executive committee of the directing council

PAN AMERICAN HEALTH ORGANIZATION

working party of the regional committee

WORLD HEALTH ORGANIZATION

92nd Meeting
Washington, D.C.
June 1984

Provisional Agenda Item 17

CE92/12 (Eng.)
8 May 1984
ORIGINAL: SPANISH

BASIS FOR THE DEFINITION OF THE ORGANIZATION'S ACTION POLICY WITH RESPECT TO POPULATION MATTERS

The Director's report expresses the view that the interrelations between population dynamics and health as a key element of development are of capital importance in the daily work of both the health sectors of the Member Countries and of the Organization itself.

It reviews the concepts in the subject and examines the trends and projections of the leading demographic variables and their effects on health.

The report shows not only how demographic information can be analyzed and used to identify and characterize the groups assigned priority in the Regional Plan of Action, but also that it is necessary for the improvement of the planning and allocation of health resources so that national health plans can be adapted to encompass the entire population.

It mentions the relationships between mortality--especially among infants--and fertility, and emphasizes that the measures required to reduce mortality and to guarantee through family planning that the individual and couple have the number of children they want at the desired intervals are primarily a responsibility of the health sector. This gives substance to human rights recognized by all the countries in the Region and makes it possible to quicken implementation of the Regional Plan of Action and provide services to the entire population, thereby fulfilling the principles of equity, efficiency and effectiveness needed for attainment of the goal of health for all by the year 2000.

CONTENTS

TABLES

CONTENTS (cont.)

I. INTRODUCTION

There are obvious relationships between the health status, demographic characteristics and level of development of a population, which affect the magnitude and types of its health problems and their solutions.

The link between health and population is most clearly apparent in one of the leading demographic variables--mortality, a traditional indicator of the health status of a population. However, health is also affected by the level of fertility and rate of increase of a population, and its spatial distribution and age structure, though they have been used less in situational population studies.

Knowledge of these characteristics permits greater precision in determining the membership of groups whose size or problems make them priority targets of health measures.

In turn, the operations of the health sector bring about changes in population variables, and in mortality and fertility in particular, and through them in the age structure of the population.

The connection between population characteristics and development has been acknowledged by the representatives of the Member Countries of the United Nations in many world and regional conferences. The World Population Conference at Bucharest in 1974 produced a "World Population Plan of Action" as a component of the strategies for attaining a better quality of life and rapid economic and social growth. That gathering brought out the implications of population growth, distribution and structure for the welfare of human beings, asserted the right of individuals to freely chose the number and spacing of their offspring, and made specific recommendations on morbidity and mortality targets, thus taking cognizance of the role of the health sector in development.

In the Conference on Primary Health Care at Alma-Ata in 1978 it was declared that the promotion and protection of health are essential to economic and social development and help to improve the quality of life. The connection between health and development was clearly stated in 1977 by the Thirty-Second World Health Assembly, in which the governments of the countries defined the goal of health for all by the year 2000 as a level of health that would permit the leading of a socially and economically productive life. Recognition of the role of population aspects in health was implicit in, among other points, their identification of priority groups and their inclusion of free access to family planning information and services as components of primary care. It was also noted that attaining the highest possible level of health also requires measures in social and economic sectors other than the health sector.

Despite the tacit recognition of the interconnections between health and population that these developments convey, the problems created by the dynamics of populations, which will continue in the years to come, merit more explicit consideration by the health sector with a view to formulating its own action program and to determining its role in the framing of population and development policies.

II. CONNECTION BETWEEN HEALTH AND POPULATION CHARACTERISTICS IN THE COUNTRIES OF THE REGION

The population characteristics whose importance as determinants of health problems makes them particularly deserving of examination include mortality, fertility, population growth, spatial distribution, and population structure in respect of certain variables.

Another point to be considered is how health measures affect mortality and fertility levels and through them other characteristics such as the growth and age composition of the population.

The levels and trends of population indicators differ widely between the developed and the developing countries, among the latter countries, and among geographic areas and socioeconomic strata in all of them.

The principal impediment to a better understanding of these situations is the nonexistence or poor quality of statistical data in many of the countries. The health sector has an important part to play in improving not only the data on the services it provides, but also those on natality and mortality. This information is important for the diagnosis of problems, the definition of priorities, and evaluation of the effects of measures in the health field.

1. Mortality

Mortality is one of the population variables most widely used to measure the level of health of a population.

According to the mortality rates estimated by the United Nations, in 1980 there were about two and a half million deaths in Latin America and the Caribbean area. If conditions had been the same as in 1960, this number of deaths would have been higher by more than one million. However, the present levels are still high if compared with those of developed countries, but more importantly if compared with the mortalities attained by some developing countries in the Region itself, such as Chile, Costa Rica, Cuba, and Panama. This means that there is still much room for improving the situation in the future.

The simplest measurement, crude mortality, is used to determine the natural increase of a population, which is obtained by subtracting it from the birthrate. Though in the health field it is used to assess the change of mortality in a given country for a short time, it is of little use in international comparisons because of the strong effect on its magnitude of the population's age composition. Hence, comparisons are preferably in terms of life expectancy at birth, which depends only on the specific mortality rates in the different age groups, and is not affected by the sizes of those groups as percentages of the total. Low values for life expectancy at birth are caused chiefly by high mortality

in infancy and childhood. Since this high mortality is cause chiefly by preventable pathologies, the life expectancy is increased relatively easily by reducing them. Progress becomes slower later on because mortality in older groups is caused predominantly by diseases that are difficult to prevent or treat. Moreover, maximum longevity is subject to an unvarying biological limit which prevents late mortality from offsetting premature mortality and thereby extending the life expectancy at birth.

In Latin America and the Caribbean area, life expectancy at birth has risen from 56.8 years in 1960-1965 to 64.4 years in 1980-1985. In the latter period (see Table 1), 13 of 31 countries have already attained the goal of 70 years set in the Plan of Action for the Year 2000, in five the life expectancy at birth is below 60 years, and in the other 12 it ranges between 60 and 70 years. According to United Nations projections, by the period 2000-2005, the countries in which the life expectancy is already 70 years or more will be joined by Chile, El Salvador, Mexico, Suriname, Venezuela and the Windward Islands. Optimistic as this prospect seems, the projections show that, in the year 2000, 55% of the population of Latin America will still be living in countries with life expectancies at birth below 70 years. This points up the urgency of bolstering health measures in them, particularly those for reducing infant mortality as the main determinant of general mortality. Such measures must not be omitted, however, in the countries projected to reach the goal by the year 2000, which may contain severely deprived populations whose situation is not reflected in the national average. For example, a study of life expectancy at birth in Brazil during the decade 1960-1970 showed differences of 17.7 years between the regions of extreme values, and a difference of 11.6 years between the groups with the highest and lowest incomes.

For a more detailed view of the health problems of a population it is useful to have mortality rates for specific age groups, by causes of death, and for place of residence or socioeconomic status. This is particularly important for the identification of priority groups and for more intelligent and efficient planning of health measures.

