

**PAN AMERICAN HEALTH
ORGANIZATION
ADVISORY COMMITTEE
ON MEDICAL RESEARCH**

ACMR/ 21/RD

**TWENTY-FIRST MEETING
26-28 APRIL 1982
CARACAS, VENEZUELA**

REPORT TO THE DIRECTOR

REF: RD/21/4

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

Washington, D.C.

Pan American Health Organization

TWENTY-FIRST MEETING OF THE
PAHO ADVISORY COMMITTEE ON MEDICAL RESEARCH

Caracas, Venezuela
28-30 April 1982

REPORT TO THE DIRECTOR

TWENTY FIRST MEETING OF THE
PAHO ADVISORY COMMITTEE ON MEDICAL RESEARCH

Report to the Director
1982

Dr. H. Groot, the Vice-Chairman, welcomed the Members of the PAHO Advisory Committee on Medical Research to the Twenty-First Meeting in Caracas, 28-30 April 1982. Dr. R.F. Badgley was elected Rapporteur.

In his opening remarks Dr. Groot welcomed the new Members of the ACMR and indicated that the important tasks to be undertaken by the ACMR would call upon the full range of abilities and experience represented by the Members. The Chairman stressed the need to work cooperatively so that more effective ways might be found to strengthen control programs and to resolve the major health problems of the Region.

The Deputy Director's Welcome

Dr. Groot introduced Dr. S. Paul Ehrlich, Deputy Director of the Pan American Health Organization

The Deputy Director welcomed the new Members of the ACMR. During the 21 years since the ACMR had been established, its mandate had been extended from focussing on excellence in research projects to encompass regional programs and policies. When the Director of PAHO reported in 1962 to the XVI meeting of the Pan American Sanitary Conference on the PAHO Research Policy and Program, he pointed out "the growing importance of research as an essential component of a comprehensive programme for the betterment of health in the Americas." One of the key aspects of

that research policy and program was the creation of an Advisory Committee on Medical Research charged with the task of recommending "the basis of a long term research policy for present and future projects."

The ACMR's initial concept of its responsibility was that "it was to deal with research, and with certain related areas such as training and education. It would not deal with the application of existing knowledge even when, as is often the case, the gap between knowledge and application is great. This should be the concern of other bodies."

In the intervening years the role of the ACMR had become more integrated with the policy-making bodies of PAHO. The Chairman of the ACMR now reports directly to the Directing Council expressing the Committee's views on priority areas for research in the Region. The ACMR's responsibilities now include: 1) serving as a research review body for work within the Organization; 2) providing counsel on research policy matters; and 3) establishing subcommittees to examine various areas requiring more emphasis and potential strengthening.

The Deputy Director noted that research is an integral component of the Regional Strategy and the Plan of Action to attain the goal of Health for All by the Year 2000. In this respect all forms of research were essential if they were of good quality, contributed to resolving priority problems and served to narrow the gap between the acquisition of knowledge and its application.

The 1982 ACMR's agenda reflected the scope of the advisory body's responsibilities. In this respect the Deputy Director cited among others

the areas of nutrition, acute respiratory diseases in children, cardiovascular diseases, health research manpower development, and the social and economic factors affecting the transmission and the control of malaria as instances in which PAHO had requested the ACMR to consider and make recommendations concerning priorities, policies and programs. In addition to serving in an advisory capacity the members of the ACMR could participate with PAHO in extending and promoting selected research activities in each of their countries.

Remarks of the Chairman of the Global ACMR

As the Chairman of the Global ACMR Dr. S. Bergström reviewed the WHO Special Program for Research and Training in Tropical Diseases (TDR). Since its establishment six years ago the TDR Program had grown by 1982 to have an annual budget of some \$30 million; its global programs now involved some 4000 scientists. The TDR Program had become a truly international research organization dealing with broad issues and involved in the allocation of funds to different priority areas among six tropical diseases.

The TDR Program's Institution strengthening activities in developing countries, in addition to providing supplies and funds, constituted a systematic effort to select and to strengthen strategically located units, to assist them on a long term basis in accordance with pre-established plans, and to foster effective coordination among these collaborating institutions. The annual meetings of this program's

governing bodies drew upon government representatives and constituted a constructive North-South dialogue. TDR could serve as an institutional model for the development of research and training programs. The work of the regional ACMRs could be expected to make an increasing contribution to these efforts by considering related issues.

Organization of the Meeting

Dr. George A.O. Alleyne, Chief of the Research Promotion and Coordination Unit of PAHO, noted that due to the convening of the Pan American Conference on Health Research Policies from 25-28 April 1982, the schedule for the ACMR Meeting had been contracted to two days. The agenda prepared for the Twenty-First Meeting adhered to the sequence recommended by the 1981 ACMR Meeting. The items included: 1) a general review of research in the PAHO Region and the work done by Collaborating Centers; 2) a review of research relating to specific priority areas identified by the ACMR; and 3) the annual detailed review of one of PAHO's special programs or supported centers.

At the Executive Session of the ACMR Meeting, the Members would be asked to detail specific priority areas for future consideration and to propose specific action recommendations in this regard for steps to be taken for review by the Director.

The agenda for the Twenty-First ACMR Meeting was adopted without modification.

SESSION I

1. RESEARCH IN PAHO

The Organization's direct support of research in the Region has expanded sharply in recent years. For 1980/81, it encompassed 131 projects. As detailed in Research in Progress: 1980-1981 (PAHO/RD 21/1) this body of research spanned a broad range of activities. These were:

<u>Research</u>	<u>Number of Projects</u>
. alcohol, drug abuse	2
. biomedical information	3
. cancer	4
. chronic diseases	6
. diarrheal diseases	25
. environmental health engineering	8
. foot-and-mouth diseases and vesicular stomatitis	12
. health services research	9
. infectious diseases (other)	11
. primatology	4
. maternal health	4
. nutrition and food sciences	10
. parasitic diseases	7
. perinatology	9
. zoonoses	17

Each research project had been annotated listing its objectives, research methods, major results, the relation between the findings and the priority health problems in a country, and the publications derived from the studies. In addition to studies directly sponsored by PAHO, the WHO Special Programme for Research and Training in Tropical Diseases had funded 213 projects in the Region in 1980, totalling US\$ 6 million and 215 projects at US\$ 5.8 million in 1981.

