

PROMOTING HEALTH SYSTEMS RESEARCH

AS A MANAGEMENT TOOL

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Health Systems Research Training Series

Volume 1



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HSR Training Series

Volume 1: Promoting Health Systems Research as a Management Tool



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For Decision-makers

Promoting Health Systems Research as a Management Tool

Health Systems Research Training Series
Volume 1

Ann Brownlee

iii

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Abstract

This is the first volume of a five-volume Health Systems Research (HSR) Training Series that has been compiled by a technical working group supported by IDRC and WHO. Each volume is directed toward a particular target group and each addresses specific aspects of the HSR process. Volume 1, for decision-makers, focuses on the need to promote the uses of HSR as a management tool. Strategies for promoting HSR among policymakers and senior managers are described. Based on an analysis of experience in developing countries in the last decade, this volume presents an overview of how HSR can lead to better decisions and how the development of an effective research program can be fostered at country level.

The other volumes in the series are: Volume 2, a course outline in modular format, that deals step-by-step with the development of an HSR proposal and field testing (Part I) and with data analysis and report writing (Part II); Volume 3, a review of strategies that can assist universities or research institutes to initiate and implement multidisciplinary HSR programs; Volume 4, a course outline in modular format designed to provide research managers with the skills for managing a program of HSR; Volume 5, a course outline in modular format, designed to assist those whose primary responsibility is organizing and conducting training courses for the relevant target groups.

The series is designed to support a program of essential national health research. Users are encouraged to examine the materials critically and to choose or adapt them to their particular needs.

Résumé

Ce volume est le premier d'une collection de cinq volumes de formation à la recherche sur les systèmes de santé (RSS) qui ont été rassemblés par un groupe de travail technique financé par le Centre de recherches pour le développement international et l'Organisation mondiale de la santé. Chaque volume est destiné à un groupe particulier et chacun porte sur certains aspects particuliers de la recherche sur les systèmes de santé. Le volume 1, destiné aux décideurs, traite de la nécessité de promouvoir la RSS comme outil de gestion. Y sont décrites les stratégies propres à cette promotion auprès des décideurs et des cadres supérieurs. Fondé sur une analyse de l'expérience des dix dernières années dans les pays en développement, ce volume présente un aperçu de la façon dont la RSS peut aboutir à la prise de meilleures décisions et à la mise sur pied d'un programme de recherche national efficace.

Les autres volumes de la collection sont les suivants: le volume 2, sous forme modulaire, est le volume central qui expose, étape par étape, la manière de formuler une proposition de RSS et de la mettre à l'essai (partie I) et d'analyser les données et de rédiger un rapport (partie II). Le volume 3 vise à aider les chercheurs de formation universitaire qui travaillent dans des universités ou des instituts de recherche et qui veulent promouvoir des programmes multidisciplinaires de RSS et y participer. Le volume 4 est un guide de gestion d'un programme de RSS. Le volume 5 aidera les personnes chargées d'organiser et de donner des cours de formation aux divers groupes cibles.

Ces cinq volumes ont pour but d'appuyer la création d'un programme national de recherche essentielle en santé. Les personnes qui s'en serviront sont incitées à les examiner d'un oeil critique et à en tirer ce qui répond à leurs besoins ou y répondrait après adaptation.

Resumen

Este es el primero de cinco volúmenes de una Serie de Capacitación sobre Investigación de Sistemas de Salud (ISS), compilada por un Grupo de Trabajo Técnico que recibió el apoyo del Centro Internacional de Investigaciones para el Desarrollo (CIID) y la Organización Mundial de la Salud (OMS). Cada volumen está dirigido hacia un grupo particular y trata de aspectos específicos del proceso de ISS. El Volumen 1, concebido para funcionarios ejecutivos, centra su atención en la necesidad de promover los usos de ISS como instrumento de gestión. Asimismo, describe las estrategias para promover la ISS entre ejecutivos y gerentes principales. Basándose en un análisis de las experiencias acumuladas en los países en desarrollo en la última década, este volumen presenta una panorámica del modo en que la ISS puede ayudar a tomar mejores decisiones y la manera en que se puede patrocinar a nivel de país el desarrollo de un programa de investigación eficaz.