Particularly important in this connection is infant mortality, which has long been regarded as one of the most sensitive indicators not only of the health status of the population, but also of its development.

In recent years there has been a distinct divergence from strict correlation between economic indicators and infant mortality figures. The countries in Latin America and the Caribbean that have reduced their infant mortality the most are not those where per capita income is highest. Moreover, in some countries appreciable declines of the economic situation have not been attended by increases in infant mortality, which, to the contrary, has continued its downward course. It

Table 1

ESTIMATES OF LIFE EXPECTANCY AT BIRTH AND INFANT MORTALITY FOR 1980-1985
AND MORTALITY BETWEEN AGES OF ONE AND FOUR YEARS AROUND 1980
IN THE COUNTRIES OF THE AMERICAS

	Life Expectancy at Birth 1980-1985 (1)	Infant Mortality 1980-1985 (2)	Mortality 1 to 5 years Circa 1980 (3)
Latin America	64.1	62.9	-
Caribbean	64.1	57.8	-
Barbados	71.1	25.5	1.3
Cuba	73.5a)	20.4	0.9
Dominican Republic	62.6	63.5	3.0
Guadeloupe	70.4	24.0	-
Haiti	52.7	108.2	-
Jamaica	71.2	26.2	-
Martinique	70.4	21.0	0.9
Puerto Rico	73.4	15.9	0.5
Trinidad and Tobago	70.0	29.9	1.3
Windward Islands 1/			
Others in the Area 2/	70.2	34.3	-
Continental Middle America 3/	65.1	56.3	8.3
Costa Rica	73.7a)	25.7	1.3
El Salvador	64.8	71.0	6.1
Guatemala	60.7	67.7	12.4
Honduras	59.9	81.5	4.3
Mexico	65.7a)	52.1	4.8
Nicaragua	59.8a)	84.5	2.0
Panama	71.0	32.5	2.1
Temperate South America 4/	69.0	41.8	1.8
Argentina	69.7a)	43.2	2.2
Chile	69.7a)	40.0	1.3
Uruguay	70.3	37.6	1.1
Tropical South America 5/	63.0	69.7	-
Bolivia	50.7	124.4	-
Brazil	63.4a)	72.4	2.7
Colombia	63.6	53.3	5.6
Ecuador	62.6	77.2	10.7
Guyana	70.5	40.5	3.4
Paraguay	65.1	45.0	4.1b)
Peru	58.6a)	81.9	5.2
Suriname	68.8	33.8	1.3
Venezuela	69.0a)	38.6	2.4
North America 6/	73.3	12.0	0.6
Canada	74.0	10.4	0.6
United States	73.2	12.1	0.7

1/ Includes: Dominica, Grenada, Saint Lucia, and St. Vincent and the Grenadines
2/ Includes: Antigua, Bahamas, British Virgin Islands, Cayman Islands, Montserrat, Netherland Antilles, St. Kitts-Nevis, Anguilla, Turks and Caicos Islands, and United States Virgin Islands
3/ Includes: Belize and the Panama Canal Zone
4/ Includes: Falkland Islands
5/ Includes: French Guiana
6/ Includes: Bermuda, Greenland, St. Pierre and Miquelon

Col. (1): Source: United Nations. Demographic Indicators of Countries: Estimates and Projections as Assessed in 1980, Department of International, Economic and Social Affairs, ST/ESA/SER.A/82, New York, 1982.

(a) Owing to estimation differences, United Nations Economic and Social Council. ECLA. Situación Demográfica de América Latina Evaluada en 1983: Estimaciones para 1960-1980 y proyecciones para 1980-2025.

Col. (2): Source: United Nations. Population Bulletin of the United Nations, New York: Department of International, Economic and Social Affairs No. 14, 1982.

Col. (3): Source: Statistics Office, PAHO. b) Information Area.

would appear that the social sectors, and the health sector in particular, have become better able to help children survive, and so have achieved mortality rates lower than could once have been expected under given economic conditions.

This phenomenon does not detract from the value of infant mortality as an indicator of development, but it does highlight the importance of social policies and health strategies as factors in its determination.

The infant mortality estimated by the United Nations for 1980-1985 is higher than 60 per thousand in one third of the countries in the Region (see Table 1). In the countries with those figures, the leading causes of death are invariably the acute respiratory infections, the diarrheas, and perinatal causes. The conditioning factors are known for all of them, and techniques for their prevention or cure exist. This lays a heavy responsibility on the health sector, particularly considering that several developing countries in the Region have been able to significantly reduce mortality from these causes. In addition to a political decision, an essential requisite in this effort is the participation of other sectors that can help avert these deaths even if economic development has not been accomplished.

Another indicator of health in childhood is mortality between the ages of one and four years. The leading causes of death in this age group are the respiratory diseases, diarrheas, infectious diseases preventable by vaccination, and accidents, all preventable. The wide differences between levels of this mortality can be seen in Table 1.

The understanding of health problems through mortality is limited in most of the countries with high mortality levels by a lack of quality vital statistics. In lieu of these, estimates are frequently resorted to that are based on survey or census data that can yield an approximation of infant mortality and of the probability of death prior to the second birthday. This has the advantage of affording a study of differences in mortality from different variables on which data are collected simultaneously.

For example, in Table 2 it is seen that in some countries mortality under two years of age is more than 40% higher in rural than in urban areas. It also shows that mortality among the offspring of mothers without schooling is two to five times as high as that of the children of mothers with 10 or more years of schooling.

Another factor that affects infant mortality is high fertility. Table 3 illustrates the known increases in this mortality by order of birth in some countries for mothers under 20 and 35 or older, and when the time elapsed since the last previous birth is less than 18 months.

Table 2

ESTIMATED PROBABILITIES OF DYING BETWEEN BIRTH AND TWO YEARS OF AGE IN SELECTED COUNTRIES OF LATIN AMERICA AROUND 1966-1971 AND DIFFERENCES FOR MOTHER'S PLACE OF RESIDENCE AND YEARS OF SCHOOLING

(Probability for one thousand)

Country and Years to Which Estimates Refer	Total	Residence		Years of Mother's Schooling				
		Urban	Rural	0	1-3	4-6	7-9	10+
Bolivia 1971-1972	202	166	224	245	209	176	110[1/]	
Peru 1967-1968[2/]	169	132	215	207	136	102	77	70
Nicaragua 1966-1967	149	143	132	168	142	115	73	48
Guatemala 1968-1969	149	119	161	169	135	85	58	44
El Salvador 1966-1967	145	139	148	158	142	111	58	30
Honduras 1969-1970	140	113	150	171	129	99	60	35
Ecuador 1969-1970	127	98	145	176	134	101	61	46
Dominican Rep. 1970-1971	123	115	130	172	130	106	81	54
Chile 1965-1966	91	84	112	131	108	92	66	46
Colombia 1968-1969[3/]	88	75	109	126	95	63	42	32
Costa Rica 1968-1969	81	60	92	125	98	70	51	33
Paraguay 1967-1968	75	60	77	104	80	61	45	27

Source: Behm, H. and Primante, D.A., "Mortalidad en los Primeros Años de Vida en América Latina," Notas de Población, Year VI, No. 16, April 1978.

