

TECHNICAL DISCUSSIONS: XVIII MEETING OF THE DIRECTING COUNCIL
OF THE PAN AMERICAN HEALTH ORGANIZATION

“PARTICIPATION OF THE HEALTH SECTOR IN POPULATION POLICY”

FINAL REPORT¹

The Technical Discussions at the XVIII Meeting of the Directing Council of the Pan American Health Organization, XX Meeting of the Regional Committee of the World Health Organization for the Americas, were held on 24 October 1968 in Buenos Aires, Argentina. There were 64 participants, including seven representatives of international organizations, governmental and nongovernmental.

In accordance with the Rules for Technical Discussions, Dr. Pedro Daniel Martínez (Mexico) was elected Moderator and Dr. Daniel Orellana (Venezuela), Rapporteur. Dr. Ruth Camacho (Pan American Sanitary Bureau) acted as Technical Secretary.

Two working parties were set up and elected the following officers: *Working party I*—Moderator, Dr. Bogoslav Juricic (Chile); Rapporteur, Dr. Simon Frazer (United Kingdom); *Working party II*—Moderator, Dr. David Bersh Escobar (Colombia); Rapporteur, Dr. Carlos A. Pineda (Honduras).

Each working party discussed and analyzed the selected topic for the Technical Discussions. Below is a summary of their views.

Definition

It was agreed that the following definition, drawn up by the Conference on Population and Development held at Caracas, Venezuela, in 1967, satisfactorily defined a population policy:

“By a population policy we understand the coherent aggregate of decisions constituting a rational strategy adopted by the public sector, in the light of the needs and desires of the family unit and the community, for the pur-

pose of directly influencing the probable size of the population, its age composition, family size, regional distribution, whether urban or rural, of the population, to the end of promoting the achievement of the goals of development.”

Conclusions

- Demographic problems are essentially the consequence of economic, social, and cultural factors and it is primarily through the modification of these factors that they can be solved.
- It is a responsibility of Governments to establish a population policy in the light of their national circumstances.
- The health sector should participate in population policy in two ways:
 - a) As part of the Government action, in the definition of that policy; and
 - b) In the implementation of the policy thus defined, within its own professional field.
- It was held that family planning should be understood to mean the process whereby human reproduction in families is harmonized with the welfare and health needs of the families concerned.
- The ideology of family planning is independent of the population policy established by the Governments.
- It is an inalienable right of parents to decide, with a full knowledge of the facts, on the number and spacing of their children.

¹Published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, Vol. LXVI, No. 1 (January 1969), pp. 1-2.

- It is essential that physicians and other health workers be properly trained to organize family planning programs and make them widely known so that they can be used along with other measures to promote and foster the well-being and health of families.

- Family planning cannot succeed unless families are properly informed and can thus develop a mental outlook enabling them to take decisions with a sense of responsibility.

- Family planning programs promoted by professional health workers require the support of Governments for their operation and large-scale application.

- Although a great deal of research and study is essential for the organization of long-term family planning programs geared to needs, it was recognized that in some areas it is urgently necessary to deal with existing problems.

- Family planning activities should form part of maternal and child health services or be closely coordinated with them.

- The advantage of integrating these programs into the activities of maternity hospitals and their outpatient departments is that it simplifies the problems of cytological examinations, referral of surgical cases, and provision of other essential services.

- The best way of treating deliveries at home might be to employ health visitors so as

to encourage expectant mothers to attend maternal and child health services.

- Even if well-organized maternal and child health services are available, the motivation of the public cannot be left solely to the health sector. Health education is vitally important, particularly for adolescents and young persons, and secondary education institutions could collaborate in it, as could the armed services, where males undergoing military training could be interested and educated in the objectives of the program.

- The other major sector with which coordination should be achieved in motivating the public is the educational sector, since a raising of the educational level leads to positive change in the thinking of a society.

- Leaders of public opinion could be used to motivate individuals or small groups by explaining the problem to them and gaining their interest in it and its solution, thus equipping them to take responsible decisions.

- The training of the personnel required is a responsibility that should be shared by universities and health agencies. The levels and duties of such personnel should be carefully defined.

- Although there are many fields in which research on this subject is highly necessary, it was held that first priority should be given to biological, sociocultural, and operational problems.

PARTICIPATION OF THE HEALTH SECTOR IN POPULATION POLICY¹

The topic discussed here is the relationship between health and population dynamics, with special reference to program content, education of the community, administration and organization. It also deals with the question of manpower and the teaching and research aspects of the subject.

I. Introduction

The title of this paper is taken from the topic chosen for the Technical Discussions at the XVIII Meeting of the Directing Council of the Pan American Health Organization, XX Meeting of the Regional Committee of the World Health Organization for the Americas.² It was presented as a background document to stimulate the exchange of experience and ideas during the Discussions, and to help in defining some of the possible approaches to participation of health programs in over-all population policies.

Concept of Participation

By participation in this context is meant the role of the health sector, i.e., its responsibilities and the ways and means of fulfilling them within an established population policy. We have to determine what such participation entails and how it is to be realized so as to help the general population policy to achieve its objects. It is assumed for the purposes of this study that Governments are free to establish a population policy, which may or may not be designed to modify the size and structure of the population by one means or another. The decision may be to leave the population to evolve in accordance with the natural and normal social forces. On the other hand, it may well be decided to try to increase the population in the country as a whole, or in certain

areas, in the light of existing or prospective development projects that call for more manpower and greater efforts to attract other social groups to the country or region. Or again, the policy adopted may be to create conditions in which the rate of growth will diminish. It is a fact that some of the nations of the Americas have already established such policies, and others are now in the process of determining what is to be their attitude on this important matter.

Basic Principles

This document lays down three basic principles: (a) the family should be completely free to request advice and to follow it in planning the number of children it desires; (b) the Government should decide the content and type of information to be provided when advice is requested, as well as the facilities for making use of it; (c) as stated in WHO and PAHO resolutions, family planning must be organized as an integral part of health services, particularly maternal and child health.

