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Provisional Agenda Item 5.3

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MATERNAL AND CHILD HEALTH AND FAMILY PLANNING PROGRAMS

This item is covered in the second progress report on the status of implementation of the Pan American Health Organization's action policy with respect to population matters, approved in 1984 (Resolution CD30.R8 of 1984 and Resolution CD31.R18 of 1985).

Document CE101/9, a copy of which is annexed, presents an analysis of the activities carried out in fulfillment of the mandates from the Governing Bodies in 1984 and 1985 and indicates the lines of work to be emphasized in the coming years in keeping with the socioeconomic, demographic, and health trends of the Region.

The report stresses advances in maternal and child health in the Region. It calls attention to the possibility that some countries may not achieve the regional goals for life expectancy and infant mortality by the year 2000. It identifies maternal mortality and the need for adolescent health care as important problems. It analyzes intersectoral coordination, the articulation of international cooperation, and the organization and quality of health services for children and for women of reproductive age. It points out the need to formulate, at the country level and at the level of the Organization, specific plans with assessable goals that will make it possible to increase the availability and the quality of health services for mothers, children, and adolescents within the framework of local health systems development.

Participating in the discussion of the report were all the members of the Committee as well as some observers. Mention was made of: the desirability of considering the potential impact of AIDS on maternal and child health services; support for breast-feeding as a means of improving child nutrition; the growing problem of teen-age pregnancy in the Region and the feasibility of its prevention; and the integration into PAHO of the groups working on maternal and child health and on local health systems. Maternal mortality and the urgency of strengthening measures for its control were emphasized in the discussions. In general the

members of the Committee expressed their satisfaction with the work carried out by the Organization in this area to mobilize resources from different sources.

At the close of the discussion, the Director of PASB highlighted the importance of studying the dynamics and the status of the populations in the countries as a basic element for health programming and for the orientation of PAHO programs. He emphasized the processes of change in the populations resulting from urbanization and aging, underscoring the need to focus not only on problems related to reproduction but on the comprehensive health of women as well. He stated that the figures on maternal mortality in the countries of the Region were unacceptable; they attest to the failure and social irresponsibility of the Region's societies in this area throughout history. He pointed out the feasibility of preventing the deaths of many children in the Region each year. He emphasized the importance of improving the quality of care, not just increasing coverage, as well as the need to stress the analysis of maternal and child mortality at the level of local health services.

He cited the joint work being done with other cooperation agencies, with special reference to the United Nations Fund for Population Activities. Finally he stressed the importance of integrating the maternal and child program as part of developing the capacity of the local health systems.

The Executive Committee adopted Resolution IX on this subject, as follows:

THE 101st MEETING OF THE EXECUTIVE COMMITTEE,

Having seen the report "Maternal and Child Health and Family Planning Programs" (Document CE101/9),

RESOLVES:

To recommend to the XXXIII Meeting of the Directing Council that it adopt a resolution along the following lines:

THE XXXIII MEETING OF THE DIRECTING COUNCIL,

Reaffirming and reiterating the concepts and mandates contained in Resolutions CD30.R8 and CD31.R18 of 1984 and 1985, respectively;

Recognizing the advances achieved by the joint work of the Organization, the Member Countries, and the United Nations Population Fund in execution of the mandates contained in the aforementioned resolutions;

Taking note of the constraints that prevent a faster pace of execution; and

Reaffirming the statements contained in Document CD33/13, "Maternal and Child Health and Family Planning Programs," which the Director has presented as a second progress report on the status of execution of the Organization's policy for action in population matters,

RESOLVES:

1. To urge Member Governments:

- a) To continue efforts to implement the mandates contained and unanimously adopted in Resolutions CD30.R8 and CD31.R18, so that faster progress can be made in the strengthening of maternal and child health and family planning programs and of actions among groups at greatest risk and adolescents in particular, to reduce differences between and within the countries;
- b) To make a special effort to study information on population, health and existing services so as to keep current the situational diagnosis needed to program the measures to be taken in the last decade of the century;
- c) To design specific proposals for the participation of other development sectors in coordinated actions to benefit the health of mothers, children, and the population at large;
- d) To take the necessary action to coordinate technical and financial cooperation in the area of population, health, and development, and especially in maternal and child health and family planning programs;
- e) To emphasize not only the extension of coverage but also the quality of maternal and child health and family planning services as part of the strategy for the development and strengthening of local health systems;
- f) To set, as soon as possible, goals for the reduction of maternal mortality and morbidity, and to design plans of action for the reduction of maternal mortality by at least 50% in the next seven years in those countries where the indicator is high;
- g) To initiate intersectoral and sectoral actions directed toward the community, teachers, and parents, with a view to helping adolescents to develop healthy life styles and avoid risk-associated behaviors that lead to drug addiction, accidents, sexually transmitted diseases, and unwanted pregnancies.

2. To request the Director:

- a) To continue the support of activities required for implementation of the collective mandates in this field, especially the mobilization of national and international technical and financial resources for a more appropriate response to existing needs;
- b) To report on the progress made in this area to the Directing Council at its meeting in 1991.

Information is also included from the WHO Special Program of Research, Development, and Research Training in Human Reproduction (Annex II) on proposed strategic guidelines for development of the Program. On the basis of the presentation to be made to the Director of the WHO Program on Human Reproduction, the Council will have the opportunity to give its opinion on the proposed strategic framework. These guidelines will be analyzed at the end of the current year by the Special Program's Committee on Policies and Coordination (CPC). The Directing Council, acting as Regional Committee of WHO, will elect a member of the CPC at the time consideration is given to Provisional Agenda Item 2.6 of the XXXIII Meeting.

Annexes

*executive committee of
the directing council*

PAN AMERICAN
HEALTH
ORGANIZATION



working party of CD33/13 (Eng.)
the regional committee ANNEX

WORLD
HEALTH
ORGANIZATION



101st Meeting
Washington, D.C.
June-July 1988

Provisional Agenda Item 4.3

CE101/9 (Eng.)
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ORIGINAL: SPANISH

MATERNAL AND CHILD HEALTH AND FAMILY PLANNING PROGRAMS

This report of the Director analyzes the activities carried out by the Pan American Health Organization during the period 1985-1988 in compliance with "the Organization's Action Policy with Respect to Population Matters," approved by the XXX Meeting of the Directing Council in 1984.

The document has two objectives: first, to analyze the activities carried out by the Organization pursuant to the mandates from 1984 and 1985, and second, to point out the lines of work that should be emphasized in the coming years in light of the socio-economic, demographic, and health trends in the Region.

Analysis of the activities carried out reveals that the objectives adopted in 1984 are still in effect. The report analyzes the achievements obtained with respect to regional maternal and child health goals, in addition to the constraints that persist and call for sustained efforts. These include difficulties related to intersectoral coordination, articulation of international cooperation, and the organization and quality of health services for children and women of reproductive age.

The pressing problem of maternal mortality is stressed, the true magnitude of which is beginning to be revealed in the first research carried out pursuant to mandates from the Governing Bodies. Also pointed out is the growing importance of the population of adolescents and young people because of its magnitude and health risks.

With respect to both problems, the report emphasizes the need to formulate concrete plans at the country and Organization level with assessable goals, so as to increase the availability and quality of services within the framework of local health system development.

In addition to analyzing the activities carried out during the period from 1984 to the present, the Executive Committee is asked to confirm the lines of work that have been followed, or to propose additional guidelines, bearing in mind the impediments to rapid progress that exist in this field.

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MATERNAL AND CHILD HEALTH AND FAMILY PLANNING PROGRAMS

I. BACKGROUND

The present document has been prepared by the Secretariat pursuant to Resolution XVIII of the XXXI Meeting of the PAHO Directing Council (1985), "Maternal and Child Health and Family Planning Programs," which in paragraph 2.b requested the Director to present a second progress report, which is hereby submitted to the 101st Meeting of the Executive Committee for its consideration.

This report also takes into account Resolution IX of the XXXII Meeting of the Directing Council (1987), which emphasizes the need to provide women with access to adequate services in order to ensure a maternity process without risks and thereby diminish mortality and morbidity in the reproductive period.

II. SALIENT FACTS AND TRENDS FOR THE PERIOD 1980-2000

Major differences in levels and trends of the demographic indicators continue to persist in the Region in 1988, both between countries and between geographical areas and socioeconomic strata within the countries, largely because of the serious crisis affecting the Region (Table 1).

Despite the efforts that have been made, a major problem continues to be the lack or poor quality of statistical data, which cannot be analyzed or utilized to design and reorient the services and care that are being provided to groups at greatest risk.

In the analysis of demographic perspectives for the period from now to the year 2000, it is still important that consideration be given to population growth, life expectancy, spatial distribution, fertility, mortality, and distribution of the population in terms of specific variables.

According to the latest United Nations report of population estimates and projections, in 1984 (1) Latin America was the second most rapidly growing area in the world as a result of a moderate but continuous decline in mortality and a rapidly falling birth rate over the two last decades. Population growth around 1987 is estimated at 2.3%, which means that it will double in 30 years. It is expected that the growth rate will continue to decline, reaching a level of 1.67% by the year 2000 (2).

Life expectancy in Latin America and the Caribbean during the period 1985-1990 is around 64 years (Table 2). Among the countries with the greatest increases are Honduras, Nicaragua and Peru, and among those with the least, Costa Rica, Cuba, Jamaica, Uruguay, and Venezuela. The change in the first three countries may be attributed to the successful

control of childhood diseases through simple, high-impact technologies. Nevertheless, a special effort will be required in order to attain the internationally set goal of 70 years by the year 2000. Costa Rica, Cuba, Jamaica, Uruguay, and Venezuela, on the other hand, have been concerned with controlling the factors associated with early perinatal mortality and the degenerative diseases of advanced age--tasks that entail the use of high-level medical technology and changes in the lifestyles of the population, both of which are difficult in Latin America and take a long time to show results.

Mortality in children and women from causes associated with the reproductive process not only reflects the excessive biological and psychosocial loss in terms of deaths but also indicates the severity of the social cost and serves to predict the quality of life and the future prospects for those who survive.

In Latin America and the Caribbean, child mortality continued to decline in the first five years of the 1980s except in Panama, the Dominican Republic, Guadeloupe, and Guyana. The most notable declines during that period were in Chile, Jamaica and Trinidad and Tobago. The lowest figure recorded was 9.2 per 1,000, and the highest, 68.5 per 1,000 (Table 3).

Other sources report data that confirm, at least initially, the deterioration that the crisis has caused in the health of children, especially among the very poor. For example, of eight countries which at the world level have shown increases in child mortality, five are in Latin America, and of 28 that have reported increases in malnutrition, 10 are in the Region. If we discount the increases that might be attributed to improvements in registration, the sensitivity of child mortality as an indicator of socioeconomic conditions is confirmed (3).

Bolivia, Brazil, Colombia, Haiti and Nicaragua did not report official data to PAHO between 1980 and 1985. This lack of information corresponds to a population of 169.6 million--47.2% of the population of Latin America. This is perhaps the most notable aspect of the analysis, and represents the most urgent challenge to be dealt with in the short term. On the other hand, it should be pointed out that of the 25 countries that reported data to the regional system, 17 have already achieved the goal of reducing child mortality to less than 30 per 1,000 live births by the year 2000.

Despite the declines in child mortality rates, they continue to be excessive in some countries and social groups. Thanks to advances in the control of diarrhea, acute respiratory infections, and diseases preventable by vaccination, there has been a significant decline in child deaths from these causes in almost all the countries. Deaths due to perinatal causes have moved up to first place in 21 countries in the Region. A decline in these rates can only be achieved through fertility regulation on the basis of risk, and through broad coverage through services for prenatal, delivery, and newborn care.

Maternal mortality, like child mortality, reflects differences in health and living conditions and is a good indicator of socioeconomic conditions and of the coverage and quality of services provided to women of reproductive age. Some of the PAHO/WHO-supported research has shown that underregistration of maternal deaths is higher than that registered, as well as deficient certification of the causes. In the Region there are 34,000 maternal deaths registered each year, which probably means, in light of the foregoing, that the real figure is more than 68,000. Abortion and its complications continue to cause approximately 30% of maternal deaths (Table 4).

The risk of women dying from causes associated with maternity is estimated at 1:73 for South America; 1:140 for the Caribbean; 1:6,366 for the United States of America and Canada; and 1:9,850 for Northern Europe (4). While not discounting the macrosocial factors that act as determinants, it can be said that most maternity-associated deaths in our Region could be prevented through organized and adequately planned actions by the health services. The existence of high maternal mortality in a country or region cannot fail to be a serious warning of possible inadequacies in the coverage and/or quality of health services for women. It should also be seen as an expression of the disadvantages faced by a sizable portion of the Region's female population in fulfilling their fundamental rights (5) (see Annex).

Overall fertility in the Region has been declining for all the countries in the last 20 years (5.9 to 4.0 children per woman), but this level still almost doubles the figures in the more developed countries. Age-specific fertility has fallen, especially among women over 30; there has been a moderate drop in the 20-to-24 year group and a very modest decline in women under 20. Estimates up to the end of the century show sustained declines for all the countries (Table 5).

These changes in fertility mean that for women under 20 there is a proportional increase in fertility and that in the years to come there will be an increase in the absolute number of births, given the larger number of cohorts who will be reaching reproductive age. If current socioeconomic conditions continue, there will be a large number of adolescent pregnancies occurring in unstable unions without social support systems, which increases the risk of psychosocial imbalances as well as of disease and death for mothers and their children.

Pregnancies in the extreme ages of reproductive life, high parity and pregnancies less than two years apart--especially when health services are insufficient--continues to be a major risk factor. This phenomenon is observed in all social strata, especially the lower educational and socioeconomic levels. There have been improvements in the educational level of women in the Region, but much still remains to be done.

The population distribution will continue to have an important proportion of youngsters. Adolescents and young people between 15 and 24 years of age will represent approximately 20% of the total population,

which in absolute numbers will mean around 124 million by the year 2000. Earlier onset of menarche, later marriages, changing values as a result of urbanization, cultures brought into contact by migration and new transportation routes, and the decline of the extended family are all factors that will increase the risks for this age group. These added risks will call for services for the prevention and treatment of accidents, suicides, drug abuse, alcoholism, sexually transmitted diseases, pregnancies, abortions, and births in the younger population.

Increasing urbanization is the most important demographic phenomenon in Latin America in the current decade, and it is estimated that 76% of the total population will live in cities by the end of the century (Table 6). The extent of this phenomenon is seen in the emergence of megalopolises and the hoardes of recent immigrants that surround them. It is predicted that by the end of the century there will be nine cities with populations of more than 5 million, and 14 of them will have between 2 and 5 million (6). The social implications of this situation, which will reflect the conflicts at the family and individual levels, are only too well known. They are an index of the political, social, and economic difficulties that make it impossible to forecast or regulate the movement of human groups from rural to urban areas.