1/ Figure is for 7 years and more of schooling.
2/ The education classes are: 0-2, 3-4, 5, 6-9, 10 and more.
3/ The education classes are: 0, 1-3, 4-5, 6-8, 9 and more.

Table 3

INFANT MORTALITY RATES BY ORDER OF BIRTH, AGE OF MOTHER AND INTERVAL SINCE PREVIOUS BIRTH IN COSTA RICA, MEXICO, PARAGUAY AND PERU. DATA FROM NATIONAL FERTILITY SURVEYS AROUND 1977

	Costa Rica	Mexico	Paraguay	Peru
Order of Birth				
1	56.7	76.2	43.7	95.6
2-3	62.1	72.8	45.1	98.4
4-6	60.6	78.5	51.4	115.4
7 y más	97.8	89.5	69.6	134.3
Age of Mother				
- 20	85.6	98.5	55.4	125.6
20-24	59.3	76.8	40.8	105.9
25-29	61.6	69.9	54.1	104.1
30-34	62.1	68.0	52.4	108.4
35 y más	95.9	90.2	61.2	112.6
Interval from Previous Birth (months)				
7-11	194.0	181.2	130.4	243.4
12-17	86.4	103.5	93.5	148.2
18-23	60.0	71.9	41.9	123.4
24-35	50.3	63.3	37.4	96.7
36 y más	40.2	55.8	40.4	57.8
Total	70.7	78.8	52.9	112.5

Source: Taucher, Erica. Fertility and Mortality in Latin America. POPULI, Vol. 10, No. 3. 1983.

The significance of these conditions can be appreciably reduced if under the maternal-and-child program the mother is educated about the risk of these factors for her child and to her own health, and she is given instruction and access to services that will enable her to have her children at convenient intervals or to limit their number.

The high risk of mortality among the infants of mothers under 20 calls for preventive measures in conjunction with the education sector so as to educate adolescents on their own sexuality and on the responsibilities it entails. They must also be given access to services responsive to their needs, including those of family planning.

For other age groups, indirect mortality estimation is less useful, and mortality by causes and among mothers can only be known from vital statistics. This bears out the importance that health personnel collaborate in improving ongoing records so that they will yield information on high-risk groups and on the nature and magnitude of the problems to be solved, and so as to keep track of the impact of health measures taken to reduce them.

2. Fertility

Fertility is another population variable of great importance as a determinant of population growth and family size, and also for its connection with the health of the population. It can be measured in terms of the birth rate, or the number of births per thousand inhabitants in a given year. Also used is the overall fertility rate, which is the average number of children that a woman would have throughout her childbearing years.

Between 1950-1955 and 1980-1985, the birthrate in Latin America dropped from 42 to 32 per thousand, and is expected to reach around 29 per thousand during the period 2000-2005. These figures do not reflect the wide variations that exist between countries. In 1980-1985, the rate in Barbados, Canada, Cuba, Guadeloupe, Martinique, United States and Uruguay was below 20 per thousand, against more than 40 per thousand in Bolivia, Ecuador, El Salvador, Haiti, Honduras, Nicaragua and Suriname. This means that, based on the overall fertility rate, a woman in Cuba will have an average of two children, but in Bolivia, Ecuador, Honduras, Nicaragua or Mexico she will have more than six (see Table 4). The surveys carried out in several countries of the Americas under the World Fertility Survey program brought out the higher fertility of women living in rural areas and with low levels of schooling, which shows that there are sizeable fertility differences within countries, as well.

Table 4

OVERALL FERTILITY RATES (OFT)[1/] FOR COUNTRIES OF LATIN AMERICA, 1980-1985

Country	OFT	Country	OFT
Andean Area		Central American Isthmus	
Bolivia	6.25	Costa Rica	3.18
Chile	2.90	El Salvador	5.56
Colombia	4.09	Guatemala	5.17
Ecuador	6.00	Honduras	6.50
Peru	5.29	Nicaragua	6.21
Venezuela	4.48	Panama	3.57
Atlantic Area		Mexico and the Caribbean	
Argentina	1.78	Cuba	1.97
Brazil	4.02	Dominican Rep.	4.25
Paraguay	4.85	Haiti	5.74
Uruguay	2.79	Mexico	6.06

Source: CELADE, Boletín Demográfico, Year XIII, No. 26, July 1980.

1/ The overall fertility rate represents the number of offspring that the average woman would have at the end of her child-bearing life assuming she is in line with the age-fertility rates estimated for the period, and in the absence of mortality.

2.1 Fertility and Health

High fertility levels with a large number of closely-spaced offspring per woman and at either extreme of the childbearing period constitute risks to the woman's health, as they also are for the survival of a child born in those circumstances. Data from the fertility surveys of Costa Rica, Mexico, Paraguay and Peru bring out, for example, that among seventh and later children born less than 18 months after the previous delivery of mothers 30 years old and older, infant mortality is about three times higher than among second and third children born more than 18 months after the previous delivery of mothers between 25 and 29 years of age (the mortality in the two groups is 144 and 49 in Costa Rica, 139 and 49 in Mexico, 140 and 42 in Paraguay, and 221 and 77 in Peru).

Differences of maternal morbidity and mortality and of infant mortality in these variables recur in different social strata and in countries at different stages of development. For example, in both a developed and a developing country a woman is at greater risk of morbidity and mortality when she has her fifth child than when she has the third or fourth. However, her risk at the fifth child is higher in a developing than in a developed country.

Another health problem stemming directly from fertility is that of induced abortion, which is viewed as considerable and serious, though for most countries reliable data are unavailable.

To the traditional rural family a large number of offspring is sometimes seen as the manpower that will contribute to the economy of the household. This situation is modified by changes in farming methods and land tenure. Moreover, such changes, combined with the higher expectations held out by the city, particularly during the industrialization process, trigger rural-to-urban migration. Both for urban residents and for immigrants from the countryside, children no longer contribute to the household income and, on the contrary, become an economic burden. It thus becomes desirable to have fewer children so that aspirations for a higher level of living may be realized. Research suggests that this is one reason for the lower fertility observed in different urban social strata than among rural populations. If in these circumstances couples do not have means for the regulation of their fertility, they will frequently resort to induced abortion for the limitation or spacing of their offspring. Since countries in which family planning is not readily accessible abortion is not permitted either, it is obtained in secret, with the consequent risks to the woman's life and health. In addition, treatment for the complications of induced abortion takes up obstetrical beds needed for the care of normal deliveries and adds to the cost of health services.

It is difficult to establish the true magnitude of this problem. Data on mortality from abortion exists for some countries in the Region (see Table 5), but statistics on mortality from causes are habitually unreliable, and the data must be viewed with caution.