WHO and PAHO Policy

In an address to the White House Conference on Health in November 1965, the Director-General of WHO defined the role of WHO, which is also pertinent for PAHO, as "to provide information which will assist Governments in their analyses of all the relevant factors, on which they themselves can establish their own health policies regarding population growth."³

¹Working paper presented during the Technical Discussions at the XVIII Meeting of the Directing Council of PAHO (Buenos Aires, Argentina, 24 October 1968); subsequently published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, Vol. LXVI, No. 1 (January 1969), pp. 4-26.

²See Appendix.

³WHO Document PA/253.65.

The role and responsibilities of WHO and PAHO in this field have been made clear repeatedly in resolutions approved during the period 1965-1968 at the World Health Assembly and in the Directing Council of PAHO.⁴ In essence, WHO can advise Governments, upon request, in regard to the development of programs of family planning, without prejudice to the normal preventive and curative activities of the local health service. These programs should be related to the over-all activity of the local services, particularly those concerned with maternal and child health, and special attention should be paid to the training of professional and non-professional personnel.

It is recognized by WHO that national administrations are at liberty to decide whether and to what extent they should endorse the provision of information to their people on the health aspects of human reproduction. It is further recognized that the problems of human reproduction involve the family unit as well as society as a whole and that the number of children is a matter of free choice for each individual family. WHO accepts no responsibility for endorsing or promoting any particular population policy, and any action on requests for assistance is contingent on a policy of family planning having been established independently by the corresponding Government.

The principles thus laid down by WHO also serve as the basis for action by PAHO within the limits prescribed by the Governing Bodies.

Other Policy Statements

Mention should also be made of the declaration on population by the world leaders which was presented at the United Nations on Human Rights Day 1967; and of the report of the Meeting of American Chiefs of State held at Punta del Este in 1967, which gave emphasis to this subject by urging the need to promote "intensive mother and child welfare programs

and educational programs on over-all family guidance methods," and called upon the Pan American Health Organization "to cooperate with the Governments in the preparation of specific programs related to this objective."⁵ Again, at the Meeting on Population Policy in Relation to Development in Latin America, held in Venezuela in 1967, it was stated: "the high fertility of Latin American women—verified in recent surveys—causes serious dangers to health that are translated into a high rate of induced abortion, among other consequences. Abortion is one of the main causes of maternal illness, disability and death in Latin America. High fertility also aggravates the prevailing conditions of infant malnutrition. In addition, it may entail social and economic problems, among them family breakdown, desertion of the home by the man, juvenile delinquency, and other social maladjustments. From the medical standpoint, moreover, the spacing and limitation of pregnancies makes it possible to improve the health conditions of the mother and of children already born."⁶

Health and the Total View

The approach to health and population policy must duly bear the past, the present, and the future in mind—the past in order to establish the factors causing or contributing to health problems and to understand them; the present so as to prevent, within the means at our disposal, conditions from which health problems develop; and the future with a view to estimating what the direct and indirect results of the changes introduced may be.

Like any other medical practitioner, the public health officer is interested in the health of every individual patient who comes to him for advice or treatment. At the same time, however, he is responsible for the people in his area as a group. Consequently, the population

⁵OAS Official Records OEA/Ser.C/IX.1 (Eng.), 1967, p.78.

⁶Document UP/Ser.H/V (REPO/II/17), October 1967.

⁴See Appendix.

as a whole tends to become his main concern, and he learns to look at it as an entity and not merely as a collection of persons. To cope with his task he has to call upon skills relating to statistics, epidemiology, organization and administration, education, etc., all of which eventually have to do with population problems. He is interested not only in improving the health of every individual and family in his jurisdiction, but also in preventing environmental conditions that threaten health or interfere with programs of health protection.

Health and Socioeconomic Development

Public health today is a component of economic and social development generally. Health care in any society involves not only the prevention and treatment of disease, the prolongation of life and the promotion of well-being, but integration with all the activities calculated to improve living conditions. Of these, paramount in importance in the developing countries are education, food production and nutrition, housing, industrialization, and the steady growth of the economy.

The public health administrator must constantly analyze the population he serves in respect of such factors as size and structure, rate of growth, age, ethnic and geographic distribution, and internal or external migration. Morbidity and mortality rates should obviously be collated with the population figures and should be the basis for the formulation of plans and programs for the promotion, protection, and restoration of health, including maternal and child health and family planning. All this should be part of the efforts by the national public health authorities to have health included in over-all plans. Here the special insight of health representatives into such multisectoral matters as population can bring about positive action at the policy level of government. Health and population should be items of long-term national socioeconomic plans, and population programs should be integrated into those plans.

Health and Social Situations to be Borne in Mind in Population Policy

The family is the basic unit in most public health work, and hence account must be taken not only of direct health hazards but also of social conditions that affect the welfare of the family and have a strong influence on health. The following points are worth noting:

a) There is evidence to show that in many countries women in the lower income brackets have more children than those of higher economic status;⁷ also that high infant mortality and morbidity are often linked with the size of the family.⁸

b) There is likewise a high correlation between the level of education of women and the number of children they bear,⁹ the less educated having more children. It is well known that high mortality rates among infants and young children in Latin American countries, as in other parts of the world, are a direct result of serious environmental and nutritional defects, coupled with the mother's inability to take care of her children.

c) It has been shown that illegitimate children have a higher morbidity and mortality rate than legitimate children,¹⁰ the reason being that they do not have the economic and social protection of the father. In addition, the mother usually lacks education and is thus unable to improve her economic status.

d) Involuntary pregnancies cause women to seek abortion.¹¹ This often leads to sterility,

⁷Ministry of Public Health and Colombian Association of Schools of Medicine. "Estudio de recursos humanos para la salud y educación médica en Colombia," *Hechos Demográficos* (January 1968), Tables 28 and 32.

⁸Gordon, Wyon, and Ascoli. "The Second Year Death Rate in Less Developed Countries," Reprinted from *Amer J of Medical Sciences*, Vol. 254, No. 3 (September 1967), pp. 369-370.

⁹Miró, Carmen A., and Ferdinand Rath. "Preliminary Findings of Comparative Fertility Surveys in Three Latin American Cities," *Milbank Fund Quarterly*, Vol. XLIII, No. 4 (October 1965), Part 2, Table 8, p. 51.

