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HEALTH RESEARCH MANAGEMENT

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1. Background

The countries of the Americas have approved and accepted the regional strategies for attaining the goal of Health for All by the Year 2000 as well as the Plan of Action for applying them. The strategies clearly indicate the role of research in achieving this goal. In Resolution XX of the Directing Council of PAHO which approved the strategies, it is recommended specifically to the governments that "they orient the development of research and of appropriate technologies in accordance with the requirements of the national process."

One of the principal functions that PAHO has performed PAHO in recent years has been the development of national policies that facilitate appropriate and necessary research in the Region. PAHO has sponsored throughout the American Hemisphere 10 national conferences, five subregional ones, and a regional one on policies of health research. These conferences demonstrated that in many countries there were no specific policies on health research and that, when they did exist, often they were not being applied. During the conferences different problems were identified that limit development of the capability to undertake research and apply its results of this in most of the countries, and the following recommendations were formulated:

a) Health research should be considered a useful mechanism for solving health problems.

b) An order of priority should be established for research in accordance with national health problems.

c) It will be important for studies to be done on application of the results of scientific research on health.

d) The existing research infrastructure is an impractical imitation of what the developed countries have.

e) It would be desirable to have positive communication among the different sectors that should be participating in health research (universities, institutions of research, Ministries of Health, etc.).

f) Efforts should be made to reduce the bureaucratic and administrative procedures that impede research activities.

g) Funds will have to be obtained in order to ensure the continuity of research activities.

When the reports of these conferences are analyzed and consideration is given, in addition, to other difficulties recognized as impeding research in the countries of Latin America and the Caribbean, the importance becomes clear of the role of Health Research Administration, as does the essential need of the countries of the Americas to improve their competence in this field.
2. Need for a manpower training program

If the existence of health administration problems in the Region is recognized, then the need is evident for a significant effort on the part of the countries to develop and/or operationalize their health research policies, as well as to raise the level of management in the health research institutes or their equivalents in the universities.

The manpower training needs in research management may be classified at two levels: the macro level, geared to the personnel responsible for the promotion and operationalization of research policies in health, and the micro level, geared to the personnel in the institutions that carry out health research.

The macro level takes into account personnel in such institutions as the National Councils of Science and Technology, the Ministries of Health, and the Social Security institutions who would be able to benefit from a training program since subsequently they will be responsible for the promotion and the national development of programs for the training of personnel in research management.

The micro level takes into account health research personnel such as directors of institutions, middle-level personnel, as the chiefs of department, and investigators responsible for projects.

The training program in health research administration has been defined as a group of activities and interrelationships among them having a purpose and specified objectives. The principal activities of the program consist of diagnostic studies, committees on planning and curriculum design, preparation of materials (including cases), and, especially, the development of seminars and other educational events, both regional nature and national, which are aimed at personnel at the macro and micro levels. In this paper, the principal emphasis has been placed on the development of seminars and other educational events.

3. Purpose and objectives of the program

The general purpose of the training program in the management of scientific health research will be the preparation of personnel so that they are capable of formulating decisions and implementing them applying criteria appropriate to the nature of each of the management functions. Among the management functions proper to health research are the following:

a) Research promotion and development, which includes in particular policies and strategies.

b) Research planning, which covers the nature and scope of the planning and indicates the structure, mechanisms, and socioeconomic and political importance of the research.
c) Execution of the research, or all the pertinent factors in this regard, such as investigators, sites, logistics, etc.

d) Control of the research, in which the methods and active surveillance of the process have a fundamental role.

e) Evaluation of the results, perhaps the most arduous function, in that it is necessary not only to apply suitable techniques but also to draw upon experience and the principles with the greatest discernment.

The specific objectives are:

a) Preparation of a strategic planning model that improves the effectiveness of the research program.

b) Application of systems analysis to the planning, programming, execution, surveillance, and evaluation of the programs and projects.

c) Application of psychosocial science criteria to the management of health research, particularly in the administrative aspects; behavior and institutional development and personnel management.