At the end of the sixties the Latin American Demography Center (CELADE) conducted surveys on abortion in four cities: Bogota, Buenos Aires, Lima and Panama. The number of abortions admitted to ranged between 24.4 per 100 women interviewed in Lima and 34.4 in Buenos Aires. Although no distinction was made between spontaneous and induced abortion, it is thought that the proportion of the latter type was high. It was also found that, in the last year prior to the interview, for every 100 sexually active women of fertile age there were 2.2 abortions among those who used effective contraceptive devices, 8.6 in those using less effective devices, and 10.0 among those who used no contraception at all.

More recent surveys indicate that, in countries in which family planning is not readily accessible, abortion is being increasingly resorted to particularly in urban areas.

Pregnancy in adolescents is another fertility-related problem that appears to be on the rise, particularly in urban populations. Among adolescents sexual indulgence has grown faster than their understanding of the psychological and social no less than the biological consequences for both mother and child of pregnancy at that age. Nor has the health sector done anything to keep sexual education in family and school, and the delivery of information and services responsive to the needs of adolescents, abreast of the speed of this change.

Data on adolescent fertility are scarce for the countries of Latin America. It is in fact higher in the countries of high fertility and it has been found that, as in other age groups, it is higher in the lower socioeconomic strata. The finding between 1967 and 1977 in all countries for which the information is available is that births from mothers under 20 years of age increased as a percentage of total births.

Another fertility-related factor is breast-feeding which, in addition to its affective benefits, improves the health of the infant, particularly in developing countries, where infant malnutrition and infections, particularly the diarrheas and pneumonias, are still major causes of death among small children. Moreover, the longer breast-feeding is practiced, the longer the interval between successive births.

Apart from all these direct connections of fertility with health, particularly that of the mother and child, the fertility level affects health through the part it plays in population increase, and increases the demand for services.

Table 5

DEATHS BY ABORTION PER 100,000 LIVE BIRTHS
IN COUNTRIES OF THE AMERICAS AROUND 1978

(Data from Vital Statistics)

Country (year)	Rate	Country (year)	Rate
Argentina (1978)	25.5	Guatemala (1978)	10.6
Chile (1979)	24.1	Honduras (1978)	2.7
Colombia (1977)	26.2	Mexico (1976)	6.9
Cuba (1978)	3.4	Paraguay (1978)	69.6
Dominican Rep. (1978)	4.9	Peru (1978)	13.2
Ecuador (1978)	13.0	United States (1978)	0.4
El Salvador (1977)	6.7	Venezuela (1978)	12.7

Source: PAHO/WHO, Health Conditions in the Americas, 1977-1980, Scientific Publication No. 427, Washington, D.C., 1982.

2.2 Fertility and Population Increase

When the now developed countries were industrializing and their levels of living rising, fertility followed closely the downward course of mortality. As a result, population increase held at relatively moderate rates. The situation has been otherwise in the developing countries. The transfer of medical technology has afforded large reductions of mortality in advance of major sociocultural and economic change. As a result, natality remains high, generating an unprecedented surge of population increase, which in turn is changing the geographic distribution of the population and its age structure. Mortality has been declining at a slackening rate in the last few years, and will eventually, as it tends to do generally, level off at some low rate; when this happens, population increase will be determined primarily by the fertility level.

In most countries of the Region the population has grown substantially in recent decades and will continued to do so in those ahead.

The population of Latin America as a whole grew from about 159 million inhabitants in 1950 to almost 352 in 1980. On the recently revised medium-variant projection of fertility, CELADE estimates that this population will increase to 534 million by the year 2000, which means that it will grow by 150 million over the next 16 years.

By the same estimates, the rate of natural increase in Latin America peaked at over 2.8% in the mid-seventies, from which it entered into decline and in 1980 was 2.3% a year. It is expected that this decline will continue and that by the turn of the 21st century the rate of increase could drop to 1.7% for 82% of the population, and by the year 2025 fall as low as 1.2% a year in countries accounting for 83% of the Region population. The rate of increase varies widely from one country to another. In the period 1980-1985 it is below 2% a year in Argentina, Chile, Cuba and Uruguay, and above 3% in Ecuador, Honduras and Nicaragua. At the rate of increase of 1980, the population of Latin America should double in the next 30 years.

Population increase poses a challenge not only of achieving a matching economic growth so that the present situation will not worsen, and a faster growth of resources, but also of distributing them more equitably in order to improve the situation and emerge out of underdevelopment.

It can be anticipated, however, that the world economic crisis that has so severely buffeted the countries of the Americas, and from which no way out is foreseen in the near term, will in the years to come

keep economic growth negligible or indeed negative, and that in consequence the needs for health, education, employment, etc., will be even harder to satisfy. Therefore, it cannot be expected that resources will increase enough to solve the Region's problems, and new action strategies must be resorted to, one of the most important of which is primary health care.

Long-term planning for the infrastructure and the human and material resources needed for health care must take account of the effects of population increase. Also to be anticipated is the effect of this increase on other demographic phenomena such as urbanization and the age structure.

Since the health sector is not exempt from the hardships imposed by the economic situation, it will have to make drastic changes in how it operates. The statements of the principal problems will have to be refined, measures favoring priority groups emphasized, and these measures so organized that they reach all members of the population in an equitable manner. In addition, priority will have to be given to actions that raise the level of health in the short run. Of course, these actions include those of family planning built into maternal and child health programs, which are specific to the health sector and will help avert the health problems associated with short spacing between births, excessive numbers of offspring, or their untimely arrival.

However, the sector's responsibility goes beyond direct action just at the individual level. It must also be an active participant in the formulation of policies on population and development and, if it is found necessary to reduce fertility, must contribute directly to this end through family planning activities. In this way it will help shorten the difficult transition during which the needs of the population outstrip the means of satisfying them.

3. Spatial Distribution and Migration

Of central importance to the proper organization of health care is an analysis of the spatial distribution of the population and the attendant health problems.

In some countries there are wide regional differences of climate, environment, socioeconomic conditions and culture, associated not only with different pathologies, but also with different degrees of accessibility to health care. Being peculiar to individual countries, they are beyond the scope of this exposition, which will be confined to urban and rural populations.

The differences between urban and rural populations in respect of mortality, fertility and other demographic phenomena, which in turn reflect or shape different health problems, are largely traceable to

differences of social and economic situation, in culture and environmental factors, and of access to health and other social services. However, major differences are also seen between different sectors of the rural population depending on the degree of their dispersal, their proximity to urban centers, the rapidity of communications, and their ethnic composition. Heterogeneity is also found in the populations of cities, where districts of great prosperity are adjacent to others of extreme poverty.

One notable phenomenon of the last decades in the countries of the Region has been the enormous growth of the urban population, which in Latin America swelled from 67 million in 1950 to 238 million in 1980, that is, three and half times. During the same period the rural population grew from 97 to 126 million. This means that the part of the total population living in urban areas grew from 40.8% in the first year of that period to 65.4% in the last year. According to the projections, by the year 2000 more than 75% of the Latin American population will be living in urban settings (see Table 6). Between 1950 and 1975 the proportion of the population living in cities of 4 million or more inhabitants rose from 7.8% to 22.6%. Much of this growth has been the result of rural-to-urban migration.

