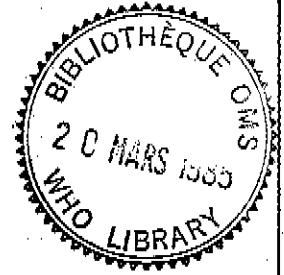


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MTP/RPD/80.1



SIXTH GENERAL PROGRAMME OF WORK
COVERING A SPECIFIC PERIOD (1978-1983)

PROMOTION AND DEVELOPMENT
OF BIOMEDICAL AND HEALTH SERVICES RESEARCH

GLOBAL MEDIUM-TERM PROGRAMME



WORLD HEALTH ORGANIZATION

GENEVA

1980



SIXTH GENERAL PROGRAMME OF WORK COVERING A SPECIFIC PERIOD (1978-1983)

PROMOTION AND DEVELOPMENT OF
BIOMEDICAL AND HEALTH SERVICES RESEARCH

Medium-term programme

This document outlines the global medium-term Programme (MTP) for the Promotion and Development of Biomedical and Health Services Research. It is a "process"-oriented programme which focuses mainly on the coordinative inputs required to promote and develop the Organization's research activities, in conformity with the Sixth General Programme of Work (GPW). The latter document has already specified the strategies for the implementation of individual programmes and the support of "substantive" research activities which are an integral part of WHO's programmes. The corresponding MTPs should therefore be consulted for specific information about the relevant research components.

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1. INTRODUCTION

One of the six major areas of concern described in the Sixth General Programme of Work is "Promotion and Development of Biomedical and Health Services Research".

Research activities are an integral part of WHO's programmes and are carried out at country level as well as at regional, interregional and global levels. Their recent reorientation has ensured substantial participation by regions and countries, whereas WHO's policy has been to increase the emphasis on the strengthening of national research capabilities and on the formulation, with the active support of the regional committees and the regional advisory committees on medical research, of national and regional priorities.

The general objectives for the promotion and development of biomedical and health services research have been stated in the Sixth General Programme of Work. In order to ensure maximum relevance to the real needs of Member States, the elaboration of the current Medium-Term Programme has proceeded as an "upward synthesis", aggregating the national activities into regional programmes, which in turn contribute to the global programme. Yet, the latter is more than the sum of its regional components, since it deals also with research policy analysis and formulation at the global level as well as with general methods and mechanisms for the Coordination and Management of Biomedical and Health Services Research.

2. POLICY BASIS

Article 2(n) of the WHO Constitution assigns to the Organization the function "to promote and conduct research in the field of health".

The World Health Assembly and the Executive Board have always attached considerable importance to research and they regularly review the Organization's activity in this respect. The current reorientation of research and research management in WHO, which forms the basis for this MTP for research, are in accordance with a series of resolutions adopted by the World Health Assembly over the last seven years.¹

Detailed statements on the relevant resolutions as well as on the Sixth General Programme of Work for research, are to be found in the Programme Profile of Research Promotion and Development (1979).

3. SITUATION ANALYSIS

3.1 The phenomenal growth in the complexity and scope of biomedical and health services research has had two major implications. First, there is now a compelling necessity for a multidisciplinary team approach to research which demands a high level of organization and coordination; and secondly, the rapidly rising costs of research have increased the need for, and dependence upon, funding from public sources. Consequently, there is a growing demand for health research that is directly relevant to the health problems of society and a pressing challenge to governments and society itself to clarify these problems and establish priorities for their solution.

At the national level, the pattern of health research organization that has evolved in response to these trends naturally varies from country to country. In some cases, one central body is charged with the responsibility of defining objectives and assigning priorities; in other cases, several agencies both governmental and nongovernmental are involved in the process. However, in many other countries, especially in the developing world, there is as yet no effective national organization for the management of health research, though there is a notable trend to develop such mechanisms and to define national focal points for cooperation in international health research.

¹ WHA25.60; WHA27.61; WHA28.70; WHA29.64; WHA30.40; WHA31.35 and WHA32.15.