4. Educational content

Considering each of the aforementioned management functions, a list is given below of curricular content to be covered in the seminars and other educational activities:

a) Relationship between scientific health research and national development, and repercussions of this for research:

   - Recognition of the role and influence of research on the development of comprehensive health services as part of overall socioeconomic development;

   - Attitudes toward research and effects this may be expected from this, particularly in improvement of the level of competence of the health personnel in the different categories.

b) Problems related to research policy:

   - Procedures for formulating national research policies;

   - Determination of broad research topics for solving current health problems and those that are foreseen;

   - Setting of priorities among the research topics of chosen;
Determination and organization of the projects and groups of projects that are to be part of a research program with specific goals;

Coordination between various national normative agencies and organizations/institutions of research.

c) Evaluation and use of the potential existing in the countries to carry out the research identified:

- Manpower resources and means of training, with emphasis on application of a teamwork approach;

- Physical resources, such as materials and supplies;

- Economic resources, procedures for recruiting personnel and system of increases and incentives.

d) Mechanisms for exchanging and utilizing information on research:

- Systems for the acquisition, organization, utilization, and dissemination of information;

- Systems for using information and applying the results of research.

e) Planning, execution, and evaluation of research.

f) Application of particular management techniques, for example, network analysis, program planning, and budget preparation, "delphi," etc. and their application to health research management.

The combination and intensiveness of the educational content to be used in each seminar will vary according to the level of the personnel to which it is geared and to the needs of said research personnel.

5. Description of the program

As a consequence of the national, subregional, and regional conferences on research policies, the need has become evident for the structuring of a program to promote training in research administration for those responsible for health research. This program has the support of PAHO and TDR (WHO) and it is hoped that it will have the close collaboration of the member countries in carrying it out.

Figure 1 shows, in terms of a flowchart, the principal activities that have been carried out at the regional and national level, as well as others programmed for the near future.

For purposes of describing these activities, they have been categorized into Regional and National.
5.1 Regional Activities

From Figure 1 it can be seen that the principal activities have been geared to realization of the Regional Seminar on Research Administration (Macro Level), which was held in Washington, D.C. from 25 to 29 April of the present year as well as to preparations for holding the National Seminar on Research Administration (Micro Level), which is programmed for June 1984 in Iquitos, Peru. It is to be hoped, as indicated in the chart, that both regional seminars will have served to promote the development of national activities in health research administration.

Below are descriptions of some of these regional activities:

a) Exploratory study on the status of research management

This study was carried out from 20 to 30 October 1982 and, although because of time and cost it was reduced to describing the prevailing situation in only three Latin American countries (Venezuela, Costa Rica, and Colombia), its results can be extrapolated to most of the countries of Latin America and the Caribbean.

The principal aspects emphasized in this study are summarized below:

- There is a felt need in all the institutions visited to have, in their top offices, administrative or advisory personnel with training in management, so as to be able to make better use of the resources allocated for research.

- It is considered that for purposes of training, the institutional level is the most productive one, since it has the most stable structure and is less subject to political changes.

- In most of the research institutions, the interest of the investigator continues to be the principal criterion for deciding on research objectives. Local funding agencies approve and support the projects based on their scientific merit and not on a national research plan or on any policy adopted by the country.

- The dissemination of research is limited by the inadequate means of publishing it. Publication costs and language barriers are even further limitations to extensive dissemination in foreign journals of wide circulation. There is no strict selection of publishable material.

- For most of the institutions there is a large number of problems shared in common in such areas as the funding of research, and the acquisition of equipment, as well as its preventive maintenance and repair.
In the preparation of human resources for research the system seen most often continues to be the improvised one in which an apprentice works alongside the investigator. The Councils on Science and Technology, however, have promoted, with some success, graduate courses and fellowships for expanding human potential in this area.

b) Working Group on Research Management

This working group on the planning of activities in research management met in Washington, D.C. on 1 and 2 December 1982, with the participation and support of TDR (WHO) and the Fogarty Center of the U.S. National Institutes of Health.