While urbanization might be regarded as good because it makes access to health care easier, intensive urbanization greatly multiplies the need for housing, basic sanitation, and health and other services, an insufficiency of which can nullify the advantage of physical accessibility conferred by concentration of the population.

In the urban population, and especially in that which is just becoming urbanized, the patterns of demand change in the direction of more services by professionals who are more highly specialized and in establishments of greater complexity. In this way, a growing number of people, requiring more services per individual, generates a geometric increase in demand, presenting a challenge that tests the capacities of the sector.

In turn, the extraordinary pervasiveness of the communications media is inducing changes in patterns of living and in the demand patterns of the rural population. This so-called cultural urbanization implies that the services required by the rural population not only will not remain static, but will indeed grow in overall volume, concentration and complexity.

Internal migration to areas of new economic opportunity has a two-edged implication for the health sector. On the one hand, the irruption of numerous contingents of settlers into hitherto relatively undisturbed regions sometimes results in the introduction of epidemics (of measles, for example) that can be devastating to the indigenous inhabitants, and spreads physical and psychosocial disorders there. On

Table 6

PERCENTAGES OF THE POPULATION LIVING IN URBAN AREAS IN 1980 AND 2000 IN COUNTRIES OF THE REGION

	Percentage of Urban Population			Percentage of Urban Population	
	1980	2000		1980	2000
Latin America	65.4	75.7	Temperate South America	82.2	87.8
Caribbean	51.3	62.3			
			Argentina	82.4	87.9
Barbados	39.3	51.3	Chile	81.1	87.7
Cuba	65.4	75.2	Uruguay	84.0	88.2
Dominican Rep.	51.0	66.6			
Guadeloupe	43.5	55.4			
Haiti	24.9	39.3			
Jamaica	41.3	54.3	Tropical South America	66.2	77.6
Martinique	66.4	79.3			
Puerto Rico	70.5	82.0			
Trinidad and Tobago	21.5	31.1	Bolivia	33.0	47.0
Windward Islands	0.0	0.0	Brazil	67.0	79.2
Others in the Area	56.1	62.1	Colombia	70.2	81.2
			Ecuador	44.6	58.0
			Guyana	21.9	30.0
			Paraguay	39.4	51.4
Mainland Middle America	60.7	71.6	Peru	67.4	79.0
			Suriname	44.8	54.1
Costa Rica	43.4	55.9	Venezuela	83.3	89.7
El Salvador	41.1	52.6			
Guatemala	38.9	51.6			
Honduras	36.0	51.6	North America	76.9	84.0
Mexico	66.7	77.4			
Nicaragua	53.3	65.9	Canada	75.6	88.8
Panama	54.3	67.1	United States	77.0	83.4

Source: United Nations. Demographic Indicators of Countries: Estimates and Projections as Assessed in 1980. Department of International Economic and Social Affairs. ST/ESA/SER.A/82, New York, 1982.

the other hand, emigrants usually catch high-incidence diseases endemic in the host area and, when they return to their places of origin, either to visit or to stay, cause outbreaks of those diseases, which may have been previously not present there.

One point in the problems of rural-to-urban migration that should be specially considered concerns women who migrate to cities to take employment in domestic service or petty trade. This migration is sometimes so great that it changes the sex composition of the urban population, causing a predominance of women in age groups in which men are normally in the majority. This disproportion between the sexes, the nature of their employment and their limited possibilities for joining a social group restrict their possibilities of getting married or forming a stable liaison. They are thus more exposed to occasional sexual encounters which, if they result in pregnancy, confront them with the alternative of either becoming unwed mothers or resorting to abortion in secret.

There is also seasonal migration, governed by the stages of the agricultural cycle, which can impose on health services additional demands that could exceed their capacities. It also raises the epidemiological problems of communicable diseases brought from the place of origin or contracted at the place of work.

One last aspect of migration that may be considered is international migration, in two separate categories: that of people in search of better employment opportunities available in neighboring countries, and that of people who, voluntarily or otherwise, migrate for political reasons, or in consequence of an outbreak of armed conflict.

Among those who migrate in search of employment, the situation is particularly unfavorable for those who do so illegally because of the vulnerability of their situation in the countries to which they migrate. Besides, they are regularly paid less than local workers and are barred from the health care entitlements of the latter.

The situation of political refugees may have the additional disadvantage that for the country to which they move they are not as useful as migrants who come in search of work. Moreover, the receiving country has to bear the cost of meeting the basic needs of these people, including those of health care, with the consequent impact on its economy.

4. Structure of the Population

Among the different categories into which a population may be classed, one of those most closely associated with specific health problems is age. As it progresses from conception to old age, the human organism encounters different health risks and requires different kinds

of services. One of the consequences of this is that there are several health programs in which one of the criteria determining the target population is age.

The age composition of a population at a given time depends on the fertility and mortality rates in the preceding period. It is also affected by major migrations. Populations with high proportions of children and young people emerge when mortality, particularly in the first years of life, declines faster than fertility. This is what has happened in most of the developing countries in the Americas. When fertility, too, declines, the adult and aged components become relatively larger. This is the situation in the United States and Canada, and that is beginning to emerge in some developing countries of the Region as well.

To program health measures it is important to know not only the present composition of the population, but also its expected future composition so that the requisite resources can be readied in good time. According to data of the Latin American Demography Center (CELADE), in 1980-1985 there are 16 countries, together accounting for 86% of the population of Latin America, with populations more than 35% of which is less than 15 years old. During the period 2000-2005, eight more countries will be in this situation.

In Table 7 it can be seen that, in the year 2000, the population covered by maternal and child health and family planning programs will remain about 63% of the total population of Latin America and the Caribbean, with wide variations from country to country. However, the maternal and child program owes its importance not only to the numbers of this population, but also to the nature of the processes that take place in this group, such as reproduction, and growth and development, which are determinants of the future life of the individual and his society.

The relative size of the population between 15 and 64 years of age will not differ greatly. Since it constitutes more than half the total population, however, it will grow considerably in absolute numbers down to the year 2000, with the increase in the demand for employment and social service that such growth implies.

The chronic diseases loom large in the health picture of the adult and aged population. The high cost of the diagnostic and therapeutic resources developed for those pathologies in advanced countries means that in the developing countries many members of that population will be barred from access to them. It will be a challenge to choose technologies that are both most effective and most economical so as not to deprive the poor of access to treatment that is abreast of scientific progress.