At the international level similar trends have aroused growing concern over the disparities in the research and development investments between developed and developing countries and have focused attention on the need for coordinated global research efforts that are relevant to worldwide health problems.¹

3.2 The disparities in research reflect the skewed distribution of human and material resources, although some of the poorer countries have shown a remarkable ability to produce research workers; this can usually be correlated with a high level of education, sustained over a minimum of one generation approximately.

It is frequently observed that adverse environmental factors, including poor working conditions and institutional instability afflict those qualified scientists who try to become dedicated researchers.

On a global scale, the effects of inequality are clearly discernible in available figures, even though such data do not reveal the differential distribution of resources and therefore can only provide a crude approximation in average terms.

Individual case studies would clearly be needed to complement existing information and assist in its interpretation.

3.3 Available global research and development figures based on 1974 estimates² indicate that there are some three million research and development scientists and engineers throughout the world; 93.9% are employed in developed countries and 6.1% in developing countries. The average expenditure on research and development per scientist or engineer is US\$ 35 400 in developed and US\$ 14 500 in developing countries. Developed nations devote on the average 2.29% of their gross national product (GNP) to research and development; the corresponding figure for developing countries is approximately 0.33%.

As far as health research specifically is concerned, the global expenditure is estimated at 7% of the world's expenditure on research and development as a whole and follow similar geographical distribution trends. Consequently, the need to strengthen the health research capability of developing countries, and the related concern for appropriate career opportunities in these countries, is part of the wider question of how much they are willing or able to spend on research and development.

There is evidence that a start has been made in the right direction. For example, between 1970 and 1974 the proportion of GNP spent by developing countries on research and development increased from 0.2% to 0.33%, in pursuit of the target of 0.5% of GNP proposed for the end of the Second United Nations Development Decade (1970-1980). Global figures of any kind are prone to certain shortcomings; nevertheless, they can at least indicate an order of magnitude of difference and trends.

It is not known to what extent the increasing expenditure of developing countries on research and development contributes also to the related problem of career structures for scientists in these countries. However, the problem itself is well known. There are two main aspects: (i) the absence or inadequacy of tenured posts and career structures in certain fields, e.g. epidemiology, entomology, malacology and biostatistics; and (ii) the relatively non-competitive conditions of service which act as disincentives to the recruitment of researchers and compel those who do take up research to carry on other remunerative activities in order to supplement their incomes.

¹ Source: Sixth report on the world health situation, Chapter 5, p. 207.

² UNESCO. Estimation of human and financial resources devoted to R and D at the world and regional level. Paris, May 1979.

3.4 WHO is concerned about this general lack of professional opportunities for health research and recognizes that attempts to strengthen research capability can ultimately succeed only to the extent that governments themselves deal effectively with the problem. Many ACMR members and other concerned scientists share this view and preliminary contacts have confirmed the pressing need for further action.

3.5 It must be conceded that there is frequently too long a delay between health research achievement and the benefits of its impact on the health of society. This fact makes it difficult for health research to compete for national resources on equal terms with other enterprises that promote short-term and more visible gains. And yet, health research is among the decisive factors for the attainment of the goal of health for all by the year 2000 and, in a wider sense, long-term investment in research is a concrete expression of hope for the future. This is the basis for the commitment to promote research and development and to strengthen national research capabilities.

3.6 This commitment is expressed in the medium-term programme of the Organization and justifies a number of approaches identified therein such as reviewing and updating priorities, building up national research management mechanisms including research planning, strengthening research institutions and research training programmes and promoting the exchange of information and the dissemination of research results for the solution of relevant health problems.

4. OBJECTIVES

Principal objective:¹ "To promote and collaborate in the development and coordination of biomedical research, including health services research".

Detailed objectives: The following four detailed objectives have been identified and are outlined below with their rationale:

4.1 Objective: to identify health research priorities

- At national level. The identification of health problems normally precedes the setting of priorities and this is achieved by a process of planning, e.g. country health programming (CHP), which identifies health problems in the broader context of socioeconomic development. The setting of research priorities based on national health problems and the formulation of health research programmes in response to such health priorities require effective coordination of national health development planning processes (e.g. CHP) and national research management mechanisms (e.g. national research councils).
- At regional and global levels. WHO's governing bodies define health priorities whereas mechanisms for the formulation and analysis of research priorities at regional and global levels rest on a system of advisory committees on medical research (ACMRs) - six regional and one global. The members of these ACMRs are scientists selected to provide a broad coverage of nationalities and a wide range of relevant disciplines. Through this international advisory network of ACMRs, preliminary regional and sub-regional priorities have been identified and broad programming areas requiring global collaborative research efforts are being identified (e.g. research information; diarrhoeal diseases; health services research and nutrition research).