These research projects supported by the Organization involved most of the Member Countries and PAHO continued to assist them in strengthening their national research resources and in ways to apply the findings obtained in the control of their health problems. As a means of disseminating research results more widely, stimulating further work and attracting attention to important areas where further study was warranted, PAHO would continue to publish summary annotations of research underway in the Region. The work documented in the 1980-81 Report constituted a progress report. These studies included: PAHO research activities, collaborating centers, the diarrheal diseases program, and the WHO/UNDP/World Bank/Special Programme on Research and Training in Tropical Diseases.

The 1980-81 listing of PAHO sponsored research had a number of limitations which it was hoped would be reduced in subsequent reports. Not all ongoing projects were represented. There were difficulties in documenting precisely the amount of funding of research done under the aegis of the Organization and there was a reluctance by some researchers to publish their results.

The ACMR concluded that a considerable strengthening of PAHO sponsored research was warranted. It was strongly emphasized that a more aggressive search for research funding be mounted by PAHO, but that this be done in terms of obtaining support for a limited number of priority areas and involving well designed inquiries. The ACMR was concerned that while the number of studies in health services' research had grown, effort in this area was still modest. Its scope within PAHO's research efforts should be sharply expanded. How-to-do-it health services' research manuals had been prepared elsewhere; these merited translation for use within the Region. An immediate aim of PAHO should be to establish a program or center specializing in health services' research.

The ACMR held the view that unpublished work was a study which in terms of its scientific contribution did not exist. The Organization should ascertain why this situation occurred and how it might be altered. It was reported that on occasion dual signals had emanated from international agencies, on the one hand establishing research as a top priority, while alternately this work was sometimes downplayed, with training and the dissemination of information rated as being more important. The ACMR concluded it was timely that a review of PAHO's research policies be undertaken which would take into account the terms set for the studies which it supported, what had been done and an evaluation of the quality of this work.

The PAHO small grants' research program was also considered. The members of the ACMR would be circulated with information about this program and their help would be sought in advertising this program and

reviewing research proposals. The matter of establishing special journals, centralized indexes and information documentation centers was also considered. Experience elsewhere indicated that some of those options had failed to achieve their intended purposes. If a PAHO sponsored Health Services' Research Center were to be established, special attention should be given to strengthening the field of clinical epidemiology. The work of BIREME should also be strengthened including fostering its efforts to disseminate information within the Region.

2. RESEARCH IN THE AMERICAS

PAHO initiated the study of health research in eleven Latin American Countries in 1978 (PAHO/RD 21/2). Information for this study was obtained directly from national research councils, or where these had not been established, from researchers in the countries of Central America and the Andean Region. The findings presented dealt with those individuals who did medical and health research and the types of studies undertaken.

The principal findings of this study were that the total number of health researchers in these countries was a function of the level of national economic development. The findings reconfirmed Lotka's principle, namely, there was an uneven distribution of scholarly production in the medical science community with 10 per cent of these researchers accounting for about 50 per cent of scientific publications, while the remainder accounted for 10 per cent of the reported health scientific literature. Statistical multivariate analyses confirmed that

those Latin American health scientists who had completed post-doctoral studies in Europe or the United States were the most productive in terms of scholarly output.

Two classifications of health research had been developed from the work underway in the eleven nations. In terms of the yardstick commonly used in the academic market place, 43 per cent was in basic science research, 39 per cent in clinical research, 16 per cent in public health/community medicine and 2 per cent combined the above approaches. Along another analytical axis, 79 per cent of the research had dealt with problems involving direct application, 7 per cent was basic, experimental or developmental research, and the remainder represented a combination of these approaches.

The PAHO report called for: (1) the development of a conceptual framework relative to the selection and the analysis of scientific indicators; (2) the use of disaggregated rather than composite indicators; (3) the selection of indicators of scientific research which were more appropriate to developing countries; (4) the need for new methodologies which took into account the particular situations of developing countries; and, (5) such research must be analyzed in the context of the historical circumstances of these nations. While the study had reached a number of preliminary conclusions about the experience of eleven nations, there was a need to amplify this analysis relative to the information already obtained and to extend the study to include other nations in the Region.

The ACMR endorsed the work that had been done in this study. It was concluded that the inventories of the research projects identified

and those prepared subsequently should be made more widely available. The ACMR affirmed that the scope of the present study should be expanded to consider the extent of work done in each country, to deal with the matter of quality and the long term impact of these studies, the sources where research was published, the trends in health manpower research supply, its changing composition and its adequacy, and to consider the dilemma involving the translation of manuscripts. The ACMR also considered the issue of how "short-cuts" might be found to break the association between research production and a nation's economic standard of living.

3. RESEARCH IN WHO/PAHO COLLABORATING CENTERS

Since shortly after its inception WHO/PAHO has cooperated actively with a number of national and regional centers whose objective is the strengthening of national health development. The Centers were national institutions which cooperated with WHO programs at national, regional and global levels. Although their primary role as national institutions was to contribute through research, training and providing services to national health development, they also participated in globally conceived and directed WHO schemes of collaborative activities.

There were 162 WHO Collaborating Centers in the Region; this group formed approximately one quarter of all WHO Collaborating Centers. More than half of the Regional Centers were in the USA with 12 other countries having Centers. 59 of the Centers dealt with communicable diseases and 32 with environmental health. However, a wide range of

other disciplines was covered including human reproduction, laboratory technology, traditional medicine and veterinary public health.

The designation of Centers did not imply a commitment of financial support, but the WHO association enabled these institutions to obtain support from other sources. WHO provided approximately \$1.5 million of assistance to these Centers in 1980. The presentation made to the Committee concluded that:

1. the number of Collaborating Centers should be increased;
2. a broadening of regional representation was desirable; and,
3. program areas where research was underrepresented merited targetted support, particularly in the areas of health services' research, diarrheal diseases and nutrition.

The excellent work of those centers was acknowledged by the ACMR. When this program had been initially established by WHO the collaborating centers had been asked to undertake work relevant to WHO priorities. The World Health Assembly of WHO had recently completed a review which had found that one third of these Centers had had no contacts with WHO for a period of over 10 years.