¹⁰*Infant Loss in the Netherlands*. National Center for Health Statistics, Series 3, No. 11, U.S. Dept. of Health, Education and Welfare, p. 24.

¹¹Puffer, Ruth R., and G. W. Griffith. *Patterns of Urban Mortality, Report of the Inter-American Investigation of Mortality*. Pan American Health Organization, Scientific Publication 151, 1967, pp. 169-182.

Hall, M. Françoise. "Family Planning in Lima, Peru," *Milbank Fund Quarterly*, Vol. XLIII, No. 4 (October 1965), Part 2, p. 100.

Armijo, Rolando, and Tegualda Monreal. "The Problem of Induced Abortion in Chile," *Ibid.*, p. 263.

chronic disability, or death and produces distress and a sense of guilt in their families. Such abortions are also a very heavy burden on hospital gynecology services.

e) Women who have had medical problems during pregnancy tend to have similar difficulties in successive pregnancies, especially when they do not have sufficient time between pregnancies to recover completely.

f) Among women with serious chronic illnesses such as pulmonary tuberculosis, nephritis, etc., pregnancy tends to aggravate the condition.

g) Widespread sterility is a factor to be borne in mind in population policy, and appropriate measures should be taken in the light of its nature and frequency.

h) The need to increase the population in certain areas of a country should be carefully planned with due regard to health hazards and health needs, including both manpower and services. The health authorities should follow the trend of development, not only in general terms but in specifics, such as the type of enterprise installed in the particular area, its location, the risks involved, the numbers of workers needed, the timing of requirements, the health care services needed for the labor force, the number of people likely to come to reside in the area, and the educational or other service institutions needed to take care of the population's health.

Some Guidelines

The health officer can help to improve conditions in several ways, including:

a) Development and maintenance of a general health program, including maternal and child health services, and compilation of data on health problems related to maternity.

b) Provision of family planning services to those who request them.

c) Assessment of current family planning practices and the impact that programs in the area seem likely to have in the future.

It is well to remember, in regard to family planning, that as indicated at the Eighteenth World Health Assembly: "It is a matter for national administrations to decide whether and to what extent they should support the provision of information and services to their people on the health aspects of human reproduction,"¹² and that a couple should have the right, freedom, and ability to have as many

children as they want, and at the time they want them. Thus parents can develop their own standards of parental responsibility in the light of their beliefs, their desires, and their means. In accordance with these principles, maternal and child health and family planning programs should include research, education (including individual counseling), and service. It is only by doing so that they can make their resources fully available to the community.

II. Program Content

In countries where Governments have already established population policies, the specific content of programs will vary according to the time, the place, and the people involved. In general, a broad program has the three major components mentioned above: service, education, and research. The fundamental aim is to help families to have the number of children they want. Attention must be paid to infertility, and the freedom of the family to request advice, to be informed, and to decide on the basis of the information provided must be fully respected. It is therefore important that in family planning the physician should pay particular heed to the wishes expressed by the woman and, as in any other medical situation, recommend the method he thinks best suited to her needs, circumstances, and capacities. Since family planning methods are as a rule greatly dependent on family motivation, pressure is virtually ineffective and should be totally proscribed.

Individual Health Problems

Wherever a health department operates special clinics for tuberculosis, cancer, diabetes, cirrhosis of the liver, or other conditions in which pregnancy could constitute a medical hazard and should therefore be deferred, information and assistance in postponing pregnancy should be an essential element in the treatment prescribed. Similarly, whenever feasible (unfortunately women in Latin America still frequently have no access to the modern resources of obstetrical technology which ensures increasing safety for mother and child) post-

¹²Off. Rec. Wld Hlth Org. 143, 35 (Resolution WHA18.49).

partum care should take due account of biological or anatomical conditions brought about by pregnancy and check the progress of uterine involution and other physiological signs of return to the pre-gravid state. In this way the clinic can detect and treat cases that should be kept under supervision to correct residual conditions resulting from pregnancy and delivery. Family planning advice, if requested and accepted, will ensure the necessary time for the recovery and stabilization of the patient's organism—a part of the total rehabilitation process.

Experience has shown that when family planning advice has been added to the program of postpartum care, the percentage of women who continue to attend the clinic has doubled and even tripled. The strategic importance of postpartum care is quite evident, since apart from the reasons already mentioned, this is the time when the mother can be helped to give the new baby a healthy start in life by means of instruction on diet and other aspects of infant care. Postpartum care services should therefore include also family planning and child health supervision. To extend such services to women living in rural areas, the local midwife may well be the key person to recruit, train, and supervise for this purpose.

As is clearly indicated in a study sponsored by WHO,¹³ induced abortion, particularly when repeated, is an important cause of maternal mortality. Experience shows that women subject to this risk readily request and accept advice in order to avoid another pregnancy. The same is true of spontaneous abortion, though to a lesser extent.

Cancer of the genito-urinary organs is another condition to be considered. According to the above-mentioned study, cancer of the cervix and corpus uteri is a serious problem in some of the large cities investigated.¹⁴ The gynecologist may feel it necessary to advise that pregnancy be avoided, both here and in other

gynecological conditions. Maternal and child health services should if possible include routine cytodiagnosis to detect cancer of the cervix or precancer conditions.

When infertility is the problem, resort to medical centers is more and more essential in view of the increasing recognition that the problem may require the attention of a variety of medical specialists and goes beyond the traditional scope of gynecology. For example, urology is often involved; endocrinology also contributes significantly, particularly in the case of the wife. Failure to achieve parenthood may result from impaired embryologic development rather than from inability to conceive. Thus chromosomal studies and other genetic investigations may be necessary to clarify the problems so that couples may be given proper guidance and advice. It has also become increasingly evident that underlying emotional factors affecting either the husband or the wife can play an extremely important role in the over-all handling of this problem, in which case psychiatric consultation may be indicated. Obviously complex services of this kind are only likely to be found in a few large urban health institutions, and cases will have to be referred to them from the regional or rural area.