¹ In accordance with the Sixth General Programme of Work covering a specific period (1978-1983), WHO Official Records, No. 233, 1976 (Annex 7), p. 104.

4.2 Objective: To strengthen national research capabilities

Research capability strengthening as a means of promoting national self-reliance in health research is a cornerstone of WHO's research promotion and development objectives. However, activities in this connexion cannot be pursued in isolation, e.g. in some circumstances the development or strengthening of national health programming procedures and health research management processes, already outlined under objective 4.1 might be a necessary first step in efforts to promote national self-reliance in health research.

4.3 Objective: To promote international coordination of research, especially with respect to problems of major importance to Member States

Within countries, medical research councils or similar bodies are an important means of coordinating national health research and of promoting links for the coordination of multi-sectoral research involving health-related and other fields of development (e.g. agriculture and education).

At the regional or sub-regional level interaction between national medical research bodies of different countries is a valuable mechanism for promoting technical cooperation in health research among countries.

At the global level, interactive cooperation between national research councils, the ACMRs, United Nations agencies as well as nongovernmental scientific bodies, must be promoted to stimulate broad-based efforts in health development.

4.4 Objective: To promote the application and transfer of scientific knowledge and research methods for health development

The transfer of knowledge and its practical application to health problems is as difficult as it is important and without it goal-oriented research becomes a futile endeavour. It is only by the pertinent application of appropriate knowledge and technology that countries can expect to achieve their respective health development targets in connexion with "Health for all by the year 2000". The main concern here is to shorten the time elapsing between scientific discoveries and their practical application.

5. APPROACHES

5.1 In respect of the first objective, WHO is in a unique position to cooperate with Member States, in order to foster the establishment and further development of national health programming processes and national health research management mechanisms.

The approaches to be utilized include national meetings, seminars and workshops on health research programming as part of the overall national planning process.

Furthermore, it will be necessary to set up guidelines for establishing national health research management systems attuned to particular needs and socioeconomic circumstances. Such managerial mechanisms should be capable of reviewing and updating readily national health research priorities to ensure continuing support for research that is relevant to social needs.

5.2 As far as the second objective is concerned, the research components of the Organization's general programme and the special programmes for research and training have built-in responsibilities to strengthen national research capabilities through national, regional and global mechanisms. The main approaches to this end are, to:

- collaborate in the design and promote the conduct of research;
- assist and enhance research manpower training at all levels (scientific, technical and managerial);
- strengthen research institutions;
- foster the establishment of technical and ethical review mechanisms.

A number of specific approaches can be defined in this context, such as:

- the development of a network of national institutions as WHO collaborating centres for collaborative research and training;
- broad spectrum approach to personnel training, with particular emphasis on scientific education of public health workers;
- institution-strengthening (including equipment maintenance and information facilities);
- promoting the establishment of appropriate career opportunities for health research personnel;
- ethical review procedures in the conduct of human and animal experimentation.

5.3 To subserve the third objective, WHO's mechanisms for promoting the coherence of the Organization's research activity at various levels involve WHO programme coordinators (at country level), research promotion and development officers, research development committees and regional committees and the Executive Board (at regional and global levels). They include also the important advisory role of the ACMRs, and the essential links with medical research councils and similar bodies at the national level. The following arrangements and activities are intended to promote the coordination required to ensure the coherence of the Organization's research activity:

- provision for overlapping membership between the regional and global ACMRs (e.g. chairmen of regional ACMRs as members of the global ACMR) and encouraging the use of ACMR members as focal points for contact and coordination with national medical research organizations;
- support for meetings of representatives of national medical research organizations to stimulate collaboration and coordination, for research on problems of common interest;
- expansion of the network of research collaborating centres participating in joint collaborative projects;
- use of established mechanisms that draw widely on the world scientific community for the planning, implementation and evaluation of research (e.g. expert advisory panels, task forces, scientific working groups, etc.).

