



WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTE

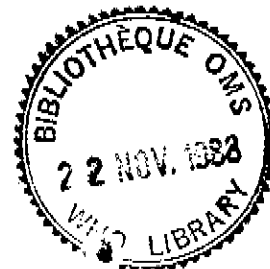
22767

HSR/86.1
ENGLISH ONLY

HEALTH SYSTEMS RESEARCH ADVISORY GROUP

First Meeting, Geneva, 7-10 April 1986

Report and Working Document



The issue of this document does not constitute formal publication. It should not be reviewed, abstracted, quoted or translated without the agreement of the World Health Organization. Authors alone are responsible for views expressed in signed articles.

Ce document ne constitue pas une publication. Il ne doit faire l'objet d'aucun compte rendu ou résumé ni d'aucune citation ou traduction sans l'autorisation de l'Organisation mondiale de la Santé. Les opinions exprimées dans les articles signés n'engagent que leurs auteurs.

HEALTH SYSTEMS RESEARCH ADVISORY GROUP

First Meeting, Geneva, 7-10 April 1986

REPORT

Contents

	<u>Page</u>
1. Introduction	3
2. Terms of reference of the Advisory Group	3
3. Who activities in the field of health systems research	4
4. Review of the present status of HSR and current problems and constraints	5
5. Recommendations of the Advisory Group:	6
A. Priorities and directions for future development	7
B. Review of country specific research and development activities for the additional budgetary allocations of 1986-87 and proposals for monitoring and evaluation of these projects	13
C. Plan of action for Advisory Group	17
Annex: Present status and future development of HSR	19

LIST OF PARTICIPANTS

Dr D. Banerji, Professor, Centre of Social Medicine and Community Health,
Jawaharlal Nehru University, New Mehrauli Road, New Delhi 110067, India

Dr J. M. Borgono, Chief, Department of International Affairs,
Ministry of Health, Santiago de Chile

Dr G. DeFriese, Director, Health Services Research Center,
University of North Carolina, Chase Hall 132-A, Chapel Hill, N.C.27514, USA

Dr R. Illsley, Professor, School of Humanities and Social Sciences,
University of Bath, Claverton Down, Bath, BA2 7AY, UK

Dr W. Koinange, Director of Medical Services, Ministry of Health
P.O. Box 30016, Nairobi, Kenya

Dr N. Kronfol, (Chairman), Professor and Chairman, Department of Health
Services Administration, Faculty of Health Sciences, American University of Beirut,
Beirut, Lebanon
current year: Visiting Professor of Medical Care Organization,
School of Public Health, University of Michigan, Ann Arbor.

Mr J.M. Martins, Director, Division of Health Services Systems,
Department of Health of N.S.W., Box K110, Haymarket, Sydney,
N.S.W.2000, Australia

Dr Indra Pathmanathan, Coordinator, Health Research Unit,
Public Health Institute, Jalan Bangsar, Kuala Lumpur, Malaysia

Observers:

Dr Doudou BA, Director, Department of Research and Planning,
Ministry of Public Health, Dakar, Senegal

Dr Owuor-Omondi, Head, Health Research Unit, Ministry of Health
Private Bag 0038, Gaborone, Botswana

WHO Secretariat:

Dr Farouk Partow, Assistant Director-General
Dr E. Tarimo, Director, Division of Strengthening of Health Services
Dr Y. Nuyens, Responsible Officer, Health Systems Research
Dr P. Rosenfield, Research and Training in Tropical Diseases
Dr A. Segall, Health Manpower Research
Dr C. Vukmanovic, Managerial Process for National Health Development
Dr J. O. Duncan, Consultant HSR/HMR

1. INTRODUCTION

1.1 Purpose and Scope

The World Health Organization convened an Advisory Group on Health Systems Research in Geneva, 7 to 10 April 1986. The Advisory Group brought together physicians and social scientists, managers and decision-makers, and principal investigators of WHO-sponsored health systems research projects at country level. All members had national and international experience in HSR.

The recommendations of the Advisory Group provide advice on the directions of the Health Systems Research Programme, particularly for the preparation of the 8th General Programme of Work, and the review, monitoring and evaluation of HSR country projects funded by WHO/HQ.

1.2 Opening

The meeting was opened by Dr Farouk Partow, Assistant Director-General, on behalf of Dr H. Mahler, Director-General. In his opening address Dr Partow reviewed the nature and scope of Health Systems Research and stated that it could be a powerful tool in facilitating the achievement of the goal of Health for All by the Year 2000. This could be done by supporting more rational policy and programme planning, by providing decision-makers with evidence as to which health policies are likely to be the most effective, efficient, economic and relevant to needs. He highlighted some of the critical areas for research and described several constraints that contribute towards the slow development of HSR and its integration into the managerial process. He said that the Executive Board at its seventy-fifth session (January 1985) and the Thirty-eighth World Health Assembly (May 1985) during the review of the proposed budget for the financial period 1986-87 considered that additional funding should be made available for HSR. The Director-General had accordingly made an additional budgetary allocation of up to US\$500,000 to support country specific research and development activities. The Health Systems Research Advisory Group would:

- discuss future trends, including the identification of priority research issues at national and global level in the reorientation of national health systems towards HFA, and advise on directions over the short, medium and long term of the Health Systems Research Programme in the light of the preparation of the 8th General Programme of Work;

- give support in the review, monitoring and evaluation of HSR country projects being funded by the increased resources provided by WHO, and plan for supporting future activities.

1.3 The Advisory Group designated Dr N. Kronfol as Chairman, and Dr I. Pathmanathan as Rapporteur.

2. TERMS OF REFERENCE OF THE ADVISORY GROUP

The following terms of reference for the Advisory Group were adopted:

The Advisory Group will:

- advise the Director-General on priorities and directions over the short-, medium- and long-term in health systems research in relation to developments and innovative trends in this field;

-advise on specific programme needs in information collection, analysis and dissemination, identification of priority issues in the reorientation of national health systems affecting a number of countries including the manpower components, utilization of research in decision-making processes, strengthening national capabilities in health systems research;

-facilitate the review, monitoring and evaluation of country-specific research and development activities through on-site visits and consultation, for which the Director-General has decided to make additional budgetary allocation for the financial period 1986-87;

-promote understanding of and political and technical support for the HSR programme at all levels of the Organization;

-mobilize scientific resources in the fields of HSR, and, whenever possible, identify and raise financial resources;

-make recommendations to the Director-General in relation to the above areas.

3. WHO ACTIVITIES IN THE FIELD OF HEALTH SYSTEMS RESEARCH

Although research for the development of national health systems has been part of WHO's programme since the creation of the Organization (1948), it was recognized in 1976 as an explicit component of the Organization's support to research to which priority should be given. The mandate to develop health systems research stems from various resolutions formulated by the World Health Assembly over the last few years, as well as from recommendations and decisions of the Executive Board, the regional committees and the global and regional advisory committees on medical research.

Health systems research aims at understanding the structure and functioning of the health system. It can support rational policy and programme planning by providing the decision-makers with evidence as to which health policies are likely to be the most effective, efficient, economic and relevant to needs. The fundamental principle is that the questions studied should be linked to the everyday concerns of policy-makers, managers and those responsible for health promotion and health care.

While the specific problems and their solutions depend on the political, social, economic and cultural conditions of a country, there are certain critical issues of common concern to many countries. Among these are optional training and deployment of health manpower, intersectoral action, community involvement, policy analysis, integration of vertical and horizontal programmes. Member States are also expressing increased concern at deficiencies in the application of present-day health care technology and, in the overall efficiency of the health system. As a result, the potential of health systems research as an agent for change in health systems operations and management is increasingly recognized. Many countries now regard health systems research as a vital tool for improving the organization and functioning of national health systems.

