

**PAN AMERICAN HEALTH
ORGANIZATION**

**ADVISORY COMMITTEE
ON MEDICAL RESEARCH**

FOURTH MEETING

**14-18 JUNE 1965
WASHINGTON, D.C.**

**REPORT OF THE PAHO/WHO
CONFERENCE ON POPULATION DYNAMICS**

Ref: RES 4/9

26 May 1965

PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the
WORLD HEALTH ORGANIZATION

WASHINGTON, D.C.

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Kellogg (W.K.) Foundation	Mr. Ned C. Fahs
Milbank Memorial Fund	Dr. Alexander Robertson
	Dr. Clyde V. Kiser
Population Council	Dr. Sheldon Segal
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Rockefeller Foundation	Dr. John Maier

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Johns Hopkins University	Dr. Paul Harper
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University of Michigan	Dr. Myron E. Wegman
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Yale University	Dr. A. M.-M. Payne (<u>Chairman</u>)

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Department of State	Dr. Layton Van Nort
Agency for International Development	Dr. Edgar F. Berman
	Dr. Benedict J. Duffy
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Other

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International Agencies

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PAHO/WHO

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REPORT OF THE PAHO/WHO CONFERENCE ON
POPULATION DYNAMICS

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REPORT OF THE PAHO/WHO CONFERENCE ON
POPULATION DYNAMICS *

The Pan American Sanitary Bureau, Regional Office of the World Health Organization, invited members of several universities, foundations, U.S. Government, international and other agencies to a Conference on Population Dynamics, which was held on January 7, 1965 in Washington, D.C. Dr. Abraham Horwitz, Director of the Pan American Sanitary Bureau, in opening the meeting, stated the positions of the World Health Organization and the Pan American Health Organization in the field of population dynamics and human reproduction. Both Organizations act according to resolutions adopted by the Governing Bodies and there has been no resolution related to birth control, family limitation or fertility control. Therefore the Organizations are not in a position to advise any Government, even if requested, on these problems. However, he stated that research in the whole field of population dynamics is urgent. Its multiple implications should be analyzed at the university level and training programs should be implemented. The World Health Organization has included human reproduction in its research program.

The subject, Population Dynamics, was discussed at the Third Meeting of the PAHO Advisory Committee on Medical Research and the Committee recommended that the Pan American Health Organization undertake research which should be wide in scope including studies of the various factors that have influenced population growth and decline in the

* Prepared for the Fourth Meeting of the PAHO Advisory Committee on Medical Research, 14-18 June 1965. The Conference was held on 7 January 1965 at the Brookings Institution, Washington, D.C.

past and should be linked to epidemiological investigation of problems of immediate importance.

Dr. Horwitz stated that the Conference had convened to provide a forum for the exchange of information on the activities of the agencies interested in research and training in the problems of population dynamics, to learn what is being done and what are probable future trends, so as to see how best the Organization can contribute to progress. Finally the participants were asked to evaluate and make recommendations regarding five specific proposals presented by the Pan American Health Organization.

Dr. Anthony M. -M. Payne was elected Chairman and Dr. Dieter Koch-Weser Rapporteur. The list of participants is attached.

The Chairman outlined the program of the day in which reports on the objectives and major activities of the programs of the participating agencies would be presented first. These would be in general terms aiming to identify those areas where further development is needed, so as to guide the Pan American Health Organization in developing its future program and to determine how the proposals of the Organization, presented in the second part of the meeting, would fit into the over-all program. Finally, an opportunity would be given for general discussion.

A. ACTIVITIES OF PARTICIPATING AGENCIES

Population Council

The activities of the Demographic Division of the Council in Latin America had been accelerated in the past two years.

Grants for research included a series of studies on fertility and attitudes relating to fertility in eight urban areas of Latin America. Analysis of data for samples of about 2,000 women in the reproductive age

group in each major city are being analyzed and the results will be discussed at a Conference at Cornell University later this year. Studies of induced abortions in Chile and Argentina are being supported by the Council. Grants for fellowships for Latin Americans are also provided.

Two types of conferences, international and national, are being supported, such as the Latin American Assembly on Pan American Population Problems to be held in August 1965 in Cali, Colombia, and a population conference in Peru at which the implications of recent population growth will be examined with respect to the major social sectors as agriculture, housing, economic development, health.