The ACMR concluded that:

1. As there were many programs doing exemplary work which fell outside this program, the terms for qualifying as a collaborating center should be made more widely known;
2. Consideration should be given to expanding the number of these centers in Latin America and the Caribbean; and,

3. A report be prepared for the ACMR setting out the guidelines followed in establishing these centers, the review procedures followed in their periodic appraisal and the results of these reviews.

4. ACUTE RESPIRATORY INFECTIONS

At its Twentieth Meeting the ACMR had requested that a review of acute respiratory infections be undertaken. A meeting was convened to consider how PAHO might develop a major regional research initiative in this area. Some major developments in this field were considered and several needs were identified where greater support was indicated. The participants had discussed the aetiological basis of acute respiratory infections in children. While the respiratory viruses were the most important cause of ARI, it was often difficult to separate the clinical syndromes caused by bacteria from those caused by viruses. The problem of ARI in Latin America was discussed. The pattern was not the same in all countries as in Costa Rica, for instance, there had recently been a steady decline in deaths from ARI. The basic research behind the production of viral and bacterial vaccines was presented. The Subcommittee recommended inter alia that:

1. a document summarizing the state of the field should be prepared;
2. a technical planning group should be established;
3. a number of Latin American centers should be identified where epidemiological and clinical studies should be started;

4. fellowships should be awarded to strengthen local research capabilities;
5. regional programs should incorporate the development of laboratory facilities for providing reagents and testing vaccines;
6. any regional program should recognize the problem of pertussis as a priority; and,
7. the PAHO Secretariat should review these proposals as regional initiatives were being developed.

Based on the recommendations of the Working Group, the PAHO Secretariat had prepared an extensive review of the research and control problems related to acute respiratory infections. ARI was a major cause of mortality and morbidity and consumed a considerable amount of the Region's health resources. The risk of dying from ARI in Latin America was 30 times higher than in North America. The relevant anatomical and physiological factors which made infants susceptible to ARI were presented. Stress was laid on the interaction between nutrition and ARI. There was a detailed account of the aetiological agents involved, their diagnosis and their treatment. The sequelae of ARI were shown to be important. Possible areas for future research were outlined and it was pointed out that because social conditions and differing lifestyles affected the efficacy of control programs, applied health services' and behavioral research should be an integral component of broader research and control programs. The review concluded that: "the time is now opportune for a major effort at all levels directed against a group of

diseases which now constitute a major, if not the most important, cause of morbidity and mortality in children."

The ACMR strongly endorsed the report of this working group as a comprehensive and detailed account of a serious health problem in the Region. The epidemiological study of these diseases, their occurrence and their management, was an essential component if morbidity and mortality were to be reduced. Long-term programs were indicated. Control measures should be integrated on a horizontal basis within the context of the provision of existing primary health care services.

To further the development of research in this area the ACMR concluded that these diseases should be considered in the context of other health problems and an operational research strategy should be developed as a demonstration program for which funding should be sought. The ACMR also concluded that PAHO should encourage further efforts to develop specific research approaches, to identify areas where such research might best be conducted in the Region, and to seek financial support for this endeavor. It was also concluded that this problem should be given a high priority in the overall research program of PAHO.

5. SOCIAL AND ECONOMIC FACTORS AFFECTING THE TRANSMISSION AND THE CONTROL OF MALARIA

At its Eighteenth Meeting the ACMR had established a Working Group on Social Science Health Research. In subsequent reports to the ACMR a general review of the state of this field had been presented. During 1981-82, this Working Group had carried forward two major activities.

This Group had completed a "Bibliografía Latinoamericana sobre Ciencias Sociales Aplicadas a Salud" which was being circulated to major libraries and Schools of Public Health in the Region. While the problems for these fields were analogous to those of the clinical and basic sciences in terms of inaccessibility to published research, this situation was exacerbated for social science research because the sources were fewer and less well established.

The holding now assembled at PAHO totalled 1674 references relating to social science health research for Latin America. The Working Group recommended that this resource be extended to other centers and work should continue in expanding and annotating this holding.

The Working Group's second major activity had been to undertake a review of the social and the economic factors affecting the transmission and the control of malaria, particularly identifying those which may foster more effective planning and the organization of existing control programs. The report summarized the current situation relating to malaria in the Region, the present position of social science research in connection with this disease and outlined a conceptual framework of the social and economic factors which affected its transmission and its control. The experience of malaria control programs in three countries was given to illustrate the direct application and the relevance of the principles identified in the conceptual framework.

The Working Group's recommendations were:

1. the convening of an interdisciplinary group to review its listing of work to be done and to develop a plan of action;

2. the establishment of a social science malaria research program in PAHO which would identify these interests, bring groups together as warranted and provide assistance to research being developed in this field;
3. the establishment of a technical advisory group on social science and malaria which would assist PAHO in the periodic review of these issues, provide counsel on proposed and ongoing research and serve as a resource in adapting the conceptual framework to other vector borne diseases;
4. the convening of a meeting on the social and economic factors related to malaria which would draw upon the experience of the Member Nations, review the conceptual framework, and identify priorities for action;
5. that a condensed version of the Working Group's Report be published to stimulate further discussion of these issues; and,
6. a social scientist(s) be appointed to the WHO Expert Committee on Malaria.

In submitting its Report the Working Group terminated its assignment given to it by the ACMR.

The ACMR endorsed the report of this Working Group as a creative interdisciplinary conceptual approach focussing on social and economic factors affecting the transmission and the control of malaria. This model could be taken as a point of departure in the analysis of other vector borne diseases. It was recognized that there was a need to

improve information about those social circumstances at local levels which facilitated or hindered the success of control measures.

The ACMR concluded that the work recommended by the Working Group should be carried on but perhaps it was not feasible within the current PAHO structure to establish a discrete Program. The special experience of the Group should be drawn upon by PAHO. There was consideration of the merits and disadvantages of horizontal versus vertical programs. The former coordinated work on a broad base while the latter permitted a specialized concentration on a particular issue. In the collaboration between malariologists and social scientists, a fruitful partnership was beginning to evolve. More work was required before the principles proposed for malaria could be extended to other tropical diseases.

6. NUTRITION

In 1981 the ACMR had recommended that PAHO support strongly the Regional Program of action-oriented Research in Nutrition. The proposed program was initiated during 1981/82, and was restricted to research projects which focussed specifically on the problem of the inadequate feeding of infants and young children. The program was designed to be responsive to needs at the community level and to develop and test appropriate technologies for the improvement of dietary practices. It was stressed that the research projects should be carried out within existing maternal and child health care services.