Los otros volúmenes de la serie son: Volumen 2, en formato modular, elemento fundamental que trata progresivamente del desarrollo de una propuesta de ISS y su prueba sobre el terreno (Parte I). Asimismo, se trata en este volumen el análisis de datos y la redacción de informes (Parte II). Volumen 3, concebido para ayudar a investigadores con educación universitaria trabajando en universidades o institutos investigativos y que deseen promover y participar en programas multidisciplinarios de ISS. Volumen 4, guía para la gestión de un programa de ISS. Volumen 5, servirá de ayuda a aquellos cuya responsabilidad primaria sea organizar y dictar cursos de capacitación para los grupos meta pertinentes.

La serie está diseñada para apoyar un programa esencial de investigación sobre salud a nivel nacional. Se exhorta a los usuarios a examinar críticamente los materiales y/o adaptarlos a sus necesidades particulares.

ACKNOWLEDGMENTS

A few years ago this volume could not have been written, as little had yet been done to develop and test new strategies for promoting the involvement of decision-makers in health systems research (HSR). Several individuals, in the last decade, have played an essential role in both emphasizing the critical importance of "decision-linked" or "utilization-oriented" HSR and experimenting with strategies for the effective involvement of decision-makers. W.A. Hassouna quite early began working with colleagues in the World Health Organization's regional offices for the Eastern Mediterranean (EMRO) and for South-East Asia (SEARO) to design and implement consultative meetings, task forces and other strategies to involve top-level managers in HSR. Yolande Mousseau-Gershman was instrumental, within the Project for Strengthening Health Delivery in West and Central Africa, in foreseeing the need for decision-maker involvement in the research process and helped design and implement new strategies within that program. Indra Pathmanathan, who spearheaded the development of a comprehensive HSR program in Malaysia, recognized the importance of HSR as a managerial tool and worked with colleagues to involve both top- and mid-level managers in the entire research process in creative ways. Corlien Varkevisser collaborated with others in the southern African region to design and hold a series of consultative meetings on HSR for leaders of key organizations which became an essential element in that region's HSR program development process. Many others, who cannot all be mentioned here, also began working on similar activities elsewhere.

Several individuals played an invaluable role at the global level in fostering and supporting the development of these new strategies. Yvo Nuyens, as head of the WHO Programme on Health Systems Research and Development, had the vision to stress the essential role of HSR in health development and was instrumental in encouraging and supporting the use of many of the strategies mentioned above. In addition, he successfully nurtured the idea of this series of training materials, encouraging the inclusion of a volume focused on decision-makers. Ascher Segall contributed in a major way to the global awareness of HSR's potential contribution to decision-making, through the development of WHO's initiative for "Improving Health Care Through Decision-Linked Research." Annette Stark also played an essential role in making this series a reality, through her courage in providing IDRC's full support for what proved to be a much larger effort than initially envisioned and the critical technical assistance and encouragement she provided.

Many of the people mentioned above, as well as others, provided valuable assistance as this volume was being written. Members of the Technical Working Group contributed many of the ideas and documents that were used in the analysis and provided useful ideas, insightful feedback, and support. Ascher Segall and W.A. Hassouna served as consultants and contributed valuable insights from their experiences. John Bishop, A.W. Sajid, Evelyn St Onge, Samuel Wishik, Miguel Gonzales Block, and Myrna Seidman each reviewed the draft manuscript and provided helpful suggestions.

A major contribution was made by all the organizers, facilitators, and participants, named and unnamed, who participated in the various initiatives that provided the experiences on which this volume is based. Finally, a great deal of effort was devoted to word processing, editing, formatting, proofreading, indexing, and all the other painstaking tasks involved in publishing by another group of dedicated people.

To all of the above, thank you.

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FOREWORD

The ultimate goal of any national health-development process is to enable its people to reach a level of health that at least enables them to participate actively in the social and economic life of the community in which they live. To attain this objective, existing health systems must be redirected to achieve equitable reallocation of resources for health - total coverage, increased accessibility to primary health-care services, and effective referral to secondary and tertiary levels of care. It is also relevant to develop appropriate mechanisms to promote effective community participation in the promotion and maintenance of health.

Such redirection of health systems may require changes in health-care planning and government policy; in the organization and administration of health and related services; in the financing and budgeting of systems and procedures; and in the selection and application of appropriate technology.