Integration of Medical Services and Family Planning

The following outline illustrates some of the opportunities for integration of medical services and family planning in a well-organized health center with complete and adequate resources:

Case history: (a) family particulars, including social and economic status; (b) pregnancy history; (c) general health history.

Medical examination: (a) general physical examination, laboratory tests; (b) gynecological examination, including Papanicolaou test.

Counseling: (a) inquiry as to family planning method preferred and specific instructions with regard to the method chosen; (b) discussion and advice on incidental health findings; (c) referral for treatment where indicated; (d) schedule of return visits and instructions concerning interim contacts when needed.

Return visits: (a) prompt contact at the center or in the home within a month following

¹³Puffer, Ruth R., and G. W. Griffith. *Op., cit.*, pp. 169-182.

¹⁴*Ibid.*, pp. 118-120.

the first menstruation after confinement is very helpful and likely to reduce considerably the percentage of cases failing to continue to use the method chosen; (b) routine checks on the patient's current condition should be made as easy and convenient as possible, and usually should not require examination by a physician; carefully designed questionnaires can be used by nurses or midwives, the case being referred to the doctor only when indicated or requested; (c) unscheduled visits in the event of dissatisfaction with the method adopted should be encouraged; (d) special visits may be arranged for follow-up or for treatment of incidental conditions detected in the course of examination or referral; (e) continuing information and counseling on family planning and health protection should always be available to individuals or couples seeking it.

III. Health Education and the Community

Where the population policy of a Government so indicates, the educational activities which form part of a maternal and child health and family planning program may be addressed to the community as a whole. But it must be emphasized that the family is the focal point for these activities, and the essentially private nature of the subject matter suggests that the focus should be on the education of the mother and the family.

Over-all family guidance as part of routine health activities is designed to provide the information needed for conscious and voluntary change of attitude toward maternal and child health problems, reproduction, relationships between members of the family, responsibility in marriage, and parenthood. Parents acquire the knowledge they need to enable them, as far as possible, to provide their children with a healthy and worth-while life.

The design and execution of an educational program calls for the voluntary and conscious consent and cooperation of its recipients. People will accept an over-all family guidance program, or any other new health scheme, if it satisfies their needs.

Factors to be Taken into Account in the Program

The adoption of health and family planning practices is affected by various psychological,

sociocultural, and educational factors. Hence the first step in formulating a program is to obtain information on the distinctive features of the population from these standpoints. This is essential in Latin America, where the native populations have preserved their own particular patterns of culture and communication, and *mestizo* groups have to a considerable extent developed their own local cultural characteristics. Both groups have preserved certain important values such as the prestige and respect attached by the community to the possession of large families.

Ignorance of the health problems which may affect mothers, lack of scientific information about human reproduction, and the fact that human groups are frequently guided in their activities by empirical principles, are elements which must be taken into account in formulating programs.

The difficulty of communication between health personnel and members of the family sometimes makes it impossible to answer questions, remove doubts, and acquire useful information. At times a sense of modesty prevents a mother from discussing intimate details of her married life with a physician or a nurse. Again, in many maternal and child health programs, which should be directed to the family, the family as a unit is disregarded.

Social, cultural, and religious values can likewise affect the program. In some social strata, older relatives play an important part in family decisions and thus can strongly influence the spacing of children. In certain countries bonuses are offered to large families, and there may even be legislation governing this. A further point worth mentioning is that in Latin America men regard the fathering of many children as a proof of their virility.

With respect to social organization two different problems arise: (a) the influence of urban patterns of behavior among the poor in urban and rural areas; and (b) the fact that the influence of female leadership in the spacing of children is still limited. Poor people in urban and rural areas are aware that, generally speaking, the more well-to-do families have fewer

children than they do. Such factors tend to create resistance and desperation.

Some Guidelines for Community Education

If the sociocultural characteristics of the population groups among whom the program will be carried out are known, it is possible to make an educational diagnosis and thus define with some degree of accuracy the aims and objectives to be reached in order to satisfy the needs of the population and the priority groups. Arbitrary selection of educational methods and techniques, without analysis of the situation, frequently results in total failure. Such diagnoses do not necessarily call for a thorough sociocultural study; nevertheless, it is desirable that the services of a social scientist should be available.

Success will depend in large measure on the quality of the technical staff carrying out the program and on the understanding and participation of members of the community. The program should form part of routine health activities. The specialist in charge should be a health educator capable of seeking out and making use of institutional, human, and material resources—both inside and outside the community—likely to be of value in attaining educational objectives.

The result of studies of the educational process shows that the most satisfactory procedure for ensuring that a message has the desired impact is by word-of-mouth communication. A message is more effective if there is a chance to analyze face-to-face the arguments for and against the health problem, and thus to make sure that the subject has fully grasped the idea.

Health programs, especially maternal and child health and family planning programs, call for continuing educational activity to sustain the motivation of mothers and families in general, till the practices inculcated become part and parcel of everyday life.

Anyone requesting information should be given it, together with instructions and advice on how to apply it. As has been said, the information must be in line with the Govern-

ment's policy, which will determine the educational activities to be addressed to the family, population groups, and community leaders, especially through health centers, hospitals, health posts, and the like.

For this task the participation of professional and auxiliary health workers is highly important. Physicians in hospitals, clinics, and outpatient departments and nurses and midwives in health centers and in the course of home visits have frequent opportunities to give advice and guidance. Maternal and child health clinics and maternity wards are of course the places where program activities should logically be initiated and sustained; but their extension to other essential preventive centers must be planned in such a way that educational activities have an impact in the home, at places of work, and in schools. Schoolteachers and auxiliary personnel in rural areas can also play a very valuable part.

IV. Administration and Organization

The basic principles and practices of modern public administration are as relevant to a population program as to any other activity in the field of health. The policy underlying the program should reflect this in all fields of administration: organization, budget, finance, personnel, procurement and supply, etc.

The Family Planning Program as Part of the Health Administration

Since family planning services are part of health care and particularly of maternity care, they are most commonly located for administrative purposes within the maternal and child health unit of the central health department. At times this merely means adding family planning to the responsibilities of the director and staff of the unit, on the principle that family planning services should be developed as an element of the health structure of the country. Whenever necessary, coordination should be established with other departments or units of

the ministry of health, and also with universities and their faculties concerned with population problems.