Although it was recognized that there were many areas meriting attention, the priority areas for research should be those which could

shed light on the determinants of existing infant and child feeding patterns. There should also be operational research on the definition, design, implementation and evaluation of activities to improve infant feeding practices as part of the nutrition component of a primary health care package. The third priority area involved the implementation of food and nutritional activities in primary care, such as the training of appropriate workers.

During the year the nutrition program had developed an operational listing of research guidelines. Pending review and revision it was intended that these would serve as the basis for the evaluation and the funding of research in this field. The program's work plan for 1982-85 was outlined. This included finalizing the specification of the research evaluation guidelines, the initiation of some 2-3 projects each year and the convening of meetings of the principal investigators of ongoing projects.

In its consideration of this report the ACMR concluded that there was a dilemma, since in the absence of baseline evaluation information it was unclear which intervention strategy might be most appropriate in terms of the organization of primary health care services. It was also suggested that sufficient resources and skills were often available, but in the absence of sufficient political and administrative support these were not mobilized. As in the case of the diseases which had been reviewed, the ACMR considered whether specific nutrition programs were warranted, or whether these should be incorporated, in this instance, within existing maternal and child health programs. Four steps were

suggested which could be followed in undertaking such studies. These were: (1) to draw upon existing resources; (2) to bring together available experts; (3) to use simply designed information collection forms; and (4) of critical importance, the sufficient marshalling of political and administrative support.

7. MENTAL HEALTH

The report of the working group on mental health was tabled for review at the ACRM's Executive Session.

8. THE HEALTH OF THE ELDERLY

Acting on Resolution XXX of the 28th Meeting of the Directing Council, a plan of action for implementing an international study on the epidemiology of aging in Latin America and the Caribbean had been designed. All the countries of the Region had a progressively aging population. Between 1980 and 2000 it was anticipated that there would be an increase of some 13 million persons over the age of 65 years. There was a need to improve the quantity and the quality of available data to evaluate the implications of the aging population for Latin America and the Caribbean.

The objective of this prospective comparative study based on interviews with the elderly was to assemble information about:

1. their health status and needs;
2. their use and accessibility to health services;

3. how social and economic considerations might affect their health status; and,
4. the identification of the nature and the scope of unmet needs.

The proposed five year sample survey would focus on non-institutionalized individuals aged 60 and older living in urban areas. The preliminary design of the research questionnaire was presented.

The importance of studying the social and psychological aspects of the social conditions and the health of the elderly was emphasized in the discussion of this report by the ACMR. The proposed design for this study would be revised, based on an appraisal by researchers in Member Countries and an expert committee which would be convened for this purpose. Based on these steps the research protocol would contain a basic listing of uniform items. Each participating research group would be able to add questions to this basic listing.

The ACMR discussion emphasized that it was essential to specify more sharply than had been the case to date the salient questions being studied, the development of dummy tables and the specification of the statistical methods to be employed. Sharper specification was also needed of the sizes of the samples to be drawn in the different countries to ensure that these were numerically sufficient to permit sound statistical analysis. One component of the survey instrument had previously only been used to collect information from individuals on a clinical basis and not as a component of a community social survey. This inquiry was seen as an instance of a vertical or categorical approach

rather than one which was integrated into existing horizontal programs. It was also suggested that extensive information on the elderly might be obtained by the inclusion of some items on an add-on basis to the census survey format being developed by the United Nations for use in the Member Nations.

9. RESEARCH IN CHRONIC CARDIOVASCULAR DISEASES (CVD)

Age-adjusted death rates due to cardiovascular diseases (CVD) are available for all of the countries in the Region and these diseases rank among the five leading causes of death. In the majority of countries CVD deaths were progressively contributing more to total mortality and this was not only due to declining non-CVD deaths. There was an association between higher per capita energy intake, and more specifically the higher the total fat and animal fat intakes, and, higher CVD and heart disease mortalities in this hemisphere. Significantly, CVD mortality was declining in the USA and Canada.

PAHO initiated a collaborative project in 1976 in Latin America on the control of hypertension as a means of reducing CVD mortality. Preliminary findings from 10 countries had shown that newly-diagnosed hypertensives often had end-organ damage. The follow up of hypertensive patients required considerable effort even where carried out in community-based programs.

Trials indicate that an increase in the intake of polyunsaturated fatty acids and a decrease in saturated fatty acids to bring their ratio to near 1 (P/S = 1) while total fat intake contributes about 25 per cent

of total calories, result in several changes. There is a lowering of blood-pressure (both systolic and diastolic) in normal as well as in mildly hypertensive populations, a lowering of serum cholesterol mostly at the expense of its low-density-lipoprotein fraction, a reduction of indices of the tendency to thrombosis, and an increase in urinary sodium excretion.

The project PRECAVAS (Prevention of Cardio Vascular Disease) is being initiated with the general aim of seeking and implementing new strategies in the primordial prevention and control of CVD. This collaborative project will involve the leading nutrition and chronic disease research groups in Latin America and the Caribbean. It is intended to generate knowledge on the epidemiology of CVD risk factors, such as dietary habits and practices, fat intake, P/S ratio of fats, and hypertension. The project will also evaluate the effects of dietary intervention in selected populations on: i) blood pressure; ii) LDL cholesterol; and iii) indices of thrombogenesis. Dietary interventions will focus initially on achieving FAO/WHO recommended fat intakes i.e., 25 per cent of total calories with a P/S near 1. Individuals with a diastolic blood pressure above 105 mmHg will be treated with a simplified therapeutic regimen based on WHO recommendations; the interactions of dietary and drug interventions will be evaluated in these individuals.

The project is conceived in three stages. In the first stage a common methodology will be developed and tested. In the second stage cross-sectional epidemiologic studies and CVD risk factor analysis will

be carried out in populations selected for their differences in dietary intakes and CVD mortality. The third stage will involve dietary and drug interventions in selected populations.

A workshop with collaborating investigators was held in March 1982. Stage I is scheduled to begin in August 1982 in Mexico, and possibly Sao Paulo, Brazil. Extrabudgetary funds for this stage of the project and until the middle of 1983 have been obtained.