The consequences are clear: explosive growth in a limited territory without adequate infrastructure offers an inhospitable habitat for a population that is urgently pressing for changes from the life they had where they came from. The sectors of education and health are most affected by this demographic phenomenon; all efforts to provide services in satisfactory quantity and quality are threatened by the growth that is taking place from one day to the next. There will doubtless be mounting pressure on the Governments of the Region to meet the basic needs of the people in their cities. In addition, the urban and surrounding areas will have to provide jobs for the increasing numbers of young people, estimated at between 4 and 5 million, who enter the labor market annually.

Nor can we overlook the large-scale involuntary external and internal migrations associated with political conflicts in the Region, or the voluntary migrations dictated by the search for opportunities to escape from extreme poverty. The living conditions of these groups, consisting mainly of women and children, are worse than those of the urban migrants. Their situation of instability makes it difficult for them to gain access to and receive basic services, which are sometimes even denied them because of their illegal status.

Children in irregular situations, living in the streets or without families, are an increasingly serious problem in Latin America. UNICEF has estimated that in 1986 this population numbered 20 million--children who are denied their fundamental rights, leading to the well-known social consequences: child abuse, prostitution, exploitation, and sale of children (7). Among the survivors, many will be incapable of loving and building a family because they never received affection as children (8).

III. ANALYSIS OF THE STRATEGIES FOR ACTION APPROVED BY THE GOVERNING BODIES IN 1984 AND 1985

Based on the program priorities of the Organization set forth in the Basic Principles for Action for 1987-1990, the strategies and activities have centered on: 1) the development of infrastructure for the health services through the mobilization of national and international resources, the definition of intersectoral activities and national programs, and support for the development of local health systems (SILOS); 2) attention to priority problems, in this case of women of reproductive age and children, for whom application of the risk approach was set as a priority and for whom normative criteria were developed focusing on the most urgent problems and conditions to be dealt with: prenatal monitoring, delivery care, care of normal and low-weight newborns, and fertility regulation; and 3) the management of knowledge through the dissemination of scientific and technological information on important aspects of maternal and child health and family planning.

To meet this challenge will call for a far-reaching transformation in the health system and services in order to improve coverage and the quality of care with equity, efficiency, effectiveness, and the participation of society. To this end, comprehensive guidelines have been developed for studying the conditions of efficiency that will enable those responsible for units and local systems to become familiar with the standards for organization of the services. All the actions mentioned in the present report have had this frame of reference. The following sections contain an analysis of the progress made jointly by the countries, the Organization, and international cooperation agencies in executing the principal lines of action recommended--in some cases two or more strategies being combined under a single heading.

1. To formulate and apply population policies adapted to the particular socioeconomic development plans

The role of the Organization in the execution of this strategy is limited to promoting the participation of the health sector in the design and implementation of population policies, for which purpose it also sponsors its delegates' participation in international conferences where these issues are debated. Through direct technical cooperation and the dissemination of information the countries are kept up to date and provided with frequent material on aspects of legislation in the area of population and family planning.

According to the information available as of February 1987 in the United Nations data base on population policies of the United Nations, of 33 countries in the Region that had responded to the surveys, 14 expressed concern about the levels of natural population growth and were taking steps to reduce it. Among these countries were Antigua, Barbados, Dominica, Dominican Republic, Grenada, Haiti, Honduras, Jamaica, Mexico, Peru, Saint Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines,

and Trinidad and Tobago. Although not all of them have enunciated policies specifically on population, the education, health, and other economic and social development sectors are working together to achieve a reduction.

The remaining 19 countries have taken the decision not to intervene in this demographic variable, since they consider that their current level of growth is satisfactory. With regard to the spatial distribution of the population, 22 countries have attempted to stem the flow of migration to the large cities and nine of them have not intervened in this situation. Only two have taken steps to stimulate internal migration to rural areas.

At the present time no country has legal barriers to the use of contraceptive measures.¹ Of 33 countries surveyed, 27 directly support family planning activities, four provide indirect support, and two do not offer services at the government level (9). In Latin America and the Caribbean, more than 90% of the population live in countries where the Government provides support for family planning services based on the exercise of a fundamental human right--to improve health and contribute to the quality of life of individuals and the well-being of families.

2. To improve the quality and use of demographic data and statistics in the services for the identification of population-related health problems and the need for services, and for identification of the groups at greatest risk so that health planning and programming can be improved

The lack, or doubtful quality, of the information collected by some of the services in the Region, coupled with the limited analysis and the little use made of it in formulating and evaluating health policies and programs, continues to be a problem at the end of the 1980s. This situation limits the use of statistics for timely identification of health problems in high-risk groups that would make it possible to define the needs for services and their structure.

It has been noted that external financing for maternal and child health and family planning programs has promoted more extensive and better use of demographic and health data, since the diagnosis of maternal and child health is an indispensable aspect of financing proposals. Despite progress in Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru and Uruguay, among others, in the identification of extreme poverty or high-risk areas and groups, there is clear evidence that data of this kind are not always being used in deciding on the priority action to be taken.

¹Abortion is not included as a contraceptive method of fertility regulation.

In April 1985 the Organization created the Health Situation and Trend Assessment (HST) Program, one of whose objectives is to contribute to a better understanding of the health situation by increasing knowledge and improving the use of information at all levels. One of the Program's tasks is to promote more and better use of morbidity and mortality statistics when they are based on acceptable coverage and are of adequate quality and timeliness. In 1988 a regional meeting was held on guidelines and procedures for the analysis of mortality. The discussions centered on research that has been carried out, as well as on the indicator "potential years of life lost" and its utilization. The Program's second task involves the identification of critical areas and factors that affect the timeliness, reliability, quality, and coverage of information. In this regard, work was carried out jointly with the United Nations Statistical Office, the Inter-American Children's Institute, the Organization of American States, and the International Institute of Vital Records and Statistics to study the possibilities for joint action to improve the registration of vital statistics. Inclusion of the health component in household surveys was promoted, and efforts are being made to reintroduce instruction on the completion of birth and death certificates in medical schools. Seminars and international courses were held to improve the quality of registration and the coding of information and, after consultation with the countries, a regional proposal was made for the 10th Revision of the International Classification of Diseases.

In the future, based on the foregoing, efforts should be made to strengthen the countries' capacity to analyze existing data more efficiently. It is extremely important for information on the maternal and child health situation to be updated before the start of the 1990s, and to be regularly kept up to date, in order to have a basis for reshaping the programs and services in response to the identified needs.

3. To promote studies on population dynamics and demographic variables

The demographic variables that have been of priority concern for the Organization during the period 1985-1988 are child mortality, maternal mortality, and health in the large cities--taking the latter as a consequence of internal migration in some of the countries.

During the period, material was published and disseminated on strategies of primary care for children and on child mortality. This material includes not only analytical models on child mortality but, more importantly, the experiences of some of the areas or countries in the Region--for example, Chile, Costa Rica, Cuba, and Neuquén (Argentina)--and it identifies common strategies for intervention that have significantly reduced the problem. The most significant and widely accepted publication in the countries at all levels was La mortalidad de los niños en las Américas (Child Mortality in the Americas), of which more than 5,000 copies have been distributed. In Central America a study of child mortality is being carried out that will contribute methodologies which could be utilized in other countries or regions.

Between 1985 and 1988 a pro-maternity movement developed at the international level, leading to two international conferences: "Maternity with Safety," sponsored by the World Bank, WHO, and UNFPA, and "Better Health through Family Planning," sponsored by WHO, the World Bank, UNICEF, UNDP, the Population Council, and IPPF, held in Nairobi, Kenya, in 1987. These conferences called for immediate action to reduce maternal mortality through the expansion and improvement of comprehensive care for women.

During the same period PAHO convoked two working-group meetings in Washington, D.C., on the subject of maternal mortality, at which studies supported by the Organization in Argentina, Brazil, Colombia, Cuba, Jamaica, and Peru were discussed. It was concluded that the problem of scant information and inadequate certification was common to all the countries studied. In addition, it was considered indispensable that research variables be expanded to include socioeconomic and service factors so that the possible points of intervention could be identified more precisely. As a result, reference documents were prepared for the study and prevention of maternal mortality (5). Also, the document "Study of Maternal Mortality in the Developing Countries" (WHO/FHE 87.7) was translated. These documents will be of help in completing the protocols and enlisting the participation of the service personnel in research on material mortality, as well as in improving the quality of research being done on the subject, thus permitting a comparison with international goals.

In April 1988 the Regional Meeting on the Study and Prevention of Maternal Mortality, held in Sao Paulo, Brazil, established development nuclei as part of national and international networks for the implementation of a plan to reduce maternal mortality. This plan recommends actions aimed at securing political and legislative support as well as the development of mechanisms that will ensure the mobilization and participation of women, communities, and society. Priority will be given to comprehensive care programs for women, especially the strengthening of local health systems in all possible ways, starting at the level of the community and, throughout the system, the identification of women at reproductive risk so that they can be referred to the appropriate levels of treatment. In this connection, it will be necessary to improve the quality of care and to organize the services and their resources so that the health system can respond to the needs, guaranteeing access to family planning, adequate prenatal control, and the basic obstetrical care, especially at the first level of referral. Research on the services and improvement of the information systems that make it possible to follow up and evaluate the work done will be indispensable. To the extent that the foregoing aspects can be implemented, it will be possible to attain the objective of reducing maternal mortality.

The studies under way reveal both a serious lack of information on maternal deaths and errors in the certification of causes; some of the studies have already disclosed up to twice as many deaths as were actually reported. The effect of unregulated fertility, of educational

level, and of quality and access to services as determinants in maternal deaths is being increasingly better documented, which means that the implementation of actions aimed at reducing these factors can no longer be deferred.

The Organization, through its programs in Health Services Development, Health Policies Development, and Maternal and Child Health, provided collaboration for regional and national meetings on the problems of urban areas in Buenos Aires, Argentina (1984), Guayaquil, Ecuador (1985), and Mexico City (1986).

Under the title "Extension of Social Protection to Urban Marginal Groups," a preparatory meeting will be held in Mexico City in June 1988, and a final meeting will be held in Buenos Aires in November of the same year, both with the assistance of the International Social Security Association.

4. To integrate family planning services into maternal and child health services

The integration of maternal and child health services and family planning services is already a reality in most countries of the Region. In those countries where family planning services are accepted by the population and made viable by the political power at the national or state level, family planning activities are a component of women's health programs within the framework of integrated maternal and child health activities. Currently, in addition to the extension of coverage brought about by this integration there is the possibility that the needs of adolescents will be met, and that truly effective preventive actions will be implemented to drastically reduce maternal and perinatal mortality. Those services that received important contributions from family planning programs saw integral improvement and, according to studies by the Maternal and Child Health Program, the impact was felt in all aspects of the services. At the present stage of integration, the quality of the services still needs to be improved. Success with this challenge will require increased accessibility, the selection of adequate technologies, and the reduction of costs, in addition to the promotion of effective participation by the community and other development sectors.

In this context, the strengthening and development of local health systems (SILOS) emerges as the strategy for the operationalization of maternal and child care, making the most effective use of planning and management in accordance with local needs. This situation dovetails with the steps toward decentralization that are being undertaken in several countries of the Region.

At the present time the Organization is working to increase management capability in the health services and to develop integrated local programming. As part of this effort, the Maternal and Child Health Program has assigned priority to training and research activities and to the formulation of criteria that will clearly support the future development of the services.

5. To promote research and financial assistance for manpower training to make maternal and child care and family planning programs viable

Research activities received increased emphasis and resources during the period. The Maternal and Child Health Program, the Latin American Center for Perinatology and Human Development (CLAP), and other PAHO programs are participating in their development. To these efforts are added the support received from the Special Program for Training and Research on Human Reproduction (HRP) and the Family Health Division (FHD) of WHO, UNFPA, and the W. K. Kellogg Foundation, among others.

Because of its contribution of scientific bases for the transformation of health services, health research is being promoted as an instrument for the development of programs, services, and human and health resources for the benefit of human well-being. It also serves as a mechanism for the development of both process and object technologies, with innovation, upgrading, application, and technology transfer being used to improve the services for mothers and children. Research is a powerful mechanism for bringing together the institutions of the sector and those of other sectors in pursuit of health objectives.

The Latin American Center for Perinatology and Human Development continued to work on the development and promotion of epidemiological and operational research for intervention and action, with a heavy component of appropriate technology development and evaluation, through a network of more than 100 maternity services in the Region (Figure 1), covering such subjects as premature birth, frequency of cesarean section, and low birthweight. As a result of this research, 120 scientific articles were published, both in journals of the Organization itself and in international scientific journals. The results supported the development of normative criteria at the country level.

Among the research projects under way or already carried out are the following: in nine countries studies are under way, some of them already noted, on maternal mortality; in 1987, to follow up and evaluate the impact of child survival programs under the health priorities initiative for Central America and Panama, a study of child mortality was initiated in Central America; in three countries an evaluation is being made of household registration of child growth and development, the preliminary data from which confirm that the mother can effectively monitor the growth and development of her children if she is motivated and adequately briefed; in seven countries, in accordance with the local situations, studies are being carried out on risk factors for different population groups, and at least two governments and one institution have reorganized their services based on the results of their investigation; in 10 countries work is under way in the area of family planning and adolescence, including integrated surveys of service coverage, and the findings have made it possible to characterize the exposed groups and redirect the corresponding programs so as to provide them with better support; in 16 countries of the Region, the efficiency of the services being provided to mothers and children has been evaluated at 1,052 sites

of different levels of complexity, and an understanding of the critical situation and of the deficiencies in the services has made it possible to orient cooperation and national efforts so as to improve the organization of the latter; in three countries, support was given for research on the participation of women, which has shown that women take an active part in the improvement of programs; and, finally, ongoing support has been given to the Latin American collaborative study on birth defects which will enable to countries to have national registers and data on the frequency of the most common defects. These 48 studies involve the participation of 21 countries. In all the areas mentioned, efforts are under way to promote multicenter research that will make it possible to establish networks of centers or collaborating groups for the short-term improvement of services provided to the population.

There are a total of 165 Latin American institutions collaborating with HRP/WHO, 16 of which receive resources for institutional development. Of the 25 WHO centers collaborating in the Program's activities, five are in the Region, and 35 scientists serve on the Program's various committees. The areas supported by HRP/WHO are development of new methods, effectiveness and safety, infertility, and psychosocial and services research.

With a view to improving the research protocols, between 1986 and 1987 CLAP held six workshops on methodology for operational and clinical epidemiological research, with the participation of 140 professionals from various disciplines. The expected impact is a growing interest in maternal and child health services research, greater political support for research, and a qualitative improvement in the services.

There is ongoing communication and exchange of data with the U.S. Centers for Disease Control (CDC) and with Westinghouse Health Services, which carry out, jointly with the countries, surveys on the prevalence and use of contraceptives, as well as on the reproductive health of adolescents in Latin America. An effort is being made to disseminate the reports in order to support the processes of decision-making and updating of the health diagnosis.

During the period 1985-1988, research funding by UNFPA remained stable at around US\$100,000 a year, that of HRP/WHO, around \$2 million a year, and that of PAHO, around \$80,000 a year.