The Council is supporting the development of institutions concerned with demographic research and training. Financial assistance is being given to the Latin American Center of Demography (CELADE), a United Nations Center, in Santiago, Chile. A three-year grant has been given to the University of Los Andes in Bogota, Colombia, for the creation of a population center within its Institute of Economic Development. A similar project with a medical emphasis is projected for the University of Valle in Cali, Colombia; and an ambitious program of training for physicians is being planned at the School of Public Health of the University of Chile.

Regarding publications, the Population Council is currently adding Spanish titles to the list of volumes for a basic library on population problems, demography and family planning, and it is being distributed throughout Latin America. The distribution of literature on population dynamics and demography in Spanish and Portuguese deserved the attention of the Conference and was thought to be an appropriate activity for the Pan American Health Organization.

The Bio-medical Division of the Population Council has a fellowship program in which, however, only 12 bio-medical fellowships, out of a total of 100 have been awarded to applicants from Latin American countries. These fellowships are strictly for research apprenticeship and it is hoped that more good applications will be received from Latin American countries in the future.

The Latin American component in the Division's grant program has also been small. The Council is supporting research in reproductive physiology in Argentina; on gamete morphology in Mendoza; in endocrinology and immunoreproduction in Buenos Aires; and on clinical experimentation on reproduction and endocrinology in Rosario. Support is also being given in Chile where both basic research in the physiology of reproduction and the investigation of clinical aspects of reproduction are under way. Reference was also made to programs in Venezuela, Bahia (Brazil), Trinidad, Barbados, Jamaica, and Mexico.

Ford Foundation

The Ford Foundation is particularly concerned with assistance to the social and economic development of developing countries throughout the world. It is becoming increasingly concerned with activities related to problems of population growth and composition in Latin America. For example, grants have been given: to the University of Chile for research and training in the Faculty of Medicine in reproductive biology and related physiological and social problems; to the University of the West Indies for demographic research and training and fertility studies. A grant has been made for the support of the Division of Population Studies of the Colombian Association of Medical Faculties.

Indirectly, Latin America benefits from the substantial support given by the Foundation to universities and organizations in the United States which provide training and assistance, such as the Population Council, the Worcester Foundation, the Schools of Public Health at Harvard, Michigan and Johns Hopkins and Departments of Sociology at Cornell, Chicago and Michigan. These are open to Latin American applicants.

Rockefeller Foundation

In 1963, on the 50th Anniversary of the Rockefeller Foundation, its programs were entirely re-appraised. It was decided to focus on five major fields, of which one was population problems. Support of research and training in many aspects of demography through such institutions as the Office of Population Research of Princeton University, Miami University (Oxford, Ohio), the University of Michigan, London School of Hygiene etc. will continue in the future. The Foundation has for sometime supported research throughout the world in a wide range of subjects related to reproductive biology. This will be continued with preference for those countries in which scientific research is less well developed. The Foundation is interested in assisting centers for training, on population problems, of workers at all levels, including interested public groups and special groups such as medical students, nurses etc.. An example of this was a grant to the Population Reference Bureau. Other fields include sociological and psychological research related to communications and motivation concerned with population problems. Action programs associated with University development, such as that of the University of Valle in Cali, Colombia, are also being supported.

Pan American Union

The Pan American Union as an official government organization has only barely begun to take interest in this field. However, its Inter-American Statistical Institute has been collecting statistics on population and the Department of Social Affairs has some small programs related to population. Leaders are showing increasing awareness that the problem of population growth has to be considered in the context of social and economic development of Latin America. A meeting was held at the Pan American Union attended by Ambassadors to the Organization of American States and other leaders in which this point was made clear. It was decided that a working committee might be formed to present plans to the Organization of American States.

Milbank Memorial Fund

The Milbank Memorial Fund started activities in the field of population research in the late 1920's. Although at present they do not usually give grants for research in the field of demography, since other foundations are active in this field, they continue to support the Office of Population Research at Princeton University and to provide for the publication of the results of research in the Milbank Quarterly. Conferences such as the 1965 Milbank Conference, which will emphasize various aspects of population dynamics in Latin America will be convened. The Spanish version of the Report of the Conference in 1963 Demography in Public Health in Latin America, is to be published shortly. Also during the next few months selected papers from the 35-year collection published in the Quarterly and Proceedings will be published in Spanish.