It should be noted, however, that health systems research is still at a relatively early stage of development and that most countries, particularly the developing countries, have not yet integrated such research into the managerial process for health development. The slow progress is due to different constraints, including: limited human, institutional and financial resources, lack of research on critical issues and insufficient application of existing (research) knowledge.

The main direction for the future is to lay further emphasis on three strategic lines of action, already reflected in the programme: information promotion and exchange, strengthening of national capabilities for HSR, and support to substantive research in priority areas. The programme should also intensify its efforts to encourage and support countries in the development of an effective HSR process.

4. REVIEW OF THE PRESENT STATUS OF HSR AND CURRENT PROBLEMS AND CONSTRAINTS

4.1 Scope and Nature of HSR and its Present Status

To facilitate discussions a working document was prepared (see Annex), which reviewed the present status of HSR and analysed the problems and constraints affecting HSR, as reflected in the various reports available from Regional Offices and Headquarters. This document generated a lively discussion among the members of the Advisory Group who drew on their varied experience and expertise to give a critical review of the current position. There was substantial agreement on the definition of HSR, its scope and its distinctive characteristics, as described in previous WHO documents. In particular it was noted that HSR is intended for action. The results of HSR are usually expected to provide immediate support for managerial decision-making in order to improve the impact of the use of available resources, manpower and technology on the health of the community. However it was also emphasized that some health systems research need not be linked to decision-making processes. It could contribute to the general body of knowledge on health systems and be applicable in many situations. For example, some countries have experienced remarkable improvement in health indices even though there has been little improvement in socio-economic status. If HSR could provide explanations for this phenomenon, it could represent a significant advance in the basic store of knowledge. It was appropriate therefore to maintain a balance between these types of HSR.

The advisory group agreed on two further matters:

- that the carrying out of HSR as an integrated management tool is difficult
- that progress to date has been limited and patchy in geographical coverage, in quantity, quality and impact.

4.2 Problems and Constraints

The slow development and use of HSR is due to many factors, some specific to individual countries while others are common to all. Certainly managers, decision-makers and clinicians are still unclear as to the nature of the potential contribution of HSR, are lacking the knowledge to perceive when and how it could be employed and believe that, like other research, it has little meaning for their tasks.

The more specific reasons for delays in the development of HSR and for doubts about its quality and impact may be divided into three groups:

- the management and action process
- practical constraints
- deficiencies in the practice of HSR.

4.2.1 The management and action process

The management process lays emphasis on positive, direct and decisive action with only minimal delay. Despite the accepted ideal that managerial leadership should be based on valid and reliable information, managerial decisions must often be made before it is possible for a conventional research process to follow its complete course. This creates tension between the need for timely managerial information and the process and products of research. An inquisitive attitude to investigate problems and seek solutions, a continuous search for greater effectiveness and efficiency is more often discouraged than rewarded. Moreover, HSR is conducted at the interface of health services and other sectors, such as education, agriculture, nutrition. This intersectoral approach is new and difficult and may expose deficiencies within the system to decision-makers outside the health sector. This can lead to resistance against such research being undertaken among the involved managers. Finally, the Group noted that managers may expect too much from HSR. Disappointment is created when HSR findings fail to deliver a miracle answer to a problem situation.

4.2.2 Practical constraints

Inadequate funding has contributed to the slow development of HSR and explains why much HSR lacks quality or is often addressed to unimportant issues. Whilst lack of funds is undoubtedly the hard reality, almost everywhere the exceptions confirm the importance of other factors. Trained and experienced manpower capable of proposing, designing and carrying out HSR is scarce, especially in developing countries. Opportunities to obtain training locally are very limited and the multidisciplinary nature of HSR creates an additional difficulty. Two major issues are involved in strengthening national capabilities: what kind of trained manpower is required and how should it be produced.

There are also limitations to institutional capability. What is required is a network of institutions capable of training and carrying out research and entering into a dialogue with the health system at different levels on the priority issues to be addressed.

4.2.3 Deficiencies in the practice of HSR

The assumption is made that HSR is effective in bringing existing technology and science into health care and can improve the effectiveness and efficiency of health services. Is this true in practice? To date there has been an inadequate documentation of successes and failures.

Much HSR lacks relevance because it has been based on external perspectives often derived from Western models and inappropriate to the conditions of developing countries. Also many HSR projects and particularly those initiated by individuals and research centres have made little effort to link their research to action either before or after the research itself. This results in a gap between the research findings and their use to effect changes in the health system. It calls in question the relevance of research to managers and decision-makers. The failure to identify HSR priorities is not only a shortcoming of health and planning authorities who neglect to identify key areas in the health system requiring research. It is also a deficiency of the HSR community as well because it has not settled priorities: what priority for training? what criteria for selecting feasible and viable projects? what priority between studying the various levels of the system? which strategy for the building up of institutional capabilities? A further question is how much thought has been given by HSR to the possibility of co-opting biomedical and allied professions to adopt HSR within their framework?

5. RECOMMENDATIONS OF THE ADVISORY GROUP

The Advisory Group considered the current situation, problems and constraints affecting the wide-spread use of HSR. The Group recognized that countries were at different stages in the development and use of HSR, as a means of strengthening the managerial process for health development. The Advisory Group consequently formulated:

- A. Priorities and directions for future development.
- B. Strategies for the review, monitoring and evaluation of country-specific projects.
- C. A Plan of Action for the Advisory Group.

A. PRIORITIES AND DIRECTIONS FOR FUTURE DEVELOPMENT

1. Establishment of an effective HSR process at country level

The future development of HSR and its application must take cognizance of the features and objectives of individual countries, to ensure the linkage of HSR activities with the health system and its managerial process in each country. Future efforts must also take into account the varied stages of HSR development and its application prevailing in individual countries. To ensure the relevance and usefulness of HSR activities, the Advisory Group recommends that:

- 1.1 Research proposals that are being considered for WHO support, should be appraised in accordance with criteria relevant to the development of HSR in each particular country, as well as in relation to the intrinsic value and viability of the project itself.
- 1.2 The use of "decision-linked" approaches should be encouraged by WHO, in efforts aimed at strengthening and expanding HSR at country level to assist HFA;
- 1.3 WHO should develop a framework for the assessment of the current status of HSR in individual countries, its use and potential, and for the evaluation of progress in future years, again at country level;
- 1.4 Within the developed framework, WHO Regional Offices should be invited to collaborate with Member States in the development of suitable and acceptable indicators to assess progress with respect to HSR, and in the use of these indicators to make periodic assessments of and report on the WHO-supported efforts.

In view of the recognized differences in the stages of HSR development in individual countries, it is apparent that there is a need for support by WHO to individual country efforts, and for the provision of assistance, when requested, to ensure progress on the path of HSR development. WHO support and assistance should include the services of a team of consultants/advisers, who would be selected for their expertise and experience in the conduct and/or utilization of HSR. Members of this team could be sent by WHO in groups of two or three to provide technical assistance together with regional and national personnel. This team would act in a consultative capacity only and would not actually carry out the research themselves. Rather they would endeavour to support country efforts in increasing capabilities in the field of health systems and manpower research by giving clarification to issues and practical design and use of HSR in health planning, administration and health service delivery. There would be considerable advantage in members of the team keeping their association with WHO for a period of 5 years in order to build their skills and allow them to gain a close understanding of WHO objectives in HSR. This would also provide an opportunity for obtaining information on relative successes of alternative approaches in varied circumstances.

The Advisory Group therefore recommends that:

- 1.5 WHO should establish an HSR consultation/advisory team of expert and experienced people in the conduct and/or utilisation of HSR, for a period of 5 years, to provide support and assistance to member countries in their progressive development and adoption of HSR.