The training activities supported by the Regional Maternal and Child Health Program were varied and far-reaching. They included, in particular, training in the administration of maternal and child health programs, project management, introduction to maternal and child public health, perinatal and postnatal growth and development, and adolescence and perinatal health. The activities benefited from the active participation of public health educational institutions in the Region, national institutions, international cooperation agencies, and the already prestigious CLAP teaching programs. It is estimated that these activities involved more than 2,000 professionals from all the countries,

their level of participation depending on the resources available. This group, plus those trained through country projects, made for a total of 12,000 people trained between 1985 and 1988.

Up to now there have been some difficulties in controlling the capabilities and prior background of the participants. It is still common for international fellows to not exactly meet the required conditions and for the groups to be too heterogeneous in terms of capabilities and prior background. Moreover, it is still not possible to ensure that the fellows after their return will actually work in the areas for which they were trained. In 1987 UNFPA conducted an external evaluation of training activities in four countries (Brazil, Honduras, Mexico and Panama) which highlighted the lack of plans for human resource development in both the training and the employing institutions; it was stressed that the training of health service personnel be directed more toward concrete skills that will improve the quality of service delivery.

There is much room for improving the training activities and their quality, both at the regional and the country level. This will call for the participation of Governments and PAHO to control the trainee selection process and follow-up on their subsequent incorporation into the health services system.

It should be recognized that training opportunities in maternal and child health and family planning, especially those carried out with PAHO resources and projects financed by AID, UNFPA, and the W. K. Kellogg Foundation, are becoming the most important resources for meeting manpower development needs. Several countries have spoken up, and initiated efforts jointly with the Maternal and Child Health Program in an effort to integrate the care components, either by extending the periods of training or by developing programs of continuing education.

6. To disseminate information and advisory services in the community in order to achieve its participation

The present report includes activities carried out in the scientific, political, and economic communities and in society at large, since they all in some way and at some time participate in the decision-making process with respect to personal, family, and community reproductive behavior, as well as in regard to the services that are required in order to meet the demand.

During the period from 1985 to 1988 the Organization has attempted--through timely translations and an active program of scientific publications, pamphlets, and scientific and technical material--to create a permanent and growing presence in fulfilling its obligation to keep the community up to date. The library's collection in the area of human reproduction was increased by more than 2,000 titles, thus not only contributing to the program's institutional memory but also placing microfilmed material at the disposal of the countries. Steps were also taken to set up specialized sections on human reproduction and

maternal and child health in the Documentation Centers of the PAHO Country Representative Offices. It is felt that, in order to disseminate and promote knowledge about the technical and scientific aspects of the programs, efforts should be made to reach out on a regular basis to teaching institutions, legislative areas, and the institutions of the education, agriculture, and labor sectors--a task that can only be achieved with the cooperation of the countries.

In some cases, when community participation in health is already a reality, the task of dissemination is the responsibility of the grassroots organizations of the community itself, financed mainly by country projects, UNFPA, and PAHO through the health infrastructure. The Organization participates in drafting the messages, proposing the strategies for dissemination, and selecting the media. At the level of the health services program, conceptual aspects have been developed for social participation in local health systems as well as for a plan of action to provide support for the countries. Through these activities the Maternal and Child Health Program hopes to improve its cooperation in this field.

7. To educate and train young people in sexual matters and family life

The demand for technical cooperation in the field of adolescent health grows constantly, while the health problems that this group faces are getting worse every day. This situation led the Forty-eighth World Health Assembly to agree that the subject be included in the Technical Discussions for 1989 and that beginning in 1991 a program on adolescence be implemented with its own identity and resources.

Since 1985, with a view to forming a critical mass of professionals capable of developing programs and services for adolescents, four seminars were held with the participation of staff from the Organization and national professionals responsible for adolescent services in some of the countries. The last of them, held in April 1988 in Campinas, Brazil, led to the formation of national development nuclei which will make up a network in the Southern Cone and Brazil. Support was provided in Uruguay for 10 courses for educational personnel from the Ministry of Education to develop sex education curricula and teaching materials as well as to explore means of intersectoral cooperation. The methodology will be made available to the countries.

Although there are adolescent care programs in Argentina, Brazil, Chile, Costa Rica, Mexico, Panama, Venezuela, and all the Caribbean countries, they need to be reviewed and brought up to date in terms of both their conceptualization and their strategies and approaches. Accordingly, the Organization has initiated an effort to integrate the activities carried out by the various technical groups. In the area of information, there are two publications: La Salud del Adolescente y el Joven en las Américas and The Health of Adolescents and Youths in the Americas, (Scientific Publication 489). In 1988 the resources required to initiate development in this area were included in the regional programs supported by UNFPA and the W. K. Kellogg Foundation.

The knowledge that is being acquired through the research on adolescent behavior described above will enable the programs and their activities to respond to the identified needs. A certain amount of progress has also been made in the design of educational material for adolescents, which will soon be distributed in the countries.

8. To intensify the Organization's coordination with the agencies of the United Nations system and the governmental and nongovernmental agencies with a view to enlisting a maximum of resources for the support of maternal and child health and family planning programs

The Organization and the Maternal and Child Health Program are continuing to develop their capabilities and diversify their strategies for the mobilization of national and international resources.

It is recognized that the national resources allocated for maternal and child care are infinitely greater than those that could be contributed through external financial and technical cooperation. Technical cooperation promotes the mobilization of national will and its resources, and it serves as a catalyst for actions at the operational level.

The Maternal and Child Health Program maintains a continuous dialogue with the academic community through congresses and pre-congress activities in the areas of gynecology, obstetrics, pediatrics, and public health. This has made it possible to benefit not only from the information that these professionals have to offer but also from their active participation in the programs.

In Latin America and the Caribbean there are nearly 60 maternal and child health and family planning health projects supported by various financial sources in 31 countries in the Region. Still greater efforts are required if these projects are to grow in number and not merely replace national efforts. The resources that these projects generate make activities possible in the areas of training, supervision, equipment, and drug supply, among others. In some countries the projects have made it possible to consolidate the development of jurisdictions and health areas in support of the strengthening of local health services and decentralization.

During the period, efforts were devoted to mobilizing women's organizations outside the sector to collaborate in the Maternal and Child Health Program. Activities of this nature took place in Honduras, Paraguay and Peru, and it is felt that they may open new perspectives for collaboration that will be multiplied. The schools of public health in Argentina, Brazil, Mexico, and Peru continued to collaborate in training activities, research, and the preparation of materials for manpower development within the programs.

The Latin American Center for Perinatology and Human Development has mobilized national resources by expanding the perinatal network, which at the end of 1987 had more than 100 cooperating nuclei based in maternity services in 27 countries of the Region. They have been the

point of departure for carrying out specific tasks in the countries in the areas of research, education, and health services development, as well as in the formation of national networks starting from the initial nuclei.

With regard to extrabudgetary funds, UNFPA continues to provide the Region with approximately US\$7 million annually for the Regional Program and for country projects (Tables 7 and 8). The W. K. Kellogg Foundation provides support on the order of US\$380,000 annually for regional activities, plus support, provided directly to the countries, for 31 maternal and child in-service teaching projects. The Carnegie Corporation and the Pew Charitable Trusts have funded a maternal and child health project on the Mexico-United States border with US\$500,000 annually (1988-1990). In addition, the Carnegie Corporation contributed \$40,000 to develop, as part of the Caribbean Cooperation in Health initiative, a preproposal on maternal and child health for the English-speaking countries. Other proposals developed during the period which are currently under negotiation will make it possible to sustain and even increase the level of extrabudgetary support for the development of national maternal and child health and family planning programs.

The Program provides technical cooperation at the regional, subregional, and country levels for the implementation of maternal and child health projects supported in Central America by the European Economic Community and the Italian Government and carried out by UNICEF within the framework of the Plan for Priority Health Needs in Central America and Panama.

With regard to regular PAHO-country funds for the 1986-1987 biennium, only nine out of 34 countries assigned resources to the area of growth, development, and human reproduction after active promotion and in response to the mandate of the PAHO Governing Bodies. In the 1988-1989 biennium, 26 out of 35 countries have assigned funds for these activities.

In response to the 1984 mandate calling on the Secretariat to coordinate efforts, programmed actions were increased and carried out jointly between units of the Maternal and Child Health Program, other regional programs, WHO/Geneva units, organizations of the United Nations system, and bilateral cooperation and nongovernmental agencies. There is a desire to carry out joint work in all the institutions mentioned--to participate in all stages from early programming to execution, to share technical and financial resources, and to unify the technical messages--with open and timely communication between the professionals who represent them. The cooperation agreements reached some years ago at the regional level are being strengthened, and daily work at the country, subregional, and regional levels is on the increase.

IV. RESULTS

It is difficult to know which changes in the maternal and child health situation can be attributed to technical cooperation and which ones to the daily work of the health sector. However, it is possible to

describe some of the changes observed by citing the activities carried out, especially at the level of the services. At the end of 1987 the following achievements could be mentioned:

Most of the countries have established maternal and child health units and programs of prevention and health promotion and recovery for women and children. Even though these units do not always cover all the interventions that directly affect maternal and child health, there is a general trend toward coordination and integration among those who direct them. Standardization, supervision, training, and evaluation of services are carried out in an increasingly integrated manner.

Use of the risk approach in programming, standardization, and the delivery of services has been expanded considerably. Some of the countries are introducing risk criteria at the local programming level, several use it in patient referral between different levels of care, and almost all of them apply these criteria in the delivery of services to the population through standards designed with this approach in mind.

Ties with the organizations of the United Nations system, bilateral cooperation agencies, and private foundations are becoming stronger and better coordinated. Furthermore, the subregional initiatives have made it possible to exercise and strengthen the mechanisms of cooperation among these institutions and between countries, such as the exchange of human resources, the joint training of personnel, the sharing of audiovisual and educational materials, the joint printing of documents and bibliographical material, and the exchange of experiences.

Despite the decline that has been seen in child mortality in most of the countries and the increase in services for children, access to child growth monitoring programs continues to be difficult, and it is estimated that coverage is only 65%. The surveillance of children's psychosocial development is still a poorly explored area, since there is no agreement on the appropriate instruments to be used or on the most desirable attitude to be encouraged in health personnel for observing and evaluating the process of children's psychosocial maturation. Prevention activities are being stepped up, as is the use of standardized treatment for diarrheal diseases and acute respiratory infections. Nevertheless, there are large groups that still do not have access to these programs, and sustained efforts will be required in order to reduce deaths from these diseases and continue to increase vaccination coverage.

Prenatal care coverage is on the order of 70%. Worthy of notice are the lack of timeliness with which these services are provided, as well as the low concentration and the still inadequate coverage of pregnant women with tetanus vaccination. Coverage with institutional delivery and qualified personal is estimated at 75%; mediatory puerperium care is very low; and the prevalence of contraceptive use in women of reproductive age living in conjugal unions is estimated at around 54%--pointing up the need to promote the transition from traditional methods of fertility regulation to more effective ones, and to increase

the use of these methods in sexually active adolescents (10) (Table 9). The acceptance of family planning as an activity integrated into maternal and child health programs has created greater possibilities for the expansion of coverage and the improvement of services. The use of simplified perinatal clinical histories as a an instrument for the surveillance of perinatal health is being increasingly adopted in the countries.

A great deal of research promoted by PAHO and CDC, among other organizations, provides information on the reproductive behavior of adolescents and young people in several countries of the Region (11). Although the need for intersectoral action is recognized, most of the programs are still either too specific for this purpose or else they are the result of actions being carried out for other purposes, which frequently ends up making for isolated interventions or programs of little effectiveness. Hence it is urgent to undertake a comprehensive review of the health of adolescents that will permit a predominantly educational and preventive approach to risk behavior, and to prepare them, among other things, for love, marriage, and family life so that they will not be exposed to unnecessary risks when they manifest their sexuality.

A worldwide evaluation of family planning programs has shown that out of 21 countries in the Region, six were considered to have good programs; seven, fair programs; seven, deficient programs; and one, a very limited program (12).

Evaluation of the efficiency of maternal and child health services at all levels revealed serious organizational problems. Among the categories analyzed (physical plant, human resources and materials, standards and procedures, programming and administration, supplies, community education, and community participation) the greatest problems were found in standards and procedures and in programming. Out of a sample of 425 services evaluated, it was found that 85% of them were rated "unsatisfactory" or "in a critical situation," while only 15% were considered "acceptable" (13) (Table 10).

From all of the foregoing it can be concluded that, despite the economic crisis being experienced by the countries of the Region, for the most part they have been making progress. But it should be kept in mind that there is still a great deal of room for improvement in the progress observed, especially improvements that will lead to transformation of the health services, higher levels of education, and intensified community participation so as to ensure access to services with equity, efficiency, and effectiveness.

Special attention must be given in the future to extending coverage and to improving the quality of services, since the figures for maternal mortality and its preventable causes are an indicator of access to services and of their quality. From what we already know about maternal mortality, the unacceptable figures continue to call for

priority programs and actions if they are to be reduced in the near future. It is also important to use child and maternal mortality as sensitive indicators of the health situation of neglected population groups.

V. CONCLUSIONS

The strategies for action formulated in 1984 and 1985 continue in effect in light of the activities carried out by the countries and the Organization pursuant to the recommendations of the Directing Council on the subject of population and health. At the present time, however, the important issues are to reduce maternal mortality and increase adolescent care, which call for the formulation of plans of action with clearly defined resources.

Plans of action for the reduction of maternal mortality should incorporate activities of the health sector, other sectors, and the community. Among the health sector activities, emphasis should be placed on determining the true magnitude of the problem and on the organization of prenatal, delivery, puerperium, and family planning services, with special attention to improving response capability at the first level of referral.

With regard to adolescent care, action plans should emphasize preventive aspects aimed at reducing or avoiding risk behavior and its devastating effects on the biopsychosocial development of adolescents, which endangers their maturation and integration into developing societies. Such plans should be integrated with the participation of the community, the family, and adolescents themselves, who should be motivated to accept the challenge of their commitment to the future.

A shared commitment of the health and education sectors in addressing the issues of maternal and adolescent health is fundamental. The education of women will enable them to improve their social mobility and integration into development, permitting them to make their own decisions about child-bearing and greatly increasing their ability to raise and care for their children. For adolescent males, it will prepare them to face the challenges that life imposes on them, to share their lives with women under equal conditions and, later, to live as a couple and raise their families on a more solid basis.

The organization of activities in maternal and child care, adolescence, and family planning should take place within the framework of a strategy for the strengthening of local health systems, contributing to their development and dynamization. In local programming, special attention should be given to the identification of groups at risk. Standardization should be the result of judicious selection of technology, bearing in mind the participation of the community. Evaluation of the services' efficiency should be used as the instrument to diagnose their characteristics and the need for reorientation and reorganization. Special attention should be given to the first level of

referral to make it capable of performing basic obstetrical, gynecological, and pediatric functions, so that ambulatory levels and comprehensive care can be complementary. Support should be given to the formation of networks of development nuclei to facilitate the exchange of knowledge, the improvement of research, and the training of human resources to operate the system. Mobilization of the national and international resources required by the process should be continued.