The Fund is financing a monograph on fertility in the series of monographs from the 1960 census period of the Committee on Statistics of the American Public Health Association. Financial assistance has been provided to the Committee on Population of the American Public Health Association and for the Health Manpower Study in Colombia. The main interest of the Fund at the present time is education and training in the social and preventive aspects of medicine in the Americas with due consideration of the fact that population constitutes one of the social aspects of medicine.

Agency for International Development of the United States

AID's policies in population dynamics relate to the objectives of the Alliance for Progress and is more oriented to the economic and social aspects than the biologic.

The President's statement on population policy in his 1965 State of the Union address put AID in a better position to act in this field. Technical assistance will be supported upon request. Work will be done through existing agencies and also new organizations will be formed. Support is being given to the Population Council, the Latin American Demography Center (CELADE), programs in Puerto Rico and university training centers. There will be a large program in population research in Brazil. Loan funds, grants, counter-part funds and also research funds will be made available.

Department of State of the United States

The United States Government is prepared to entertain reasonable requests for assistance in this field. The list of Governments requesting assistance in the field of population research, sanitation, data collection

and action programs is growing rapidly. The multi-lateral organization should decide now in regard to their role or whether assistance should be provided only through bilateral programs.

United States Public Health Service

The role of the United States Public Health Service had been made clear in which, in the field of research, basic studies of population dynamics and biological and clinical investigation would be supported by the National Institutes of Health and studies related to community health practice including applied demographic methodology would be supported by the Bureau of States Services, on the basis of merit. In general, funds for a foreign project would be extended when there was a predictable value for the United States health interest.

National Institute of Child Health and Human Development, United States Public Health Service

This Institute created, two years ago, has a broad mandate to foster and support biomedical and behavioral research in population dynamics. Grant requests for research projects and research training are supported if they show promise of contributing to scientific knowledge.

The objective of the Reproductive Biology Program is to foster medical research in the various aspects of reproduction, including both biological investigations in the laboratory and studies of reproductive behavior. Studies in population dynamics, including demography, are within the jurisdiction of this program. A remarkable increase in the number of grants awarded has occurred with 208 assigned to the Reproductive Biology Program (\$5 million for grants alone).

Of 280 grants by the National Institutes of Health dealing with some aspect of reproduction, 10 were foreign research grants, but only one was in Latin America, in Argentina (Cordoba).

The National Institute of Child Health and Human Development provides about 20 training grants in reproductive physiology, one in demography to Princeton and one to Johns Hopkins School of Hygiene for a training program in population dynamics. Some of the trainees will hopefully come from Central and South America.

University of Virginia

The participant from the University of Virginia commented as a member of one of the Councils of the National Institutes of Health on the difficulties arising from the present mechanisms of handling foreign grants and of the great importance of improving them.

The cooperation which the International Health Division of the American Association of Medical Colleges is giving to the Agency for International Development in their programs related to medical education overseas was mentioned. It was pointed out that education and research are inseparable and the need for enlisting the cooperation of medical schools in Latin America in population research programs was stressed.

Johns Hopkins School of Hygiene

The Johns Hopkins School of Hygiene has established a new Division of Population Dynamics, a cooperative endeavor of the Department of Maternal and Child Health, Biostatistics, International Health and Physiology in the School of Hygiene and the Department of Obstetrics and Gynecology of the Medical School and of Social Relations of the Faculty of Philosophy. Training includes the program for the master of public Health with major studies in population dynamics.

Several Departments are participating in research on population growth in Pakistan where pilot studies have been carried out and birth and death registration established. A research project in Peru was also carried out in 1964.

University of Michigan

The University of Michigan has a population program involving three major sections. The Population Study Center is concerned largely with demographic studies in various parts of the world and with training. The Department of Obstetrics and Gynecology has a center of Reproductive Biology, and the School of Public Health a Center for Population Planning. These are also plans for a short intensive training program over an eight-week period to complement training on population problems for those who have taken Master of Public Health degree.

