are a little better than in the rural areas. In 1962, a study about a special rural area of Lara State, showed that the mortality rate of children under 10 years old, was 28 per 1,000 population, as contrasted with 12 per 1,000 in the cities. The life expectancy is 67.4 in urban areas, and 60.6 in rural areas of the country. Comparing the physical health of the barrios with other residential areas of the cities, although it is difficult to discriminate the final statistics from the different areas of the same political department, nevertheless, studying the disease incidence, the study found that those important cases of transmisible diseases like, tuberculosis or pneumonias, or others from poor environmental sanitation, like those of diarrheic origin, came from those barrios.[24] Mental health, according to

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[24]Arnoldo Gabaldon, "El Problema de los Barrios insalubres, sus cansecuencias sobre la Salud y su alivio por medio del Saneamiento Ambiental," in Boletin Informativo de la Direccion de Malariologia y Saneamiento Ambiental, Vol. 5, No. 6, Maracay, Venezuela, December 1965, p. 259.

specialists is critical; among the problems, the population of the barrios suffer from isolated environment and lack of friends and relatives, loneliness, economic difficulties, crowding, anguish by uncertainty, noise, poor housing, lack of water supply, etc. In social health, unknowing residents begets immorality, and crowding produces delinquency.

Summary

Dispersion of population in rural areas is an important factor which makes the provision of better housing and health facilities, and medical assistance more difficult. The provision of rural areas with water is aimed to improve health conditions of the environment, by preventing diseases of hydric origin and by reducing the endemic level of diarrheic diseases and raising the level of life in rural areas. About 50 per cent of the total population living in towns 5,000 and under, have been provided with aqueduct services by the government.

Lack of healthful housing conditions is increasingly grave, although there exists official and private organizations to solve the problem. The unhealthy environment of the "ranchos" or shanties are natural habitats for disease. Other diseases are also attributed to the unhealthy environment of the "rancho" where the majority of rural population live. About two million housing units will be needed in the near future for rural and urban areas, where lack of

housing has created overcrowded slums with poor health conditions.

The "barrios" or slum areas located in central and peripheral areas of cities are populated by humble people with social disorganization and precarious life conditions of social, mental, and physical order.

Nutrition

This reserves special attention because a high percentage of diseases is related with nutrition.

TABLE 40.--Reports on deficiency diseases, 1965.*

Disease	Consultations
Anaemias	252,331
Syndrome Plus. Inf.	11,744
Goiter	5,010
Rachitics	3,844
Avitaminosis	3,621
Obesity	2,125
Beriberi	1,662
Arriboflaminosis	1,143
Pellagra	1,208
Scurvy	995
Diabetes	928
Cretinism	200

*Luis Chaurio Bermudez, "Principales Problemas Nutricionales del Pais," Los Teques, Venezuela, 1967, p. 14.

Avitaminosis and other deficiency diseases as a direct cause of death were reported in 512 cases and rate 9.1 per

100,000 for the whole country, of which 134 cases were among the adult population. The rate with respect to all deaths of the year was 9.1 per 100,000 population, which is low if we compare it with other causes of death. But, many times, lack of nutrition is not registered as direct cause of death, but out of 27 causes of death, 20 were related directly or indirectly to poor nutrition in 1965. In 1968, there were 730 deaths caused by Avitaminosis and a rate of 7.8 per 100,000 population.[25] Most of the deaths, 323 of them were in the group of 1 to 4 years old. Mortality among this group is regarded as the best indication of the nutritional situation of the country. The nutritional situation is regarded as grave when the mortality rate is above 10 per 1,000 among the group.[26]

The National Institute of Nutrition of the Ministry of Health and Social Assistance (SAS) has some programs directed to the relief of the nutritional problem. Among them: protection of the pre-natals by administering to the registered pregnant women, polivitaminics pills, and also the program for the sick by avitaminosis which in 1964 were reported 3,900; the family nutritive program is directed by the Educational Service of the Ministry to

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[25]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1969, Caracas, 1970, p. 183.