Table 7

CHILDREN UNDER FIVE, WOMEN FROM 15 TO 49, AND PERSONS 65 YEARS OLD AND OLDER AS PERCENTAGES OF THE TOTAL POPULATION IN 1980 AND ESTIMATED FOR THE YEAR 2000 IN THE COUNTRIES OF THE AMERICAS

	Age Groups as Percentages of Total Population					
	0 - 4		Women 15 - 49 Years		65 Years and Older	
	1980	2000	1980	2000	1980	2000
Latin America	40.9	37.1	23.8	25.6	4.3	4.9
Caribbean	37.5	31.7	24.5	26.2	5.3	5.9
Barbados	27.8	23.3	26.2	28.4	8.9	7.9
Cuba	32.0	25.1	24.9	25.8	7.3	8.9
Dominican Rep.	44.8	35.5	22.9	26.3	2.8	3.7
Guadeloupe	32.1	24.6	25.8	27.7	6.4	9.5
Haiti	43.6	43.4	23.2	23.6	3.6	3.1
Jamaica	40.5	28.3	22.8	28.7	6.0	6.2
Martinique	31.6	24.4	24.9	27.9	7.0	9.0
Puerto Rico	30.8	23.2	29.1	29.2	6.1	7.0
Trinidad and Tobago	33.0	24.0	25.5	27.8	4.7	6.8
Windward Islands	46.0	33.7	22.2	28.3	5.0	4.0
Others in Caribbean	38.4	29.8	24.5	27.2	5.1	5.5
Continental Middle America	45.2	41.7	22.6	25.6	3.4	3.8
Costa Rica	37.9	31.7	25.3	26.6	3.7	5.0
El Salvador	45.1	40.6	22.1	24.1	3.4	3.8
Guatemala	44.1	39.5	22.7	24.2	2.9	3.8
Honduras	47.8	42.3	21.3	24.0	2.7	3.3
Mexico	45.3	42.3	22.6	26.0	3.5	3.8
Nicaragua	48.0	44.0	22.1	23.8	2.4	2.4
Panama	39.8	31.5	23.4	26.1	4.2	5.4
Temperate South America	29.4	26.0	25.4	25.2	8.0	9.6
Argentina	28.2	25.0	24.2	24.7	8.7	10.7
Chile	32.5	28.1	26.1	26.4	5.5	6.7
Uruguay	27.2	26.1	23.6	24.3	10.3	12.1
Tropical South America	41.7	37.3	24.0	25.6	3.8	4.6
Bolivia	43.8	41.2	23.2	23.5	3.3	3.2
Brazil	41.5	37.3	24.2	25.8	4.0	5.1
Colombia	40.4	35.2	24.5	26.6	3.5	4.5
Ecuador	44.4	41.3	22.5	24.1	3.5	3.5
Guyana	40.1	28.7	24.3	28.7	3.9	4.9
Paraguay	44.3	39.7	23.4	25.6	3.4	3.7
Peru	42.5	38.0	23.4	24.1	3.4	3.5
Suriname	51.2	43.8	20.6	25.4	4.0	3.6
Venezuela	41.6	35.6	24.1	26.3	2.8	3.8
North America	22.6	21.7	25.9	25.7	10.6	11.2
Canada	23.2	20.1	26.8	26.5	8.9	10.4
United States	22.5	21.9	25.8	25.6	10.7	11.3

a/ Ref. 2

Source: United Nations. Demographic Indicators of Countries: Estimates and Projections as Assessed in 1980. Department of International Economic and Social Affairs. ST/ESA/SER.A/82, New York, 1978.

Though education is not, properly speaking, a demographic variable, the composition of the population in respect of schooling is considered here for its importance as a determinant of health status. This importance is reflected, for example, in the differences in infant mortality found to be associated with the mother's level of schooling. This is in part because of the socioeconomic indicativeness of level of instruction in countries in which access to education varies with socioeconomic status. It is also clear, however, that education itself can make a difference even within a given socioeconomic stratum. Another close correlation found for education is with fertility and with the use of contraceptives in countries where they are available.

For all these reasons, intersectoral articulation between health and education is of prime importance so that every individual may understand from childhood the basic principles of disease prevention, feeding and other matters basic to the attainment of a good state of health, and become aware of what needs to be done to preserve it. This coordination is of central importance to the specific problem of adolescents, particularly for health problems associated with their sexual behavior. These problems can only be averted if the education is imparted before the onset of adolescence.

In every developing country of the Region great efforts have been and are being made to reduce illiteracy and raise the level of schooling of the population. According to data of the United Nations Educational, Scientific and Cultural Organization (UNESCO), between 1960 and 1980 enrollments of children between six and 11 years of age rose from 57.3% to 82.3% in the Region.

However, access to instruction varies widely from country to country in the Region and also within them by sex and place of residence. It can be seen in Table 8 that illiteracy is always higher among women and in rural areas. A confrontation of these data with those for childhood mortality and fertility adduced in other sections brings out the association between those levels and education.

Though not a demographic variable either, economic activity is also connected with health in different ways: on the one hand because it affects the level of the family income, which in turn helps determine the level of economic welfare, and on the other because some employments, the concern of occupational health, can impair the health of the unprotected worker.

In sum, it can be seen that the composition of the population in relation to the different variables considered yields a picture from which the health situation of a population and the specific indicators thereof can be predicted. This knowledge also helps detect the kinds of health problems ahead for the population and, in the case of aspects that can be changed by measures that are the province of different sectors, it shows the path that intersectoral policies must take to improve the welfare of the population and make it healthy.

Table 8

PERCENTAGES OF ILLITERACY BY SEX IN URBAN POPULATIONS OF LATIN AMERICAN COUNTRIES FROM AVAILABLE DATA

Country	Year	Total		Urban		Rural	
		Male	Female	Male	Female	Male	Female
Bolivia	1973	24.2	48.6	6.2	23.2	37.3	68.5
Brazil	1978	22.0	25.7	12.8	18.1	40.9	43.9
Colombia	1973	18.8	20.2	9.0	13.0	32.8	36.8
Costa Rica	1973	11.4	11.8	4.0	5.7	16.6	17.5
Chile	1970	10.1	11.8	5.4	7.7	23.6	27.9
Ecuador	1974	21.8	29.6	6.9	12.2	32.3	44.4
El Salvador[a/]	1975	34.5	41.1	12.7	22.2	48.9	57.2
Guatemala	1973	46.4	61.5	20.0	35.5	59.9	77.6
Haiti	1971	73.8	83.1	32.3	53.8	82.8	92.2
Honduras	1974	41.1	44.9	17.6	24.0	52.1	56.8
Nicaragua	1971	42.0	42.9	16.1	22.1	63.8	67.0
Puerto Rico	1970	10.8	13.4	6.9	9.6	16.4	19.7
Paraguay	1972	14.9	24.5	7.4	14.7	19.7	32.3
Peru	1972	16.7	38.2	5.9	19.1	32.9	69.2
Uruguay	1975	6.6	5.7	5.1	5.2	12.6	8.6

Source: UNESCO. Statistical Yearbook 1982

[a/] Population 10 years of age and older; in other countries, 15 and older

III. HEALTH, DEVELOPMENT AND POPULATION POLICY

1. Health and Development

The connections between population and health described in the previous section are part of the connection between health and development.

Defining health as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" makes the point that health is an essential element of development because development is ultimately no more than an improvement in the welfare of the human being and the quality of his life.

The principal components of economic and social development--satisfaction of the basic food needs, adequate housing, access to education, good working conditions and opportunity for recreation--together with access to health care, are also the basic requisites for better health of the population, which in turn will make it possible to enjoy the other blessings of development.