The realization of the potential benefits of biomedical and clinical research depend to a great extent on their relevance to the health problems of the community, and the capacity of the health system to take advantage of them. HSR is concerned with the improvement of health and improved delivery of health services, within available resources. Consequently, biomedical, clinical and health systems research have a complementary role in the attainment of HFA-2000, in individual country settings. HSR needs to be carried out as part of the overall health-related research effort, to enhance the direction and use of the findings of other research efforts. The Advisory Group recommends that:

1.6 WHO, through its structure and activities, should encourage the strengthening of the dialogue between researchers in biomedicine, clinical medicine and health systems, with a balance being maintained between the efforts required in different directions.

2. Manpower development and training

HSR requires a multi-disciplinary approach, which demands a combination of skills and perspectives, from a number of different areas of knowledge and experience. Reaching the ideal mix requires considerable effort. Many countries have a scarcity of trained researchers in HSR approaches and practice. The challenge is to establish a viable HSR capacity with the present human resources.

Training efforts need to be directed towards four main groups: existing health personnel, decision-makers (including administrators and managers of clinical services), teachers/trainers of health related subjects, and students in health related disciplines. In the short-term, training activities should be directed towards existing health personnel and those involved in decision-making, irrespective of their professional backgrounds.

In the longer term, two additional groups should receive attention. They are, first, teachers/trainers of health-related subjects, such as medicine, public health, nursing, health education, and social sciences; and, second, students in these health related disciplines.

In practical terms, this means the identification of health workers who can profit from the use of HSR approaches, and their training through the provision of courses, workshops, and the creation of opportunities for experience in undertaking research. This would involve formulating research proposals, the conduct of HSR, presentation of findings in a form acceptable to managers, and subsequent implementation.

Those involved in decision-making should have opportunities to increase their capacity to identify problems requiring research that would benefit from the application of HSR, to formulate questions in research terms, and to interpret research results and translate them into action.

Further, teachers/trainers need to relate their general disciplinary and scientific body of knowledge to HSR and translate it into HSR proposals and experience, so that their students can be introduced to HSR in an appropriate way.

Students should gain a basic knowledge of scientific method and the research process, to improve their capacity to use research in their later professional life, and allow them to specialize in its practice.

Manpower development and training in HSR will require focal points and/or networks, at country level. These focal points should be involved in HSR development in general, as well as having clear responsibility for manpower training and development. The requirements will vary in accordance with the current stage of development of HSR in individual countries. A range of options needs to be available: short courses/workshops at district, country or regional level, fellowships of varying durations within the country, and abroad, professional conferences and meetings, and relevant university and college curricula for those being trained.

At a minimum, training experience should include basic instruction in research methods and approaches, case study analysis, research practice in problem definition and research formulation, through to conduct of research and implementation.

The Advisory Group recommends that WHO supports and collaborates with individual country efforts, providing assistance when required in the:

- 2.1 review of manpower resources, and the requirements of countries, for training and manpower development in HSR;
- 2.2 development and organization of training activities; grants or fellowships for selected students; procurement of sources of funds;
- 2.3 development and provision of training material in consultation with individual countries and regions;
- 2.4 initiating discussion with professional associations, educational and other institutions about the inclusion of HSR in the curricula of basic and further training of health and health-related workers;
- 2.5 inclusion of appropriate HSR components in WHO sponsored training efforts in health system infrastructure, health promotion and care, disease prevention and control.

3. Institutional strengthening

The emphasis on institutional strengthening required to further develop HSR, and enhance its impact, is clearly dependent on the relative stage of HSR development, and the existence or absence of relevant structures and institutions. In some cases, existing structures and organizations can be further strengthened and/or broadened to incorporate an HSR focus. While in other cases, new institutions may be required.

The strengthened or developed structures should:

- identify HSR priorities,
- appraise HSR proposals,
- monitor and evaluate HSR projects,
- coordinate research projects proposed on similar themes, to utilize to the maximum effect the resources provided for HSR,
- strengthen national capability in HSR through training and development,
- encourage the use of HSR findings by relevant health authorities and providers of care,
- activate the development of management information systems.

The Advisory Group recommends that WHO support and assist countries, when requested, in their efforts to:

- 3.1 strengthen existing national health research committees to increase their capacity to promote and review health systems research;
- 3.2 expand the capacity of existing institutions, such as newly established National Health Development Centres, to promote, coordinate and use HSR;
- 3.3 encourage existing education, training, and research institutions and non-governmental organizations to give added emphasis to HSR in their activities.

4. Facilitating the utilization of HSR findings

To ensure that HSR findings are used, it is important that HSR conclusions are credible and timely. Findings should be communicated in language which is readily understood by decision-makers and the implications of implementation should be clearly stated. A dialogue should take place between decision-makers and researchers before research is begun, and at each subsequent stage of the research process. During this interaction, the management issues or problems at stake should be defined in specific terms, and the type of information that can be expected to emerge from the research should be visualized clearly. This should help the decision-maker not only to recognize the contribution that HSR can make to the managerial process, but also to have realistic expectations of HSR findings.

The Advisory Group recommends that:

- 4.1 WHO should emphasise the necessity for interaction between decision-makers and researchers, and for clear understanding of the type of information that can be expected from WHO-sponsored HSR projects;
- 4.2 WHO should encourage and facilitate the development or strengthening of mechanisms for interaction between decision-makers and researchers aimed at increasing the utilization of research findings.

5. Diffusion of information

A considerable amount of HSR has been carried out, but has not always been documented systematically nor made available to a large audience. There is need to provide managers and other potential users with convincing evidence that HSR is feasible and useful. It is also necessary to give current and future practitioners guidance on how HSR has been successfully conducted in a practical setting.

The Advisory Group recommends that:

- 5.1 WHO assumes responsibility for the compilation of a collection of case studies of how HSR has been used by decision-makers and providers of care, to improve the health of the community, the training and utilization of health manpower, and the impact of health services, within available resources;
- 5.2 WHO assume responsibility for the collection of approaches, methodologies and a list of relevant skills to help potential users in their application of HSR in varied situations and cultural settings.

The Advisory Group is aware that in accordance with previous recommendations, every programme should have an HSR element, and there are a number of WHO activities which have an HSR component. WHO is also currently supporting a number of approaches to promote HSR at country level. Accordingly, the Advisory Group recommends that in the short-, medium- and long-term:

- 5.3 WHO should periodically evaluate and document its HSR related activities, and use existing publications, such as the World Health Forum, the WHO Bulletin, and similar publications to disseminate this information;
- 5.4 WHO, through its Regional Offices, should encourage the establishment of newsletter-type publications on HSR in countries. These could be prepared by HSR focal points or by interested academic or other groups in individual countries or groups of countries;
- 5.5 As part of efforts to educate the community on the need to reorient health resources towards HFA-2000, relevant community organizations and mass media be used to involve the community in HSR and inform them of HSR findings and their application.

6. Support at Global and Regional levels

The Advisory Group sees the need for strong support at global and regional levels, in order to initiate and sustain the development outlined by the Group, and recognizes that there are only limited resources currently available for HSR at these levels. In the light of current needs and constraints, the Advisory Group made the following recommendations:

- 6.1 The HSR Advisory Group at global level should be continued and similar groups should be strengthened or created at regional levels to:
 - 6.1.1 set the basis for policies and guidelines for the activities of WHO in the support of the development of HSR at country level;
 - 6.1.2 monitor ongoing research and development projects at country level;
 - 6.1.3 collaborate in the evaluation of completed projects and synthesize the lessons learned and disseminate experiences.
- 6.2 The potential use of existing HSR components within various WHO programmes and activities should be maximized, through the strengthening of the HSR Core Group at Global level, involving exchanging information and evaluating experiences of country- or programme-specific HSR projects. Similar initiatives should be taken at Regional level.
- 6.3 To facilitate the funding of the development of appropriate HSR efforts, WHO should:
 - 6.3.1 develop an inventory of funding agencies, that can be contacted by countries seeking external support;
 - 6.3.2 allocate, from its regular budget, funds specifically for seed-money for country projects, to facilitate them in attracting more national and external support;
 - 6.3.3 initiate discussions with funding agencies about the status of HSR in their policies in the framework of WHO's Governing Bodies' decisions.
- 6.4 WHO should explore the necessity and feasibility of developing a network of Collaborating Centres in HSR in all regions, in order to give support to countries in the development and strengthening of HSR capabilities, including training.
- 6.5 WHO should strengthen and develop the HSR programme at headquarters and regional levels by redistributing existing resources within the Organization (manpower and funds) whenever opportunities arise and by allocating additional resources in order to effectively respond to countries' requests.