[26]Ibid., pp. 21-23.

improve nutritive education for schools and general public against ignorance and bad nutritive habits.[27]

Summary

Avitaminosis, a disease caused by lack of vitamins in the diet, and other deficiency diseases are not so important as direct cause of death, but a high percentage of diseases is related with nutrition. Death from avitaminosis is very high among pre-school children. There are some nutritive programs organized by the Ministry of Health and Social Assistance (SAS), but they are not sufficient to alleviate the gravity of the problem.

Summary

Health needs have been presented in four big areas: infectious diseases, environmental sanitation, the many causes of mortality, and nutrition.

In the area of environmental sanitation, the situation is a precarious one in both rural and urban areas of the city slums. Construction of aqueducts and housing units are, at the present, a significant source for the improvement of the environmental sanitation.

In the area of infectious diseases, they have high rate of deaths, and poor environmental sanitation plays an important role on their propagation. There has been a

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[27]Ministerio de Sanidad y Asistencia Social, Memoria y Cuenta, 1964, Caracas, 1965, p. 515.

significant improvement in the eradication of certain endemic diseases like malaria, Chagas and yellow fever.

In the area of nutrition, the lack of adequate nutrition is grave because it is an indirect cause of many diseases.

Deaths by heart diseases are the greatest cause of certified deaths, but deaths caused by infectious diseases and gastroenteritis are high and closely related to the environmental sanitation.

APPENDIX B

VENEZUELAN BROADCASTING SYSTEM

REGULATIONS

VENEZUELAN BROADCASTING SYSTEM REGULATIONS

The Telecommunications Law is a piece of legislation issued by the President of Venezuela on July 12, 1940 abolishing the old communications laws of 1936 and 1927.[1] It has twenty eight (28) articles giving general guidelines about the telecommunication systems of the country. It has seven (7) Chapters. Chapter I deals with rights, responsibilities, and obligations of the Nation about telecommunications in general; Chapter II, attributions of the National Government; Chapter III, permissions and concessions; Chapter IV to VI taxes and penalties, and Chapter VII, some final provisions.

It is interesting to note that the first article states that all telegraphic communications systems of the country through writings, signs, images, cables, sound or visual, and any transmission procedures invented or to be invented belong to the State.

Nevertheless, the Federal Government grants permissions and concessions to particular persons to establish radio and television broadcasting stations for commercial and/or educational purposes, as long as such services do not endanger

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[1] Compilacion Legislativa de Venezuela, Ley de Telecomunicaciones, (Embassy of Venezuela, Washington, D.C.) n.d.

the State and other concessionaires, and fulfilling Broadcasting Rules and Regulations will serve a real need of progress.

Articles 3 and 4[2] refer to the prerogative of the government to revoke such concessions when the national interest, public order, individual security, and laws and morals might be in danger. Such permissions and concessions cannot be transferred without federal approval, and will never be transferred to foreign governments, or persons not legally residents of Venezuela.

Importation and exportation, construction and fabrication of sets and broadcasting equipment for public services are subjected to the Broadcasting Rules and Regulations stated by the Ministry of Communications (5 and 6). The implementation of International Agreements and Treaties on Telecommunications belongs to the Federal Government. The general taxes to be paid by the owners of commercial broadcasting stations is one per cent of the raw product. On the other hand, the owners of a private broadcasting station have to pay yearly between $89.00 and $667.00 depending on the broadcasting power of the station (15).

Construction, installation, possession or use of a clandestine broadcasting station are punished with fines from $111.00 to $889.00 or corresponding arrest and

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[2]The numbers of the subsequent articles cited from The Telecommunications Law will be given in the text immediately after the citation.

confiscation of the materials used (20). Other crimes like severe transgression of the Telecommunications Law, of International Agreements ratified by Venezuela, and of the Broadcasting Rules and Regulations of the country are punished with the temporal or permanent suspension of the permission granted; other small transgressions might be punished with fines from $11.00 to $889.00 or proportional arrest plus other penalties that might be applied by other laws (21).

The owners or users of instruments producing broadcasting interferences and perturbations to broadcasting stations should take the necessary precautions stated in the Broadcasting Rules and Regulations to avoid such broadcasting disturbances (26).