The ACMR recognized that the mortality trends presented did not constitute a wholly valid assessment of the extent of these diseases, but constituted the best sources now available. The merits of different approaches to studying these diseases were contrasted - the risk factor approach versus an intervention strategy. A number of social and lifestyle factors affecting the onset and the course of cardiovascular diseases were cited, including the migration of people and social factors generating stress. An ongoing prospective study involving two population groups in Trinidad was cited as a pertinent example of the interplay of social and genetic factors in the occurrence and outcome of cardiovascular disease.

10. ENVIRONMENTAL HEALTH: CEPIS

The program and the research activities for 1982-83 of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS) were presented. The Center's major functions include research, the training of personnel, the exchange of information and the provision of direct technical cooperation. The scope of the environmental health

research undertaken included pilot and field projects intended to identify new technologies and/or environmental control methodologies, an assessment of their efficacy in resolving major environmental problems, and applied research on the nature of the social and economic forces which may affect the outcomes of these programs. For 1982-83, 48 projects spanned the eight priority program areas established by CEPIS.

During the discussion of this report it was indicated that the budget of this Center was about US\$ 1 million, of which 10 per cent was funded by the Government of Peru. An additional US\$ 0.5 million came from other sources to support the Center's training and research programs. The Center was seen as an important Regional resource as it served as a focal coordinating point for work on the environment and it carried on important training and research activities.

The ACMR concluded that the work of CEPIS should be assigned a high priority in PAHO's activities. Special attention should be paid to social factors which in some instances resulted in the underutilization of available water and waste disposal services and the special problems posed for such programs by the extensive migration of the population in some parts of the Region.

The ACMR strongly endorsed the work being carried out by CEPIS. Its activities were regarded as a viable institutional model which should be adapted to the provision of primary health care and applied to the field of health services' research.

EXECUTIVE SESSION

11. Field Research in the Special Programme of Research and Training in Tropical Diseases

The report of this WHO/TDR subcommittee was tabled for review. This report spelled out the scope of field research which was being undertaken, reported on site visits to four nations, and enumerated a number of prerequisites for the successful undertaking of field research. The Subcommittee concluded that if its principal recommendations were adopted, these would involve a realignment in the development of the Special Program. These changes would include the designation of several key centers with a high portion of available funding being channelled directly through their programs.

In its review of the TDR Special Program, the ACMR endorsed the work being undertaken. It recommended that the Organization commend to the Member Countries the establishment of national committees to coordinate this work and to seek ways to integrate these programs at the level of local primary health services. The ACMR emphasized the importance of coordinating this research program within existing horizontally organized health services.

12. TWENTY-THIRD MEETING OF THE GLOBAL ACMR

In the absence of the Chairman of the Global ACMR, Prof. Sune Bergstrom, Dr. George Alleyne summarized the 1981 meeting and the recommendations. A number of priorities common to each Region included:

diarrheal diseases' control programs, dengue and dengue haemorrhagic fevers and liaison with national medical research councils.

The Global ACMR had emphasized the importance of the continuing exchange of information between Regions on matters of common concern. In particular, the work of regional WHO units of research promotion and development were singled out with the recommendation that their efforts to collect and to disseminate information be strengthened and extended.

On the matter of strengthening national research capabilities, the Global ACMR had recommended a dual approach which included, first, the development of a long-term policy for research capability development, and secondly, the organization on a short-term basis of courses in research methods and the preparation of research protocols.

The Global ACMR had endorsed the Diarrhoeal Diseases Control Program, had recommended its extension and urged that Member Countries increase their support. During 1981, three global scientific working groups had developed research priorities; 55 per cent of the projects which had been funded were based in developing countries.

The research on dengue and dengue haemorrhagic fever included clinical, epidemiological, immunopathological and virological studies as well as work on a live attenuated vaccine. The Global ACMR endorsed the research underway, considering it a good example of the importance of WHO Regional Offices in developing and coordinating such research.

Most Regional Offices had established liaison with the medical research councils or analogous bodies operating in the Member Countries.

While the structure and purposes of these councils varied, the Global ACMR recommended that in each nation a comparable coordinating mechanism was essential for better communication.

Guidelines for ethical review procedures for research involving human subjects had been prepared in light of the Declaration of Helsinki and this step had resulted from extensive consultation with the Member Countries. The Global ACMR endorsed the guidelines and recommended that they be circulated widely through regional offices.

Of eight million new cases annually of neoplastic disease, over half were found in developing countries. As about a third of these cancer cases could be prevented, WHO was in a unique position to initiate and to coordinate early detection programs. The Global ACMR recommended that the WHO Cancer Unit develop an action program for further consideration.

Health literature services were being strengthened in the Western Pacific Region by an agreement to circulate Medlars searches and photocopies to researchers in developing nations without direct costs. On a worldwide basis the problem of drawing upon the "fugitive" literature was recognized and it was recommended that such sources be indexed. There was also the need to review the application of an appropriate communications' technology for the dissemination of an ever-burgeoning medical research literature.

The field of health services' research merited continued support and the assigning of high priority by the Regional Offices and the Member

Nations. In this regard the Global ACMR recommended that WHO, by means of establishing partnerships with funding sources, expedite the development of health services' research capability in developing countries. It also recommended that Subcommittees on Health Services' Research be established to focus respectively on maternal and child health, and health care for adults.

New developments in the field of mental health were reviewed. Priority areas included the development of mental health components of primary health care and fostering the emergence of the behavioural sciences as resources for medicine and public health. WHO could facilitate research in these fields. The Global ACMR strongly supported the review, identified topics meriting special attention and noted that many of the concerns cited were important components of existing WHO Programs. Such work could best be accomplished on an interdisciplinary basis.

Research on gerontology and changing world demographic trends was reviewed. The Global ACMR had recommended that WHO establish two scientific groups. The first should plan future international epidemiological and social survey research focussing on the elderly, promote standardization in the assessment of functions, and foster the development of a network of collaborating centers. The second scientific group's mandate would focus on senile dementia. It was recommended that a single centre be designated as the focal point for coordinating research on this problem.

Based on its review of the use and the protection of non-human primates and other animals in research, the Global ACMR had recommended

that WHO should be integrally involved in the transfer of technology, should stimulate field surveys, and should collect and distribute information on legislation on the use of primate resources for research. WHO should further its collaboration with the Member Countries contributing to programs on laboratory animal health and primate resources. The Global ACMR also recommended that WHO assemble and distribute information on pertinent legislation relating to the use of laboratory animals for research.