B. STRATEGIES FOR THE REVIEW, MONITORING AND EVALUATION OF COUNTRY SPECIFIC PROJECTS

Seven countries had submitted proposals of HSR projects to be supported by the Director-General's additional budgetary allocation for 1986-87. In order to review these proposals in the context of supporting the development of HSR in the countries, the Advisory Group developed a set of guidelines and criteria aimed at facilitating the viable development of HSR and applied them to each of the country-specific proposals. The subsequent amendments suggested to each proposal should be guided by these guidelines and criteria. The Advisory Group will during the period April 1986 - April 1987 assist the Secretariat to refine the criteria even further. This refined set of guidelines and criteria will be made available to the countries and can be used by them and by WHO to monitor the progress of the projects.

Guidelines and criteria

If country proposals are to be reviewed in the context of their potential for developing and establishing the conduct and use of HSR within the country as well as the usefulness of the project and the feasibility of producing credible and timely results, the Advisory Group recommends that:

1. Proposals should emanate from the country itself and have social relevance in terms of the health system, existing problems and available resources;
2. The project should have the potential for significant impact within the country;
3. Proposals should provide training opportunities and have potential for stimulating the growth of HSR structures and processes within the country;
4. It should have potential for developing HSR linkages within the country and the region;
5. There should be some evidence of commitment in terms of support, allocation of resources and utilization of findings from appropriate levels of management in the country;
6. The project should facilitate the raising of extra-budgetary funds by WHO and allow for collaboration with other funding agencies;
7. Research proposals should be technically valid in terms of the problem stated or issue being researched and feasible in terms of the available skills, funds, support facilities and time frame within which results are expected. This should take into consideration the experience of the principal investigator and the resources that can be obtained;
8. The research project should have potential for transferability to another country/region so that others can test the results so far obtained;
9. There should be explicit mutually agreed indicators for monitoring the progress and evaluating the eventual success of the project.

Review of Country-specific Proposals

Botswana

-a study of home and hospital deliveries, assisting the government in directing policy in terms of either emphasizing or de-emphasizing domiciliary deliveries;

-a follow-up study on the existing structures for community involvement to find out what other options are available for community organization especially in those areas where Village Health Committees cannot be reactivated;

-a study on the effectiveness of the Family Welfare Educator as a change agent, assisting the government in directing policy on the future role and role relations of the FWE.

The proposal from Botswana is impressive and appears to have considerable potential for success. There has already been considerable commitment in the country and the priority problems have been identified with interaction between managers and researchers. A considerable training component has been completed through HSR methodology workshops at national and district level. The research projects themselves have been clearly specified and there is a sufficient infrastructure to sustain the HSR process. Assistance might be usefully given to review the technical components of the projects to ensure the validity and feasibility in terms of time and resources and the eventual credibility of the findings.

Burma

-a comparative study of State/Division performance, organization and management in four States to determine if differences in staffing, management procedures and style and leadership characteristics effect ultimate service performance;

-township health services utilization study and procedures development for major improvement in health service coverage, efficiency and effectiveness within the township health services.

The proposal clearly defines the priority problems within the national context and outlines ways to solve the problems. It describes the shift in emphasis from quantity to quality and efficiency. Although the strategies for strengthening manpower and management at all levels are mentioned, they are not adequately articulated. In selecting primary health care and health information systems for attention the project addresses existing and long-term policies.

It allows for collaboration with another funding agency (DANIDA) and gives evidence of considerable commitment from the country itself. It has a training component that will facilitate development of HSR.

However there is a need to review the viability and validity of the project in terms of the skills and resources that will be available and in terms of the proposed methodology vis a vis the problems being researched.

Ivory Coast -Development of research activities on critical issues, as defined by the Evaluation of the National Strategy for HFA, e.g. in the areas of nutrition, behavioural aspects of diarrhoeal diseases, community involvement.

The proposal has been generated by the country and gives evidence that there has been an attempt to identify priority problems. The National Institute of Public Health is one of the WHO collaborating centres in Africa. However, there is insufficient information in the proposal regarding the health system, or the available infrastructure and resources. It will be necessary also to define the problems more sharply and to develop appropriate and feasible methodology.

Mauritius -the establishment of an HSR process at country level, including the identification of priority issues for research, the creation of HSR structures and mechanisms, strengthening capabilities for research.

This proposal has been generated by the country and spells out the steps for development of HSR in the country. However, it gives no information on the existing health system, priority problems of concern nor the available resources and infrastructure in the country. Also it does not give sufficient evidence of commitment from the country itself towards initiating and establishing HSR.

Senegal -Analysis of the appropriateness of training programmes of doctors, nurses and midwives vis a vis the health needs of the population;
-Evaluation study of the health centres.

Both proposals deal with critical issues in national health care policy and are explicitly designed to solve priority problems in the country. The research design of both proposals is sound and the proposed survey methodology appropriate. The health centre project will focus on a stratified sample of districts and the district team(s) will be actively involved in the implementation of the project. For the analysis of training programmes the collaboration of the different national training institutes has been obtained. Both projects have been generated and will be carried out by the Directorate of Research, Planning and Training within the Ministry of Health, which already has extensive experience and expertise in the field of health systems research. The two project proposals show promise to become successful case studies of HSR, from which other countries could benefit.

Sri Lanka -The establishment of an HSR Unit within an existing training institution and an HSR network. It will fund commissioned or invited projects of high quality and advise the Government of the outcomes of projects. It will carry out a series of training activities.

No specific research projects are identified in the proposal so it is not possible to assess whether there will be any impact regarding "improving access to high quality services". There is also no indication that policy makers and managers have been involved in the identification and prioritization of the problems. There might be little potential for subsequent utilization of findings. A substantial amount of the very large budget will be used for building physical infrastructure and acquiring manpower. This project will be jointly funded by IDRC. The role of WHO could be to collaborate and coordinate with IDRC and Sri Lanka to facilitate this new HSR unit and the proposed HSR network which will actively engage in viable research projects. WHO could play an active role in orienting these projects towards the priority concerns of policy makers.

Zimbabwe

-Evaluation of the pilot project on strengthening management at district level:

- a) To determine how effective the implemented recommendations from the national Workshop have been in strengthening management as well as to find out where weaknesses continue to exist and for what reasons and,
- b) To examine how the interventions were carried out, in order to contribute to the nationwide implementation of the project.

The proposals from Zimbabwe as they stand have a number of shortcomings. These have to be viewed against some positive features:

- Zimbabwe's enthusiasm for health system development coincided with WHO's interest in promoting implementation of HFA/2000. This has resulted in a good partnership between Zimbabwe and WHO;
- A new generation of enthusiastic and socially committed scholars is emerging - e.g. from the Zimbabwe Institute of Development Studies.

Taking these considerations into account the Advisory Group recommends that:

- Zimbabwe should be encouraged to develop its own research strategy, as perceived by the country with provision of active support by WHO;
- The Advisory Group, if requested, should assist Zimbabwe in improving the research design, including implementation, analysis and its use in health service development;
- If requested, the Advisory Group could work with scholars in Zimbabwe in building up a wider framework for HSR.