To effect the necessary changes, countries must decide on the best approaches to adopt. This requires detailed and accurate information on needs, possibilities, and consequences of recommended actions. Such information is often lacking, inadequate, or unreliable. As a result, decisions are based on assumptions and unjustified conclusions and often result in inappropriate policy choices, the consequences of which are only discovered after implementation.

Research is a systematic search for information and new knowledge. It serves two essential and powerful purposes in accelerating advances in health. First, basic or traditional research is necessary to generate new knowledge and technologies to deal with major unresolved health problems. Second, applied research is necessary to the process of identifying priority problems and to designing and evaluating policies and programs that will be of the greatest health benefit, using existing knowledge and available resources, both financial and human.

These two purposes together, in what has now been defined as essential national health research, must catalyze the generation of new knowledge and the application of existing knowledge, an essential link to equity in development.

During the past decade, concepts and research approaches to support health development have evolved rapidly. Many of these have been described by specific terms such as operations research, health services research, health manpower research, policy and economic analysis, applied research, and decision-linked research. Each of these has made crucial contributions to the development of Health Systems Research (HSR) but their limited and highly focused approaches to problem solving have resulted in their being integrated within the scope of HSR while at the same time describing their unique contribution to health in development.

HSR is ultimately concerned with improving the health of a community, however defined, by enhancing the efficiency and effectiveness of the health system as an integral part of the overall process of socioeconomic development.

The aim of HSR is to provide health managers at all levels with the relevant information that they need to solve the problems they are facing. The participatory nature of such research is one of its major characteristics. It is argued that the involvement of all parties - the community, health-care managers and decision-makers, and researchers - in the definition of the problem helps to focus the investigation and to enrich the quality of the data collected. Similarly, participating in all stages of the research is essential if feasible and acceptable solutions to problems are to be implemented and sustained at community, district, regional, or national level.

Because HSR addresses health problems in the broad context of social, economic, and community development, research inputs from many different disciplines are required. These include demography, epidemiology, health economics, policy and management sciences, social and behavioral sciences, statistics, and some aspects of the clinical sciences. Each of these disciplines has developed specialized research approaches in its efforts to provide information that will support health development, but it is increasingly evident that the problems that are addressed by HSR require a combined input from many disciplines and especially that researchers from these specialized fields need to acquire the skills to work together in multidisciplinary teams.

The main characteristics of HSR are

- Its focus on priority problems in health;
- Its participatory nature;
- Its action orientation;
- Its integrated, multidisciplinary approach;
- Its multisectorial nature;
- Its emphasis on cost-effectiveness;
- Its focus on practical, timely solutions; and
- Its iterative nature that allows for evaluation of the impact of planned change and consequent revision of action plans and health policy.

Although its methodologies can be applied to similar problems in different countries, the findings and solutions to these problems are unlikely to be the same because of differences in cultural, social, economic, and political realities. This is one of the strong arguments in support of a national core of persons trained in HSR whose orientation and plan of work is guided by the country's agenda of essential national health research.

With progressive development, the uses of HSR are becoming more widely appreciated. As a result, it is being integrated into and applied in special areas of management such as quality assurance, technology assessment, and resource management.

Because the capacity for HSR is small, especially in developing countries, it is not surprising that, over the last few years, a series of training programs has been organized or funded by many agencies, including the International Development Research Centre (IDRC), the Pan American Health Organization (PAHO), the World Health Organization (WHO), and the US Agency for International Development (USAID).

As well, several international health programs have given high priority to capacity building for HSR.

- The UNICEF *Special Program on National Capacity Building for Child Survival and Development* aims "to strengthen awareness, knowledge, and skills for operations research using the health systems approach to promoting inquisitiveness and self-reliant approaches to identify pressing problems at the community level and find practical solutions for them."

Sciences is "to improve the relevance of health professions education by enhancing the ability of graduates to help identify and solve the problems of communities in which they serve ... using as framework a new system of partnerships among universities, governments and communities, the focus of which is a program of essential national health research."