A Resolution of the "Junta de Gobierno" (Council of Government) of Venezuela on January 10, 1952, created "La Comision Nacional Supervisora de Radiodifusion" (The Supervising Commission of Broadcasting).[3] Some of its functions are: to write its own Rules and Regulations; to propose modifications to the Broadcasting Rules and Regulations in order that broadcasting programs be for public welfare, to raise the cultural level of the Venezuelan people by improving science, arts and public morals, and to develop the highest value of human life; to supervise the implementation

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[3]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones No. 9, Caracas, January 10, 1952.

of broadcasting rules, and to recommend procedures to attain broadcasting goals.

The Commission is formed by five principal members and five substitutes who fill the vacancies of the principal ones. The election of the members is in this way: two principals and two substitutes are elected by the Ministry of Communications, one principal and one substitute by the Venezuelan Broadcasting Chamber, one principal and one substitute by the Ministry of Education, and one principal and one substitute by the Venezuelan Council for Children. The members are elected for one year and they can be re-elected, and their job is remunerated.

Venezuelan broadcasting regulations are handled by The Telecommunications Division of the Ministry of Communications. Some of them are issued in form of Resolutions by The Ministry, and the principal ones are contained in a special set of rules called Broadcasting Rules and Regulations.[4]

For special purposes of the present study we will point out only those articles of the Broadcasting Rules and Regulations directly related to our interest. Article 14[5] says that broadcasting stations can be established with

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[4]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Reglamento de Radiodefusion.

[5]Of the Broadcasting Rules and Regulations. Subsequent articles cited from this Regulations will be given in the text immediately after the citation.

commercial and educational goals. Broadcasts must be in Spanish, although the Ministry of Communications, under certain circumstances, might permit broadcasts in other languages besides Spanish (44).

Broadcasting hours are at the best convenience of the concessionary between 6:00 A.M. to 12:00 P.M. Venezuelan legal hour, although the Ministry of Communications can modify the hours at the stations' own convenience (45), as it did so, April 15,1968, by Resolution No. 800 stating that broadcasting stations can operate twenty four hours a day.[6]

Permits for the establishment of broadcasting stations and use of transmission channels can only be granted to Venezuelan citizens of mature age, as far as such permits are in the public interest. Concessionaries must be formed according to Venezuelan laws. The totality of its board of directors and administrators should be Venezuelan, and 4/5 of the capital investment with voting rights must be Venezuelan. In the case of an anonymous corporation, its voting stock must be nominal. And when the owner of a broadcasting station loses his Venezuelan citazenship, the Federal Government will suspend his permit. In any case, directors of all broadcasting stations must be Venezuelan (14).

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[6]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones No. 800, Caracas, April 15, 1968.

All applications for broadcasting station installations should be addressed to the National Government through the Ministry of Communications with: name, age, nationality, profession and address of the applicant; place and maps of the future installations; indication if the station will be commercial or educational; name, nationality and title of the technical director of the station; capital available for its construction and exploitation; explanation why the broadcasting station will be for public interest, and brand and type of the equipment to be utilized (15). The application should be made in accordance with the following requirements: A promise under oath to use the broadcasting station for the same purpose for which it was granted; a promise to surrender it to the National Government in case of war or public disaster; a descriptive report of the work to be done containing: a budget, a diagram of the whole installation (antennas, towers, underground installation and power of the amplifier); and securities totalling up to fifty (50) per cent of the projected capital investment (16).

After permission is granted, construction of the broadcasting station must start in sixty (60) days and it should be finished in six (6) months, although these fixed terms can be extended under certain circumstances. Such permission will be outdated if broadcasting operations do not begin by the term fixed by the National Government (25).

A careful inspection from the Ministry of Communications with the assurance that the transmitter will carry at least eighty-five (85) per cent modulation and that it will not produce more than fifty (50) per cent harmonics of audiofrequency will be needed for the final operation permit (18-20). The installation must be of the most modern system and equipment to assure the best service free from interferences (22).

Construction permits are granted for only one broadcasting station to each natural or legal person in the same locality (26), but, a concessionary can broadcast in two bands using one transmitter for each band (27). The Federal Government can authorize the transfer of permits granted to persons or firms to other persons who meet the regulations underlined by these Regulations (28).

All broadcasts should be made from authorized studios. Special permission from the Ministry of Communications is needed to broadcast from other places (52).