Recommendations:

In order to facilitate and support the development of HSR in these seven countries, the Advisory Group recommends that:

1. the proportion of the available funds allocated to each country should be in keeping with the potential for successful establishment of HSR;
2. each country should be supported in its efforts to improve its development of HSR. However, the type of support required varies considerably with the relative stage of development in each country. For those who are in the early phases of initiation of HSR, the regional office could play a role by encouraging and assisting the country to prepare a proposal that has sufficient data in it for an adequate initial review by WHO (with assistance from the Advisory Group). After such an initial review, an on-site technical visit could be a second method of further stimulating appropriate development as well as providing guidance on technical aspects of the research projects themselves;
3. whenever indicated and feasible, the exchange of experience and expertise between the countries on developmental as well as on technical aspects of the research projects should be encouraged and facilitated as part of technical collaboration among developing countries (TCDC).

C. PLAN OF ACTION OF THE ADVISORY GROUP

After reviewing its terms of reference, the Advisory Group decided to propose the following plan of action for the coming year:

1. Review revised and new HSR country projects and identify type of external support/intervention needed.
2. Technical visits to HSR country projects to advise on and monitor progress of the projects.
3. Develop a framework for a consultant intervention strategy, dealing with the environmental variables of HSR projects and processes at country level. A draft framework will be developed by the secretariat and circulated for comments and suggestions to the Advisory Group members.
4. Advise the HSR programme on any critical document or activity.
5. Reconvene after a year, by preference in a country where WHO is supporting HSR projects, to evaluate and monitor the progress made with the country projects.

Health Systems Research Advisory Group
First Meeting, Geneva, 7-10 April, 1986

*

WORKING DOCUMENT

PRESENT STATUS AND FUTURE DEVELOPMENT OF
 HEALTH SYSTEMS RESEARCH

Contents

	<u>Page</u>
1. Situation Analysis	20
1.1 Origins and raisons d'être	20
1.2 Scope and nature	20
2. Problems and Constraints	22
2.1 Assessment of the current status and development of HSR	22
2.2 Reasons for the slow penetration of HSR	23
2.2.1 General reasons	23
2.2.2 Specific reasons	23
the management and action process	
practical constraints	
deficiencies in the practice of HSR	
2.2.3 The management and action process	23
2.2.4 Practical constraints	24
2.2.5 Deficiencies in the practice of HSR	25
3. Next stages in the Development of HSR	27
3.1 Strengthening of HSR as a research/service strategy	27
3.1.1 Demonstrations of why? and how?	27
3.1.2 Co-option of bio-medicine	28
3.1.3 Determination of HSR priorities and strategies	28
3.2 Strengthening of HSR manpower and capabilities	28
3.2.1 Managing HSR	28
3.2.2 Training	29
3.3 Promotion through substantive research	29
3.4 Other HSR promoted by WHO	30

*

This working document was prepared for the meeting by
 Professor Raymond Illsley, Consultant to the Health Systems Research Programme,
 Division of Strengthening of Health Services.

Present Status and Future Development of HSR

1. Situation Analysis

1.1 Origins and raisons d'être

Formal WHO commitment to Health Services Research (HSR) came 10 years ago with a resolution of the World Health Assembly. This commitment was re-affirmed at the Alma Ata Conference on Primary Health Care in 1978 in the following terms:

"The Conference,

"Emphasizing that enough is known about primary health care for governments to initiate or expand its implementation, but also recognizing that many long-range and complex issues need to be resolved, that the contribution of traditional systems of medicine calls for further research, and that new problems are constantly emerging as implementation proceeds,

"RECOMMENDS that every national programme should set aside a percentage of its funds for continuing health services research; organize health services research and development units and field areas that operate in parallel with the general implementation process, encourage evaluation and feedback for early identification of problems; give responsibility to educational and research institutions and thus bring them into close collaboration with the health system; encourage the involvement of field workers and community members; and undertake a sustained effort to train research workers in order to promote national self-reliance."

The most recent, and positive affirmation came in the 1985 Report of the ACMR Sub-Committee on Health Research Strategy for HFA2000.

"Considering that the health needs of a particular country are specific to that country, and that the practice of health can be vastly different between countries and also within a given country, it has become apparent that the advances in science and technology can play only a limited role towards fulfilment of the goal of HFA/2000. The crux of the problem and the challenge for the future lie in the assimilation, adaptation and modification of the technologies already available so as to make them more relevant, appropriate and applicable to the needs of the community and the health care system into which they are to be integrated. The selection and utilisation of health technologies and the provision of health services appropriate to the prevailing needs and conditions constitute the field of health systems research (HSR)." (see Background Document ACMR27/85.5 Annex 4, para.1).

1.2 Scope and nature

There has been substantial agreement throughout the decade on the definition of HSR, its scope, and its distinctive characteristics. The salient characteristics were set out in the Background Paper prepared for the Executive Board in 1984 (see Background Document EB75/PC/WP/4).

Whilst it is not necessary to comment extensively on this description of HSR, certain features require emphasis because of their relevance to the current status of HSR and the problems encountered in its promotion and dissemination as a research strategy.

- (1) It is intended for, is indeed a prelude to, action. This is a characteristic shared with much traditional bio-medical and scientific research - the difference, apart from subject matter, lies in its time-scale, and its immediacy. The time-scale of traditional scientific research may be a decade or more, as precise findings are tested and fitted into a slowly developing (and occasionally receding) body of knowledge. HSR on the other hand identifies relevant knowledge and principles from a range of disciplinary areas and combines them in problem solving exercises, using

principles of combination derived from these disciplinary areas - and ultimately its own experience. The results of HSR are expected to be integrated into current and immediately planned policies, financial and administrative structures, allocation of resources, use of manpower, re-organization of services, etc.

- (2) Its subject matter is twofold. On the one hand it deals with quantities and distributions relating to individuals, groups, communities and areas - mortality, morbidity, health needs, health behaviour, socio-economic characteristics, lifestyles, levels of living, health resources, manpower, technologies. On the other, it deals with the structures and processes whereby health is produced, managed, and treated, the policies, priorities and balances whereby needs are perceived and assessed, resources mobilised and allocated and the administrative, managerial and professional procedures and processes whereby action emerges at national, district, local, clinical and individual levels.

It is important to recognise that neither of these subject areas, and most particularly the second, is the subject area of traditional scientific research. Indeed it differs so sharply that both bio-medical and social sciences, contrasting it with familiar practices, frequently ask, is it research? is it science?

Equally it is unfamiliar practice to the majority of decision-makers and managers whose expertise is acquired by experience and/or by general principles laid down in management science, who recognise choice as a combination of facts, values, and negotiations and may not know what issues are researchable, how research could contribute to understanding or how research results can be assessed, modified and applied.

- (3) The forces affecting health and health care go well beyond the health sector. If HSR were to confine itself to issues conventionally labelled 'health' (and more frequently called 'medicine') it would fall far short of applying existing science and technologies to understanding the origins of health and disease, the factors promoting or hindering prevention, treatment and care, or the discovery of effective and efficient means of optimising health. The point was well-stated by the Sub-Committee on Health Research Strategy for HFA/2000 (see Background Documents).

Some of the reasons for this difference are examined below:

Problems of poverty, nutrition, housing, transport and pollution, and life-style factors such as the abuse of alcohol, tobacco and other drugs, are now major determinants of health. Some of their consequences can perhaps be mitigated within the health sector but prevention lies in other sections of the society and of the economy - with government departments and local authorities, with taxation policies and industrial and commercial practices and with educational and social services. Policy in all sectors and at all levels needs to be analysed for its health implications and also for its equity implications, because it has become evident that health inequity derives from social and economic inequities.