- The *International Health Policy Program* is planning to develop health-policy research and training centres, whose role will be to facilitate and coordinate the "synthesis of policy-relevant research, dissemination of such research, capacity building in health policy analysis, and technical assistance for policy analysis and research."
- The *International Clinical Epidemiology Network* (INCLEN) supports the development of clinical epidemiology units (CEUs) in medical schools in developing countries. The role of CEUs is to provide leadership in the application of quantitative measurement principles (drawn from clinical epidemiology, biostatistics, health economics, and health social science) in the research, education, and service responsibilities of the medical school.
- The Danish International Development Agency (DANIDA) has been supporting a series of inter-regional training workshops for research managers in HSR and, since 1987, the *Joint Project of the World Health Organization and The Netherlands Ministry for Development Cooperation - The Royal Tropical Institute* is involved in a process for capacity building for HSR in 14 countries of southern Africa.

All these and many more initiatives in capacity building for applied research received, in 1990, a strong political, moral, and intellectual backing in the recommendations of the Commission on Health Research for Development. In its *Agenda for Action*, the Commission recommends

That building and sustaining research capacity be integrated as a key objective and powerful instrument for all health and development investments. Primary commitment must come from developing-country governments to accord priority and provide sustained financial support. Strong international re-enforcement is also needed. International exchange and interaction can do a great deal to help strengthen the capacity of developing-country researchers and institutions.

Within the broader context of the Commission's recommendations, three major challenges for the future development of HSR can be identified:

- How to enhance the demand for HSR;
- How to strengthen national capacities in HSR; and
- How to institutionalize the efforts into a sustainable process.

It is with these challenges in mind that this *Health Systems Research Training Series* was developed.

Annette Stark, Associate Director
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Development
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GENERAL INTRODUCTION

A recent review of Health Systems Research (HSR) workshops sponsored by IDRC concluded that, although IDRC's objectives had been met, training materials should be revised and expanded to meet the needs of specific groups and to guide the development of follow-up sessions. In a related action, the WHO Global Advisory Group on HSR concluded that building and sustaining national capacities for HSR was a major issue to be addressed in program activities. It was specifically recommended that these activities must include components to "evaluate and revise training materials periodically and to support training programs at different levels of the health systems."

As a result of these recommendations, representatives of IDRC, PAHO, and WHO met in Ottawa in October 1988 to review past and current initiatives and to propose future activities. The group recognized that, if training in HSR is to have an impact on improving health and health care, it is necessary to clarify the context and stages of development of an effective HSR process within a given country. It was further decided that specific target groups for orientation and training in HSR should be selected and appropriate training strategies developed to strengthen the research capacity of countries, based on their specific needs and capabilities in HSR.

To achieve this goal, a technical working group was established and given the mandate to define and coordinate the development of a basic set of training materials for each of five identified target groups. The framework consisted of:

- A definition of the target group;
- A description of the entry competence or entry characteristics of the target group;
- The expected outcome behaviour, including skills and attitudes;
- The appropriate training strategies and training context; and
- The available training materials.

The deliberations and effort of the Technical Working Group have resulted in these five volumes of materials. Users are encouraged to become familiar, generally, with the entire set and then to selectively implement a program of training, research, planning, and health-care policy based on their country's needs.

Volume 1: Promoting Health Systems Research as a Management Tool

For Decision-makers

This document focuses on the need to promote the use of HSR as a management tool among decision-makers. Based on an analysis of experience in developing countries in the last decade, it presents an overview of how HSR can lead to better decisions and how the development of an effective research program can be fostered at country level. In addition, it provides descriptions of specific strategies for promoting HSR among policymakers and senior managers that have been used successfully in a number of settings.

Volume 2: Designing and Conducting Health Systems Research Projects

Part I - Proposal Development and Fieldwork

Part II - Data Analysis and Report Writing

Course participants, who may include concerned citizens, health workers, researchers, and health decision-makers from the provincial or even national level, will select priority health problems particular to their own situations that cannot be solved unless more information is collected. Preferably, the topics will have been selected before the training starts (see Volume 1), but they may need more specification. In most cases, a team of course participants will then carry out the planned research alongside their regular duties (Part I). A second workshop is then scheduled to provide information on data analysis, report writing, and utilization of results (Part II).

This volume is the pivotal one that deals specifically with the development of research proposals of a participatory nature (community/health-care manager/researcher) and, subsequently, with the implementation of the field study and the analysis and dissemination of study results. In this context, it is also of interest to junior researchers and those persons in universities and other training facilities who wish to operationalize HSR.