The level of development has been preferentially measured in terms of economic indicators. For a clearer view of the situation, however, it is essential to complement them with information on access to the different constituents of social welfare.

Starting in the fifties, the Region's gross domestic product grew at a steadily rising rate, which during the period 1970-1975 exceeded 7%. This growth declined to slightly over 5% during the period 1975-1980 and, continuing its downtrend, sank to a negative 1% in 1982.

According to the Economic Commission for Latin America (ECLA), the Region's development has displayed two almost diametrically opposed trends: while on the one hand the Region demonstrated a capacity to expand its production rapidly, on the other hand it was remarkably incapable of distributing the fruits of that rapid growth to the entire population in an equitable way. This inadequacy has resulted in different outcomes in the different areas of social development.

Inequitable income distribution, with its sequela of extreme poverty for part of the population, reflects the contrast between material and social gains in the countries of the Region. ECLA estimates, from data for seven countries accounting together for almost 80% of the population and slightly over 90% of the gross domestic product of Latin America, indicate that in 1975 10% of the most prosperous households received 47.3% of the total income while the poorest 40% received only 7.7% of it. The most serious aspect of this inequality is its persistence: after 15 years of economic progress, the poor were worse off at the end of the period than at its beginning.

The magnitude of the problem in the Region is conveyed by the estimate of about 110 million poor at the end of the seventies, of which 54 million were destitute. This situation is expressed in the wide differences between the levels of health of different countries and within each of them.

The high rates of economic growth of the seventies were not accompanied by the increase in employment needed to occupy the population of working age, which was swelled by the high rate of population increase in the Region. According to the Regional Employment Program for Latin America and the Caribbean (PREALC), between disguised and overt unemployment there were 23 million unemployed in 1980, and the situation has grown worse in the years since.

Nevertheless, progress has indeed been made in social development, as is shown by a review of the data on school enrollments, electric energy consumption, increases in calorie and protein intake, and declines in the number of inhabitants per physician, among others. However, the same data bring out that much remains to be done to bring the social benefits of economic progress to the entire population in an equitable manner.

The countries of Latin America and the Caribbean are today confronted by major economic problems created by their high foreign debts, the payment of which would impose severe restrictions on public expenditure. At the same time, the differences between population sectors are widened by high unemployment. All this points to a suspension of the possibility of any gains being made toward real social and economic development in the countries.

To this are added the high rates of population increase, which prevent satisfaction of the needs of the population in the absence of parallel economic growth. These inequalities are maintained by other population factors as well, including spatial maldistribution and migration. In recognition of these conditions as obstacles to development, in 1974, when the economic outlook still seemed encouraging, the Bucharest Conference approved the World Population Plan of Action (WPPA) recommending that countries implement population policies and explicitly established the formulation and implementation of population policies as the sovereign right of each country.

2. Population Policies and Family Planning

For the Second Meeting on Population of the Committee of High-level Government Experts (CEGAN) in Cuba in November 1983, ECLA reviewed the current situation of population policies in the countries of the Region. A population policy was defined in that document as the adoption by a national government of measures integrated into its socioeconomic programs and designed to change a population variable

either as the chief effect or as a an intended side effect with a view to bringing population trends into line with those of development. The information had been supplied to the United Nations by the Governments of the countries.

Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Jamaica, Mexico, and Peru have policies explicitly designed to reduce the growth of their populations through family planning measures linked to the health sector, as well as through information and education work with the population and other measures. The governments of Argentina, Bolivia and Chile have explicit policies aimed at raising their rates of increase. On the other hand, those of Brazil, Cuba, Ecuador, Haiti, Honduras, Nicaragua, Panama, Paraguay, Uruguay, Venezuela and some of the English-speaking countries in the Caribbean have no explicit policies on population growth; but all have government-supported family planning programs whose goals are in health and not demographic.

In the areas of spatial distribution and internal migration, explicit policies exist in Argentina, Bolivia, Brazil, Colombia, Cuba, Jamaica, Mexico, Nicaragua and Panama. The other countries have no explicit policies, but their goverments are aware of the disadvantages of the spatial distribution of their populations.

International migration is regarded as of slight importance in Brazil, Guatemala, Haiti, Nicaragua, Panama and Peru. The governments of most of the countries regard such migration, whether in or out, as a flow that has risen to undesirably significant levels. Those of Costa Rica and Venezuela are concerned about high levels of immigration. The governments of Colombia, the Dominican Republic, El Salvador, Honduras and Paraguay find the numbers of foreigners within their borders unobjectionable. Immigration is being encouraged by those of Argentina, Bolivia, Chile, Ecuador and Uruguay, and that of El Salvador is dissatisfied by the low level of emigration.

The WPPA makes clear that, just as nations have the sovereign right to chart policies in accordance with their national needs, those policies should be implemented with due regard for the dignity of the individual, respect for the human being, and his freedom of choice in keeping with the universally acknowledged standards of human rights.

At the aforementioned CEGAN Meeting, the following principles, among others, were reaffirmed:

> "...that man must be taken as the object and subject of development, the essential purpose of which must be to improve the quality of life, meet the material and nonmaterial needs of the entire population, and particularly of the less favored groups, and give the entire population a share in the wealth generated by the society;

"...that the family is the basic unit of society and government must protect it by appropriate laws and policies so that it may accede to its rights and shoulder its duties in society;

"...that, to be truly effective, the population policies adopted by the countries must be integral constituents of their economic and social development policies and not alternatives to or independent from them;

"...that to give effect to the basic right of couples and individuals to decide freely and responsibly the number of their offspring and the intervals at which they will have them, government must reach out to the community and give to all social groups access to the information and means they require for the purpose, including those for the diagnosis and treatment of involuntary sterility. The exercise of this right must be shielded from all pressures, whether overt or indirect, so that individuals will not be prevented from controlling their own fertility in keeping with their own preferences. If government feels it is necessary to change the reproductive patterns of the population in order to bring them into line with national objectives, it must respect prevailing social patterns and adopt the economic, social and cultural measures needed to enable individuals to decide freely the number and spacing of their offspring. Government must also provide proper supervision to prevent unethical birth control practices."

The only area of the implementation of population policies in which the health sector has direct responsibilities is family planning.

Since 1965 momentous changes have taken place in the position of the governments of Latin America and the Caribbean in this area.

Whereas in that year only one country offered any family planning services in its health programs, in 1975, one year after the World Population Conference in Bucharest, 17 countries in the Region were providing these services through their government structures. In 1983, with the exception of two countries, they all appreciate and support, though with different emphases, family planning integrated into maternal and child health services as a valuable health measure that makes a distinct contribution to the reduction not only of fertility, but also of mortality and morbidity among mothers and children.

Important in bringing about this shift in the perception of problems and towards support to both population policies and family planning activities have been the joint efforts of the United Nations Fund for Population Activities (UNFPA), the Pan American Health Organization (PAHO), the United Nations Children's Fund (UNICEF), and other international and bilateral cooperation agencies such as AID, IDRC, and SIDA, and nongovernmental agencies.