- (4) HSR is inevitably a multidisciplinary activity. From the subject matter it follows that research staff would, depending upon the precise problem, be drawn from biomedical scientists, epidemiologists and demographers, sociologists, economists and political scientists and organisation and management scientists. Some experienced HSR researchers, but very few, have acquired sufficient knowledge of one or more disciplines than their own that they can substitute for experts in simple exercises or alternatively can recognise when they need expert help. For the most part, however, HSR means bringing scientists of different skills to work together. Scientists of different 'persuasions' often find it difficult to accept, share and integrate each others perspectives and knowledge. And in many circumstances the practical difficulties of mobilising the necessary skills are themselves formidable.

2. Problems and Constraints

2.1 Assessment of the current status and development of HSR

Parallel with consensus upon the importance and the nature of HSR, there exists equal agreement on two further points:

1. that implementation of the policy of promoting HSR as an integrated instrument of health service management will be difficult;

2. that progress to date has been limited and patchy in geographical coverage, in quantity, quality and impact.

Reports from the Regions (see for example, Health Services Research, the proceedings from a 1984 PAHO workshop in Mexico or the 1984 Report of the WPRO sub-committee on Health Systems Research) have been used to assess progress. From such reports it is difficult to assess the quality and impact of HSR nationally, but they leave little room for doubt that volume has increased sharply over the decade, most in the developed countries but also in developing countries.

Non-events are not reported, half-hearted attempts and failures rarely get publicity, so it is difficult to estimate the extent of HSR inadequacies in terms of quality and impact. Nevertheless it should be noted that reviews and inventories of HSR are already being produced. These include reviews from WHO Regions, but also national inventories e.g. those from Thailand, India and Nepal.

From the reviews it has been possible to call the following critical comments on quality and impact. Whilst deriving at about the same time from very different and distant parts of the world there is considerable overlap in their comments. Written by individuals or groups committed to HSR they are self-critical assessments based on experience.

The majority of criticisms relate to relevance:

- not based on national/local health policies and priorities not -realistically related to local health resources
- based on external perspectives often derived from developed countries but inappropriate to conditions elsewhere
- reflecting interests of researchers rather than those of health service decision-makers
- absence of clear objectives.

Other criticisms related to methodology and the conduct of research:

- over-simplification of issues and of methodology designs likely to produce misleading, unreliable findings, too descriptive (even banal) rather than analytical
- poor communication among researchers
- poor communication between researchers, funders and services
- inadequate briefing of field staff
- untrained personnel/learning by doing/blind leading blind
- budgets inadequate for design.

Finally, perhaps the strongest criticisms relate to utilisation:

- results not reported or not widely reported
- results not adequately described or interpreted
- results too late or too unreliable for utilisation
- failure to implement findings.

Failures in utilisation are usually referred back to failures in initiation and planning, e.g. the research was irrelevant to policies, priorities or needs; was not negotiated with decision-makers who themselves were not incorporated into the research process; was not part of any agreed HSR programme.

This critical assessment should cause no surprise. Whilst it drew primarily on reviews from developing countries, its findings would be completely familiar to HSR practitioners in developed societies, including those with a longer HSR history, relatively plentiful resources and a large body of experienced scientists. Undoubtedly the problem is intensified in developing countries short of resources and manpower and overloaded with acute health problems. However, the existence of a similar 'application gap' in otherwise favourable circles raises further fundamental questions about the relationship between HSR, the scientific and research communities and the organisational structures responsible for health policy and health services.

2.2 Reasons for the slow penetration of HSR

2.2.1 The 1985 SEARO Report also notes the wide acceptance of the view that it is not a technology gap, but an application gap that hampers and delays health development and notes that it is the acknowledged and urgent task of HSR to fill the gap. It goes on: "The logic of this argument is shattered by what we observe in reality: biomedical and clinical research everywhere in the countries retain their overwhelming predominance, seldom do the mechanisms or arrangements that would gradually create an "appropriate HSR mentality ... , exist and properly function; and the resources allocated to HSR, even in the best circumstances, are the crumbs of what is available." Some of the reasons for this difference between rhetoric and reality are examined below. Before dealing with specific points one general observation seems appropriate. HSR has powerful supporters. It received legitimation at Alma-Ata and it is sinful to question Alma Ata. WHO has given it strong support in subsequent statements. On reasoned rational grounds it is highly favoured by international and national figures in public health who see it as a powerful tool for shaping and managing national and local health systems. Others may accept this received wisdom but at the same time they may well:

- be unfamiliar with its nature and its potential contribution;
- lack the knowledge to perceive when and how it could be employed;
- believe that, like other research, it has little meaning for their task.

The supportive statements of the public health establishment may therefore be accepted but not result in action. Yet the development and application of HSR depends upon managers, decision-makers, clinical and nursing personnel at all levels and it is from such professionals carrying out their day-by-day duties that ultimately the flow of HSR must emerge. It is a point for discussion how far the necessity and knowledge of HSR has penetrated health systems, either by changes in the attitudes of managers and health personnel or by leading to the adoption of structures and procedures which incorporate HSR principles.

2.2.2 The more specific reasons for delays in the development of HSR and for doubts about its quality and impact may be divided into 3 groups:

- the management and action process
- practical constraints
- deficiencies in the practice of HSR.

2.2.3 The management and action process

(a) The SEARO report mentioned above noted a lack of research awareness in the decision-making and managerial world. "Also generally deficient, especially among health service workers, is an inquisitive attitude to uncover problems and seek solutions, an ability to put oneself continuously in question in the search for greater effectiveness and efficiency. Much could be done by a health planner, a programme manager, a hospital director or health centre chief who possessed this attitude of mind. Unfortunately, such an attitude of mind seems to be neither encouraged nor rewarded and may even backfire against the person who shows it."

The term health service 'management' covers a wide spectrum of professions operating at many levels and scales of decision-making, administration and supervision, including those mentioned in the above quotation. They arrived at 'management' by very different routes and with very different educational experiences and acquired skills. Their work requires a mixture of values, negotiation, experience, routine and regulation plus the willingness and ability to take decisions, in the absence of relevant information, using a minimum of time and resources. As sociologists have shown decades ago and demonstrated repeatedly in subsequent years, 'decisions' are rarely taken on the basis of systematic principles and a comprehensive review of data and alternatives. Nor, in many situations, are data and systematic principles relevant to political situations and pressures and the short term perspectives they may engender.

HSR should address itself seriously to the question, 'why should managers adopt a research perspective?' and should examine and demonstrate how HSR can contribute to the needs and objectives of managers, the need for information for more efficient allocation of services and for time saving and cost cutting procedures which nevertheless retain effectiveness.

(b) Research, in the eyes of its proponents, is good and useful. It may not, rightly and wrongly, have that image in the minds of action-oriented decision-makers and managers. It can be seen as:

- an esoteric costly 'academic' exercise
- a barrier to action or an excuse for postponing it
- a threat to existing plans and programmes
- a means of diverting resources from one service or purpose to another.

Taking a long-term synoptic view these perceptions may be untrue and unjustified. If they exist, however, they will influence action. HSR must therefore find ways of demonstrating that research can and will contribute to the practical concerns of management. It must also seek new ways of inserting itself into the structure of decision-making so that researchers and managers do not exist as two separate communities. HSR may have a special problem (see below) in convincing that substantial proportion of managers who have a bio-medical background that it is research and that its findings are reliable.

(c) Bio-medical dominance of the research field and of research funds is often quoted as one reason for HSR's slow penetration. This is undeniably correct and is unlikely to change. Bio-medical science has made great achievements, acquired great prestige and has consolidated its position in power, funding and knowledge. Individuals potentially concerned with whether and how HSR should be initiated and pursued often have backgrounds in bio-medical research.