Broadcasting stations cannot invade the privacy of persons, they cannot broadcast anything antagonistic against friendly nations; they cannot incite to rebellion or disrespect against institutions and legal authorities; they cannot transmit propaganda to subvert public order, political propaganda involving polemics among persons or among militant parties, news or messages obstructing action of the justice, immoderate and persistent advertising of the use of alcoholic drinking, such commercials must be approved

by the Ministry of Health and Social Assistance (SAS); advise about health, hygiene, treatment and prevention of diseases, prescription about treatment and recovery, and to give medical diagnosis, such broadcastings can only be permitted with authorization of the Ministry of Health and Social Assistance (SAS) or by an official health institution of public assistance; and in general, it cannot broadcast anything that is punishable by Venezuelan law (53).

The following are forbidden: language against good manners; immoral scenes or something that can hurt responsible human feelings; programs talking about political, social, or religious subjects insulting convictions of some sectors of the audience (62).

Mechanical reproductions should be presented as background or occasionally, otherwise, they cannot account more than 50 per cent of the total broadcasting time (65). A copy of each broadcasting program should be kept on file at the station up to one year after the broadcast was made (67).

All and every broadcasting station must release free time for the government to broadcast themes of national interest, up to one weekly hour, and they should also broadcast official news bulletins and when the President of the country or members of his cabinet address the nation in the public interest (69).

A special permission from the Ministry of Communications is needed for interchanging materials between foreign and national stations (72). Critics of science and art, and general commentaries should be constructive and objective excluding bias in scientific or artistic analysis (60).

All broadcasting stations should pay taxes to the National Government, but they can be modified in some circumstances by the Ministry of Communications.

Special authorization from the Ministry of Communications granted to natural or legal persons is needed for installation, construction or alteration with profitable goals of receivers to tune stations class "D" of limited audience. Such broadcasting stations should provide the Ministry of Communications with a semester list of receivers installed or modified. Failure to implement this is punished with fines of $111.00 to $889.00 or proportional arrest and confiscation of all materials used.[7]

By Resolution of the Ministry of Communications No. 630, broadcasting stations of frequencies 540 to 1,600 kilocycles are classified into four categories:[8]

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[7]Republica de Venezuela, Ministerio de Comunicationes, Direccion de Telecomunicaciones No. 001976, Caracas, April 15, 1968.

[8]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Division de Radiodifusion No. 630, Caracas, April 30, 1964.

a. Class "A" of general coverage, frequencies 450 to 950 kilocycles and from ten to 100 kilowatts. These frequencies cannot be repeated in the national territory;

b. Class "B" of regional coverage, frequencies 960 to 1,300 kilocycles and one to ten kilowatts. Two broadcasting stations can operate simultaneously in the country in places where distance and characteristics permit appropriated protection;

c. Class "C" provincial coverage, frequencies 1,310 to 1,450 kilocycles, and one to five kilowatts power. Three broadcasting stations can operate simultaneously in the country in places where distance and characteristics permit appropriated protection;

d. Class "D" local coverage, frequencies 1,460 to 1,600 kilocycles, and 250 to 500 watts power. In this frequencies can operate simultaneously as many stations as the characteristics of local coverage already studied will permit.

The same Resolution states that, one broadcasting station can be installed in those populated areas in which do not exist direct service on frequencies 540 to 1,450 kilocycles if other stations of the same category do not cover the same place and according to the technical rules of Table 41.

And one broadcasting station Class "D" local coverage can be installed out of 7.5 miles perimeter, in direct line,

TABLE 41.--Minimum intensity power needed to cover primary zone.

Population Areas	Intensity Power	
City, industrial & commercial areas	10	MV/m.
City, residential areas	5	MV/m.
Towns from 2,500 to 5,000 population	0.5	MV/m.
Towns from 5,001 to 10,000 population	2	MV/m.
Towns from 10,000 to 20,000 population	5	MV/m.
Rural areas	0.25	MV/m.

from any broadcasting station class "A," "B," or "C," frequencies 1,460 to 1,600 kilocycles, in those towns in which such a service does not exist, and according to the following rules:

a. In towns of 2,500 to 5,000 population not covered with 0.5 MV/m. minimum power from nearby stations of the same category. With maximum power of 350 watts, vertical antenna of 45 degrees or Marconi 1/4 wave length;

b. In towns of 5,001 to 10,000 population not covered with 2 MV/m. minimum power from nearby stations of the same category. With maximum power of 250 watts, vertical antenna of 45 degrees or Marconi 1/4 wave length;

c. In towns of more than 10,000 population not covered with 5 MV/m. minimum power from nearby stations of the same category. With maximum power of 500 watts, vertical antenna of 45 degrees or Marconi 1/4 wave length.