Significant gains have been made and, according to data of the World Fertility Survey, 33% of the married and cohabiting women in Latin America use contraceptives. However, 40% of the women who say they do not want more children still do not use contraceptives and so are unable to exercise their right to plan their families.

IV. RESPONSE OF THE HEALTH SECTOR TO POPULATION TRENDS AND CHARACTERISTICS AND TO DEVELOPMENT-RELATED FACTORS

The preceding chapters have considered the connections between population characteristics, the health status of the population, and their interdependence with the level of development.

The response of the health sector requires that its operations be revised in keeping with the observed demographic situation and the projections thereof so that the goal of health for all by the year 2000 may be fulfilled.

Summing up the situation, it is seen that:

In several countries mortality rates remain high. In a third of them, infant mortality during the period 1980-1985 exceeds 60 per 1,000 live births. Moreover, it is estimated that not to take the measures needed to reduce mortality and its differences creates the risk that in the year 2000 55% of the population of Latin America will still be living in countries with life expectancies at birth of under 70 years.

According to the projections, in the year 2000 the birthrate will stand at around 29 per 1,000, with wide differences between the countries in the Region, within each of them, and between socioeconomic strata. High fertility will remain a factor hostile to the health of women and children and a determinant of rapid population growth. It is estimated that in what remains of the century the population of Latin America will grow by 150 million persons.

The governments of the countries take different positions vis-à-vis this population growth. Some view the present or predicted growth rates as excessive, others want to increase them and, finally, some take no explicit position on the matter.

The countries would do well to assign values to their birthrate, natural increase and periods for doubling their populations in relation to their development plans and to the prospects for improving the standard of living and health of their populations.

When a country decides to reduce population increase and sets demographic targets for itself, family planning is the most direct course in this direction. However, while there may be differences of policy on population growth, in all the countries family planning must be accessible to individuals as a right and as a health measure that benefits mothers, children, families, and the community. This also involves treating the causes of infertility in indicated cases.

In the year 2000 women of childbearing age and persons under 15, the target populations of the maternal and child program, will still account for more than 60% of the population of Latin America.

It is also foreseen that the proportion of the population living in urban areas will continue to increase, and reach 76% in the year 2000. Among other effects, this development will increase the demand for goods and services, particularly for those of health, and existing care schemes will have to be reassessed.

An important factor in urban growth is internal migration. These migrants, like some of those who move to other countries, may have health problems requiring special care.

Whatever a country's demographic situation, the health sector has certain inescapable responsibilities:

It will have to promote the framing and adoption of population and development policies, in whose implementation the importance of health measures is not open to doubt.

It will have to favor the intersectoral coordination and articulation needed to ensure that population aspects are considered in national development planning. Direct measures by the health sector to reduce mortality and those that affect fertility must be integral constituents of development programs, and the sector will have to have a hand in their preparation.

Among the activities to be considered for the implementation of these policies, the sector will have to promote special emphasis on those that can impose order and change on urban growth and migration, raise the level of instruction and strengthen other components of development that affect health, for, while the sector may not have the means with which to act upon those components, it does have the obligation to deal with the problems they generate.

The demographic characteristics of the population will have to be taken into account in the planning of health measures. This will refine the diagnosis and make it possible to estimate the volume of the investment required to satisfy the health needs of the population. The activities can then be organized so as to satisfy the requirements of equity, efficiency and effectiveness enunciated in the Plan of Action.

The maternal and child program and its family planning component, are important supports to the health of the family, which in turn is a basic component of community health.

The size of the population at which the maternal and child program is aimed and the magnitude of the eminently avoidable problems that beset that group (for whose prevention and treatment technologies exist which are effective and of reasonable cost) not only justify the priority attached to the program in all the countries, but make larger funding essential. Four minimum goals of the Plan of Action, those for infant mortality, mortality in the ages of one to four years, life expectancy at birth, and immunizations, are within the province of the program and have profound repercussions on the health status and level of living of the population.

Family planning activities enable the couple to exercise its acknowledged right to decide the number and spacing of their offspring. These activities are also important in raising the health level of mothers and their children by reducing the morbidity and mortality associated with large numbers of children and with close spacing between them.

Family planning must be integrated into the maternal and child program because it allows identification of the cases of reproductive risks, better utilization of the available resources, and improved response by the population to comprehensive care, and makes it easier to provide care for the family. Embedded in the setting of maternal and child health measures, family planning is an instrument of prevention that helps raise the quality of life of the woman, her child, and the family as a whole.

Family health also involves special measures directed at adolescents in aspects of sexuality and fertility in which health problems are increasingly frequent. Of special importance in the prevention of these problems are education within the family and specific sexual education programs in schools.

Health care must embrace sectors of the population that may be barred from the enjoyment of its benefits by special problems. Particularly dramatic cases in point are those of undocumented international migrants, refugees, and persons displaced for any reason.

The efforts and expenditures incurred in the provision of services will have been wasted if they continue to be made in ways that do not take account of the attitudes and the present and future needs of potential users, which vary greatly from group to group. The expectations of users and of the different groups influence their acceptance or rejection of services, and it is hence necessary to reaffirm the importance of active participation by the community in the identification of its own problems and in the design, organization, operation and evaluation of the health sector's responses to those problems.

Governments should be prepared to pool efforts and coordinate with other official agencies and with nongovernmental organizations and institutions providing health services. Studies and evaluations should be made of the different types and forms of delivery of services, including those provided by the various official and social security institutions in hospitals, clinics, health centers and posts, mobile units, etc., and in other arrangements already successfully tried in the Region, such as the use of commercial distribution channels and community-based programs.

Governments must make available to the population and the different audiences means of communication and education that make possible a free choice of possibilities.

Existing statistical data in the countries must be put to better use in the planning process. Health personnel also have the responsibility of contributing to make records more complete and improve the quality of the data, particularly those on deaths and births, which they are often called upon to record and certify to. Also important is this personnel's participation in the production of service statistics, which will facilitate the follow-up and monitoring of health measures and the accomplishment of their purposes in the population.

The health sector also plays an important part in the generation and transmission of knowledge. Particularly important at this time is research on the organization and operation of services, the social, cultural and economic factors that affect the use and nonuse of health services, and ways of servicing special groups. One of the sector's central functions is personnel training to improve the quality of its services.

Discussion of this paper will, it is hoped, generate the requisite mandates for increasing and coordinating technical cooperation in this field in accordance with the specific needs and established priorities of each government. It is considered that, with the conjunction of regular funds of PAHO/WHO, the agencies of the United Nations System--the United Nations Fund for Population Activities and the United Nations Children's Fund--and nongovernmental and bilateral aid agencies, the governments will coordinate and channel cooperation with their countries not only in the identification of problems and selection of priority areas of action, but also in the consolidation and analysis of the information needed to improve the organization and administration of programs, and in the identification and evaluation of appropriate technologies for maternal and child health and fertility control, the training of the requisite manpower and, most important, monitoring the demographic trends that affect health and development.