Priority importance should also be given to the coordination of external assistance so that it will provide support for national programs without dispersion of efforts or distortion of objectives. Steps should also be taken to articulate the activities carried out by nongovernmental agencies with national programs. Only to the extent that efforts and resources can be joined in the pursuit of common objectives will there be a chance to achieve them sooner, at an acceptable social cost and with the contribution of the countries.

It is hoped that from the discussion of this report the commitments undertaken collectively in previous years will be reaffirmed and, in addition, that new lines of action will emerge which will make it possible to update current programs and speed up even more the progress being made, in spite of the economic crisis, in protecting and improving the health of mothers and children. This need takes on greater importance as we approach the beginning of the last decade of the 20th century, at the end of which it will be time to evaluate the achievements that have been made toward the goal of health for all by the year 2000.

Table 1

BASIC DATA FOR ANALYSIS OF THE ECONOMY IN THE COUNTRIES OF THE AMERICAS. 1985.

| País | Population (in millions) | GDP Per Capita US\$ | Average Annual Growth Rate | Average Annual Inflation (%) | Life Expectancy at Birth | External Debt in Millions of US\$ | External Debt per Capita |
|------------------------|-----------------------------|---------------------------|-------------------------------------|---------------------------------------|--------------------------------|--|--------------------------------|
| Haiti | 5.9 | 310 | 0.7 | 7.0 | 54 | 704 | 119.3 |
| Bolivia | 6.4 | 470 | -0.2 | 569.1 | 53 | 3,972 | 620.6 |
| Honduras | 4.4 | 720 | 0.4 | 5.4 | 62 | 2,713 | 616.5 |
| Nicaragua | 3.3 | 780 | -0.2 | 33.8 | 59 | 5,615 | 1,701.5 |
| Dom. Republic | 6.4 | 790 | 2.9 | 14.6 | 64 | 3,294 | 514.6 |
| El Salvador | 4.8 | 820 | -0.2 | 11.6 | 64 | 1,736 | 361.6 |
| Paraguay | 3.7 | 860 | 3.9 | 15.8 | 66 | 1,780 | 481.8 |
| Jamaica | 2.2 | 940 | -0.7 | 18.3 | 73 | 3,795 | 1,725.0 |
| Peru | 18.6 | 1,010 | 0.2 | 98.6 | 59 | 13,688 | 735.9 |
| Ecuador | 9.4 | 1,160 | 3.5 | 29.7 | 66 | 9,233 | 982.2 |
| Guatemala | 8.0 | 1,250 | 1.7 | 74 | 60 | 2,595 | 324.3 |
| Costa Rica | 2.6 | 1,300 | 1.4 | 36.4 | 74 | 4,191 | 1,611.9 |
| Colombia | 28.4 | 1,320 | 2.9 | 22.5 | 65 | 14,044 | 494.5 |
| Chile | 12.1 | 1,430 | -0.2 | 19.3 | 70 | 20,221 | 1,671.1 |
| Brazil | 135.6 | 1,640 | 4.3 | 147.7 | 65 | 106,730 | 787.4 |
| Uruguay | 3.0 | 1,640 | 1.4 | 44.6 | 72 | 3,910 | 1,303.3 |
| Mexico | 78.8 | 1,973 | 2.7 | 62.2 | 67 | 97,429 | 1,109.5 |
| Panama | 2.2 | 2,100 | 2.5 | 3.7 | 72 | 4,710 | 2,140.9 |
| Argentina | 30.5 | 2,767 | 0.2 | 342.8 | 70 | 48,444 | 1,588.3 |
| Venezuela | 17.3 | 3,080 | 0.5 | 9.2 | 70 | 32,079 | 1,854.2 |
| Trinidad and Tobago | 1.2 | 6,020 | 2.3 | 7.6 | 69 | 1,087 | 905.8 |
| Total | 380.2 | - | - | - | - | 380,234 | 1,000 |
| Canada | 25.4 | 13,680 | 2.4 | 6.3 | 76 | | |
| USA | 239.3 | 16,690 | 1.7 | 5.3 | 76 | | |

Source: World Development Report 1987. The World Bank. pp. 202 and 232.

Table 2

LIFE EXPECTANCY AT BIRTH (YEARS) IN COUNTRIES IN THE AMERICAS
1980-1985, 1985-1990, and 1995-2000

| Country | 1980-1985 | 1985-1990 | 1995-2000 |
|---------------------------------|-----------|-----------|-----------|
| LATIN AMERICA | | | |
| <u>Andean Area</u> | | | |
| Bolivia | 50.7 | 53.1 | 59.4 |
| Colombia | 63.6 | 64.8 | 66.9 |
| Ecuador | 64.3 | 65.4 | 67.7 |
| Peru | 58.6 | 61.4 | 67.0 |
| Venezuela | 69.0 | 69.7 | 71.0 |
| <u>Southern Cone</u> | | | |
| Argentina | 69.7 | 70.6 | 72.0 |
| Chile | 69.7 | 70.7 | 72.0 |
| Paraguay | 65.1 | 66.1 | 67.8 |
| Uruguay | 70.3 | 71.0 | 72.1 |
| <u>Brazil</u> | 63.4 | 64.9 | 67.5 |
| <u>Central America a)</u> | 64.8 | 66.5 | 69.4 |
| Costa Rica | 73.0 | 73.7 | 74.4 |
| El Salvador | 64.8 | 67.1 | 71.3 |
| Guatemala | 59.0 | 62.0 | 67.2 |
| Honduras | 59.9 | 62.6 | 67.8 |
| Nicaragua | 59.8 | 63.3 | 68.5 |
| Panama | 71.0 | 72.1 | 73.3 |
| <u>Mexico</u> | 65.7 | 67.2 | 69.6 |
| <u>Latin American Caribbean</u> | | | |
| Cuba | 73.4 | 74.0 | 74.7 |
| Haiti | 52.7 | 54.7 | 58.4 |
| Puerto Rico | 74.0 | 74.7 | 76.1 |
| Dominican Republic | 62.6 | 64.6 | 68.1 |
| CARIBBEAN | | | |
| Barbados | 72.7 | 73.5 | 75.1 |
| Guadeloupe | 72.4 | 73.4 | 74.9 |
| Guyana | 68.2 | 69.8 | 72.1 |
| Windward Islands b) | 69.1 | 70.4 | 72.6 |
| Jamaica | 73.0 | 73.6 | 75.3 |
| Martinique | 73.2 | 74.1 | 75.5 |
| Other Caribbean c) | 70.7 | 71.8 | 73.6 |
| Suriname | 68.0 | 69.6 | 71.9 |
| Trinidad and Tobago | 68.7 | 70.2 | 72.4 |
| NORTH AMERICA d) | | | |
| Canada | 75.7 | 76.3 | 76.8 |
| United States of America | 74.3 | 75.0 | 76.3 |

Source: United Nations. World Population Prospects: Estimates and Projections as Assessed in 1984. ST/ESA/SER.A/98. New York, 1986.

a) Includes Belize.

b) Dominica, Grenada, Saint Lucia, St. Vincent and the Grenadines.

c) Anguilla, Antigua and Barbuda, Netherlands Antilles, Bahamas, Cayman Islands, Turk and Caicos Islands, Virgin Islands (US), Virgin Islands (UK), Montserrat, and St. Christopher and Nevis.

d) Includes Bermuda and St. Pierre and Miquelon.

Table 3

CHILD MORTALITY IN COUNTRIES OF THE AMERICAS:
UNITED NATIONS ESTIMATES AND OFFICIAL DATA
PROVIDED TO PAHO

| Country | United Nations Estimates ¹ | | | Official Data Around: | |
|---------------------------------|---------------------------------------|-----------|-----------|-----------------------|------|
| | 1980-1985 | 1985-1990 | 1995-2000 | 1980 | 1985 |
| LATIN AMERICA | | | | | |
| <u>Andean Area</u> | | | | | |
| Bolivia | 124 | 110 | 74 | ... | ... |
| Colombia | 50 | 46 | 39 | 42.6 | ... |
| Ecuador | 70 | 63 | 52 | 54.3 | 40.5 |
| Peru | 99 | 88 | 66 | 37.0 | 33.8 |
| Venezuela | 39 | 36 | 31 | 31.7 | 27.6 |
| <u>Southern Cone</u> | | | | | |
| Argentina | 36 | 32 | 26 | 33.2 | 25.0 |
| Chile | 23 | 20 | 18 | 32.7 | 19.5 |
| Paraguay | 45 | 42 | 36 | 63.2 | 46.0 |
| Uruguay | 30 | 27 | 23 | 37.6 | 29.5 |
| <u>Brazil</u> | 71 | 63 | 51 | 81.1 | 73.7 |
| <u>Central America a)</u> | | | | | |
| Costa Rica | 20 | 18 | 16 | 19.1 | 19.0 |
| El Salvador | 70 | 59 | 40 | 53.0 | 35.1 |
| Guatemala | 70 | 59 | 40 | 81.2 | 68.5 |
| Honduras | 82 | 69 | 46 | 23.0 | 17.4 |
| Nicaragua | 76 | 62 | 41 | 42.9 | ... |
| Panama | 26 | 23 | 19 | 21.7 | 22.8 |
| <u>Mexico</u> | 53 | 47 | 37 | 34.5 | 33.0 |
| <u>Latin American Caribbean</u> | | | | | |
| Cuba | 17 | 15 | 11 | 19.6 | 16.5 |
| Haiti | 128 | 117 | 95 | ... | ... |
| Puerto Rico | 17 | 15 | 11 | 18.4 | 14.9 |
| Dominican Republic | 75 | 65 | 49 | 29.7 | 40.6 |
| CARIBBEAN | | | | | |
| Barbados | 14 | 11 | 9 | 22.3 | 17.3 |
| Guadeloupe | 14 | 12 | 9 | 15.3 | 15.9 |
| Guyana | 36 | 30 | 22 | 33.5 | 36.2 |
| Windward Islands b) | 30 | 27 | 20 | | |
| Jamaica | 21 | 18 | 14 | 25.9 | 9.2 |
| Martinique | 14 | 13 | 10 | 11.1 | 9.4 |
| Other Caribbean c) | 26 | 23 | 17 | | |
| Suriname | 36 | 30 | 22 | 34.8 | 26.7 |
| Trinidad and Tobago | 24 | 20 | 15 | 21.7 | 12.6 |
| NORTH AMERICA d) | | | | | |
| Canada | 9 | 8 | 7 | 10.4 | 7.9 |
| United States of America | 11 | 10 | 7 | 12.6 | 10.6 |

1/ Source: United Nations. World Population Prospects: Estimates and Projections as Assessed in 1984. ST/ESA/SER.A/98. New York, 1986.

a) Includes Belize.

b) Dominica, Grenada, Saint Lucia, St. Vincent and the Grenadines.

c) Anguilla, Antigua and Barbuda, Netherlands Antilles, Bahamas, Cayman Islands, Turk and Caicos Islands, Virgin Islands (US), Virgin Islands (UK), Montserrat, and St. Christopher and Nevis.

d) Includes Bermuda and St. Pierre and Miquelon.

Table 4

INSTITUTIONAL COVERAGE OF DELIVERY CARE AND MATERNAL MORTALITY
IN SOME COUNTRIES IN THE REGION OF THE AMERICAS

| Country | Year | Percentage of Deliveries in Institutions | Maternal Mortality per 10,000 Live Births |
|---------------------------|---------|--|---|
| Netherlands Antilles a) | 1983 | 94.8 | 2.5 |
| Antigua and Barbuda | 1984 | 86.0 b) | ... |
| Argentina | 1981 | 91.4 c) | 6.9 |
| Belize | 1984 | 60.0 | 4.9 |
| Bolivia | 1984 | 20.0 d) | 48.0 d) |
| Canada | 1984 | 99.0 | 0.3 |
| Colombia e) | 1977-80 | 54.6 | 12.6 |
| Costa Rica | 1983 | 92.7 | 2.6 |
| Cuba | 1985 | 98.8 | 4.6 f) |
| Chile | 1985 | 97.7 l) | 4.5 |
| Dominica | 1983 | 58.0 g) | 5.8 f) |
| Ecuador | 1983 | 26.9 h) | 20.0 |
| El Salvador | 1982 | 50.0 i) | 8.5 |
| United States of America | 1984 | 99.0 | 0.8 |
| Guatemala | 1983 | 22.0 | 12.3 |
| Haiti | 1983 | 20.0 | 23.0 f) |
| Honduras | 1983 | 24.0 | 5.0 |
| Jamaica | 1982 | 89.0 | 3.6 |
| Mexico | 1981 | 64.0 i) | 8.7 |
| Nicaragua | 1984 | 40.6 | 4.7 |
| Panama | 1984 | 96.0 | 4.9 |
| Paraguay | 1984 | 22.0 | 27.5 |
| Dominican Republic | 1980 | 64.0 | 7.2 |
| St. Christopher and Nevis | 1983 | 98.0 | 18.3 |
| Saint Lucia | 1983 | 91.6 j) | 2.6 |
| Uruguay | 1983 | 97.2 | 3.9 |
| Venezuela | 1984 | 98.0 | 5.9 k) |

a) Curacao only. Mortality data from 1981.

b) Births in Holberton Hospital only.

c) Live births in institutions.

d) This figure is based on an estimate that from 80% to 85% of deliveries take place in the community. Mortality data are an estimate for 1980-85.

e) Deliveries and abortions in one year; excludes pregnancies that did not report place of delivery or abortion care. (Result of National Health Study). Mortality data from 1981.

f) 1984 data.

g) Deliveries in hospitals only.

h) Deliveries in institutions of the Ministry of Public Health.

i) Includes all deliveries in health institutions (public, social security, or private).

j) Deliveries in hospitals and health centers.

k) 1983 data.

l) Source: Instituto Nacional de Estadísticas, Anuario de Demografía 1985.