New areas proposed for review at the 1982 meeting of the Global ACMR were: (i) violence linked mortality; (ii) research dealing with health manpower development; and (iii) research on respiratory diseases.

The PAHO/ACMR concurred with the recommendation of the Global ACMR that the links between it and the Regional ACMRs be strengthened as a means of coordinating information on research programs and priorities.

The ACMR noted that a regional conference would be held in the Caribbean focussing on the clinical, laboratory and epidemiological aspects of dengue and dengue haemorrhagic fever. The ACMR asked that the report of this conference be brought to its attention and also be sent to the Global ACMR.

The question of health manpower studies was reviewed by the ACMR. Traditionally, the central work done in this field had focussed on the supply side of the equation, namely, the training, the distribution and the migration of health workers. More attention was warranted on: (i) the demand side; (ii) on how these services were provided and used; and

(iii) their accessibility to the population. The Brazilian health manpower survey was cited as an example of the latter approach; it was requested that a report of these findings be brought to the attention of the PAHO/ACMR and the Global ACMR.

13. RECOMMENDATIONS OF THE 20th MEETING OF THE PAHO/ACMR (1981)

The recommendations of the Twentieth Meeting of the ACMR held in Washington (June 1981) were reviewed as well as the steps taken subsequently by PAHO In this regard.

i. Diarrheal Diseases

The report of the first meeting of the PAHO SWG on Diarrheal Diseases was tabled. This report had emphasized the operational and health services' research aspects of this program, the efforts being made to encourage the participation of epidemiologists in the National Diarrheal Disease Control Program Committees and their inclusion in specific research projects. Guidelines for epidemiological research in this field had been widely distributed.

ii. Health Services' Research

In light of the ACMR recommendation that health services' research be introduced into a number of categorical programs, five programs had been initiated or expanded between 1981-82. These included: (1) studies relating to drug management and supply for five nations; (2) the concept of the risk approach was being incorporated in the

maternal and child health care program; (3) health services' research was incorporated in a Mexican program providing health care to people living in marginal urban areas; (4) by means of visits paid by the PAHO Secretariat, a strong liaison was being maintained with the academic community in the Region; and, (5) a workshop on operational research and health management had been convened in Caracas.

iii. Social Sciences

The ACMR had recommended that its Subcommittee complete its inventory of research and its review of the social and economic factors related to the transmission and the control of malaria. These steps had been accomplished and were documented in the Report submitted to the 1982 ACMR meeting.

iv. Guidelines for the Protection of Human Subjects in Medical Research

The ACMR had recommended that Members be circulated with the procedures used by the PAHO review committee. During the year, guidelines and review procedures for research involving human subjects were developed and approved by the Director. A Review Committee for Research Involving Human Subjects had been established at PAHO Headquarters.

v. Liaison with the Special Program for Research and Training in Tropical Diseases

The 1981 ACMR Meeting had recommended that PAHO continue to stimulate interest and participation in this Special Program.

During the year collaborative research studies in Chagas' disease had been fostered. A meeting to consider standardized protocols for chemotherapy of Chagas' disease had also been convened. Members of the Secretariat participated in the meetings of Scientific Groups on Chagas' Disease, Leishmaniasis, Malaria and the TDR Research Strengthening Group.

vi. Nutrition

The ACMR had recommended that programs in the field of nutrition be strengthened. Two research projects had been initiated: these were on child-feeding practices in Colombia and the development of health and nutrition indicators for use by primary health care workers in Mexico. Additional projects were being considered and steps were being taken to develop guidelines for the design of research protocols.

vii. Mental Health Research

The recommendation here was that a regional initiative be undertaken and a group be convened to review the situation in the Region. During the year a meeting was convened and a report was tabled for the 1982 ACMR meeting.

viii. Acute Respiratory Infections

The ACMR had recommended that a subcommittee be established to review research in this field and to consider the feasibility of mounting a regional research program to control acute respiratory infections in children. The

Report of the meeting of the subcommittee was tabled for the 1982 meeting.

ix. Cardiovascular Diseases Research

The ACMR had recommended that a review of research be assembled for assessment at the 1982 meeting. The report dealing with this review was tabled for the 1982 meeting.

x. Environmental Problems

The ACMR had recommended that the work of CEPIS be reviewed at its next meeting. This report had been tabled for the 1982 meeting.

The ACMR reiterated its concern that health services' research be assigned a higher priority in PAHO's activities. It was proposed that the concepts and methods in this field be integrated in a review of perinatal care and child health. The Committee was reminded that a degree of prudence was warranted in considering the expansion of the scope of primary health services. Implied, but not always specified, was the corollary that if this was done it also connoted a reorientation of secondary and tertiary health care services. In addition, a caveat was expressed that research should not be proposed or undertaken as a substitute for improving and extending inadequate existing health services.

14. MENTAL HEALTH

In the absence of Dr. D.A. Hamburg, Dr. George Alleyne presented the report of the ACMR Subcommittee on Mental Health and Neuropsychiatric

Research. This review highlighted recent major developments relating to mental health. The advances in the neurosciences and the promising steps in the behavioral sciences had important implications for family planning, nutrition, child care, migration, and water and sanitation. To stimulate research interest in these disciplines, a broader dissemination of recent examples of tangible accomplishments in the behavioural sciences was warranted. The centers in developing countries which specialized in these fields should be identified and their research and training capabilities strengthened. An international collaborative study on mental health had found that existing primary health care staff was capable of acquiring mental health skills, and on this basis, it would be possible to provide simple, low-cost mental health care to those persons in need in the community.

The ACMR concluded that the work of the Mental Health Committee should be broadened to encompass the following areas:

1. A review of the program and the findings of the Health Problem Classification Field Trial being tested in eight countries (two sites in Latin America) under the direction of the WHO Divisions of Mental Health and of Health Statistics. The objective of this study was to validate a reliable and practical set of "labels" and codes along both social/emotional and physical/biological axes that would be simple enough to be applied at the level of primary care so that the mental health facets of health problems could be identified.