Ultimately, the core of WHO's research lies within individual programmes, for which there are distinct MTP statements. The present MTP should ensure a certain standardization in methods and procedures of coordination and management, thereby ensuring greater coherence in WHO's overall programme.

5.4 Concerning the fourth objective, strategies for the identification and dissemination of scientific and technical knowledge and for the adaptation and application of appropriate technology will vary according to local circumstances. At the national level such strategies will depend largely on the effectiveness of research management and other mechanisms for making available relevant new knowledge and extending its application to the community level, in the development of comprehensive health services.

The following approaches and activities must therefore be considered together with the need for effective health research management mechanisms at national level and coordinating mechanisms at national, regional and global levels:

- identification of relevant scientific knowledge and appropriate technology through meetings of experts and representatives of medical research councils;
- promotion of multisectoral approaches in the context of primary health care, using national and regional consultations and conferences;

- assistance with the development of information systems for the collation and dissemination of relevant research results to shorten the time interval between discoveries and their application.

6. PROGRAMME MANAGEMENT

Information on the management of substantive research activities can be found in the MTPs of respective programme areas.

One of the principal functions of research coordination and management is to pursue three important goals, namely to: (a) promote the development of national and regional research programmes; (b) ensure the coherence and consistency of global research activities; and (c) strengthen national research institutions and research manpower. The extent to which these aims are achieved can serve as a yardstick to measure progress in the principal function.

Coordination of WHO's research activities implies systematic interaction between the various components and participants concerned.

Within countries this will take place through medical research councils or similar bodies. Interaction between medical research councils of different countries will be encouraged as part of technical cooperation among countries.

Coordination is also required between regional ACMRs and national medical research councils, or other national research mechanisms. Likewise it is required between the regional ACMRs and the regional committees. Between regional and global levels there is a need for coordination of the activities of regional ACMRs and the global ACMR. The global ACMR too must interact with the Executive Board and the World Health Assembly. At all levels there is a need for mutual feedback between research activities and the other activities of the programme of which they all form a part.

The development of a number of mechanisms and methodologies will be needed for: (a) the systematic formulation of research policies, priorities and programmes; (b) obtaining and allocating resources; (c) establishing procedures for ethical review; and (d) evolving criteria for evaluation.

WHO will collaborate with Member States to improve and refine existing evaluation procedures or devise suitable approaches under a variety of circumstances, in order to evaluate health research at all levels in respect of its relevance, quality, progress, efficiency, effectiveness and impact and to ensure its acceptability on ethical grounds.

The criteria for evaluation, the targets to be achieved and the output indicators that reflect actual performance are all essential elements of the research programming process and must be built in at the planning stage.

At the national level an appropriate beginning to the development of research evaluation procedures is to establish health research programming as an integral part of national health programming processes.

The following other activities are aimed at promoting and assisting the evaluation of national health research programmes and WHO's contributions to them:

(a) At the national level

- (i) Collaboration with Member States to: define health research related targets as part of CHP; develop guidelines for the evaluation of health development including intersectoral research; evaluate national health research programmes; establish national policies on the ethical requirements for research involving human and animal experimentation.
- (ii) Case studies of research evaluation experiences in different countries to serve as a basis for refining existing procedures.

(b) At the regional and global levels

Through the network of advisory mechanisms (ACMRs) and the policy organs of WHO the following activities relevant to monitoring and evaluation are contemplated:

(i) developing guidelines for the planning, execution and evaluation of health research;

(ii) developing guidelines for the definition of national policies on the ethics of biomedical and health services research and for the establishment of review mechanisms for the ethical aspects of such research.

7. RESOURCES

People are the principal driving force in the promotion and development of health research. Manpower resources are energized at different levels (national, sub-regional, regional and global) and must be derived from a proper mix of WHO staff, consultants, as well as national experts.