Volume 3: Strategies for Involving Universities and Research Institutes in Health Systems Research

For Senior Researchers and Academic Staff

This volume is designed to assist university-trained researchers located in universities or research institutes who wish to promote and participate in multidisciplinary programs of HSR. This volume will be of particular interest to those who wish to integrate the concepts of HSR into existing health and social science degree programs and to promote the development of student theses in the area.

Volume 4: Managing Health Systems Research

For Research Managers

The research managers for whom this volume is intended include managers of research institutes, academic departments, and agencies that have a function in processing research applications and in funding and coordinating research projects. The training should enable managers to facilitate their institutions' or organizations' contribution to and support of the development of HSR in the country as well as the utilization of research in improving the health of the people.

Volume 5: Training of Trainers for Health Systems Research

For Trainers and Facilitators

Experienced researchers are not necessarily experienced teachers. Moreover, few of them have experience in the organization and training of participants for whom research is a secondary responsibility and who have limited time to read or engage in research activities.

For training in HSR to be effective, experienced researchers need to acquire competence in the training approaches that have been successfully developed and used during the past few decades for training health personnel in a variety of important topics related to health.

Trainers and facilitators include those whose primary responsibility is organizing and conducting training courses for the different target groups and those who assist trainers in conducting courses.

INTRODUCTION TO THIS VOLUME

Why this Document was Developed

This document was developed as part of a Health Systems Research Training Series by a Technical Working Group sponsored by the International Development Research Centre and the World Health Organization. The Working Group, responding to the need for materials to assist in training sufficient personnel to promote, conduct, and utilize health systems research (HSR) focused on priority problems, identified five target groups for which training materials were needed:

1. Decision-makers (both policymakers and senior managers);
2. Health workers and middle-level managers;
3. Researchers in universities and research institutes;
4. Research managers; and
5. Trainers and facilitators.

This document focuses on the need to promote the use of HSR as a management tool among decision-makers, the first of the five target groups. Based on an analysis of experience in developing countries in the last decade, it presents an overview of how HSR can lead to better decisions and how the development of an effective research program can be fostered at the country level. In addition, it provides descriptions of specific strategies for promoting HSR among policymakers and senior managers that have been used successfully in a number of settings.

Whom this Document is For

This document can be used by several types of audiences:

- Health policymakers and senior managers who wish to promote the use of HSR as a management tool within their own organizations and collaborating institutions;
- Senior research and training professionals working with national ministries of health or collaborating agencies to conduct workshops for decision-makers or to implement other strategies to promote the use of HSR as a management tool;
- Health research advisors or consultants who are working to assist countries in the development of effective HSR programs; and
- Health workers, researchers, and students involved in HSR who wish to understand the role of decision-makers in HSR and how their collaboration can be effectively promoted.

How this Document Can be Used

Users of this document can either read it in its entirety or focus on specific sections, depending on their needs and interests. The chart below will help identify where specific types of information can be found:

Question

Where to find the answer

What is HSR all about, anyway?	Chapter 1: page 1
How can HSR be promoted as a management tool?	Chapter 2: page 10
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What strategies can be used to promote HSR among senior managers?	Chapter 4: page 22
Are there some good examples of how countries have actually used these strategies?	Chapter 5: page 27
What information is needed to plan and implement specific strategies?	Annexes 1-11:
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What are some other useful documents on HSR and decision-making?	Annex 12: page 115

CHAPTER 1:

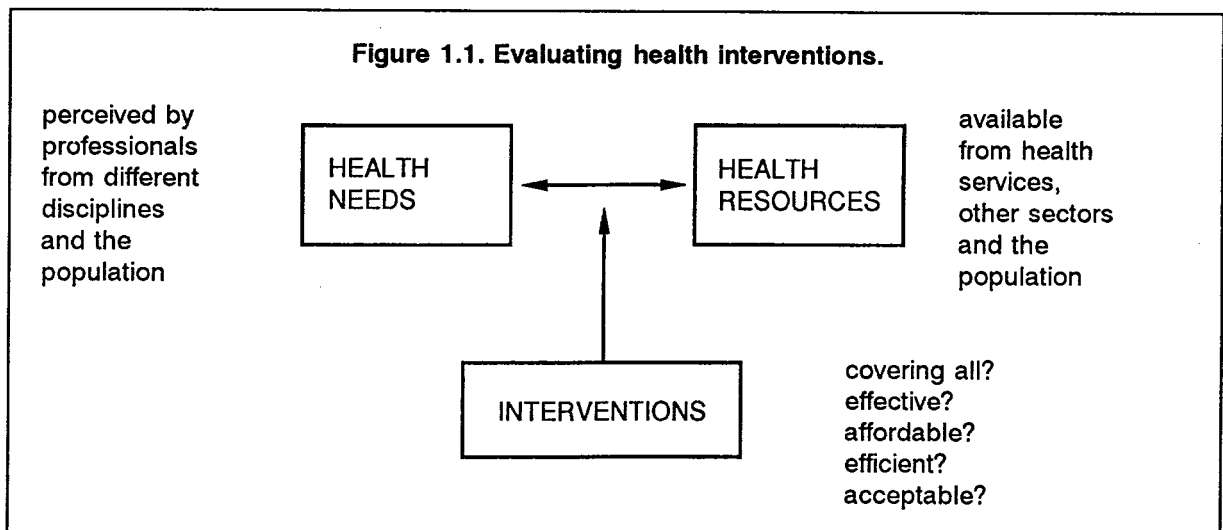
HEALTH SYSTEMS RESEARCH — AN OVERVIEW¹

Health for All

The adoption of the philosophy and strategies for **Health For All by the Year 2000** implies that we are committed to ensuring that *all* people (not just some) will attain a level of health that enables them to participate actively in the social and economic life of the community in which they live.

In the past, research has made major contributions to health by providing knowledge on the causes of diseases and ill health and by developing the technology to cure and prevent disease and promote health. However, despite the considerable amount of knowledge and technology that is available today, many peoples remain unable to achieve the targets of Health For All. Why is this so?

The health of any community depends on the interaction and balance among the health needs of the community, the health resources that are available, and the selection and application of health and health-related interventions. This is illustrated in Fig. 1.1. It is evident that it is important to apply the available technology in an optimal manner, within the limited resources available, to serve the health needs of the community.



To effect the necessary changes to achieve Health for All, countries must decide on the best approaches to adopt. This requires detailed and accurate information on needs, possibilities, and consequences of recommended actions. Because such information is often lacking, inadequate, or unreliable, decision-making based on assumptions and unjustified conclusions often results in the selection of inappropriate policies and programs, the consequences of which are only discovered after implementation. In many instances, **research** can provide the information needed for informed decision-making.

¹ Material in this chapter also appears in an expanded version in Volume 2 of this Training Series, *Designing and Conducting Health Systems Research Projects*, "Module 2: Introduction to Health Systems Research."

What is Research?

RESEARCH is the systematic collection, analysis, and interpretation of data to answer a certain question or solve a problem. It serves two major purposes in accelerating advances in health.

First, **basic research** is necessary to generate new knowledge and technologies to deal with major unresolved health problems.

Second, **applied research** is necessary to identify priority problems and to design and evaluate policies and programs that will deliver the greatest health benefit, making optimal use of available resources.

During the past two (or even three) decades, there has been a rapid evolution of concepts and research approaches to support managerial aspects of health development. Many of these have been described by specific terms such as operations research, health-services research, health-personnel research, policy and economic analysis, applied research, and decision-linked research. Each of these has made crucial contributions to the development of HSR.

The Focus of Health Systems Research

HSR is ultimately concerned with improving the health of a community by enhancing the efficiency and effectiveness of the health system as an integral part of the overall process of socioeconomic development.

What is Meant by a "Health System"?

A **HEALTH SYSTEM** may be described as:

- A set of **cultural beliefs** about health and illness that forms the basis for health-seeking and health-promoting behaviour,
- The **institutional arrangements** within which that behaviour occurs, and
- The **socioeconomic, political, and physical context** for those beliefs and institutions.

In short, it consists of what people **believe and know** about health and illness, and what they **do** to remain healthy and cure diseases.² Beliefs and action are usually closely connected. For example, if in a society people perceive evil ancestor-spirits as a cause of disease, there will be specialists and rituals to appease those spirits. If they see germs as the cause, they will look for modern (biomedical) health care.