2. A review of the mental diseases' sections of the International Classification of Diseases, and the present plans for the Tenth Revision of what is to be a family of classification modules (to be retitled as the International Classification of Health Problems);
3. To expand the review of epilepsy to include population-based studies and seizures, particularly febrile seizures in infants which may be the most frequent reason for mothers' bringing their children to sources of health care in several countries in Africa; and,
4. To encourage the study of behavioural factors and influences on immune responses, and particularly, the influences of social and environmental deprivation and occupational stresses on the susceptibility to a broad variety of disease agents and toxic substances, including respiratory, diarrheal and parasitic diseases.

14. REPORT OF THE PAN AMERICAN CONFERENCE ON HEALTH RESEARCH POLICIES

The Final Declaration of the Pan American Conference on Research Policies in Health held in Caracas, Venezuela, 25-28 April 1982 was reviewed by the ACMR. This Declaration reads as follows:

"Having reviewed aspects of the health conditions of the Americas and the relation between research policy and development in health at this Pan American Conference on

Research Policies in Health held in Caracas, Venezuela, April 25-28, 1982, we are convinced of the necessity for establishing a national research policy in health where it does not exist, and strengthening such a policy in those countries which have one."

"We reaffirm the relevance and importance of the Regional Strategies and Plan of Action for achieving the goal of Health for All by the Year 2000 and the appropriateness of the emphasis placed on research policies in those documents."

"We adhere to the concept of health research as being an endeavour which is absolutely essential and has as its fundamental objective the development of knowledge and technologies which will lead to the solution of health problems both current and future and consequently an improvement in the well being of our people. We hold to the view as expressed in the sixth Report of WHO on the world health situation that research "begins with the people and ends with the people."

"We recognize that the development of a health research policy entails planning at all levels and a close collaboration between the responsible authorities and the scientific community. This planning involves, inter alia, the financial allocations to be made to research, the priority areas of research to be supported, the mechanisms of support to be used, the personnel to be trained and the institutional

arrangements to be made to support and implement a national research policy in health."

"We accept that a distinction has often been drawn between basic and applied research, but in terms of advances in health care, both are equally desirable in our countries. The differentiation between these types of research is often imprecise and the use of one or the other is dependent on the problem to be solved and the resources available."

"We are aware of the long tradition of clinical and laboratory research in our countries but would wish at this stage to see attention given to strengthening the fields of epidemiological, behavioral, environmental and health services research."

"We recognize that it is impossible for every country in the Region to undertake all of the research which is essential for the solution of its own health problems. Because of the similarity of many of those problems, information exchange and collaborative research between countries at all levels of development is essential as a form of technical cooperation which, however, must be clearly defined to be practically useful."

"We are concerned that scientific information does not always reach the different levels where health care is provided and the available resources are not utilized to their fullest in some of our countries."

"We accept that the diversity of the fields of research proper to the knowledgeable management of health problems makes it imperative that there be involvement of the universities and institutions of higher education in the continuing development of activities in this field. This involvement produces beneficial research results, strengthens teaching capacity and ensures the future of research as an activity of the community of health professionals."

"We believe that the magnitude and nature of the health problems are such that programs in health research have to be interdisciplinary and multidisciplinary."

"We hold the view that no program of development of health research can be successful unless emphasis is also placed on development of the necessary human resources. Research is an example of an activity which provides training in its execution."

"We recognize the social implications of health research and a health research policy, and stress that the public needs to be kept informed about the principles and practices of research in health."

"We support the development of procedures for considering the ethical aspects of research involving human subjects and animals."

"We submit that the financing of research is critical to the whole process and that there should be a national mechanism

for ensuring the continuity of financial support for research and research training."

"IN THE LIGHT OF THE ABOVE AND RECOGNIZING the importance of national research policies in the context of the Plan of Action to implement the Regional Strategies for achieving Health for All by the Year 2000,"

"WE DECLARE our firm committment to the promotion of national research policies in health and the actions which emanate therefrom."

"IN WITNESS THEREOF the representatives of the governments and institutions attending the Conference sign this final declaration in the English and Spanish languages both texts being equally authentic."

The Committee strongly supported the Declaration of the Pan American Conference on Research Policies on Health.

ACMR PROGRAM OF ACTIVITIES

FOR 1982 - 1983

The ACMR considered several issues where further review was warranted including:

(1) non-nutritional factors in brain and mental development; (2) aedes aegypti; (3) a program of integrated research and action; (4) the management and the application of findings relative to health policies and their application in the Region; and (5) mental health.

RECOMMENDATIONS OF THE 21st MEETING OF THE PAHO/ACMR

Based on the reports received and its review of these issues, the ACMR made the following recommendations:

1. Research in PAHO

The ACMR noted with approval PAHO's direct support of a broad range of research and congratulated the Organization on issuing the report on Research in Progress: 1980-1981. In light of the Deputy Director's request that the Committee adopt as a priority the matter of research policies for the Organization and the Region, the ACMR recommended that:

- (i) The report Research in Progress: 1980-1981 be widely circulated by the Organization in the Region;
- (ii) the Organization should expand its research efforts in the field of health services' research;
- (iii) the situation regarding the publication or non-publication of research sponsored by PAHO be reviewed further;

(iv) the Members of the ACMR be informed of the policies and the procedures of PAHO's Research Grant' program; and,

(v) the Organization should translate for wide dissemination in the Region a number of health services' research manuals developed elsewhere;

2. Research in the Americas

The ACMR strongly endorsed the PAHO study initiated in 1978 on health research being done in eleven countries of Central America and the Caribbean. Based on its review of this study, the ACMR recommended that:

(i) this inquiry be completed and its results published;

(ii) additional analysis be done relative to the indicators of the quality of the research being done;

(iii) inventories of the research identified be prepared including names and addresses and be disseminated.

3. Research in WHO/PAHO Collaborating Centers

The ACMR recognized that Collaborating Centers had been established as a means of strengthening research related to PAHO/WHO priorities, and the work of many Centers had been exemplary in this regard. The ACMR felt that it was timely that a full review be made of the work of these Centers. It recommended that:

(i) a report be prepared for the ACMR setting out the guidelines followed in establishing these Centers, the guidelines and the procedures followed in their periodic review and the results of these reviews;

- (ii) as there were many programs doing exemplary work which fell outside this program, the terms for qualifying as a Collaborating Center should be made more widely known;
- (iii) due to an imbalance in their distribution, PAHO should consider how a more balanced regional representation might be achieved;
- (iv) consideration be given to designating collaborating centers focussing on health services' research, epidemiology and social survey research.