The global and regional ACMRs, various national, regional and interregional coordinating bodies (for example in the fields of economics, agriculture, science and technology) can be and are being called upon to contribute knowledge and experience and to mobilize the scientific and professional community. It might not be very meaningful to quantify such contributions in financial terms and the effects of research promotion and coordination can readily be perceived through the rapid growth of regional research capabilities.

Financial resources for the stimulation, management and conduct of research activities are derived from the regular budget (RB) and from voluntary contributions (VF).

Although the volume of research supported through VF tends to be much larger than that supported through RB, all such activities must be considered as part and parcel of "service oriented" programmes, under the umbrella of WHO's overall programme of work.

It can be added that in many instances, WHO funds spent on the promotion and coordination of health research are only a fraction of the expenditure on such research activities. Indeed, through a "multiplier effect" the participating institutes and countries are often able to generate support and turn out to be the major financial contributors.

Finally, with the new orientation outlined in this MTP, opportunities have arisen for regional and interregional research activities to build up multidisciplinary programmes, for example, by linking health services research with family health and manpower development. It is hoped that such integrated approaches will be more successful in attracting support from a variety of possible sources.

A number of other advisory bodies are also used, such as expert advisory panels and committees as well as scientific groups. In the special programmes for research and training, multidisciplinary groups of scientists have been set up, on a worldwide basis, under the name of task forces or scientific working groups to define research objectives, devise strategic plans to achieve them, follow up the implementation of the plans and monitor progress.

8. TARGETS AND ACTIVITIES

In synthesizing the global target and activity descriptions, it was considered undesirable to retain the discrete regional and headquarters submissions. A consolidated synopsis has therefore been prepared which outlines the major activities being implemented by the Organization. The tables attached show targets and activities for objectives mentioned under item 4. The period is broken into the three biennia although many of the activities will be going on throughout the period.

In view of the specificity of research activities in each region, more detailed documents describing regional research MTPs are available upon request.

1.0 Objective: To identify health research priorities at regional and national levels

1.1 Targets

- 1.1.1 All Member States will have identified or reviewed their health research priorities in relation to HFA/2000
- 1.1.2 Regional priorities established and updated in all regions
- 1.1.3 Global priorities synthesized by 1980 and reviewed in 1983

1.2 Activities

	1978 - 1979	1980 - 1981	1982 - 1983	Linkages
1.2.1	Establish mechanisms for involving national and regional policy making bodies (such as Research Councils) in the formulation of research policies and priorities (HQ, all regions)	(HQ, all regions)	(HQ, all regions)	All technical programmes, individually or collectively concerned with the conduct and support of research activities.
1.2.2	Develop methods for the elaboration and review of WHO's research policies and priorities (e.g., ACMRs and their subcommittees) (HQ, all regions)	(HQ, all regions)	(HQ, all regions)	
1.2.3		All regions to carry out case studies on national research plans and programmes (All regions)		
1.2.4			Develop health research programming methodologies (HQ, all regions)	
1.2.5		Promote the establishment and/or strengthening of research management mechanisms (All regions)		
1.2.6		Case studies for the development of national research management systems (All regions)		

2.0 Objective: To strengthen national research capabilities with a view to developing effective national mechanisms for undertaking relevant researches in the identified areas/priorities

2.1 Targets

- 2.1.1 Most Member States will have developed or strengthened research institutions able to collaborate with WHO in one or more research programme areas
- 2.1.2 National ethical review policies and mechanisms will be established in all Member States

2.2 Activities

	1978 - 1979	1980 - 1981	1982 - 1983	Linkages
2.2.1	To support programmes for research training awards and research grants (All regions)		(All regions)	All technical programmes, individually or collectively concerned with the conduct and support of research activities, and more specifically: SCR
2.2.2	(AMR, WPR)	Institutional strengthening activities (All regions)	(All regions)	
2.2.3		Planning and organization of training programmes in research management (AMR, EMR, SEA)	(All regions)	
2.2.4		Study on research career structures (All regions)		
2.2.5	To promote the establishment of appropriate ethical review mechanisms in Member States (AMR)	(AMR, SEA)	(All regions)	
2.2.6		National workshops on research methodology (AMR, WPR, SEA, EMR)	(All regions)	
2.2.7	Identification, designation and evaluation of suitable institutions as WHO collaborating centres	(All regions)		
2.2.8	Elaboration of a data base on country research policies, priorities and resources in relation to institutions, research workers and research projects (AMR)	(AMR)	(AMR)	