Under the general heading of health, there must be a place for population in the over-all national health plans. Long-term planning is necessary here as in the case of all other elements of health in the context of socioeconomic development.

Organization

Like other health care programs, those for maternal and child health, including family planning, comprise different geographic levels: central, regional, and local. Activities at the regional and local levels will often be in the hands of personnel with more general administrative, supervisory, or technical responsibilities. At the local level field staff may deal with family planning simultaneously with maternal and child health care. Where a maternity program exists advice can be given on request, following policy guidelines, in the prenatal and postnatal clinics.

In a Government's own health centers and general dispensaries not attached to hospitals, family planning services may be given in connection with a maternity or general health clinic. The decision depends, once again, on the established policy, the level of attendance, the number and type of personnel, and so on. Similarly such activities can be introduced in nongovernmental hospitals and health centers. These organizational arrangements apply to all programs, whether their aim is to increase or to reduce the population.

Operational Levels

Activities might be organized at the following three operational levels. In each case, the national health authorities would establish the detailed procedures to be followed:

Minimum rural units

(auxiliary staff)

- Information on maternal and child health and family planning.
- Simple registration of statistical data.

- Referral of cases to health services having professional staff.
- Surveillance of cases undergoing medical treatment.

Health centers

(professional staff)

- Registration and statistical analysis.
- Health education.
- Medical examination.
- Recommendations and treatment.
- Taking of samples for specialized tests (Papnicolaou, etc.).
- Referral to specialized services.
- Medical care in relation to the family and home visiting.
- Home visits.
- Supervision of minimum rural units.

Maternity hospitals and specialized centers

(in addition to the above health center functions)

- Specialized examinations and treatment in maternity services; health education, prenatal and postnatal.
- Handling of problem cases referred by the units and centers.
- Supervision of health center activities.

In adapting and operating this scheme, an important factor to be taken into consideration is the need to establish permanent and continuous supervision and guidance.

The maternal and child health unit of the health ministry has excellent opportunities to improve the programs of voluntary and private groups, such as family planning associations, by arranging for the inclusion in them of maternal and child health services and general medical counseling or consultation.

Whenever family planning is added to an existing service, the chief problem is that of personnel time. Staff already burdened by too many patients cannot take on additional work without giving up something. A number of different solutions may be tried. The most painless and often the most effective method is to reduce the frequency of routine return visits. Any service of long standing tends to develop habits which are a carryover from the past when a new program called for closer contact with patients than was later on found to be necessary. As a rule, it seems better to see more patients occasionally than to see fewer patients frequently. In the former case, the physician

can see the maximum number and decide selectively which of them need his further attention. This weeding-out of unnecessary routine visits in all services not only reduces the burden but focuses the effort where it is most needed and places the physician's work on a higher professional level.

A closely related solution is to make sure that activities are graded according to their technical complexity. Is the physician doing what could be done by a nurse or midwife? Is the nurse or midwife doing what could be done by a trained auxiliary? Which patients can be screened out by a lower-level worker so that only those in real need will be referred to the professional staff? Much can be done by training personnel in the use of questions carefully prepared and specially designed for each particular service. Every physician knows that a good case history can detect more health deficiencies than a stethoscope. The professional must be able to concentrate his efforts at a level more and more commensurate with his capacity and training.

When possible, arrangements should be made for staff to work overtime and to be compensated accordingly. This is particularly helpful when it is desirable to keep the service operating at odd times such as evenings or weekends. Of course, more staff will still have to be recruited, trained, and put to work if it is found necessary.

Another way in which family planning can be integrated into other health services is through home visiting. A trained visiting nurse or other worker can be the general contact between the family and all types of service in the health program or can serve certain particular health units.

Phasing of the Program

No health program ever starts at full capacity. Plans for progressive expansion should be the outcome of an assessment of the situation in the area where it has been decided to establish a service. If it is decided to

incorporate family planning services into existing maternal and child health or other activities, in all probability they will start in the larger cities, where the literacy rate and educational possibilities are as a rule higher. Furthermore, in predominantly agricultural countries the cities are influential nuclei for the spread of ideas and practices. Rapid urbanization with continued contacts between the immigrants and their villages of origin encourages the diffusion of information.

Under certain circumstances it may be found necessary to give emphasis early on to the marginal populations of large cities, the so-called "shanty towns," or to the rural communities. Vital and health statistics and demographic data may be used as a basis, provided the fundamental principle of the family planning program already referred to is maintained, namely, the free decision of couples to request and receive advice.

As a rule, it is preferable to aim at organizing the rapid transportation of patients to better equipped services than to attempt to mobilize a makeshift unit. But distances should not be greater than would reasonably permit a round-trip within a single day, either for the patients from their homes or for the staff from their bases of operation. Stationary services should be preferred to mobile teams.

The number of women seeking advice will depend on the objectives of the program. It can be estimated that roughly one fifth of the total population are women of child-bearing age. This number is further reduced by estimates of the proportion pregnant at any given time; survey findings on attitudes and readiness levels, age, and parity; economic groups upon which the program would concentrate; and estimated number of patients in the previously described conditions in whom pregnancy should be avoided. As a matter of principle, all such estimates should be strictly related to the detailed policy established by the Government, and to experience with regard to the numbers that have consulted the service from its inception.

Supporting Activities

The administration of a program also involves establishing and maintaining the supporting activities of supervision, consultation, training, evaluation, and research. An adequate pyramid of supervision is likely to be the key to success or failure of the entire effort. The ratio of number of supervisors at each level to that of the next echelon below should be such as will permit meaningful office contacts and observation in the field. Mobile consultants make it possible to maintain a program with fewer highly trained staff. Training units should have a formalized curriculum for preservice orientation and periodic inservice refresher courses.

Evaluation

A certain amount of evaluation should be built into the records and reports so that the administrator can assess and compare the work done in the areas under his jurisdiction. For special evaluations in depth, it is usually desirable to have a separate evaluation unit. A research unit should have sufficient autonomy to be free of demands by the operating program, but should recognize the program's need for studies that will answer urgent questions.