The Ministry of Communications does not grant more than three construction permits for a person to install broadcasting stations of this category. But, the Ministry can grant permission to install new commercial broadcasting stations in those cities directly covered by the cited service and according to the following rules.

One broadcasting station for each 150,000 population increase for the Caracas Metropolitan Area; one broadcasting station for each 100,000 population increase for Maracaibo city; and one broadcasting station for each 50,000 population increase for other cities of the country. Such population increases are estimated according to existing broadcasting stations. The Ministry also recommends that all new broadcasting stations should be installed according to the technical regulations of the Ministry of Communications. The Ministry does not grant permits for the establishment of exclusively repeating broadcasting stations or to transfer an existing broadcasting station into a repeating one. But, stations class "A," "B," and "C" can broadcast programs originated in other stations up to 50 per cent, and stations class "D" up to 20 per cent of their total broadcasting time.[9]

The Ministry of Communications issued some norms and recommendations for the installation of broadcasting stations

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[9] Ibid.

in the country.[10] Some of these recommendations refer to: antennas for 540 to 1,600 kilocycles: for long wave bands it recommends antennas on radiating posts, and the minimum length of such antennas should be guided by the rules of Table 42.

TABLE 42.--Minimum height of antennas on radiating posts for transmission on long wave bands.

Frequency Kc/s	Height
550	310'
600	300'
700	280'
800	260'
900	245'
1,000	235'
1,100	220'
1,200	210'
1,300	200'
1,400	195'
1,500	190'
1,600	185'

Other recommendations refer to the underground system of the antenna which should be formed by no less than 60 radials of .3λ length each; the radials should be of copper wire no less than N.8 AWG diameter and welded to a copper

[10] Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Division de Radiodifusion, Recomendaciones y Normas para la Instalacion de Estaciones de Radiodifusion, Caracas, September 1957, and 1958.

rim under the base of the tower; the antenna should be connected with the ground system in a weather proof box. A coaxial cable is recommended; the tower supporting the antenna should be constructed to support winds up to 80 miles per hour, and it should be painted and illuminated and protected by its own lightning rods.

Antennas for the Tropical Broadcasting Band: they should be located in a convenient altitude, no more than .25λ; the antennas should be provided with a counterweight of parallel wires 15 to 20 cm. directly underground above the antenna and with no more than .1λ separation among themselves and 1/4 of length more than the antenna in order to form a good radiation angle; Hertz antennas or directional combinations of balance dipoles are recommended; the transmission line to the antenna should be of the balance type and its joint point should not permit stationary waves more than 1:1.5; the open transmission lines should be on posts no less than 2.50 m. from the ground and protected by lightning rods.

Transmitters and Equipment to be used: for a better implementation of article 22 of the Broadcasting Rules and Regulations that says that the installations must be of the most modern system and equipment to assure the best service free from interferences, the Ministry recommends that all the studio equipment and transmitters of the broadcasting stations be connected to the ground; that all AC

conductors should be calculated with 50 per cent of security margin and for a loading no more than 1,500 circular mils per ampere; all power cables, but the high frequency power, should be in conduit; and all broadcasting stations should have measuring and monitorial instruments and corresponding spares.

Other recommendations refer to the broadcasting technicians and staff personnel: so, broadcasting stations concessionaires should report during the first month of operations: name and certificate number of the chief engineering technician of the station; name and certificate number of plant and studio staff, and working hours of both personnel and station; when the broadcasting station has technical or staff personnel with no credit certificate, they should present a list with: name, age, number of identity card, time of service and grade of instruction of those willing to apply for a validated certificate.