Table 5

OVERALL FERTILITY RATE (FOR WOMEN 15-49 YEARS OF AGE)
IN COUNTRIES IN THE AMERICAS, 1980-1985, 1985-1990, and 1995-2000

| Country | 1980-1985 | 1985-1990 | 1995-2000 |
|---------------------------------|-----------|-----------|-----------|
| LATIN AMERICA | | | |
| <u>Andean Area</u> | | | |
| Bolivia | 6.25 | 6.06 | 5.50 |
| Colombia | 3.93 | 3.58 | 3.00 |
| Ecuador | 5.00 | 4.65 | 4.00 |
| Perú | 5.00 | 4.49 | 3.50 |
| Venezuela | 4.10 | 3.77 | 3.20 |
| <u>Southern Cone</u> | | | |
| Argentina | 3.38 | 3.26 | 2.74 |
| Chile | 2.59 | 2.50 | 2.37 |
| Paraguay | 4.85 | 4.48 | 3.75 |
| Uruguay | 2.76 | 2.61 | 2.38 |
| <u>Brazil</u> | 3.81 | 3.46 | 2.91 |
| <u>Central America</u> | | | |
| Costa Rica | 3.50 | 3.26 | 2.85 |
| El Salvador | 5.56 | 5.10 | 4.45 |
| Guatemala | 6.12 | 5.77 | 4.90 |
| Honduras | 6.50 | 5.59 | 5.00 |
| Nicaragua | 5.94 | 5.50 | 4.50 |
| Panama | 3.46 | 3.14 | 2.65 |
| <u>Mexico</u> | 4.61 | 3.98 | 3.00 |
| <u>Latin American Caribbean</u> | | | |
| Cuba | 1.97 | 1.97 | 2.10 |
| Haiti | 5.74 | 5.56 | 5.15 |
| Puerto Rico | 2.54 | 2.44 | 2.23 |
| Dominican Republic | 4.18 | 3.63 | 2.81 |
| CARIBBEAN | | | |
| Barbados | 1.94 | 2.00 | 2.08 |
| Guadeloupe | 2.55 | 2.24 | 2.08 |
| Guyana | 3.26 | 2.75 | 2.19 |
| Windward Islands a) | 3.47 | 2.86 | 2.24 |
| Jamaica | 3.37 | 2.86 | 2.24 |
| Martinique | 2.14 | 2.08 | 2.08 |
| Other Caribbean b) | 2.86 | 2.55 | 2.24 |
| Suriname | 3.59 | 2.97 | 2.25 |
| Trinidad and Tobago | 2.88 | 2.68 | 2.27 |
| NORTH AMERICA | | | |
| Canada | 1.71 | 1.75 | 1.83 |
| United States of America | 1.85 | 1.91 | 2.09 |

Source: United Nations. World Population Prospects: Estimates and Projections as Assessed in 1984. ST/ESA/SER.A/98. New York, 1986.

- a) Dominica, Grenada, Saint Lucia, St. Vincent and the Grenadines.
b) Anguilla, Antigua and Barbuda, Netherlands Antilles, Bahamas, Cayman Islands, Turk and Caicos Islands, Virgin Islands (US), Virgin Islands (UK), Montserrat and St. Christopher and Nevis.

Table 6

PERCENTAGE OF THE POPULATION RESIDING IN URBAN AREAS IN
COUNTRIES IN THE AMERICAS, 1980, 1985, 1990, and 2000

| Country | 1980 | 1985 | 1990 | 2000 |
|---------------------------------|------|------|------|------|
| LATIN AMERICA | | | | |
| <u>Andean Area</u> | | | | |
| Bolivia | 44.3 | 47.8 | 51.4 | 58.5 |
| Colombia | 64.2 | 67.4 | 70.3 | 75.2 |
| Ecuador | 47.3 | 52.3 | 56.9 | 64.9 |
| Peru | 64.5 | 67.4 | 70.2 | 75.2 |
| Venezuela | 83.7 | 86.6 | 88.4 | 90.9 |
| <u>Southern Cone</u> | | | | |
| Argentina | 82.7 | 84.6 | 86.2 | 88.8 |
| Chile | 81.1 | 83.6 | 85.6 | 88.6 |
| Paraguay | 41.7 | 44.4 | 47.5 | 54.0 |
| Uruguay | 83.8 | 84.6 | 85.5 | 87.3 |
| <u>Brazil</u> | 67.5 | 72.7 | 76.9 | 82.7 |
| <u>Central America a)</u> | 60.4 | 63.3 | 65.9 | 70.6 |
| Costa Rica | 46.0 | 49.8 | 53.6 | 60.8 |
| El Salvador | 39.3 | 39.1 | 39.8 | 43.6 |
| Guatemala | 38.5 | 40.0 | 42.0 | 47.5 |
| Honduras | 36.1 | 40.0 | 44.0 | 52.0 |
| Nicaragua | 53.4 | 56.6 | 59.8 | 65.9 |
| Panama | 50.5 | 52.4 | 54.8 | 60.4 |
| <u>Mexico</u> | 66.4 | 69.6 | 72.6 | 77.4 |
| <u>Latin American Caribbean</u> | | | | |
| Cuba | 68.1 | 71.8 | 74.9 | 79.9 |
| Haiti | 24.6 | 27.2 | 30.3 | 37.3 |
| Puerto Rico | 67.0 | 70.7 | 73.9 | 78.8 |
| Dominican Republic | 50.5 | 55.7 | 60.4 | 68.1 |
| CARIBBEAN | | | | |
| Barbados | 40.1 | 42.2 | 44.7 | 51.1 |
| Guadeloupe | 43.5 | 45.7 | 48.5 | 55.4 |
| Guyana | 30.5 | 32.2 | 34.6 | 41.8 |
| Windward Islands b) | 00.0 | 00.0 | 00.0 | 00.0 |
| Jamaica | 49.8 | 53.8 | 57.6 | 64.2 |
| Martinique | 66.4 | 71.1 | 74.7 | 79.3 |
| Other Caribbean c) | 47.7 | 49.9 | 52.4 | 58.7 |
| Suriname | 44.8 | 45.7 | 47.5 | 54.1 |
| Trinidad and Tobago | 56.9 | 63.9 | 69.1 | 75.0 |
| NORTH AMERICA d) | | | | |
| Canada | 73.9 | 74.1 | 74.3 | 74.9 |
| United States of America | 75.7 | 75.9 | 76.2 | 76.9 |
| | 73.7 | 73.9 | 74.1 | 74.6 |

Source: United Nations. World Population Prospects: Estimates and Projections as Assessed in 1984. ST/ESA/SER.A/98. New York, 1986.

a) Includes Belize.

b) Dominica, Grenada, Saint Lucia, St. Vincent and the Grenadines.

c) Anguilla, Antigua and Barbuda, Netherlands Antilles, Bahamas, Cayman Islands, Turk and Caicos Islands, Virgin Islands (US), Virgin Islands (UK), Montserrat, and St. Christopher and Nevis.

d) Includes Bermuda and St. Pierre and Miquelon.

Table 7

**MATERNAL AND CHILD HEALTH/FAMILY PLANNING
PROJECTS FINANCED BY UNFPA AND EXECUTED BY PAHO
1982-1987 (in US\$)**

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Anguilla | 30,619 | 13,046 | 1,282 | - | 7,360 | 11,800 |
| Antigua | 22,118 | 15,888 | 13,653 | 23,147 | 22,068 | 16,000 |
| Argentina | - | - | - | - | - | 13,700 |
| Belize | - | - | 95,305 | 37,954 | 23,655 | 33,940 |
| Bolivia | 231,580 | 394,990 | 224,332 | 481,469 | 388,714 | 335,000 |
| Brazil | - | 136,563 | 309,634 | 2,000,316 | 1,417,913 | 2,217,290 |
| Virgin Islands (UK) | 37,061 | 26,796 | 17,108 | 7,925 | 15,552 | 26,200 |
| Cayman Islands | - | - | - | - | - | - |
| Chile | - | - | - | - | - | - |
| Chile | - | 32,937 | 10,474 | 11,340 | 7,533 | - |
| Colombia | 389,217 | 953,164 | 451,595 | 303,829 | 162,061 | 51,000 |
| Cuba | 22,451 | 55,827 | 37,191 | 72,315 | 63,031 | 149,000 |
| Dominica | 18,033 | 56,909 | 78,245 | 60,515 | 82,032 | 69,000 |
| Dom. Republic | - | - | 73,589 | 109,408 | 37,011 | 80,000 |
| Ecuador | - | - | 10,000 | 338,399 | 321,954 | 214,000 |
| El Salvador | 7,208 | 13,542 | 99,851 | 24,141 | - | - |
| Grenada | - | - | - | 33,616 | 42,955 | 67,595 |
| Guatemala | 145,110 | 352,417 | 481,064 | 257,867 | 152,972 | 84,230 |
| Haiti | 445,514 | 400,610 | 549,273 | 554,233 | 309,284 | 90,000 |
| Honduras | 368,092 | 414,574 | 440,746 | 380,226 | 217,448 | 205,340 |
| Jamaica 020 | 279,825 | 86,137 | 278,028 | - | - | - |
| Jamaica 030 | 1,200 | - | 15,280 | 100,309 | 77,029 | 45,000 |
| Mexico | 562,718 | 688,398 | 1,007,574 | 897,405 | 374,696 | 1,292,000 |
| Montserrat | - | 4,800 | 9,827 | 12,872 | 1,208 | - |
| Nicaragua | 113,309 | 429,954 | 902,766 | 1,072,095 | 801,284 | 782,000 |
| Panama 010-021 | 189,918 | 240,449 | 196,811 | 199,292 | 109,148 | 70,000 |
| Panama 020 | 31,338 | 32,247 | 45,319 | 50,749 | 49,732 | 4,000 |
| Paraguay | 14,581 | 185,357 | 216,844 | 247,581 | 113,697 | 206,000 |
| Peru | 223,991 | 913,708 | 770,217 | 151,490 | 252,832 | 287,000 |
| Peru (ORT Serv.) | - | - | - | - | 14,635 | 24,000 |
| St. Christopher | 43,775 | 32,418 | 24,146 | 35,448 | 22,400 | 29,500 |
| Saint Lucia | 73,499 | 68,340 | 90,782 | 79,816 | 25,515 | 49,100 |
| St. Vincent | 77,676 | 70,232 | 50,932 | 24,271 | 11,385 | 67,500 |
| Trinidad and Tobago | - | - | - | - | - | - |
| Turks and Caicos | - | - | 10,872 | 3,110 | 6,316 | 8,700 |
| Uruguay | 24,249 | 21,440 | - | 64,770 | 19,208 | 34,700 |
| Venezuela | - | - | - | 5,447 | 4,495 | - |
| Subtotal | 3,343,082 | 5,640,923 | 6,523,798 | 7,674,971 | 5,229,778 | 6,563,595 |
| Regional | ... | ... | 493,022 | 625,394 | 422,800 | 528,766 |
| Global Total | ... | ... | 7,016,820 | 8,300,365 | 5,652,578 | 7,092,359 |

Note: 1982-1986 - Final Expenditures and Obligations

1987 - Budget

Table 8

PAHO/UNFPA BUDGET BY EXPENDITURE ITEM
LATIN AMERICA, 1984-1987 (in US\$)

| | Personnel | Travel | Grant/ Cont. | Training | Equipment | Miscella- neous | Total |
|-----------------|-----------|-----------|-----------------|-----------|------------|--------------------|------------|
| <u>Country</u> | | | | | | | |
| 1984 | 1,424,463 | 234,199 | 693,827 | 1,001,505 | 3,127,498 | 300,895 | 6,782,387 |
| 1985 | 1,186,972 | 300,637 | 782,657 | 1,414,367 | 3,749,169 | 470,294 | 1,904,096 |
| 1986 | 1,105,301 | 246,842 | 340,907 | 1,757,811 | 1,668,451 | 243,715 | 5,363,027 |
| 1987 | 950,669 | 231,528 | 438,094 | 2,732,253 | 1,845,769 | 314,409 | 6,512,722 |
| Total | 4,667,405 | 1,013,206 | 2,255,485 | 6,905,936 | 10,390,887 | 1,329,313 | 26,562,232 |
| | 17.6% | 3.8% | 8.5% | 26.0% | 39.1% | 5.0% | |
| <u>Regional</u> | | | | | | | |
| 1984 | 329,640 | 66,000 | 47,500 | 10,689 | - | 39,193 | 493,022 |
| 1985 | 397,879 | 97,027 | 42,385 | 47,917 | 8,100 | 32,086 | 625,394 |
| 1986 | 192,705 | 61,100 | 62,000 | 70,000 | 8,550 | 31,495 | 422,800 |
| 1987 | 225,364 | 47,968 | 22,912 | 82,550 | 37,833 | 112,137 | 528,764 |
| Total | 1,145,588 | 272,095 | 174,797 | 211,156 | 51,433 | 214,911 | 2,069,980 |
| | 55.5% | 13.1% | 8.4% | 10.2% | 2.5% | 10.3% | |

Source: Final budget reports.

Table 9

SOME RESULTS OF DEMOGRAPHIC AND HEALTH SURVEYS
1984-1986

| Countries | Global Rate Fertility | Preva- lence of Use (%)* | Tetanus Vaccinat. Mothers | Pre- natal Care | Institu- tional Care | Puerpe- rium Care |
|------------------------|-----------------------------|--------------------------------|---------------------------------|-----------------------|----------------------------|-------------------------|
| Brazil | 3.1 | 65 | 38 | 74 | 79 | - |
| Costa Rica | 3.6 | 70 | 18 | 90 | 92 | 81 |
| Colombia | 3.4 | 63 | 40 | 72 | 70 | - |
| Ecuador | 4.3 | 44 | 38 | 69 | 61 | - |
| El Salvador | 4.4 | 47 | 48 | 92 | - | - |
| Honduras | 5.3 | 35 | 22 | 83 | 45 | 28 |
| Panama | 4.0 | 58 | - | 89 | 83 | 81 |
| Paraguay | - | 45 | - | - | - | - |
| Peru | 4.4 | 46 | 16 | 55 | - | - |
| Dom. Republic | 3.8 | 50 | 87 | 95 | 90 | - |
| Trinidad and Tobago | 3.1 | 53 | - | - | - | - |