The administrator maintains supervision of the program, first by studying the usual type of service reports covering activities, personnel time, and expenditures. To assess the utilization of this program he has recourse to data on numbers of clinic and home visits, broken down by new admissions and return visits, particulars of the clients, and methods of contraception adopted.

V. Human Resources, Education, and Research

Each new change in the scope and content of public health programs is for the public health officer a new challenge in manpower development. Two main questions that usually arise are:

a) How can present health personnel be trained and utilized for new duties?

b) Should new skills be created for employment in health?

Numerous examples can be cited of the development of new occupations in public health. Entirely novel activities have been started, such as public health social work and public health education. Special technicians have been required, such as electrocardiograph operators and cytologists, for conducting the Papanicolaou tests.

Staff employed on new health activities not only embark on original tasks that had not existed before, but often absorb a number of functions formerly carried out by other categories, combining them into a new set of duties. This can relieve the pressure on the others and makes for a more thorough approach to the work.

Types of Training

Whenever new activities are added to a public health program, the health officer is faced with three types of training responsibilities:

a) He must provide instruction for those already engaged in the different fields of public health so as to allow them to incorporate the new activities into their own programs.

b) He must train the new personnel needed to furnish services to a larger sector of the population.

c) With an eye to the future, the health officer must try to give appropriate content to the basic education of all relevant personnel so that they will start their careers in public health with sufficient understanding and skill to ensure the stability and continuity of the programs in future years.

Training of Staff

a. *Education and training of personnel already employed in public health.* The training of such personnel should be closely related to their educational and professional background. In recent years a fairly large number of teaching programs for physicians and nurses, usually at

the university level, have been set up in different countries of the world, under national or international sponsorship. These are primarily didactic, providing instruction in theory, principles, and methods. The period of training is at least one academic year and often longer.

From time to time national health departments, international agencies or universities offer short-term training programs of one to three months in the administration of maternal and child health and family planning programs. They assume that the trainees have already acquired competence in public health administration and merely attempt to superimpose thereon a short review of the new special material. At times the focus is more specifically on acquainting staff at intermediate or lower administrative levels with the procedures of the services in which they will work. This is a situation that appropriately falls within the responsibility of the public health agency itself, especially in the case of a larger agency launching a large-scale program. Where the national scheme aims at covering extensive areas within a short period of time, it may be necessary to offer simultaneous short training courses in different areas of the country in order to expedite the process and reduce travel and expense. In all such courses, the emphasis should be on the complete integration of family planning advisory services into the maternal and child health services.

It must be brought home to the public health professional that his primary responsibility is to protect the health and welfare of the mother and her children, using family planning techniques as yet another valuable tool for that fundamental purpose. In addition to being fully familiar with the scope of the program, the administrator must have at his fingertips the details of procedure, especially that of reporting from the periphery to the center of the administrative structure, and methods of tabulating reports and drawing inferences from them. He must be fully aware of the nature of the training offered to his collaborators and to others in the program, so that he can be discriminating in his expectations from various

types of personnel. He must also be acquainted with the nature and possibilities of research that can provide him with new methods, as well as with evaluation techniques which will give him a clue to the strength and weakness of his program and indicate possible changes.

b. Statistics and demography. Statistics has long been recognized as an essential tool in public health administration. As awareness of the health implications of population change has grown, the statisticians of health departments have become more and more involved in demographic questions. They collect and analyze data on the size of the population, its rate of growth, age and sex distribution, migration in and out of the country and from one part of the country to another, the development of urban agglomerations, and the relationship between these factors and over-all economic and social development and national planning. Over a period of more than two decades, 13 countries in Latin America have developed training programs for demographers. A valuable contribution to the training of personnel in population matters has been made by the Pan American Health Organization and the Latin American Center for Demography (CELADE) in Santiago, Chile. It is essential both that health officers recognize the importance of the demographer in the development of health programs and in turn that training in biostatistics and demography should pay greater attention to health. The health officer has a stake in the attainment of this goal.

c. Clinical training. The progress of scientific knowledge concerning maternal and child health and family planning has increased medical responsibility. Physicians need special training to choose between the different methods, to appraise the techniques and skills required in their use, and to anticipate the side-effects that may occur and devise methods for correcting them.

Training programs should include elementary diagnosis of subfertility, checking for cancer by means of Papanicolaou tests, and the possible need for other laboratory tests. Persons

with a mainly clinical background may need to have more specialized training to equip them to set up a laboratory, to select appropriate equipment and supplies, and to supervise procedures.

Clinical training, whether long-term or short-term, requires operational services in which the training can take place. Hence a first essential step is the organization at strategic points of large, active demonstration services with a sufficient caseload so that the training can be effective without extending the time period unduly. In some cases the persons who are to be responsible for organizing a new service have to be sent elsewhere before training facilities are established in their own country.

Nurses can undertake greater responsibility in maternal and child health services, including family planning, than they have been given hitherto. In obstetrical and gynecological services, nurses should learn enough about the clinical aspects of family planning to enable them to use this knowledge in their work. An important function the nurse can perform is that of singling out from among the patients those who should be referred to the physician. She can help most of the cases herself, passing on those in need of medical attention proper.

The nurse trained in midwifery—the nurse-midwife—can be given additional responsibilities in the family planning service of a maternal and child health program. In some cases she can even replace the physician for the application of certain technical procedures. To do so she will of course need special training and supervision, which she can obtain in a demonstration center, working under the direct supervision of a physician.

In most places there is a shortage of both doctors and nurses, and it is difficult to imagine that enough of either can be obtained to support an extensive maternal and child health service including family planning if they have to bear the brunt of the direct service to the public. For this reason, nonprofessional persons should be trained as clinical auxiliaries in general health services which include maternal and child health and family planning. They

should be young persons, and they should be given approximately a year of training, some pedagogic and much practical, in all aspects of public health, with special emphasis on the health of the mother and child and the importance of family planning.

d. Education and community development.