² The definition of a health system is adapted from chapter 3 of Foster (1978).

If biomedical health care is a recent introduction, people may accept services, but the beliefs and knowledge to support this behaviour may not have been fully developed. Health workers, therefore, should be aware of the indigenous explanations for illness, so that "biomedical" explanations can be adapted to these more deeply rooted indigenous concepts.

Institutional arrangements within which health behaviour occurs encompass more than the delivery of medical care through governmental health services. They include all individuals, groups, and institutions that directly or indirectly contribute to health. These may differ from society to society, but usually cover four components: the individual, family, and community; health-care services; health-related sectors; and the international sector.

1. The individual, family, and community

The individual, family, and community assume a vital responsibility for health promotion as well as for the curative care of its members. In any society, as much as 70-90% of all curative activities may take place within this network.³

2. Health-care services

There are health-care services in the public (government) sector as well as the private sector.

Public-sector health-care services

These include:

- Health workers at the village level, mobile health teams, rural health clinics, and their outreach services (e.g., midwifery, sanitation, nutrition, malaria control, etc.);
- Health centres, urban clinics, district hospitals, and large multispecialty hospitals with their various support services such as laboratory, radiology, pharmaceuticals, etc.;
- Institutions responsible for health personnel, health financing, and physical infrastructure.

The number, type, distribution, and quality of services provided by these services influence health and well-being.

Private-sector health-care services

This sector may include :

- Folk (or traditional) medicine with traditional birth attendants, herbalists, and diviners, who may identify natural or supernatural causes of diseases and treat them accordingly;
- The large non-Western professionalized healing systems (Ayurvedic, Chinese, Yunani, homeopathic, chiropractic, etc.). In some societies, these belong to the public sector;

³ Several studies, carried out in Western and non-Western societies, support this statement (see Kleinman 1978).

- Private "modern" medical practice, legal or illegal;
- The pharmaceutical sector (private or parastatal); and
- Nongovernmental health care (religious organizations, Red Cross, etc.).

The relative importance of these components varies in different societies.

3. Health-related sectors

These include, for example:

- Agriculture and food distribution;
- Education (formal and nonformal);
- Water and sanitation; and
- Transport and communication.

All these sectors contribute to health, either directly or indirectly.

At the village, ward, district, provincial, and national level, development committees or councils may exist that could promote intersectoral cooperation for development and health.

4. The international sector

The international sector includes bilateral and multilateral donor agencies (UNICEF, WHO, etc.) that may support health as well as development activities.