By Resolution from the Ministry of Communications No. 670 those persons applying for a Certificate of Commercial Broadcasting Announcers should meet the following requirements: they should be Venezuelan, over 18 years old, and with three years of secondary education, and pass an examination at the secondary education level.[11] They

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[11]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, No. 670, Caracas, April 20, 1965.

should send an application to the Ministry of Communications asking for designation of an examination panel, date, hour and place to take the required examinations for the Certificate of Broadcasting Stations Announcer. The Application should contain: birth certificate or citizenship document, proof of third year secondary education, address of the applicant and signed by the applicant.

The required examination is about Broadcasting Rules and Regulations, National and Universal History and Geography, Functional Spanish Grammar, General Culture and specific knowledge of Broadcasting Announcing. The examination has two parts: a written one, (one hour), and the second, practico-oral ten (10) minutes.

Radio Broadcasting Stations

There are two hundred twenty nine (229) radio broadcasting stations in Venezuela.[12]

Stations on Amplitude Modulation (AM)

There are two hundred-thirteen (213) stations and they are broadcasting as in Table 43.

All of the broadcasting stations in Table 43 are commercially operated by private organizations, but the 17 Radio Nacional broadcasting stations which belong to the Ministry of the Interior and the two Radiophonic Schools

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[12] Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Lista de Estaciones de Radiodifusion Sonora, Caracas, March 6, 1970.

TABLE 43.--Radio stations on amplitude modulation (AM).

Stations				
*133	Medium waves	540	to	1,500
27	120 meters	2,340	to	3,395
39	60 meters	4,760	to	6,170
7	31 meters	9,510	to	9,750
4	25 meters	11,725	to	11,970
2	19 meters	15,390	to	15,400
1	16 meters	17,840		

*Sixteen (16) radio stations in installment process.

stations which belong to the Ministry of Education and broadcast for the Radiophonic Schools of the National Government.

The official stations of Radio Nacional are mainly cultural and informational in character and broadcast in both Spanish and English, and they do not carry advertising. Private-owned stations get their revenue from advertising restricted by the government to about 50 per cent of the total broadcasting time. Programs are in Spanish, and occasionally also in Italian, Portuguese, English, Dutch and German.[13]

Stations of Frequency Modulation (FM)

There are 16 radio stations class "D" of limited audience in the country, one of them still in process of installation. All of them are privately owned and operated.

[13]UNESCO, World Communications: Press, Radio, Television, Film, Paris, 1964.

They broadcast on frequencies from 89.3 to 106.7, and 250 watts power (12 stations), one kilowatt (2 stations), and five kilowatts (2 stations). They cover the principal cities of the country.[14]

Radio sets in use increased from 260,000 in 1952 to 1,685,000 in 1970, which represents 17.5 per 100 people in the 9,600,000 total population of the country.[15]

Television Broadcasting Stations

According to Resolution No. 1,620 from the Ministry of Communications,[16] Television Broadcasting Stations are subject to all applicable resolutions of the present Broadcasting Rules and Regulations, to those of the present Resolution, and to those resolutions that the Ministry will issue in the future.[17]

Other norms from this resolution state that the Television Broadcasting Stations should follow the following

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[14]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Lista de Estaciones de Radiodifusion Sonora: Estaciones Classe "D" de Audiencia Limitada (Ambiente Musical) en Frequencia Modulada, Caracas, March 6, 1970.

[15]World Radio-TV Handbook 1970, p. 361.

[16]Republica de Venezuela, Ministerio de Comunicaciones, Division de Radiodifusion No. 1,621 Resolucion Relativa a la Instalacion y Funcionamiento de Estaciones de Television, Caracas, October 30, 1964.

[17]Of the TV Broadcasting Stations, Regulations, Numbers of subsequents articles cited will be given in the text.

basic rules: Channels to be used in Very High Frequency (VHF) should have a wide band of six megacycles each, as in Table 44.

TABLE 44.--Frequency gamut in megacycles for TV channels.

Channel Number	Frequency Gamut in Megacycles	
	From	To
2	54	60
3	60	66
4	66	72
5	76	82
6	82	88
7	174	180
8	180	186
9	186	192
10	192	198
11	198	204
12	204	210
13	210	216

Channels and hours to use them will be assigned by the Ministry of Communications and by petition of the interested party, but the simultaneous use of adjacent channels in the same place is not permissible. Exceptions to the use of adjacent channels and the simultaneous use of the common channels are stated in the Appendix 2 to this resolution. Those frequency bands assigned for television cannot be used by any other service (2).