Family planning is a very personal matter. Not only does a man and his wife have full responsibility for it, but they may keep it to themselves and be unwilling to discuss it with professional persons or anyone else. The subject is one of such delicacy that persons can easily be offended. All advice on family planning and maternal and child health should therefore be given with great sensitivity to the feelings of patients and clients, and no attempt should be made to force ideas on those who are unwilling or unable to face the matter. Workers who are new to the job tend to be enthusiastic and sometimes unduly aggressive, all with the best of intentions. A period of training is necessary for the gradual acquisition of an awareness of the delicacy and tact that must be used.

e. Levels of education. Education as a part of maternal and child health and family planning services involves a number of levels.

1) The highest level is that of the professional health educator, whose task is to devise ways of informing the public about the services so that their purpose, nature, and voluntary character are properly understood. Their confidential and private nature should likewise be respected. The training of the professional health educator will already have covered these principles, but their specific application to maternal and child health services and family planning needs to be emphasized. Short courses of approximately four weeks are adequate for this purpose and have been given in a number of universities and elsewhere.

2) Another educational level is that of counselor or adviser on family planning in maternal health services. A good deal of discussion may be needed before a woman knows which method she would like to try, and also afterwards if she has questions or complaints. Nonprofessional personnel can be trained to carry out such duties, thereby saving the time of physicians, nurses, professional health educators, social workers, and other more highly paid and scarce personnel. This type of personnel operates at a lower level than the

professional health educator, but the lack of background brought to the work means that the period of training will be proportionately longer. They need to know about the physiology of reproduction, the various family planning methods and their side-effects, as well as how to appreciate personal feelings. All this should be obtainable in a training period of several months, including both theoretical instruction and clinical work.

3) Workers are also needed for support and follow-up activities in the community and for informing the public about services available in the area. They should concern themselves with public health generally, and maternal and child health in particular, helping the family in connection with maternity, postpartum care, cancer prevention, immunization of children, nutrition and child care, and family planning.

Basic Professional Education in Various Disciplines

Professional education curricula should strongly emphasize general health and family planning so that as students are graduated from professional schools and move out into their respective fields they will be aware of and support new programs as they are developed. In most parts of the world there is at present surprisingly little concern with family planning and its relation to maternal and child health in the medical curricula. Various studies have been made showing how this subject could be conveniently included within the typical curriculum, not only in courses on obstetrics but in such subjects as physiology, psychiatry, and preventive and social medicine.¹⁵ The same could be said of schools of nursing, social work, and public health. Where, as often happens, the ministry of health has responsibility for schools of public health, it should utilize this opportunity.

Professions other than that of medicine are less immediately concerned, but there should be some awareness of such needs in general schools of education so that teachers will be better equipped to guide their students in

matters relating to family life and sex education. Nutritionists, in the course of helping families to achieve the best possible diet, have an opportunity to discuss with the family related questions about health problems and plans.

Regardless of the type of persons concerned, there are four aspects of training:

a) *Theoretical* instruction.

b) *Practical* training at various levels. Such training obviously presupposes an existing service; hence one of the first tasks in the development of a training program is for the health agency to set up demonstration facilities where the training can take place.

c) Once the trainee is on the job, the chief factor in his continuing development is *on-the-job supervision*. It is essential that there should be a reasonable ratio of supervisors to field personnel. Supervisors should know what kind of training their subordinates have had and preferably should have participated with them in the training program. Supervision goes on throughout the period of a worker's employment.

d) It is useful to bring groups together from time to time for short *refresher courses*. These may last one day or longer, the one-day program usually being easier to arrange and less expensive. Refresher sessions should be held at periodic intervals so that the trainees can bring to the discussions their experiences and the problems they have recently encountered. They also give the trainers a feedback, showing the effects of their teaching as reflected in the type of work being done.

A word may be said about where the training takes place. For professional training at the highest level, there is a reasonable limit to the capacity of each agency or geographic area to set up its own programs. Thus in some countries a few centers may have to exercise regional responsibility. It is not very satisfactory for a worker to be trained exclusively in a country where conditions are quite unlike those in his own country. The training should be complemented by a period back at home or in a place very much like that in which he will be called upon to work in the future. It is not enough merely for the periods to follow one after the other; they should be linked together in a single comprehensive training plan.

When a new type of training is established, it is desirable that existing training resources—

¹⁵Conference on Teaching of Demography in Medical Schools in Latin America (Bogotá, Colombia, June 1968), cosponsored by PAHO, CELADE, and the Pan American Federation of Associations of Medical Schools.

universities or other types of facilities—should be utilized to the fullest possible extent. The curricula should be designed jointly by the training staff and the officials of the health agencies, who in a sense are the consumers of the trained product. The Pan American Health Organization has sponsored several conferences on this subject, and as part of its operations has given support to two regional training centers.

Research

The increasing importance of health in relation to population problems, the steps taken by Governments for the establishment of population policies, and the demand for reliable information on which to initiate such action have emphasized the need to promote, conduct, and coordinate specialized studies in this complex field.

A number of major areas for such studies can be easily identified. Mention is made of some of them below, for the purpose of stimulating discussion and as an example of the subjects which merit detailed consideration.

Psychological, sociological, and physiological aspects of human reproduction

- Clinical research in fertility, sterility, and the reproductive process.
- Administrative research.
- Sociological and psychological problems related to changes in human fertility patterns:
 - Knowledge, attitude, and practices.
 - Social and psychological factors determining program acceptance.
 - Abortion studies.
 - Problems of illegitimacy and abandoned children.
 - Mental illness (retardation, criminal offenses, alcoholism) and family structure.
 - Juvenile delinquency and family structure.

Human ecology

- Form, development, and change of community structure.
- Rural community organization.
- Urbanization.
- Community action program development.
- Long-term effects of family planning on community stability (migration).
- Family structure.
- Population genetics.

- Long-term effects of family planning on family stability (divorce and desertion).

Demography

- Fertility, migration, and mortality in relation to social, cultural, and economic factors and population policy.
- Analysis of population growth and policy.
- Interaction between the development of material and human resources and population growth.
- Field and census research.

Operations Research

Operations research in the above fields is called for in order to make the best use of the available resources. The few examples given suggest that there are broad areas to be explored and that careful thought should be given to possible ways of establishing priorities and obtaining resources. There is the feeling that the professional and scientific groups in the Latin American countries are aware of the importance of these studies for the future, but unfortunately lack of resources has hampered action.