In this meeting the following topics were presented and discussed:

- Exploratory study on the status of health research administration in Latin American and the Caribbean.
- Problems of health research management in the United States.
- The needs of health research management.
- Steps taken by TDR to solve problems in health research management.
- Curriculum design in seminars on research management.

The working sessions addressed general aspects of the development of a training program, including its objectives as well as the characteristics of the participants and working dynamics at each level of training (macro and micro). The working group recommended the following:

- Adopt, as a basic strategy in the development of the program, progressive decentralization of activities at the national level.
- Initiate the program with a regional seminar (macro level) in order to motivate high-level staff responsible for the development and implementation of research policies to conduct subregional and national activities geared to the training of personnel involved in research management both at the level of institutions and in health research.
- Support the development of national activities in those cases where it is needed.
- Explore the possible contribution of academic groups interested in the management of science and technology in the development of national activities in health research management.
c) Regional Seminar on Health Research Management (macro level)

This seminar was held at PAHO Headquarters Washington, D.C., during the week of 25-29 April 1983. This meeting was sponsored by PAHO, TDR (WHO), and the Fogarty International Center of the National Institutes of Health (USA).

Participating in the seminar were 15 high-level staff from eight Latin American countries and the Caribbean who are responsible for health research in the national councils on science and technology, Ministries of Health, or social security institutes, as well as observers from TDR (WHO), the Fogarty Institute, and PAHO.

The seminar was under the responsibility of two consultants with experience in research management and three facilitators (one for each working group). The objectives of the seminar were as follows:

i) To define needs perceived by the participants and to discuss the possible curriculum content of seminars on research management for the directors of research institutions of research;

ii) To include the use of research management techniques for improving the effectiveness of the program for investigators;

iii) To incorporate the general principles, concepts, and methodologies of research management, such as: the formulation of policies, the planning of research programs, financial and budgetary administration, and the monitoring, control, and evaluation of research programs.

The working dynamics for meeting these objectives included: didactic explanations, plenary sessions, sessions on small groups, collective presentations of the participants, and questions and answers. The presentations of the speakers covered the following aspects: concepts and administrative terminology; information for the formulation of research policies; coordination of research and development of networks, the role of the directors in research institutions, personnel management (of professional investigators), techniques for project selection, manpower planning, and the planning, control, and evaluation of programs.

During the working group sessions the discussions focused on the following topics: systems for the planning of health research in Latin America and the Caribbean; development of an effective research program; personnel management of professional research staff; deciding on and orienting applied research in Latin America, and the formation of health researchers.

A more extensive description of the topics presented by the consultants, as well as the recommendations of the working groups, may be consulted in the final report of the seminar (Annex 1).
5.2 National Activities

Figure 1 shows several national events, some already carried out (Brazil) and others to be carried out in the near future (Argentina and Peru).

In the case of Brazil, PAHO has collaborated with the Foundation for Administrative Development (FUNDAP), of Sao Paulo, in the development of three seminars on management for health research institutions. The first one was from 18 to 29 October 1982, the second from 16 to 27 May 1983, and the third is scheduled for end of the current year.

These seminars have been attended by directors of research institutions and heads of departments; in addition, PAHO has sent participants from other countries. The working basis for the groups in these seminars has been the discussion of a case in health research institution management prepared by the personnel of FUNDAP (administrators, psychologists, sociologists). This case was prepared based on the problems observed during diagnostic visits made to different research institutions in Sao Paulo.

Among the various aspects that the case presents are the following: institutional, structural, and organizational; planning and programming; budget and cost control; spending and financing structures; human resources; functions of the director’s office; installation, equipment, and materials; integrated administration and modernization of the management function.

In Argentina the Ministry of Health, with the support of PAHO, has programmed a national seminar that will take place in Buenos Aires from 11 to 15 July 1983, which is for directors of health research institutions.

In Peru, the Council on Science and Technology, in collaboration with PAHO, has programmed a National Seminar of Health Research Management, to be held in Lima from 7 to 11 November 1983. In this seminar, aimed at chiefs of research, the use of systems analysis methodologies will be looked into for project management.