Harvard University

The organization and wide range interests of the newly formed center for population studies of Harvard University were outlined briefly. This Center will draw on the knowledge and skills of the faculty members in all

departments of the University ranging from theology to reproductive physiology. The only research under way in Latin America is a study of the epidemiology of provoked abortion in Santiago, in which the Department of Demography and Human Ecology of Harvard University cooperate.

Population Reference Bureau

The Population Reference Bureau has three major areas of operations: demographic information; background research to understand the problems of dissemination of information, and implementation on the basis of the findings. Since 1961 their programs have gradually been extended into the Latin American area. The fact that there are 200 million people who speak the two languages, Spanish and Portuguese, facilitates communications, so that Latin America is a large area of the world well suited for activities in this field.

Kellogg Foundation

This Foundation does not support any program in research or research training concerning population dynamics. At present the Foundation is undergoing a reappraisal of policies regarding assistance for Latin American programs.

Princeton University

Princeton has a grant from the National Institutes of Health, for training and research in demography. Technological developments in demography have been rapid and there is a great need for trained personnel in this field. The recruitment of qualified candidates from Latin America for the study of demography was an appropriate activity for the Pan American Health Organization. With the establishment of planning boards in major ministries, the need for demographic training will increase.

World Health Organization

The World Health Organization, like the Pan American Health Organization, is an inter-governmental health organization with certain limitations in its activities. In areas which are also the concern of other United Nations agencies it endeavors to coordinate its activities with them. Population dynamics is one of these. There is for instance, the interest of the Population Branch of the United Nations.

The policy of World Health Organization regarding programs in relation to fertility control, is the same as that expressed by Dr. Horwitz, above. In many aspects of world health directly or indirectly, population dynamics are of immense importance.

At the present time the Organization has an active program of research on the physiology of human reproduction. A series of scientific meetings and the other activities in this field are in progress. A Population Genetics Unit has been established recently and more research on human genetics is planned.

Through the generous contribution of \$500,00 from the United States, the World Health Organization was enabled to undertake a major investigation into aspects of biology of human reproduction.

B. PROPOSALS OF THE PAN AMERICAN HEALTH ORGANIZATION

The second part of the meeting was devoted to discussion of five projects proposed by the staff of the Pan American Health Organization.

I. Epidemiologica Study of Natality

This collaborative project is designed to provide information on fertility and fetal loss in areas of widely differing environmental and

social conditions. It would involve monthly observations of women of the child-bearing age for a three year period. Complete records of pregnancies, menstrual periods, dates of the start and termination of pregnancy, live births, and infant deaths would be obtained in communities of approximately 5,000 or of a sample of this size in five or six countries. It was estimated that the cost of this project would be about \$15,000 to \$20,000 for a year in each country and that there would be costs for Central Office staff of \$50,000 - \$60,000 per year.

The program was considered to be bold and imaginative but the complexities of such research particularly in relation to data collection and analysis were great. Although one of the purposes was to secure data on abortion through observations, it was reported that in the Harvard Khanna Study in India difficulties were encountered in obtaining reliable data on menstrual delays. One method of assessing this would be through monthly urine tests which would increase the cost of the study. The cost estimate for the project of this size was thought to be unrealistic by one participant. It was pointed out by another participant that the Pan American Health Organization through its Inter-American Investigation of Mortality has shown that this is exactly the type of research the Organization is well qualified to carry out. In general, there was agreement that this type of study should be done and that it was one which the Pan American Health Organization should undertake.

II. Demographic Research on Pregnancy, Natality and Mortality

This project would include investigation of around 300,000 births in urban areas in a year. A sample of the infants born alive would be followed to five years of age in order to study the relationship of the

condition and health problems of the child and of infant and child mortality to various environmental factors using comparable procedures and international definitions.

It was generally agreed that this study was closely related to the first one and that it might be worthwhile to combine protocols. It was suggested that malnutrition should be one of the factors investigated.

One participant stressed the importance of knowing the incidence of induced abortion which could be obtained through continuing surveillance of women.

The comment was made that too many questions were asked, that there were too many variables and that the objectives should be more specifically defined.