4. BIREME

The ACMR recognized the vital importance of the broad dissemination of scientific research knowledge. It strongly endorsed PAHO's support of BIREME. The ACMR recommended that:

- (i) PAHO give high priority to the work of BIREME; and,
- (ii) a report on this program be considered at its next meeting.

5. Acute Respiratory Infections

The ACMR took note of the fact that acute respiratory infections were a major cause of morbidity and mortality in the Region. Based on its review the ACMR recommended that:

- (i) The Working Group focus on the development of research approaches which could be quickly undertaken, identify areas where such research might best be conducted in the Region, and seek out financial support for this endeavor; and,

- (ii) this problem should be given a high priority in the overall research program of PAHO.

6. Social and Economic Factors Affecting the Transmission and the Control of Vector Borne Diseases

The ACMR Subcommittee recognized that different strategies were warranted to control effectively the rising incidence of these diseases. The Committee also recognized that a fuller understanding of the social and economic factors could contribute to making control programs more effective. The ACMR recommended that:

- (i) the "Bibliografía Latinoamericana sobre Ciencias Sociales Aplicadas a Salud" should be circulated to other Centers and work should continue in expanding and annotating this holding;
- (ii) an interdisciplinary group should be convened to review the work recommended by the Working Group and the development of a plan of action;
- (iii) a technical advisory group on social science and malaria and other vector-borne diseases should be established which would assist PAHO in the periodic review of these issues, provide counsel on proposed and ongoing research and serve as a resource in adapting the conceptual framework to other vector-borne diseases;
- (iv) a meeting should be convened to deal with the social and economic factors related to malaria, draw upon the pertinent

experience of the Member Countries, review the conceptual framework, and identify priorities for action; and,

- (v) a condensed version of the Working Group's Report be published to stimulate further discussion and review of these issues.

7. Nutrition

In its review of the report on nutrition, the ACMR noted that due to the absence of sufficient evaluation information, there was reasonable uncertainty about the most appropriate intervention strategy. The ACMR recommended that:

- (i) this program be continued with attention paid to how nutritional action programs might be incorporated into primary health care programs; and,
- (ii) a consideration should be given to the following:
 - (a) preparation of a review of the scientific bibliography on the sociocultural factors related to infant and young child feeding;
 - (b) formulation of a general research protocol so that comparable collaborative studies could be carried out within the PAHO/WHO Regional Program; and,
 - (c) identification of suitable collaborative research opportunities in the countries of the Region.

8. Mental Health

The ACMR recognized the importance of the field of mental health in the priorities of the Organization. Based on the report received, the ACMR recommended that:

- (i) the Global Working Group continue its review concentrating on ways to strengthen the research capability in mental health.

9. The Health of the Elderly

Although problems involving the health and the welfare of the elderly were more prominent at this time among more economically affluent nations, their adequate care and the provision of health care was recognized by the ACMR as an emerging concern for the developing countries of the world. The Committee had received the draft of a proposed international comparability study detailing the social circumstances and the health of the elderly. Based on its review, the ACMR recommended that:

- (i) this project be continued and the proposal to pretest the design and the questionnaire for this study be undertaken;

10. Research in Chronic Cardiovascular Diseases

PAHO had initiated in 1976 a collaborative project in Latin America on the control of hypertension as a means of reducing CVD mortality. Based on a review of the situation of these diseases in the Region, the project PRECAVAS (Prevention of Cardio-Vascular Disease) had

been proposed with the general aim of seeking and implementing new strategies in the primordial prevention and control of CVD. Based on its review of this proposed research project, the ACMR recommended that:

- (i) this project be continued with attention being paid to the design of the protocol, ensuring that a distinction be made between a study of the risk factors and a study of the efficacy of any form of intervention.

11. Environmental Health: CEPIS

The ACMR was impressed by the report on the work of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS). Based on its review the ACMR recommended that:

- (i) the work of CEPIS should be assigned a high priority in PAHO's activities;
- (ii) the activities of the Center be regarded as a viable institutional model which could be adapted to the provision of primary health care and the field of health services' research; and,
- (iii) CEPIS should strengthen the exchange of applied research information in environmental health engineering and foster the establishment of a Pan American network for such a purpose.

12. Program of Integrated Research and Action

Throughout its discussions the Members of the Committee considered the organizational and intervention strategies which might be most effective in reaching the goal of Health for All by the Year 2000. In this connection two broad philosophical approaches (horizontal and vertical), amongst others, had been considered in connection with programs involving services and diseases. The Committee recommended that:

- (i) consideration be given to establishing a program of integrated research and action geared to reducing morbidity and mortality in children under 5 years of age within a designated time period;

13. Special Programme for Training and Research in Tropical Diseases

The ACMR recommended that:

- (i) TDR should support some centers in the American Region in order to promote field research, train personnel in the subject and test new methods for the control of the six target diseases of the Special Programme;
- (ii) the Regional ACMR and the Regional Office should be jointly involved in the process of the identification and the selection of the institutions to be supported; and,
- (iii) PAHO should recommend to Member Governments that they give special attention to the different factors that inhibit the adequate development of field research, which is an essential component of any program of disease control.

14. Brain and Mental Development

The Committee considered a range of nutritional and non-nutritional factors related to brain and mental development. The Government of Venezuela had initiated studies in this area and would welcome collaboration with the Organization in this area. In the past PAHO had held a number of meetings to consider these issues. In light of recent developments in this field, the ACMR concluded that it would be opportune to review the progress which had been made on nutrition and brain development and to review new findings which related to the effectiveness and the efficacy of various levels of early stimulation.

The ACMR recommended that:

- (i) PAHO should review and promote research activities in this area.

15. Dengue and Dengue Haemorrhagic fever

The ACMR recommended that the report of a proposed conference to be held in Cuba on dengue and dengue haemorrhagic fever summarizing research, the clinical, laboratory and epidemiological aspects of these diseases be brought to its attention.

CLOSING SESSION

1. Election of Chairman and Vice-Chairman

Dr. H. Groot and Dr. F.C. Robbins were unanimously elected as Chairman and Vice-Chairman respectively of the ACMR.

2. Adjournment of the 21st ACMR Meeting

The Chairman thanked the Members for their contribution. The Chairman also acknowledged the efficient administration provided by the Pan American Health Organization.

* * * * *