Regarding implementation, there are two paramount needs: (a) to promote and carry out adequate training of research personnel, and (b) to stimulate and conduct research activities in the light of Latin American social, cultural, and economic patterns. Universities, government agencies, and private institutions are now engaged in basic scientific investigations, but the nature of the unanswered questions strongly suggests the need for strengthening and coordinating the various projects and supporting new projects by means of a permanent mechanism equipped to provide each institution with the resources it requires.

Summary

Some of the Latin American countries have already established policies for reducing population growth, and others are about to take a decision one way or the other on this vital issue. It is therefore important to define the role of the health sector in population policies freely established by Governments. Three basic principles should be observed: (1) couples must be absolutely free to request advice and to apply it in planning the number of children

they wish to have; (2) the Government must decide on the kind of information to be given when advice is requested and on the facilities for applying it; (3) family planning must be organized as an integral part of health services, in particular maternal and child health services.

As a rule, a broad population policy has three main components: services, education and research.

The educational activities forming part of a maternal and child health and family planning program can sometimes be aimed at the community as a whole; but the family is the focal point on which all activities should converge. The private nature of the subject-matter suggests that it be directed first and foremost to the education of the mother and the family.

The principles and practices of modern public health administration are as relevant to a population program as to any other activity in the health field. Activities can be organized at three levels: (1) minimum rural units, staffed by auxiliary personnel; (2) health centers,

staffed by professional personnel; and (3) maternity hospitals, hospitals, and specialized centers. The training of personnel for population programs must observe the following criteria: (1) personnel already in the public health service must be given instruction so that they can incorporate the new activities into their own programs; (2) new personnel must be trained to serve a growing sector of the population; and (3) the content of the education given to personnel must be such that they will begin their public health careers with the understanding and skill to ensure the continuity of the programs in the years ahead.

Population research must examine the psychological, sociological and physiological aspects of human reproduction and undertake studies on human ecology and the social aspects of demography, and research workers must be trained and encouraged to carry out investigations in the light of the specific social, cultural and economic patterns of Latin America.

Appendix

Resolutions of PAHO and WHO Relating to Participation of the Health Sector in Population Policy

1) *Resolution XXXIII adopted by the XVII Meeting of the Directing Council of PAHO, XIX Meeting of the Regional Committee of WHO for the Americas*

"... To select the topic "Participation of the Health Sector in Population Policy" for the Technical Discussions to be held during the XVIII Meeting of the Directing Council of PAHO, XX Meeting of the Regional Committee of WHO for the Americas."

2) *Resolution IX adopted at the XVI Meeting of the Directing Council of PAHO, XVII Meeting of the Regional Committee of WHO for the Americas*

"... To request the Director to provide technical advice, as requested, on the health aspects of population dynamics, in line with Resolution WHA18.49 adopted by the Eighteenth World Health Assembly ... [and] ... To conduct studies as may be desirable on population dynamics related to the program activities of PAHO, and to support professional training as appropriate."

3) *Resolutions of the Eighteenth World Health Assembly*

"... Approves the report of the Director-General on programme activities in the health aspects of world population which might be developed by WHO:

... Requests the Director-General to develop further the programme proposed ... (a) in the fields of reference services, studies on medical aspects of sterility and fertility control methods and health aspects of population dynamics; and (b) in the field of advisory services as outlined in ... his report, on the understanding that such services are related, within the responsibilities of WHO, to technical advice on the health aspects of human reproduction and should not involve operational activities; and ... Requests the Director-General to report to the Nineteenth World Health Assembly on the programme of WHO in the field of human reproduction."

4) *Resolutions of the Nineteenth World Health Assembly*

"... Noting the part played by economic, social, and cultural conditions in solving population problems, and emphasizing the importance of health aspects of this problem; ... Noting that several Governments are embarking on nation-wide schemes on family planning; ... Noting that the activities of WHO and its scientific groups have already played their part in collecting and making available information on many aspects of human reproduction; ... Recognizing that the scientific knowledge with regard to human reproduction is still insufficient; and ...

Realizing the importance of including information on the health aspects of population problems in the education of medical students, nurses, midwives and other members of the health team, . . . Confirms that the role of WHO is to give Members technical advice, upon request, in the development of activities in family planning, as part of an organized health service, without impairing its normal preventive and curative functions; and . . . Requests the Director-General to report to the Twentieth World Health Assembly on the work of WHO in the field of human reproduction."

5) Resolutions of the Twentieth World Health Assembly

"... Recognizing the urgent nature of the health problems associated with changes in population dynamics now facing certain Member States, especially in the recruitment of suitably trained and experienced staff; ... Considering that abortions and the high maternal and child mortality rates constitute a serious public health problem in many countries; and Believing that the development of basic health services is of fundamental importance in any health programme aimed at health problems associated with population, . . . Requests the Director-General: (a) to continue to develop the activities of the World Health Organization in the field of health aspects of human reproduction; (b) to assist on request in national research projects and in securing the training of university teachers and of professional staff; and (c) to report to

the Twenty-first World Health Assembly on the work of WHO in the field of human reproduction."

6) Resolutions of the Twenty-first World Health Assembly

"... Recognizing that family planning is viewed by many Member States as an important component of basic health services, particularly of maternal and child health and in the promotion of family health, and plays a role in social and economic development; Reiterating the opinion that every family should have the opportunity of obtaining information and advice on problems connected with family planning, including fertility and sterility; and Agreeing that our understanding of numerous problems related to the health aspects of human reproduction, family planning and population is still limited, . . . Requests the Director-General . . . (a) to continue to develop the programme in this field . . . including also the encouragement of research on psychological factors related to the health aspects of human reproduction; (b) to continue to assist Member States upon their request in the development of their programmes with special reference to: (i) the integration of family planning within basic health services . . . [and] (ii) appropriate training programmes for health professionals at all levels; (c) to analyze further the health manpower requirements for such services and the supervision and training needs of such manpower in actual field situations under specific local conditions; and (d) to report on the progress of the programme to the Twenty-second World Health Assembly."