HSR funding agencies have learnt to protect their funds against bio-medical applications dressed in HSR clothing. HSR, however, has not yet managed widely to interest bio-medical scientists in its own perspectives, methods and contributions. Yet as clinical service managers many could profit from HSR application. It should be an urgent task for HSR to demonstrate the clinical service benefits to be derived from its adoption.

2.2.4 Practical constraints

Three major constraints are widely cited:

(a) Inadequate HSR budgets

It is true that only a few countries earmark part of their regular WHO or national budgets for HSR - that the funds made available are usually very small and insufficient. This may be one reason why much HSR lacks quality or is addressed to petty issues.

There are, however, some situations in which the amount of money available for HSR exceeds the number of good projects available. Whilst lack of funds is undoubtedly the hard reality almost everywhere the exceptions confirm the relevance of other factors.

(b) Manpower

Trained and experienced staff capable of proposing, designing and carrying out HSR are scarce, especially in developing countries. Opportunities to obtain training locally are usually very limited. This problem follows inevitably upon the newness of HSR, its shortage of funds, and its multidisciplinary nature. Two major issues are involved which require debate. What kind of trained manpower is required and should be produced? And how should they be produced? The problem is not an unfamiliar one in the 20th century as new disciplines or bodies of professionals have been created at the edge of their own and other disciplines. The developing science usually makes use of practitioners of the disciplines out of which it grew and of professionals with which it is associated in its activities. For many years and in most countries HSR is likely to be composed of epidemiologists and social scientists and of a range of health workers collaborating with managers and decision-makers. The situation is well expressed by Carl Tayler in *The Uses of Health Systems Research* (Public Health Paper 78): "Of the six categories of research approaches listed in section 2, the first three can best be done within the health system; the rest are more likely to need special studies by an academic institution ... It would be desirable for research to become part of regular activities in the health system, but for this to happen technical skills should be developed or consultation made available so that any health or community worker can carry out or participate in appropriate studies. Similarly, research and academic institutions need to maintain a solid working contact with field realities in order to ensure the relevance of their research projects."

In the long run a separate discipline focused on HSR may develop: this will depend on national conditions and is not currently a matter with which WHO need concern itself.

The second question, how will trained workers be produced, also presents alternatives. The advice commonly given, to learn by doing, is often countered by the advice that nobody profits from the blind leading the blind. Some centres of quality exist for HSR training and many more could easily be adapted in developed countries if the training centre strategy were adopted. There are dangers; it can be costly; trained workers sometimes remain in the country of training and do not return to apply their expensive knowledge; and the unrealistic "European" perspectives mentioned in some documents have to be avoided. The oft-regretted practice of trained medical doctors returning to developing countries to practice high technology medicine in expensive hospitals resulted from the training centre philosophy.

The requirement is for professionals trained in a range of disciplines, able and willing to work flexibly and collaboratively at many levels of research design, conduct and evaluation. They must also be knowledgeable about their national/local health system and its procedures and be able in co-operation with management to translate problems into research and findings into action. In a few countries these requirements can be adequately met. How it can be achieved elsewhere is a point for discussion.

(c) Limitations of institutional capability

This is largely the same problem at the collective level. The requirement is for research institutions or networks of institutions capable of training and carrying out research and entering into a dialogue with the health system at different levels about how policies, priorities, services can be promoted by research means. The point for debate is what approximation can be made towards this requirement in countries with a few sparsely scattered individuals and/or institutions.

2.2.5 Deficiencies in the practice of HSR

The natural temptation is to blame external circumstances - lack of money and manpower, lack of inquisitive managers, etc. - and with some justification. External constraints, however, can only be removed with great difficulty. HSR should look at its

own deficiencies, not only because they might more easily be remedied but because their rectification might help to loosen the external constraints.

(a) Does HSR work? Does it pay?

The assumption embodied in HSR policy documents at WHO and national policy levels is that HSR is effective in bringing existing technology and science into health care and that it results in more effective and efficient services. The logic is undeniable but is it evident in practice? Can the successful application of HSR be demonstrated at each of the levels and in each of the policy and service areas at which it is aimed? If it can be demonstrated, has this been done sufficiently, and has such demonstration reached health service managers and workers in an acceptable form?

There are:

- a few how-to-do-it textbooks
- a lot of science/academic-oriented monographs and case studies in book form
- a number of journals
- an increasing number of factual inventories (title, name of investigator, funding agency, duration and synopsis)
- and a very few simple imaginative descriptive works (e.g. the Uses of Health Services Research by Carl Taylor).

(b) Guidance into new territory

The previous point dealt with the credibility of HSR, i.e. does it work? Potential users have many other questions about how HSR is carried out. The image of research can be formidable and off-putting for reasons mentioned above. At the other extreme decision-makers may see descriptive work on minor problems and ask "Is this research?" HSR spans a huge range of operations from large-scale intervention, controlled trial and evaluation on large populations over many years to the focussed manipulation of familiar statistics or even the culling of experience from the existing HSR literature. In countries with well-developed funding systems this presents no problem at national level because researchers' portfolios are bursting with costed proposals. This is not so true at local/district level even in developed countries and is not applicable at any level in many developing countries. Managers/decision-makers need guidance into unfamiliar territory, not with heavy textbooks but with the nearest equivalent to direct counselling.

(c) Failure to link research to the decision process

This is not simply an HSR deficiency. Various critics remark that it is difficult to integrate research in key areas of the national health programme if no such programme exists or if it has failed to identify its priorities. The managerial diffidence or hostility mentioned above is also relevant. On the other hand, many HSR projects and particularly those initiated by individuals and research centres make no effort to link their research to action either before or after the research itself. Frequently this results from intellectual or physical distance between researchers and relevant decision-makers. The demand of some reviewers that no HSR should be initiated which is not linked to action in the first place is perhaps too rigorous - some unlinked research has a demonstration value and in some circumstances if all research had to be linked, no research would occur. Nevertheless, when HSR is expected to fill the application gap, the sentiment is appealing. Similar remarks apply to the evaluation of research-led changes.

The failure to link research to decision and decision to evaluation is not surprising. Much research, particularly in the social sciences, has prided itself on its detachment and seen this as a pre-requisite of scientific objectivity. For many reasons the worlds of research and action have been separate. Ten years is a short time in which to build new perspectives and relationships.

(d) Failure to identify HSR priorities

This is an observation directed at two different targets. On the one hand it refers to failure to identify those key areas of health system functioning which require early and/or more heavily-resourced research. It is thus directed largely against health and

planning authorities. Sometimes, however, it is directed against the HSR community because "it" has not settled its own priorities:

-What priority should be given to teaching?

-Who should be taught? Should it be research professionals, health workers or management personnel, and should the training be done by teaching, by doing, or by a combination of both?

-What priority should be given to the building up of institutional capability. Should this be based on universities, on more dedicated research centres or on health departments?

-At the research level the choice of priorities lies between the various levels of the system, e.g. service, district, planning, policy.

-Should any take precedence? Do some occupy strategic positions for the development and implementation of HSR? For WHO at global and regional level is it effective to try and support all countries and all levels? If not, what criteria of selection could be applied.

Whether the failure lies with health authorities or with HSR, the difficulty in setting priorities stems from the lack of adequate resources to tackle a huge collection of problems and from the uncertainties inevitable in introducing new concepts and practices.

3. Next stages in the Development of HSR

This section takes up the problems and constraints discussed above and assesses the implications for future action. There are, of course, no simple or universal solutions. The implications differ at global, regional, country and district level. Existing resources in funds, manpower, institutions and the past and existing volume of research differ vastly between countries. The charting of such resources across countries must be a priority for WHO globally and regionally as a pre-requisite of any systematic support programme. The present report cannot deal with issues at such a detailed level.