Source: Preliminary Reports, WHS/Respective Countries. PAHO/HPM Archives

* Women of reproductive age, married or in conjugal union

Table 10

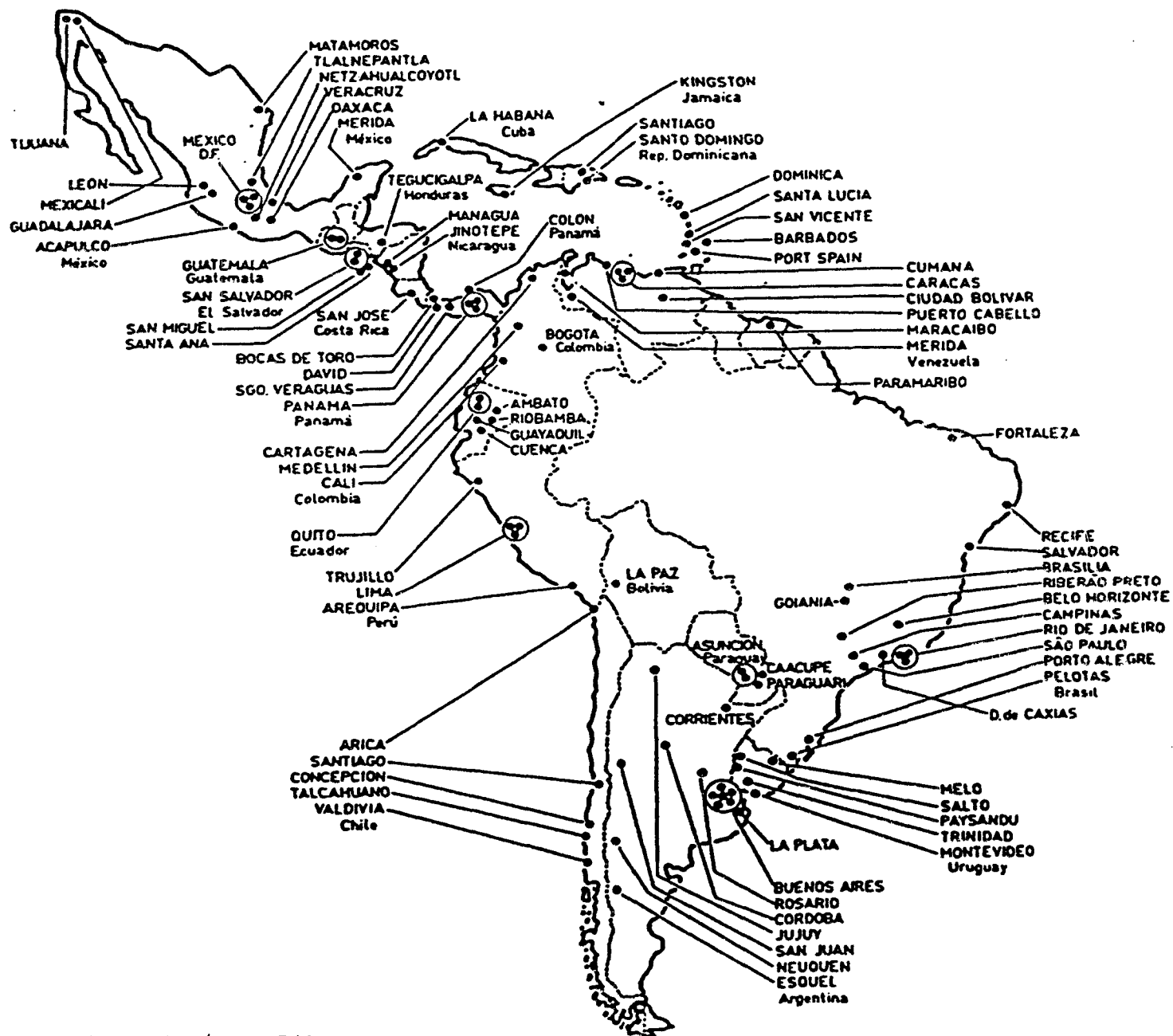
EVALUATION OF EFFICIENCY AND DISTRIBUTION OF FREQUENCY OF
SERVICES ACCORDING TO TYPE AND OVERALL VALUE OBTAINED
LATIN AMERICAN COUNTRIES, 1985-1987

| Type | Total No. of Services Evaluated | Critical Situation | | Services Unsatisfactory | | Acceptable | |
|------------------------------|--|-----------------------|----|----------------------------|----|------------|----|
| | | No. | % | No. | % | No. | % |
| Health Post | 102 | 19 | 19 | 67 | 65 | 16 | 16 |
| Health Center | 118 | 6 | 5 | 95 | 81 | 17 | 14 |
| Ambulatory Obstetrical | 31 | 1 | 3 | 18 | 58 | 12 | 39 |
| Ambulatory Pediatric | 31 | 5 | 16 | 24 | 77 | 2 | 7 |
| Neonatology | 40 | 5 | 13 | 29 | 72 | 6 | 15 |
| Obstetric Hospitalization | 51 | 7 | 14 | 40 | 78 | 4 | 8 |
| Pediatric Hospitalization | 52 | 7 | 13 | 39 | 75 | 6 | 12 |
| Total | 425 | 50 | 12 | 312 | 73 | 63 | 15 |

Source: PAHO/WHO Maternal and Child Health Program, 1987

Figure 1

NATIONAL PERINATOLOGY NUCLEI LINKED TO CLAP
THROUGH JOINT PROGRAM ACTIVITIES



REFERENCES

1. United Nations. World Population Prospects: Estimates and Projections as assessed in 1984. Department of International Economic and Social Affairs; ST/ESA/SER. A/98. New York, 1986.
2. United States Department of Commerce. World Population Profile: 1985 WP-85 Bureau of the Census. Washington, D.C., October, 1986.
3. Giovani, Andrea Coria; Richard Jolly and Frances Steward. Ajuste con Rostro Humano UNICEF. Editorial Siglo XXI, Spain, 1987.
4. Stars, Ann. Preventing the Tragedy of Maternal Deaths. A Report on the International Safe Motherhood Conference. Cosponsored by WB, WHO, UNFPA. Nairobi, Kenya, February, 1987.
5. Pan American Health Organization. Documentos de Referencia sobre Estudio y Prevención de la Mortalidad Materna. Programas HPM/HST Washington, D.C. 1986 y 1987.
6. United Nations Fund for Population Activities. Population Images Population and Evaluation Division. New York, 1986. p. 21.
7. UNICEF. Estado Mundial de la Infancia, New York. 1987.
8. Galeano, Eduardo. Memoria del Fuego. III. El Siglo del Viento. Bogotá, Los Gamines. Editorial Siglo XXI. México, 1987. pp. 247-248.
9. United Nations. Global Population Policy Data Base 1987. Department of International Economic and Social Affairs. ST/ESA.SER.R/71. New York, 1987.
10. United Nations. World Contraceptive Use Chart. Population Division of the Department of International and Social Affairs. New York, 1987.
11. Morris, Leo. Experiencia Sexual y Anticoncepción en Jóvenes en Algunos Países de América Latina. Presentado en XII Congreso Latino Americano de Ginecología y Obstetricia. Guatemala City 25-30 October 1987. (Mimeo).
12. Population Crisis Committee. World Access to Birth Control: A World Assessment. Population; Briefing Paper No. 19, Washington, D.C., October 1987.
13. Pan American Health Organization; Maternal and Child Program. Condiciones de Eficiencia en Países de América Latina, 1985-1987. Taller Regional sobre Evaluación de Servicios de Salud Maternoinfantil. Caraballeda, Venezuela, 24-28 August 1987.

BIBLIOGRAPHY

Institute for Resource Development/Westinghouse. Child Survival Risk and the Road to Health. Demographic Data for Development Project. Washington, D.C., March, 1987.

Omran, R. Abdel. Fertility and Health; the Latin American Experience. Pan American Health Organization. Washington, D.C., 1985.

Pan American Health Organization. Documentos Básicos en Reproducción Humana; Maternal and Child Health Program. Washington, D.C., September 1986.

Pan American Health Organization. La Salud del Adolescente y del Joven en las Américas. Washington, D.C., 1985. Scientific Publication No. 489.

Pan American Health Organization; Ministry of Health and Welfare; Ministry of the Family, Venezuela. Reunión Latino Americana sobre Mujer, Salud y Desarrollo. (Mimeographed). Caracas, Venezuela, 1-4 September, 1987.

Pan American Health Organization. Principios Básicos de Acción de la Organización Panamericana de la Salud 1987-1990. Washington, D.C., 1987.

Pan American Health Organization. Programa de Salud Maternoinfantil. Evaluaciones, 1985, 1986 y 1987.

Pan American Health Organization. Children's Health in the Americas; A Commitment of the People and Their Governments. Washington, D.C., 1984.

Pan American Health Organization. Health Conditions in the Americas Scientific Publication No. 500. Washington, D.C., 1986.

Pan American Health Organization. Program and Budget, 1988-1991. Official Document 210. Washington, D.C., 1987.

Pan American Health Organization. The Use and Prevalence of Contraception in Some Countries of the American Region. Washington, D.C., 1985.

Population Council. Better Health through Family Planning. Recommendations of the Conference on Better Health for Women and Children through Family Planning. Cosponsors: WB, UNICEF, UNDP, UNFPA, WHO. Nairobi, Kenya, 5-9 October, 1987.

The World Bank. World Development Report. Washington, D.C., 1987. pp. 202-232.

World Health Organization. Adolescent Health: Global Medium-Term Programme, 9.2 Draft. Geneva, Switzerland. September, 1987.

World Health Organization. Coverage of Maternity Care. A Tabulation of Available Information. Division of Family Health, FHE/85.1, pp. 12-16. Geneva, 1985.

World Health Organization. Studying Maternal Mortality in Developing Countries, Rates and Causes, Guide Book. Division of Family Health. WHO/FHE/87.7, 1987.

THE CAUSES OF MATERNAL MORTALITY

Interregional Meeting on the Prevention of Maternal Mortality (Geneva, 11-15 November 1985)

Dr. M. F. Fathalla, the meeting's Chairman, emphasized in his opening address that the causes of maternal deaths are complex. To do this, he described the case of Mrs. X:

Mrs. X died in the hospital during labor. The attending physician certified that the death was from hemorrhage due to placenta previa. The consulting obstetrician said that the hemorrhage perhaps might not have been fatal if Mrs. X had not been anemic owing to parasitic infection and malnutrition. There was also concern that Mrs. X had only received 500 ml of whole blood, and because she died on the operating table while a cesarean section was being performed by a physician undergoing specialist training. The hospital administrator noted that Mrs. X had not arrived at the hospital until four hours after the onset of severe bleeding, and that she had had several episodes of bleeding during the last month for which she did not seek medical attention. The sociologist observed that Mrs. X was 39 years old, with seven previous pregnancies and five living children. She had never used contraceptives and the last pregnancy was unwanted. In addition, she was poor, illiterate, and lived in a rural area.

Why did Mrs. X die, and how could her death have been prevented? Dr. Fathalla pointed out that there were a number of points at which Mrs. X could have been helped off the road to death. In order to identify these, and to design and implement effective programs, the various kinds of causes need to be understood.

Source: WHO Chronicle, 40(5):177, 1986

Optimal Role of the Special Programme in the 1990s

A STRATEGIC FRAMEWORK

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INTRODUCTION

The Special Programme of Research, Development, and Research Training in Human Reproduction prepares a detailed Programme Budget every two years. The Programme Budget provides a definitive plan for one biennium and tentative projections for the next biennium. Because of the nature of the research and development process, it is difficult to make precise predictions and give budgetary implications for a longer term.

The objective of this document is to provide a broad strategic framework for the development of the Biennial Programme Budgets over the ten year period 1990-1999. Complementary information is provided in the 1986-1987 Biennial Report of the Programme and, in particular, in Chapter 1 (Continuity and Change), Chapter 4 (Coordination and Collaboration), Chapter 6 (Strategies of the Special Programme) and Chapter 21 (Research Needs in Human Reproduction).

This framework will be examined and revised as necessary and, in particular, every two years at the time when the Biennial Programme Budget is being prepared. In this way it will be periodically updated to guide the Programme in drawing up concrete plans for implementation on a biennial basis.

SUMMARY

The optimal role of the Special Programme has always been kept under continuous review to ensure that the Special Programme's limited resources are directed to areas where the need is greatest and where its activities can have the maximum impact.

The optimal role of the Programme has to be based on a consideration of the unmet needs in human reproduction research, particularly in developing countries, the mandate of the Programme, its areas of comparative advantage and strength, and the availability of resources.

The need for research in the technology of fertility regulation remains high on the global agenda for research in human reproduction. At the developing country level there is a growing consensus that research needs in fertility regulation have to be addressed within the broader context of research needs in reproductive health. Major constraints in addressing these research needs include a communication gap between researchers, "consumers", and policy-makers; lack of coordination of activities; and inadequacy of resources available at present.

The mandate of the Special Programme is broad and covers the entire field of human reproduction. Emphasis in the mandate is placed on the technology of fertility regulation research, which includes both fertility and infertility management.

The comparative advantages of the Programme derive from its position as the main instrument within the UN system for research in human

reproduction, its place within WHO, its success in mobilizing a global scientific partnership, and its network of collaborating centres. The Special Programme has some constraints in the area of research and development, but it can play a very important complementary role to that of industry for the benefit of developing countries.

The unpredictability of resources available to the Special Programme makes the definition of an optimal role a difficult exercise. Its role has to be flexible and yet its priorities need to be clearly defined. The Programme needs, in addition, to tap indirect resources by collaborating at the country level in activities undertaken by its sponsors and in activities supported by bilateral aid programmes in developing countries.

In fulfilling its mandate the Special Programme plays a number of roles: promotion and support of research and development; improving and expanding resources for research in developing countries; provision of advice to Member States; dissemination of information; setting of standards and development of guidelines, and coordination.

In research and development the Programme will continue to focus on the technology of fertility regulation. First priority will continue to be on research to improve the performance of existing methods of fertility regulation, including safety aspects and behavioural and social determinants of fertility regulation.

Promoting and supporting research aimed at finding new methods of fertility regulation will be the second priority and will emphasize those methods that are at an advanced stage of development. Methods at an earlier stage of development will receive less emphasis, and the Programme's involvement in mission-oriented basic research will be only justified in certain limited situations.

Research on the prevention and management of infertility will continue to be emphasized as an integral component of fertility regulation.

The role of the Programme in improving and expanding resources for research in developing countries will continue to have two objectives: to encourage the involvement of developing country institutions and researchers in the global research effort to improve fertility regulation technology, and to assist countries to address their own research needs. Greater emphasis will be placed on the second objective and, if additional resources are made available to the Programme, this activity could be greatly expanded. A "technical collaboration package" will be offered to support country research efforts. In addition to financial support to research institutions the package will include technical collaboration in assessing research needs and their priorities; developing of mechanisms to promote communication between researchers, "consumers", and policy-makers; strengthening of research management capabilities; coordination of inputs and activities at the national

level; and technology transfer from north to south and from south to north. The technical collaboration package will address the research capacities needed to deal with problems in the broad field of reproductive health.

The advisory role of the Programme will continue and will be expanded.

Dissemination of information by the Special Programme will target not only the scientific community but also policy- and decision-makers and possibly the public at large.

The Programme will continue to play an important role in the setting of standards and development of guidelines for laboratory procedures, research methodologies and protocols, drug regulatory requirements and ethical issues.

The Programme's role in coordinating international research will continue to be promoted and reflected in all its activities. Special emphasis will be given to promoting coordination within WHO, particularly with the Division of Family Health and with the Regional Offices, as well as within the UN system and with bilateral aid agencies.

EVOLUTION OF THE SPECIAL PROGRAMME

The Special Programme of Research, Development and Research Training in Human Reproduction was established by WHO in 1971 to respond to a global expansion of research needs in human reproduction, particularly in developing countries. The Programme has always kept the field of human reproduction research under continuous review in order to direct its limited resources to areas where the need was greatest and where it would have the maximum impact. The emphasis in the Programme has, therefore, evolved with time and changing circumstances.

In the initial phase of the Programme emphasis was placed on the development of new technology. Since the greatest unmet need in the development in human reproduction technology was, and continues to be, in the area of fertility regulation, the Special Programme was oriented to pursue promising research leads in fertility regulation. A major constraint was that the human and institutional resources available for mobilization in this global research effort were poor, especially in developing countries. The Special Programme therefore devoted a considerable proportion of its resources to developing and strengthening a global network of collaborating research centres, which formed the backbone of the Programme's research and development effort.