Television broadcasting power as related to the population is assigned as in Table 45.

TABLE 45.--Minimum broadcasting power needed to cover population areas.

Population of Cities	Minimum Broadcasting Power
More than 1,000,000	50 Kilowatts (17 db/k)
From 250,000 to 1,000,000	10 Kilowatts (10 db/k)
From 50,000 to 249,000	1 Kilowatt (0 db/k)

The maximum permissible broadcasting power is 100 kilowatts (20db/k) for channels 2 to 6, and 316 Kilowatts (25 db/k) for channel 7 to 13. The power of the sound transmitter cannot be less than 20 per cent of the power of the image transmitter (3).

All television broadcasting stations are required to maintain the technical characteristics and the quality of their broadcastings according to the Recommendations of the Ministry of Communications and to the international communications requirements (CCIR) and the most advanced principles of engineering (4).

Other norms from this resolution state that television broadcasting stations in color should use a system compatible with black and white system (7); a Venezuelan broadcasting technician with certificate from the Ministry of Communications is responsible for the proper function of the station (10).

The Appendix number 2 to this resolution states that the allocation of the remained 14 to 18 television channels belongs to the Ministry of Communications. It also states that displaced channels can be used as follows: about 15 kilocycles when there is possibility of interference with adjacent channels from a nearby area; and half channel or more (3 megacycles), when in the same locality channels have been allocated in such a way that two free channels remain between the inferior and the superior, only for cultural or educational use and limited reception, with transmitters no more than 100 watts power, directional antennas, and if they do not cause interference to channels already operating in the area;

Simultaneous use of adjacent channels in the same area are not permitted, exception is made in those cases in which transmitters of less than 100 watts are used with high directional antennas to cover small delineate areas, and when the topography of the terrain and location of the antennas guarantee no interference in primary service areas;

Channels 2, 3, 4, 5 and 6 will not be assigned for simultaneous use of the same channel to places of distance less than 186.5 miles in direct line, exception made in the same cases as above;

Channels 7, 8, 9, 10, 11, 12 and 13 will not be assigned for simultaneous use of the same channel to places of distance less than 155 miles in direct line, exception made in the same cases mentioned above.

Connection between main stations and repeaters or among repeaters stations themselves will be made only by independent means (microwaves or UHF channels). Nevertheless, the direct method can be used when the amount of assignments in the locality permit so, but when the direct method is causing interference it should be changed to the independent method in a fixed period of 18 months.

In regard to the stations already in operation before this resolution, they can only enjoy protection against interferences in their primary service areas regarding the new concessions.

There are six main television broadcasting stations and 29 relay-transmitters in the country operating most of them in 525-line definition.[18] And they are located as in the following tables.

All of the television broadcasting stations as shown in Tables 46 through 51 which cover practically most of the populated areas of the country, are privately owned and commercially operated, except the Televisora Nacional which is owned by the National Government for cultural and educational purposes mainly. The first telecast was made in December 1952 by the government-owned station, which

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[18]Republica de Venezuela, Ministerio de Comunicaciones, Direccion de Telecomunicaciones, Lista de Estaciones de Television, Caracas, March 6, 1970.

TABLE 46.--TV Station: YVVA-TV Radio Caracas television.

Repeater	Channel	Zone	Location	Power KW
	2	Caracas	La Colina	60
YVVB-TV	7	Litoral Central	P. Mulatos	10
YVVC-TV	7	Valencia Lake	Altamira	88
YVVD-TV	10	Puerto Cabello	Naval Base	10
YVVE-TV	3	Barquisimeto	Terepaima	40.2
YVVF-TV	10	Falcon	Curimagua	330
YVVG-TV	2	Maracaibo	C/73-3C-97	66
YVVH-TV	7	Trujillo	El Zamuro	0.275
YVVI-TV	7	Merida	La Aguada	0.400
YVVJ-TV	7	Tachira	Zumbador	50
YVVK-TV	3	Barcelona	Sabana Larga	100
YVVL-TV	10	El Tigre	El Tigre	10
YVVM-TV	2	Ciudad Bolivar	C/La Soledad	0.125

TABLE 47.--TV Station: YVXA-TV Venevision.