The National Institute of Child Health and Human Development was a suggested source of support for such an investigation.

It was indicated that the agency for International Development might be sympathetic, particularly if the economic advantages of such an investigation would be stressed. It was suggested that an economist should be incorporated in the study.

One of the participants from the Harvard School of Public Health commented on the first two proposals and suggested that because of Harvard's experience in the India (Khanna Study) the School would be able to assist in the planning and perhaps even in the execution of such a study. The advisability of carrying out such research in collaboration with a Latin American University was suggested as a method of involving the faculty of medical schools.

Although the techniques and exact planning of the study still had to be worked out, with perhaps a reduction in the number of variables included, the great desirability for this study was recognized and it was agreed that it could best be done under the auspices of the Pan American Health Organization.

A staff member of the Pan American Health Organization made it clear that the proposals were drafts of general plans which were not intended to be detailed project descriptions. Full advantage would be taken of the experience of Schools of Public Health, such as Harvard, California and Hopkins as well as of the other organizations.

III. Operational Demographic Research in Areas with Limited Facilities

This proposal was for experimentation in new methods of collection of records of births and deaths in areas lacking physicians and hospitals. Such operational research might lead to the development of a more adequate system than exists at present.

The general consensus was that this project could and should be combined with the first and second proposals. The great importance and desirability of this basic investigation for future projects in public health research in developing countries was agreed. It was regarded as an appropriate responsibility of the Pan American Health Organization.

IV. Research Training Centers in Medical Demography

Centers are proposed for providing training in medical demography as part of the Organization's program of developing research training centers in medical schools. A working group, for developing the content of such a course will be convened in March 1965 and an experimental course in Chile is planned in 1966. It is expected that such instruction can be

incorporated into the course on biostatistics of the School of Public Health in Chile and into a course on medical statistics of the Faculty of Hygiene of São Paulo.

There was general agreement that much more training and stimulation of interest in this field in Latin America is needed. The Organization was advised to explore the availability of sufficient qualified candidates and of rewarding job opportunities in Latin America.

V. Research Studies and Training in Physiology of Human Reproduction and Fertility Research

Part of the world wide activities of the World Health Organization, in this field involves the Americas Region. The Pan American Health Organization should serve as a coordinator with the World Health Organization, the National Institutes of Health and scientists and laboratories for research in this field in so far as they concern the Americas.

Specifically the Organization should help in carrying out the world program with regional differences in mind.

Above all, the group stressed that the training of more and better qualified scientists was essential for improved research activity.

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In relation to the proposals IV and V, the maximum use of training facilities in Latin America was suggested, because greater understanding would be provided of the problems if they were studied in their own social, economic and cultural environments. There was recognition of the difficulty at present of finding well qualified teachers for such centers in Latin America. Therefore, in the initiation of such program qualified persons from

the United States or other countries should be brought into the program. At the same time, Latin Americans should be trained so that they can take over teaching responsibilities as the centers are established.

C. GENERAL DISCUSSION

In the final general discussion of the five proposals it was stressed that they represented research programs with broad areas of interest to the Pan American Health Organization. As such they were well accepted and endorsed. They were not intended to be specific and detailed in their outline, methodology, budget, etc. This will be accomplished as the second step with the cooperation of specialists in the various fields.

The Conference recognized that studies in the field of population dynamics needed a multi-disciplinary approach in which the medical profession must play a leading role. This is particularly true in Latin America, in which for acceptance, the population problem has to be considered as a health problem within the framework of general public health.

The desirability of additional publications and the distribution of information regarding population dynamics in Latin America was stressed. It was suggested that the Pan American Health Organization could help greatly by devoting space in, or even a whole section of, its Bulletin to this subject. It was recognized that it would be desirable for the Member Governments to indicate their interest in such a development.

It was further suggested that the Pan American Health Organization should serve as a clearinghouse for information on medical demography for the hemisphere.

Finally it was proposed that the Pan American Health Organization should hold an annual meeting, similar to that held on medical education (Medical Education Information Center, MEIC), so that the efforts and activities of the various agencies, universities, foundations and other groups would develop in full knowledge of the policies and program activities of one another and thus afford opportunities for cooperation, collaboration, and voluntary coordination.