The experience of a number of years of intensive and successful research effort showed that the research and development process, particularly for methods of fertility regulation, was a lengthy one and was a risk venture. This did not detract from its importance or the need for it. It called, however, for not neglecting the present whilst working for the future. Hence, in the next phase of the Programme,

emphasis was also placed on research on existing methods of fertility regulation and their performance in different health care delivery systems and cultural settings.

Country-specific research needs and problems can only be effectively and efficiently addressed through the strengthening and promotion of national self-reliance. Since, therefore, the Programme's needs in its global research effort were already well served by a network of collaborating centres, the emphasis in institution strengthening was later shifted from Programme needs to country needs.

As will be seen from this summary outline, the emphasis in the Programme's activities from its inception to the present time have been kept under continuous review and have evolved with changing circumstances; they have never remained static.

CONSIDERATIONS TO BE TAKEN INTO ACCOUNT IN DEFINING THE OPTIMAL ROLE OF THE SPECIAL PROGRAMME

The optimal role of the Programme has to take into consideration:

- unmet needs in research in human reproduction, particularly in developing countries;
- the mandate of the Programme;
- the Programme's areas of comparative advantage and strength;
- the availability of resources.

The optimal role of the Programme has to be re-assessed from time to time because some of these considerations upon which it is based may, and in fact do, change.

The research needs change with the emergence of new problems or the diminishing importance of others. Even if research needs did not change, the perception of these needs and their relative priorities may change. The degree to which the different research needs are being met also changes, with new actors entering the field or the departure of others.

The mandate of the Programme sets the boundaries for its activities. This document has been prepared on the assumption that the mandate of the Programme will not change. Within the mandate, however, there are a wide range of potential activities: choices have to be made and priorities set by the Programme among the activities. These will differ with time.

The Programme's areas of comparative advantage and strength also require assessment from time to time. On the one hand the Programme develops areas of strength which it can then put to more and

better use; on the other hand, the Programme learns through experience and careful evaluation more about its areas of strength and relative weakness.

The Special Programme depends entirely on voluntary contributions and consequently the availability of resources will inevitably vary. What the Programme can best do with its limited resources will be different from what the Programme can best do if it has access to far greater resources. This document has been prepared on the assumption that the Programme will continue to have, at least in the '90s, the same levels of funding as in the 1988-1989 biennium. It also attempts, however, to provide a guide to the direction in which the Programme could best move if it secures additional, much needed, funding.

The objective of this document is to take a fresh look at the changing environment with a view to examining the present roles of the Programme to ensure that it is responding to change.

Research Needs in Human Reproduction

A detailed discussion of the research needs in human reproduction has been provided in Chapter 21 of the 1986-87 Biennial Report of the Programme. A number of points need to be emphasized for their relevance in defining the future optimal role of the Programme.

1) The need for research in the technology of fertility regulation continues to receive high priority on the global agenda for research in human reproduction. This is based on a number of considerations:

- (a) The large number of couples using methods of contraception at present and the ever-increasing number expected to do so.
- (b) The growing realization of the potential impact of fertility regulation on the health of women and children, for improving the status of women, and on development in general.
- (c) The apparent inadequacy of the presently available range of methods to meet the increasing needs of both developed and developing countries. The shortcomings of existing methods are scientifically documented or the subject of concern. Further attestation to their inadequacy is provided by the large number of women who would like to use fertility regulation methods but who are not using contraceptives (as revealed in fertility surveys); the high levels of discontinuation of present methods, the increasing reliance by young women on permanent contraception; and the large number of induced abortion, both legal and illegal.

- (d) The increasing withdrawal of private industry from research and development in this field for reasons of cost and profit, litigation, and the political climate.

2) There is a growing consensus that the need for fertility regulation cannot be met in isolation and should best be met within the context of health and development. Reproductive health needs also cannot be compartmentalized. Maternal health, infant and child health, fertility regulation, adolescent health, sexuality and sexually transmitted diseases are all interrelated. Fertility regulation in particular interacts with all these other areas of reproductive health. At the country level, research needs in fertility regulation have to be met within the broader context of research needs in reproductive health.

3) There has been commendable progress in promoting research in human reproduction in developing countries. Three major constraints, however, can be identified:

- (a) There is a gap between "consumers" with their perceptions of the problem, researchers with their data and solutions, and policy-makers with their need for decision-making in the allocation of resources. Research needs in human reproduction will only be effectively met at the country level if communication channels are improved between the three parties. Communication is needed for the identification of priorities for research and for the utilization of research findings.
- (b) There is a need, at the country level, to coordinate the activities of researchers and research institutions to meet the needs in human reproduction research. This would also involve coordination of the external inputs, including bilateral aid.
- (c) Last but not least, there is a need for a major increase in resources if the desired impact on reproductive health is to be accomplished.

Mandate of the Special Programme

The Memorandum on the Administrative Structure of the Special Programme between the Programme's Co-sponsoring Agencies, which was approved by the Special Programme's Policy and Coordination Advisory Committee in 1987 and endorsed by the 1988 session of the World Health Assembly, defines the mandate of the Programme as follows:

"The Special Programme is a global programme of international technical cooperation initiated by WHO to promote, coordinate,

support, conduct and evaluate research in human reproduction with particular reference to the needs of developing countries, by:

- (i) Promoting and supporting research aimed at finding and developing safe and effective methods of fertility regulation as well as identifying and eliminating obstacles to such research and development;
- (ii) Identifying and evaluating health and safety problems associated with fertility regulation technology, analysing the behavioural and social determinants of fertility regulation, and testing cost-effective interventions to develop improved approaches to fertility regulation within the context of reproductive health services;
- (iii) Strengthening the training and research capability of developing countries to conduct research in the field of human reproduction; and
- (iv) Establishing a basis for collaboration with other programmes engaged in research and development in human reproduction, including the identification of priorities across the field and the coordination of activities in the light of such priorities."

The Memorandum clearly underlines the following points:

- The mandate of the Programme is broad and covers the field of human reproduction as it relates to the research needs of developing countries.
- The research activities of the Programme should focus on the technology of fertility regulation, which includes both contraception and infertility.
- The research capability strengthening activities of the Programme are not limited to fertility regulation but cover the broad field of human reproduction.
- The coordinating role of the Programme is not limited to fertility regulation but covers research in human reproduction. This was reaffirmed by the Forty-first World Health Assembly (Mayo 1988) in Resolution WHA41.9 (attached as Annex 1) endorsing the role of the Programme in "coordination of the global research effort in the field of reproductive health."

The Comparative Advantages of the Programme

In defining its optimal role and in planning its activities the Programme has to recognize and make use of its areas of comparative advantage and strength.

The Programme is a part of the UN system. This gives the Programme ready access to countries and to collaborating with governments. The WHO Regional Offices and Country Representatives provide the Programme with the necessary support at the regional and country level. The recent co-sponsorship of the Programme by the UNDP, UNFPA, WHO and the World Bank adds another dimension of strength to the Programme through increased access to governments and other points of contact, particularly in developing countries.

The WHO is the Executing Agency of the Special Programme. The acknowledged neutrality and objectivity of WHO gives the Programme a distinct comparative advantage. The Special Programme is in a unique position to make independent assessments of new and existing technologies and to provide necessary advice to Member States. The Special Programme can also handle sensitive issues with objectivity and without bias, from a health perspective.

With WHO as Executing Agency, the Programme also has ready access to technical support and to collaboration with other divisions and programmes with related activities in WHO, and in particular with the Division of Family Health.

Another asset of the Programme is that it can draw its scientific expertise from a global pool of the most distinguished scientists in any country or area, according to need, and without any political barriers. This ability of the Programme to mobilize scientists and scientific institutions in both developed and developing countries in a global partnership is the fundamental basis for all its operations.

The Programme has also built up, over the years, a strong base for its activities. In collaboration with countries and research institutions it has established a wide network of collaborating research centres with particular expertise in the conduct of clinical trials. This network, in both developed and developing countries, provides a unique research resource for the Programme.

It must be realized that, along with these comparative advantages, the Programme has also certain constraints. These relate, in particular, to its role in promoting and supporting research aimed at finding and developing new methods of fertility regulation and put it at a disadvantage when compared, for example, with industry. The insecurity of long-term funding is a major constraint in respect of long-term research commitments. The limited public funds at the Programme's disposal do not permit it to allocate funds as "venture

capital" for research investment. As a public sector programme it has much less flexibility than a private enterprise. Also, compared with industry, it lacks an infrastructure with which to handle all the stages of the research and development process, from applied basic research to manufacture and marketing. Recognizing these constraints the Programme needs to tailor a role for itself which is different from that of industry, but which should complement it to the benefit of developing countries.

Availability of Resources

The Programme is dependent for its financial resources on voluntary contributions from its co-sponsors, developed and developing country governments and other interested parties. Apart from these financial resources, contributions in-kind are made by collaborating research institutions and by scientists worldwide who volunteer their time and effort to the activities of the Programme. There are also other indirect resources that could be made available to the Programme through coordination of its activities with those of other agencies. The new co-sponsorship mechanism of the Programme provides a potential for linking activities at the country level with those of the UNDP, UNFPA and the World Bank. There is also a trend for more bilateral aid to developing countries. Here, too, there is also a potential for linkages and mutual re-enforcement of activities, particularly with financial contributors to the Programme and with developing countries with whom the Programme already enjoys collaboration.

It is difficult to predict with any degree of accuracy the level of funding that will be made available to the Programme in the '90s. It can be predicted, however, that the resources required will progressively increase from one biennium to the next, in accordance with the following trends: more developing countries will be committed to finding ways of improving the reproductive health of their populations; more methods of fertility regulation will reach advanced stages of development which will require increased levels of fundings; and more promising research leads will emerge which will need to be pursued for the development of new methods.

Given this inability to predict the expected level of funding which will be available to the Special Programme in the '90s, the optimal role of the Programme has to allow enough flexibility to accommodate the different possibilities with a clear definition of priorities.

ROLES OF THE SPECIAL PROGRAMME

In defining the optimal role of the Programme in the '90s, the present activities of the Special Programme need to be examined and re-assessed in the context of the above discussed considerations. The

Programme fulfills a number of roles which have been already highlighted in Chapter I of the 1988-1989 Biennial Report (Continuity and Change). These need to be reiterated here, and further analysed:

- research and development
- improvement and expansion of resources for research in developing countries
- advisory role
- dissemination of information
- setting of standards and development of guidelines
- coordinating role

These different roles of the Programme remain valid, and will continue. The following offers a forward look into these roles of the Special Programme in the '90s.

ROLE OF THE PROGRAMME IN RESEARCH AND DEVELOPMENT

The Programme supports research on improving the performance of existing methods of fertility regulation and on finding and developing safe and effective methods of fertility regulation, including infertility.

Promoting and Supporting Research Aimed at Improving the Performance of Existing Methods of Fertility Regulation

The Programme has distinct comparative advantages for improving the performance of existing technologies for fertility regulation through identification and evaluation of health and safety problems, analysis of behavioural and social determinants, and testing of improved approaches to services. This area will, therefore, continue to receive a high priority on the Programme's agenda. The strengths of the Special Programme in this area derived from its access to countries and governments, WHO's acknowledged and accepted neutrality and objectivity, the Programme's collaboration with other WHO technical units, and its ready access to a global network of collaborating centres.

The extent of the involvement of the Programme in testing improved approaches to services, an activity included in its mandate, will depend on the requests it receives for such research support, whether from governments or financial contributors. This activity will be addressed as a research capability strengthening activity, and will be referred to later under the discussion addressing country research needs.

Promoting and Supporting Research Aimed at Finding and Developing Safe and Effective Methods of Fertility Regulation

The Programme has a number of constraints, which have already been outlined, in finding and developing new technologies for fertility regulation. The research need, however, is great, and is largely unmet in view of the diminishing role played by industry in this field. The Programme envisages making a significant contribution to the field in a role which recognizes its strengths and its constraints. This should be a supportive, stimulative, collaborative, and coordinating role. Given the limited resources available, the wide scope of the field, and the time, cost and risk venture in pursuing leads from basic research to final development, the Special Programme has to continue to be very selective if its activities are to have any impact on the field.

Methods at an advanced stage of development

Given the urgency of the need and its limited resources the Special Programme gives priority to methods that are further advanced in the research pipeline. The Programme has an optimal role to play in promoting and supporting the further development, as well as in accelerating the introduction, of those methods that have passed the early critical phases of testing. The Programme's access to governments and health services, its global network of collaborating research centres and its advisory and coordinating role place it in a unique position to make a significant contribution to global research efforts in this area.

The objectives of the Programme's involvement in these methods are:

- to accelerate their final development and introduction through the provision of increased resources for research;
- to ensure that developing country perspectives are taken into consideration in the final stage of development by supporting research in the developing countries in which the methods are more likely to be utilised;
- to ensure, through collaboration with industry in the development process, that favourable concessionary prices will be made available to the public sector as well as options for the transfer of technology to developing countries, where appropriate;
- to make an objective assessment of new methods so as to be able to provide this information to Member States; and

- to coordinate the activities of all parties involved in research on these methods to ensure that there is no unnecessary duplication.

The Programme will invest in the final development of a method only if it is expected that it will be available to developing countries and is likely to be acceptable, effective and safe for developing country use. The Programme will support the final development of such methods whether or not it has contributed to their earlier development. Where the Programme has not contributed to their earlier development the support provided will be complementary to the activities undertaken by the developers of the methods.

Because of the uncertainties inherent in the research and development process, it is difficult to predict which methods will be developed over the period of the long-term plan. At present, however, the methods include:

- once-a-month estrogen/progestagen injectables;
- new long-acting progestagen injectables and implants;
- hormone-releasing vaginal rings (levonorgestrel, progesterone, and possibly oestrogen/progestogen);
- anti-progestins in combination with prostaglandins; and
- anti-fertility vaccines based on human chorionic gonadotrophin.

Although no exact time estimates can be given for the final development of these methods, they are all likely to be introduced into family planning programmes over the time-span of this Plan. There may be other methods too. The introduction of these new methods will fulfill important needs not met by presently available methods. Monthly injectables would offer the new option of a long-acting hormonal method with less disruption of the menstrual pattern. New long-acting progestagen injectables would have the same contraceptive protection as presently available preparations, but at a much reduced dose. A new implant will offer the advantage of being biodegradable, and hence would not need removal. Hormone releasing vaginal rings would provide the first long-acting method that is completely under the control of the user. A combination of an anti-progestin and a prostaglandin would offer a new approach to menses induction and early fertility termination by medical means. The introduction of an anti-fertility vaccine providing contraceptive protection for up to two years would have advantages in terms of effectiveness, simplicity of administration and potential acceptability.

Methods at earlier stages of development

Research supported by the Programme on methods of fertility regulation that are further back in the research pipeline receives a lower priority. The objectives of the Programme's involvement in these methods are:

- to stimulate research in areas that need special re-enforcement; and
- to encourage researchers, particularly in developing countries, to pursue initiatives in this field.