Repeater	Channel	Zone	Location	Power KW
	4	Caracas	La Colina	90
YVXB-TV	9	Valencia Lake	Picacho	76
YVXC-TV	6	Barquisimeto	Terepaima	65
YVXD-TV	4	Maracaibo	Maracaibo	35
YVXE-TV	9	Litoral	La Guaira	1.8
YVXF-TV	12	Coro	Curimagua	1.5
YVXH-TV	9	Tachira	Cerro Colorado	1.2
YVXI-TV	7	Barcelona	Sabana Larga	30

TABLE 48.--TV Station: YVUA-TV color television (CVTV)

Repeater	Channel	Zone	Location	Power KW
	8	Caracas	La Colina	251
YVUB-TV	11	Litoral	La Guaira	7.9
YVUC-TV	11	Valencia Lake	Aleton	151
YVUD-TV	7	Barquisimeto	Terepaima	109.5
YVUE-TV	8	Maracaibo	Maracaibo	147
YVUF-TV	11	Pto. La Cruz	Vidoño	23
YVUG-TV	11	Anaco	Cerro Grande	100
YVUI-TV	11	Ciudad Bolivar	Ciudad Bolivar	15
YVUJ-TV	8	Ciudad Bolivar	Ciudad Guayana	20
YVUM-TV	9	Margarita	S. Juan Bautista	40

TABLE 49.--TV Station: Televisora Nacional.

Station	Channel	Zone	Location	Power KW
YVKA-TV	5	Caracas	Caracas	400

TABLE 50.--TV Station: Ondas del Lago Television.*

Station	Channel	Zone	Location	Power KW
YVMF-TV	13	Maracaibo	Maracaibo	12

*The Ondas del Lago Television station is at the present closed because of administrative reorganization.

TABLE 51.--TV Station: YVOX-TV Teletrece (Radio Valencia TV).

Repeater	Channel	Zone	Location	Power KW
	13	Valencia Lake	Picacho	12
YVXD-TV	13	Caracas	El Avila	160

broadcasts about 6 hours daily. Private stations are on the air much longer.[19]

Television sets in use increased from 30,000 in 1954 to 700,000 in 1970, which represents 7.4 receivers from 100 people for the 9,600,000 total population of the country.[20]

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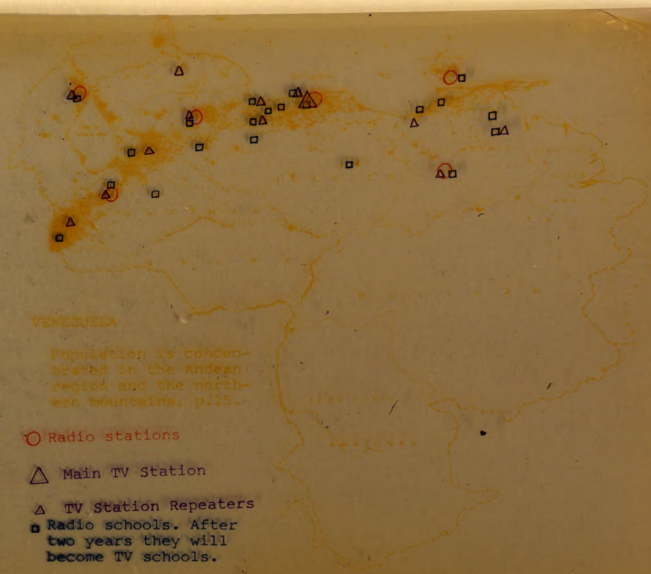
[19]UNESCO, World Communications: Press, Radio, Television, Film, Paris, 1964.

[20]World Radio-TV Handbook 1970, p. 361.

APPENDIX C

DISTRIBUTION MAP OF THE RADIO AND TELEVISION STATIONS AND SCHOOLS OF THE PROPOSED PILOT PROJECT IN VENEZUELA


VENEZUELA
Population is concentrated in the Andean region and the northern mountains, p.15.
Radio stations
Main TV Station
TV Station Repeaters
Radio schools. After two years they will become TV schools.

○ Radio stations

△ Main TV Station

△ TV Station Repeaters

■ Radio schools. After two years they will become TV schools.