3.1 Strengthening of HSR as a research/service strategy

3.1.1 Demonstrations of why? and how?

Despite critical assessments of HSR's progress there is already a great volume of successfully completed research - in many countries and at all levels of the health system. Much has only been written-up for internal circulation within a limited local organisation, much is hidden in what Dr Ramalingaswami described as "the fugitive literature" - journals and documents not designed for and not reaching the world of management and action; others, appearing in professional journals are likely to address conceptual or methodological issues relevant only to experienced research workers and academics. The basic requirement is for a flow of project descriptions which:

(a) describe the research process in simple terms, shorn of unnecessary detail but providing the steps from objectives, through methods and conduct to analysis, feedback, action and evaluation;

(b) discuss how the research fits into the local health programme and what benefits it has or will achieve for health care;

(c) comment upon the implications of the findings for similar issues and research in the same locality and in other geographical areas.

Such a production could take many forms (newsletters, journals, books of selected readings) and could be produced in many places. Given the already large output of research such publications would be selective, containing examples of practical value and scientific merit, covering the range of HSR from inter-sectoral action to local service

delivery, designed to breakdown the barriers between management and research and to provide what has been described as a 'road-map' into this new activity.

Initial responsibility for promoting such work should be at global level but the ultimate aim should be a 3-tiered effort starting at national level and followed by regional and global selections.

3.1.2 Co-option of bio-medicine

The dominance of bio-medical sciences in research funding and practice will not go away. It is a constraint within which HSR will have to work. More thought should be given, however, to the possibilities of co-opting bio-medical and allied professions to adopt HSR within their framework. The possibilities vary greatly from country to country. Community medicine, medical sociology and health economics already occupy a place within the undergraduate medical curriculum. For clinicians in charge of area services HSR can, depending upon budgetary arrangements, increase their effectiveness and efficiency. Perhaps the bulk of HSR is initiated by clinicians.

Two steps might be taken:

- (1) Consideration should be given to strengthening the place of HSR within medical education. On previous occasions WHO has convened expert committees to examine the inclusion or strengthening of particular themes in the training of doctors. The case for HSR could be argued.
- (2) Discussions globally and nationally should take place with research funding agencies about the status of HSR in their policies.

3.1.3 Determination of HSR priorities and strategies

This issue will be discussed at the end of the report.

3.2 Strengthening of HSR manpower and capabilities

3.2.1 Managing HSR

With scarce resources the objective must be flexibly to make maximum use of what exists rather than accept formulae which may be unusable in many, and particularly in the most needy, areas. Several possible steps are envisaged below; the steps however are less important than the overall aim of bringing together and achieving communication between the essential participants.

(1) Identification of key types of personnel for involvement in HSR at action levels. Bearing in mind the need for research to grow out of health system problems and for research to be linked to action, the first priority is to identify at each level, of policy and planning and delivery those managerial/administrative professionals who are the potential customers and users of HSR. In the first instance their research competence is less important than their research sympathy, or their desire to ask questions, and their ability to implement whatever findings may emerge.

The other participants are the research workers, drawn from whatever institutions exist. Whilst there will most frequently be Universities and research centres, the innovative service chief, trained in research of another kind, can be a powerful initiator and leader.

National circumstances are so varied that in some countries this will be a few persons hardly amounting to a viable team. In others where HSR is already functioning well the step becomes irrelevant. WHO regional staff through their use of sub-committees and focal points have already begun this process of identification.

(2) The second necessary step must be the creation of structures and machinery at global, regional, national, and district level whereby such key personnel meet and establish common ground.

This stage has only been reached patchily and erratically in countries with a high volume of health systems research. And in very few do personnel from outside the health service sector participate. The organisational framework will be varied, from advisory committees on HSR, through professional associations to task forces and focal points. The objective however should be to groups which stay together long enough to establish patterns of contact and collaboration.

(3) Groups without agenda cease to meet. At global, regional, country and district levels, however, there are a series of tasks needing constant attention. These include priority setting, project determination, research planning, fund raising, publication and publicity, institutional support and research training. The third step envisages that groups of key personnel such as those described above be asked to undertake these tasks. The main purpose is to ensure that such tasks are carried out, like HSR itself, collectively. Division of labour and specialisation are essential but only within a co-ordinated framework. Training conducted away from the scene of action may produce qualifications but lack application. Management outside such a framework means little and poor HSR. It is only within such a framework that health policies and plans can be examined for their research implications and that action can be built into research. WHO should consider how far it could assist teams at national and district level by producing guidelines and the material relevant to priority setting and the identification of the research needs implicit in health plans.

3.2.2 Training

The usual options are short courses and workshops, travel visits, and long-term formal study at training centres, usually universities and research institutes. All are valuable, all have drawbacks. Costs and the need for numbers and for quick results constantly lead to the recommendation of 'learning by doing', which can have even greater drawbacks. The need is for a variety of options and for knowledge (and funds) to feed 'students' into the learning process at the appropriate times and for the right periods of time. If some group framework such as that described above existed it would serve two training functions:

- (1) to provide experience of 'learning by doing' within a collectivity which included some experienced professionals;
- (2) to advise upon, to create, or to manage the arrangements for training, including the secondment of students to training centres.

Perhaps more thought should be given to intermediate steps, e.g. the planning and conduct of local HSR interspersed with visits to training centres for experience and advice related to their project. Health economists in the UK provide correspondence (diploma) courses for health administrators with occasional week-end workshops.

The strengthening of local training institutions is clearly preferential to the alternative of sending students to distant centres.

3.3 Promotion through substantive research

3.3.1 At global level WHO has limited funds for the initiation and conduct of HSR in member countries. Funds are never likely to be substantial. WHO staff have very limited time for the initiation and monitoring of research. It is therefore essential that priorities be established about the objectives, distribution, conduct and monitoring of such a programme.

3.3.2 The first set of priorities relate to WHO objectives in initiating and involving itself in such research. These questions have arisen in the preceding discussion. Is WHO interested in:

- getting research started in countries with poor HSR achievements?
- in bringing managers and researchers together?
- in research as a demonstration exercise?
- in research as training?
- the substantive issues?

It is inevitably interested in all these questions and they are rarely mutually exclusive. Particular decisions however could have a sharp impact upon the nature of the programme. The order in which they have been listed could be regarded as a hierarchy of priority consistent with the situational analysis and the discussion of problems and constraints.

3.3.3 The second set of priorities concern the criteria for project selection. Should these be:

- the country's need for external HSR support?
- the linking of research with action?
- the existence of at least a minimum HSR infrastructure?
- the strength of the design?
- the training potential of the project?
- the importance and/or urgency of the problem?

Are there other important criteria? What should the hierarchy of priority be? Again, a different order of priority could have major effects on the total programme.

3.3.4 The third set of questions concerns the depth and nature of WHO's own involvement:

- What priority does this activity have as against its other strengthening tasks?
- How active can it be in searching for the best research opportunities?
- Should it limit the programme to some defined set of countries?
- Can it monitor the projects stage-by-stage?

By definition, this programme of projects entails high risks of failure. Countries are likely to need more help than WHO can give. Thought should be given to setting up a panel of experts who share the objectives of WHO programme staff and can be called upon where necessary to provide help.

3.3.5 In some circumstances there may be alternative ways of promoting substantive research. The usual method is to award funds for the conduct of a specified project. Where at least one experienced institution, or local (non-HSR) funding agency exists funds given to them could be channeled outwards to a clientele of organisations, facilities and individuals. This can frequently be a highly economical way of encouraging research and simultaneously creating an interest group - depending upon the reliability of the intermediary institution.

3.4 Other HSR promoted by WHO

One important role of the WHO programme of HSR is to co-ordinate the Organisation's effort. Many more projects are promoted this way than can be initiated by the HSR programme manager alone. Thought should be given to ways in which the objectives of the HSR programme can be furthered by selective support through this wider research effort.