Examples of areas of research that need special strengthening include: male methods of fertility regulation, immunological approaches, and indices of the fertile period as a method of natural family planning.

Mission-oriented Basic Research

The importance of basic research cannot be over-emphasized. It provides the necessary information for all practical developments. Advances in molecular biology are opening widely expanding fields for medical progress. However, the limited resources of the Programme preclude any major involvement in this area. The Programme supports basic research only, where it is mission-oriented, to solve a problem encountered in the research development process or when there is a paucity of research leads to pursue in applied research, such as in the area of male fertility regulation.

The Programme can play a leadership role in stimulating mission-oriented basic research and highlighting it without diverting a great deal of its resources to basic research. The Special Programme will continue to hold a basic science symposium each year in carefully selected research fields. These symposia allow the collaboration of scientists engaged in fundamental research with scientists concerned with applied and clinical research.

Research on Infertility

The management of infertility is an integral component of fertility regulation. Research on fertility regulation in the Programme will continue to give appropriate emphasis to infertility. This applies both to research aiming to improve the performance of existing methods for the prevention, diagnosis and management of infertility, and to research aiming to promote and support the development of new methods. The same principles outlined earlier in the section on fertility regulation apply to research on infertility. Research on infertility is directed, as with other research supported by the Programme, towards the needs of developing countries. The emphasis therefore is on technologies for the prevention of

infertility (including the prevention and management of sexually transmitted diseases) and on technologies for the management of infertility in primary health care settings.

Further details on the strategy for research in fertility regulation are provided in Chapter 6 of the 1986-1987 Biennial Report of the Programme (Strategies of the Special Programme).

IMPROVEMENT AND EXPANSION OF RESOURCES FOR RESEARCH IN DEVELOPING COUNTRIES

The Programme will continue to collaborate with national authorities and research institutions to expand and improve their resources for research in response to perceived research needs.

The strengthening of research capabilities in developing countries has two objectives:

- to ensure and promote the involvement of developing country research institutions and scientists in the global research effort in human reproduction; and
- to assist countries to address their own specific research needs in primary health care.

Participation in the Global Research Effort

The Programme will continue to encourage and promote the participation of developing country research institutions and scientists in a global research effort aimed at developing new methods of fertility regulation and at improving the performance of existing methods. A requirement for participation will continue to be the explicit interest of national authorities and research institutions in pursuing the lines of research identified. Not all developing countries need to, or should, participate in all aspects of a global research effort. Where research resources are scarce in a country, they should be better utilized in addressing research issues of direct immediate relevance to the country's own needs which can only be addressed by the country itself.

Participation in the global research effort received major emphasis in the institution strengthening efforts of the Special Programme in the past. At that time it was essential for the Programme to build a network of collaborating research institutions to serve as the backbone for its research and development efforts. With this network now established the emphasis has shifted, and will continue to shift, to strengthening research capabilities to respond to a country's own specific needs, rather than Programme needs.

Addressing Country Research Needs

The Programme will continue to promote national self-reliance by expanding the research capabilities of countries to address their

own research agendas. Country research needs in human reproduction are enormous and can only be effectively met through a systematic and coordinated effort in strengthening a country's own research capabilities. The WHO Director-General recently recommended in a meeting with staff of the Special Programme that "HRP must play the key role in supporting WHO's Member States, individually and collectively, to grapple productively with the necessary agenda relating to human reproduction in its broad health, and by implication development setting."

Subject to the availability of the necessary additional financial resources, the Programme's activities in this area could be greatly expanded. The optimal role of the Programme in the '90s has to shift from responding to research interests in individual scientific institutions to an emphasis on perceived research needs in the country. The Special Programme is well placed to play this important role and, from its position in the UN System, it is accepted in this role. The Programme's ability to mobilize global scientific technical collaboration, north to south and south to north, will be instrumental in its effectiveness in this capacity.

The Programme proposes to offer a Technical Collaboration Package for support of country research efforts, to be implemented in partnership with the WHO Division of Family Health and in close coordination with the WHO Regional Offices and Country Representatives. This package will include a number of essential components together with the provision of support to research institutions. A first component in this technical collaboration package is to assist countries in assessing their own research needs and priorities. This is not an easy exercise. In many countries, there is no database for making such an assessment. Even if knowledge about the prevalence of health problems is available, this is not enough. Research priorities do not necessarily correspond to health priorities. A health problem may be serious but, if the know-how to deal with it is already available, the real need is for political commitment and the allocation of resources rather than for the generation of more information through research. Thus, a strategy and methodology for the assessment of research needs and priorities will be the first component of the technical collaboration package.

A second component of the technical collaboration package is to assist countries to develop mechanisms for promoting channels of communication among researchers, policy makers and "consumers". The optimum mechanism will vary from country to country; there will be no uniform formula for all countries.

A third component in the technical collaboration package will be to strengthen the research management capabilities in a country. The experience accumulated by the Programme to date in the holding of regional research management workshops will be continued and extended.

With the above three components in place (a database, a coordinating mechanism and management capability) the stage will be

set for a fourth and basic component of the technical collaboration package: the provision of support to research institutions. This assistance will continue to be provided through grants for institutional support and the strengthening of human resources within the context of research programmes developed in response to the perceived country needs.

A fifth component of the technical collaboration package concerns coordination of inputs in a country by bilateral and multilateral donors interested in strengthening its research capabilities. The responsibility for this coordination should lie primarily with the national authorities. The Special Programme can, however, in accordance with its mandate, play a leadership role in promoting this coordination. The Programme will endeavor to collaborate and involve all interested parties in the planning and implementation of all components of the technical collaboration package.

A sixth component of the technical collaboration package concerns the transfer of technology between developed and developing countries and between developing countries. The Special Programme, representing as it does a global partnership in science and technology, is well placed to facilitate this activity.

The technical collaboration package will address research needs in the broad field of reproductive health. Fertility regulation is one basic element in reproductive health that has an impact on all other elements, and will receive appropriate emphasis. The disciplines that need particular strengthening at the country level are epidemiology, social sciences and health systems research.

The optimal role of the Special Programme in promoting in-country capabilities in research to improve reproductive health services will be to have its input as a part of a more comprehensive service package supported from other sources. It is considered that research results will more effectively be used when there is an ongoing commitment for services. The Special Programme will only support the research component; it will not provide support for service interventions, which go beyond the Programme's limited resources. Financial contributors to the Special Programme often provide support to countries to improve their reproductive health services. A research component to test and evaluate new service interventions may be needed. The Special Programme will be in a position to collaborate with a national research institution in conducting this necessary research. Financial contributors to the Programme may find this a useful link between two activities which they support: bilateral programmes and the multilateral Special Programme.

It is recognized that this technical collaboration will only succeed, and will only be worthwhile, in those countries that are

committed, through their own action and appropriate allocation of resources, to the improvement of reproductive health of their populations.

ADVISORY ROLE

The Special Programme, as the main instrument within the UN system for research in human reproduction, and as a WHO-executed programme, has responsibility for advising Member States on technical issues in human reproduction to enable them to make policy decisions. This role will continue and expand.

The Special Programme will:

- respond to any (special) requests for information from a Member State;
- make information available to Member States on a regular basis through its publications: the biennial report and the quarterly newsletter;
- make information available to Member States on an ad-hoc basis, through the publication and distribution of a "News Alert", technical reports and guidelines;
- maintain and strengthen its liaison with WHO Regional Offices and the WHO Country Representatives as well as the Country Representatives of its sponsors, and make all information available to them (through formal and informal channels); and
- provide assistance to institutions that it is strengthening to enable them to serve in an advisory role to their governments.

To fulfill this advisory role, the Programme will:

- utilize the results of research supported by the Programme and from other sources;
- regularly review and evaluate through its Task Force Steering Committees new scientific data in the field, and
- convene special consultations and expert group meetings to discuss and report on important topics.

DISSEMINATION OF INFORMATION

Dissemination of information will continue to play an important part in the Programme's activities. Information will be disseminated to the following:

- scientific community, particularly in developing countries;
- health and family planning policy- and decision-makers;
- public at large.

Dissemination of information to the scientific community will take place through publications in scientific journals, distribution of other scientific publications, and supporting, convening and participating in scientific meetings, particularly in developing countries.

Dissemination of information to policy- and decision-makers has already been outlined in the previous section under the Programme's advisory role.

The potential role for the Programme of disseminating information to the public at large has its advantages and disadvantages. On the one hand, "consumers" have a right to information; rumors have to be dispelled and distortion or misinterpretation of scientific findings have to be corrected. On the other hand, the Programme has to weigh up carefully the risk of becoming directly involved in controversial debates which are not subject to the objectivity displayed in scientific circles. On balance, however, it would seem that there is an important role for the Special Programme to play in this area, although it needs to be carefully delineated. The Special Programme will, after appropriate review and consultation, make concrete proposals to PCC that should require minimal financial support and that should avoid the risks mentioned.

SETTING OF STANDARDS AND DEVELOPMENT OF GUIDELINES

As a WHO-executed programme, the Special Programme has an optimal role to play in the standardization of procedures related to research in human reproduction. The WHO Constitution, Article 2 - Functions, items (t) and (u), gives the Organization a special mandate in the area of standardization. The setting of standards and development of research guidelines will promote high quality research and will improve the coordination of research activities. This role of the Programme needs to be continued and expanded, particularly in the areas of laboratory procedures, research protocols, drug regulatory requirements, and ethical issues.

Laboratory Procedures

The Programme will continue to support standardization and quality control of laboratory procedures to ensure reliable, valid and comparable hormonal and biochemical assays in institutions carrying out research in human reproduction. For this purpose, the provision of matched reagents and appropriate external quality control services,

maintenance of a bank of key reagents, and the publication and distribution of laboratory manuals will continue to feature among the activities of the Programme.

The Special Programme will also continue to assist countries in establishing national or sub-regional programmes to take over some of these functions.

Research Protocols

The Programme will continue to develop guidelines for studies, standard research protocols and, where necessary, new methodologies to address problems relevant to developing countries.

Drug Regulatory Requirements

The Special Programme has a leadership role to play in response to the recommendation made at the International Conference on Population held in Mexico City in August 1984 which called for "modernization and updating of the official requirements for the preclinical and clinical assessment of new fertility regulating agents." This leadership role would not, however, include or imply the role of a supra-national drug regulatory agency. The Programme has already developed guidelines for the toxicological and clinical assessment and post-registration surveillance of steroidal contraceptive drugs and will continue its work in this area. There is, for example, a notable need at present for the development of guidelines for the safety testing of immunological methods of fertility regulation.

The objective of the Special Programme is to develop and promote guidelines that:

- are based on sound and rational scientific criteria;
- ensure the safety of human subjects to every extent possible during the research and development process and after products are in wide use;
- protect animals from unnecessary experimentation; and
- avoid unnecessary delay in the research and development process.

Ethical Issues

As reaffirmed by the World Health Assembly in May 1988 in Resolution WHA41.9, the Special Programme has an optimal role to play in "promoting ethical practices in the field of human reproduction research to protect the health and rights of individuals in different social and cultural settings."

The Special Programme will continue to work closely with CIOMS (Council for International Organizations of Medical Sciences) to promote international guidelines for biomedical research involving human subjects and involving animals.

The Special Programme will also continue to encourage and support national scientific research institutions in establishing their own Ethical Review Committees.

The Special Programme intends to expand the scope and the membership of its Review Group to enable it to function as an Ethical Review Panel. The Panel, in addition to its advisory role on research supported by the Programme, will advise on specific ethical issues in the field of contraceptive research and development, and will propose ethical guidelines.

The Programme will also continue to collaborate with CIOMS in supporting and promoting an inter-cultural dialogue on ethical issues and human values in family planning.

The Special Programme's role in drug regulatory requirements (already discussed) is also relevant to its role in ethical issues through development and promotion of guidelines to ensure the safety of human subjects during the research and development process and afterwards, and to protect animals from unnecessary experimentation.

Further details on ethical considerations in the Programme's activities are provided in Chapter 6 of the 1986-1987 Biennial Report (Strategies of the Special Programme).

COORDINATING ROLE

Coordination of activities at whatever level is to the benefit of all parties concerned. The Special Programme, as a part of the UN inter-governmental system, has responsibility for promoting coordination, and its role in this area is accepted by all parties. Promotion of coordination is not a separate activity. It is a role that the Programme has to fulfill in exercising all its activities: in research and development, in improving and expanding resources for research in developing countries, in providing advice, in disseminating information, and in the setting of standards and development of guidelines. Detailed information about this expanding coordination role of the Programme is provided in the 1986-1987 Biennial Report of the Programme, particularly in Chapter 4.

The relationship between the Special Programme and the WHO Division of Family Health goes beyond simple coordination of activities to complementarity of roles. Open channels of communication and regular, formal and informal liaison are supplemented by mutual representation and participation in all the relevant planning and advisory committees and meetings. A specific

area for closer collaboration between the Programme and the Division of Family Health in the future will be the improvement and expansion of resources for research to assist countries to meet their own research needs in the field of reproductive health.

The close liaison developed with the Regional Offices will be maintained and strengthened. The Special Programme will continue to coordinate its activities with other WHO activities at the regional and country levels, while maintaining the Programme's global perspective and function as a technical collaboration global partnership.

Developed country contributors to the Programme have their national bilateral aid programmes. The Special Programme will try to link and coordinate its efforts with these bilaterally supported activities in the area of reproductive health.

FORTY-FIRST WORLD HEALTH ASSEMBLY

WHA41.9

Agenda item 21

11 May 1988

SPECIAL PROGRAMME OF RESEARCH, DEVELOPMENT
AND RESEARCH TRAINING IN HUMAN REPRODUCTION

The Forty-first World Health Assembly,

Having considered the Director-General's progress report on the Special Programme of Research, Development and Research Training in Human Reproduction;

1. ENDORSES the policy guidelines outlined by the Director-General, with particular attention to the role of the Programme in:
 - (a) the continued assessment of existing technologies and the acceleration of the development of new technologies in fertility regulation;
 - (b) the building-up of national self-reliance in research on all aspects of human reproduction in developing countries to meet their specific needs in primary health care;
 - (c) promoting scientific and technical cooperation between developed and developing countries, and between developing countries;
 - (d) coordination of the global research effort in the field of reproductive health;
 - (e) promoting ethical practices in the field of human reproduction research to protect the health and rights of individuals in different social and cultural settings;
2. REAFFIRMS the close relationship between family planning, health and development, and the necessity to integrate family planning activities with those of maternal and child health;
3. EMPHASIZES the importance of ensuring the rapid and widespread application of the results of research supported by the Programme in countries' national health strategies and programmes;
4. APPROVES the co-sponsorship of the Programme by the World Bank, the United Nations Development Programme and the United Nations Population Fund, as outlined in the report of the Director-General;
5. URGES Member States to contribute, or to increase their contributions, to the Programme in order to accelerate the achievement of its objectives at the approved level.

Fourteenth plenary meeting, 11 May 1988
A41/VR/14

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