3.0 Objective: To promote the coordination of research at national, regional and global levels, especially with respect to health problems of major importance to Member States

3.1 Targets

- 3.1.1 Member States will establish suitable mechanisms such as national research councils or similar bodies to act as focal points for the coordination of national and collaborative regional and global health research
- 3.1.2 Expansion of the network of WHO Collaborating Centres
- 3.1.3 Promotion of international coordination through appropriate meetings

3.2 Activities

	1978 - 1979	1980 - 1981	1982 - 1983	Linkages
3.2.1	Establish and maintain close coordination with Regional Offices in carrying out WHO's research (HQ)	(HQ)	(HQ) activities	COR All technical programmes, individually or collectively concerned with the conduct and support of research activities, and more specifically:
3.2.2	Maintain liaison with ICSU, CIOMS, members of the UN family and scientific and technological institutions as per standing commitments of WHO (HQ)	(HQ)	(HQ)	
3.2.3	Promotion, establishment and strengthening of national research management systems (AMR)	(All regions)	(All regions)	
3.2.4	Periodic meetings of representatives of national research councils or analogous bodies (All regions)	(All regions)	(All regions)	
3.2.5	(All regions)	Annual ACMR meetings (All regions)	(All regions)	
3.2.6	Promoting attendance of RACMR members in scientific meetings held in their own and/or other countries of the region (All regions)	(All regions)	(All regions)	
3.2.7	Participation of regional scientists in scientific group meetings and in intercountry collaborative research projects (All regions)	(All regions)	(All regions)	
3.2.8		Collaborate in the promotion of, and active participation in existing WHO special programmes for research and training as well as in new ones (HQ, all regions)	(HQ, all regions)	CDD HRP TDR

4.0 Objective: To promote the application and transfer of scientific knowledge and research methods for health development

4.1 Target: Formulation of action-oriented research plans utilizing available scientific information and applied towards health development

4.2 Activities

	1978 - 1979	1980 - 1981	1982 - 1983	Linkages
4.2.1	Assist in the design and elaboration of new R & D efforts, as appropriate (HQ)	(HQ)	(HQ)	All technical programmes, individually or collectively concerned with the conduct and support of research activities.
4.2.2	Stimulate multi-sectoral cooperation by promoting inter-disciplinary approaches to health development problems (HQ, all regions)	(HQ, all regions)	(HQ, all regions)	
4.2.3		Technology assessment and forecasting (HQ, EUR)	(HQ, EUR)	
4.2.4		Plan and help establish an information system in the Regions for transmission of research information to the scientists in Member Countries (All regions)	(All regions)	
4.2.5		Promote close collaboration between health administrators and national research organizations and institutions (All regions)	(All regions)	
4.2.6		Support "state of the art" courses in subjects relevant to national research needs (All regions)	(All regions)	
4.2.7		Assist in the development of methods for adapting research findings to combat common health problems (All regions)	(All regions)	

5.0 Objective: Monitoring and evaluation

5.1 Target: Guidelines and criteria for the evaluation of biomedical and health services research

5.2 Activities

	1978 - 1979	1980 - 1981	1982 - 1983	Linkages
5.2.1		Develop methodologies for the assessment and evaluation of research programmes (HQ, all regions)	(HQ, all regions)	DPE All technical programmes, individually or collectively concerned with the conduct and support of research activities, and more specifically:
5.2.2	Monitor the various components of WHO's research at all levels with a view to prevent counterproductive duplications and/or inconsistencies (HQ)	(HQ)	(HQ)	
5.2.3	Implement a system of peer review evaluation for grants programmes, including ethical aspects (AMR)	(HQ, all regions)	(HQ, all regions)	
5.2.4		Monitoring and utilization of research results (HQ, all regions)	(HQ, all regions)	