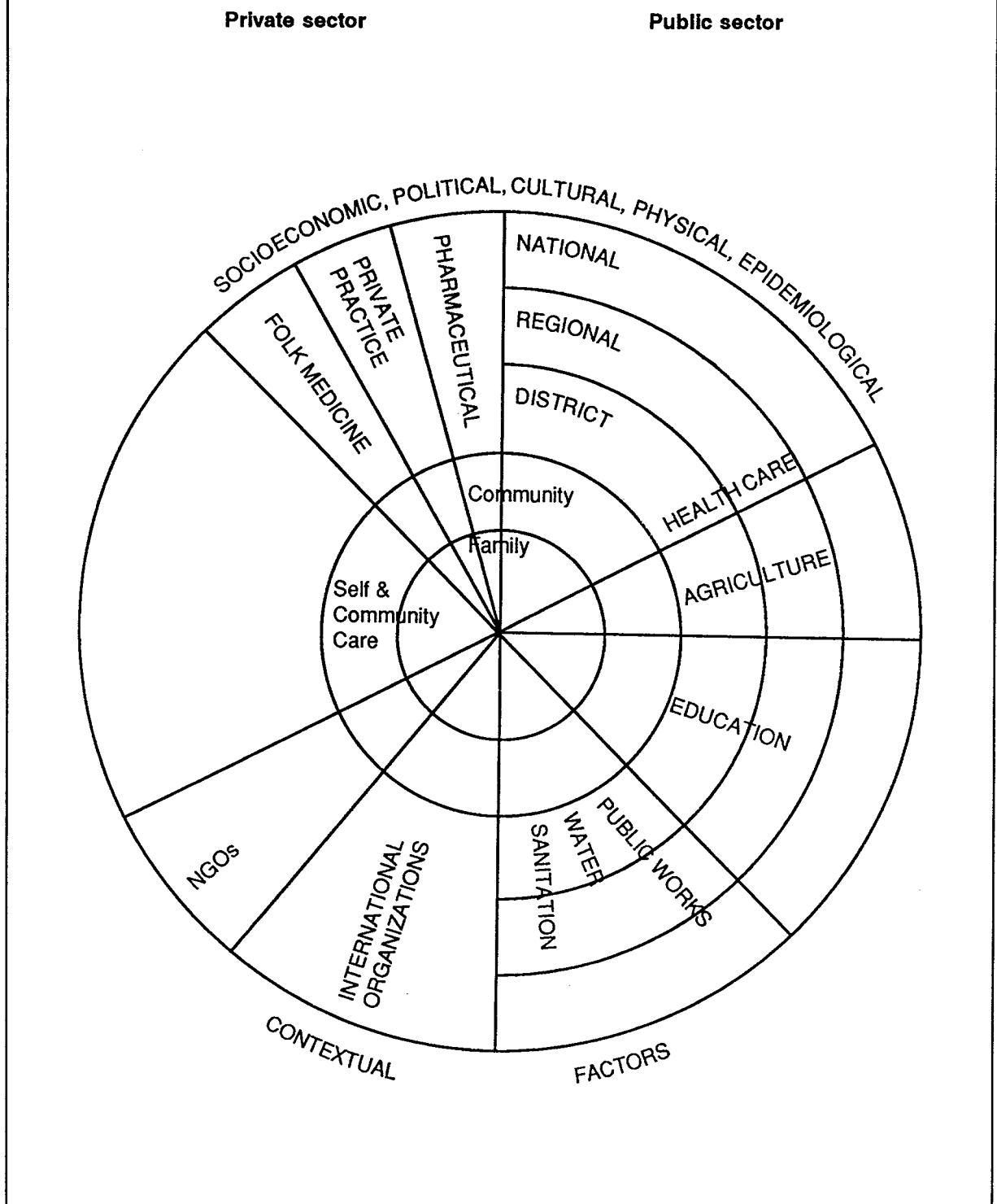
The individual and his or her close relatives form the major integrating force of the health system. They choose and combine the activities that they believe will promote their health and well-being. They may decide to use certain institutions and reject others. Health services may not always be their first choice.

In many countries, efforts are being made to increase coordination among the various public services, and among governmental services, nongovernmental organizations (NGOs), and other healing systems to promote health.

How well the different components of the health system function depends to a large extent on socioeconomic, political, cultural, physical, epidemiological, and other contextual factors. For example, economic crises or booms will affect the health and nutritional status of individuals as well as the national budget available for health services.

Figure 1.2 illustrates various possible components of the health system.

Figure 1.2. The health system.



Selectivity Versus Comprehensiveness in HSR

Because HSR is **problem-oriented**, it should be **selective** and concentrate on those factors that will help to explain and solve the problem being examined. It is very seldom that all components of the health system will be involved in one study, although HSR studies rarely limit themselves to one component only.

Even within the narrower field of the health services, HSR focuses on specific topics, depending on who experiences the problem and at what management level.

Health policymakers may, for example, want to know:

- How can special programs be prevented from draining away resources (time, money, and staff) from other, equally necessary services?
- Should specially prepared packets of electrolytes be purchased for oral rehydration of children with diarrhea or should people be taught how to prepare sugar-salt solutions themselves?

Managers at district or provincial level may raise questions such as:

- Why is neonatal mortality in certain districts much higher than in other districts?

Hospital directors may ask:

- Why do we observe such a high rate of complications in leprosy cases? Are the first-line services sufficiently available and adequate? Are our own services adequate? Are patients coming late for treatment and, if so, why?
- Are the routine procedures and policies (clinical, nursing, referral, recording, etc.) in the different units appropriate? Comprehensive? Acceptable to patients? Efficient?

Managers at village level (village health committees, village health workers) may want to know:

- Why are our village health posts underutilized?
- How can we assist illiterate women so that they can effectively prevent and treat diarrhea?

Community leaders may want to know:

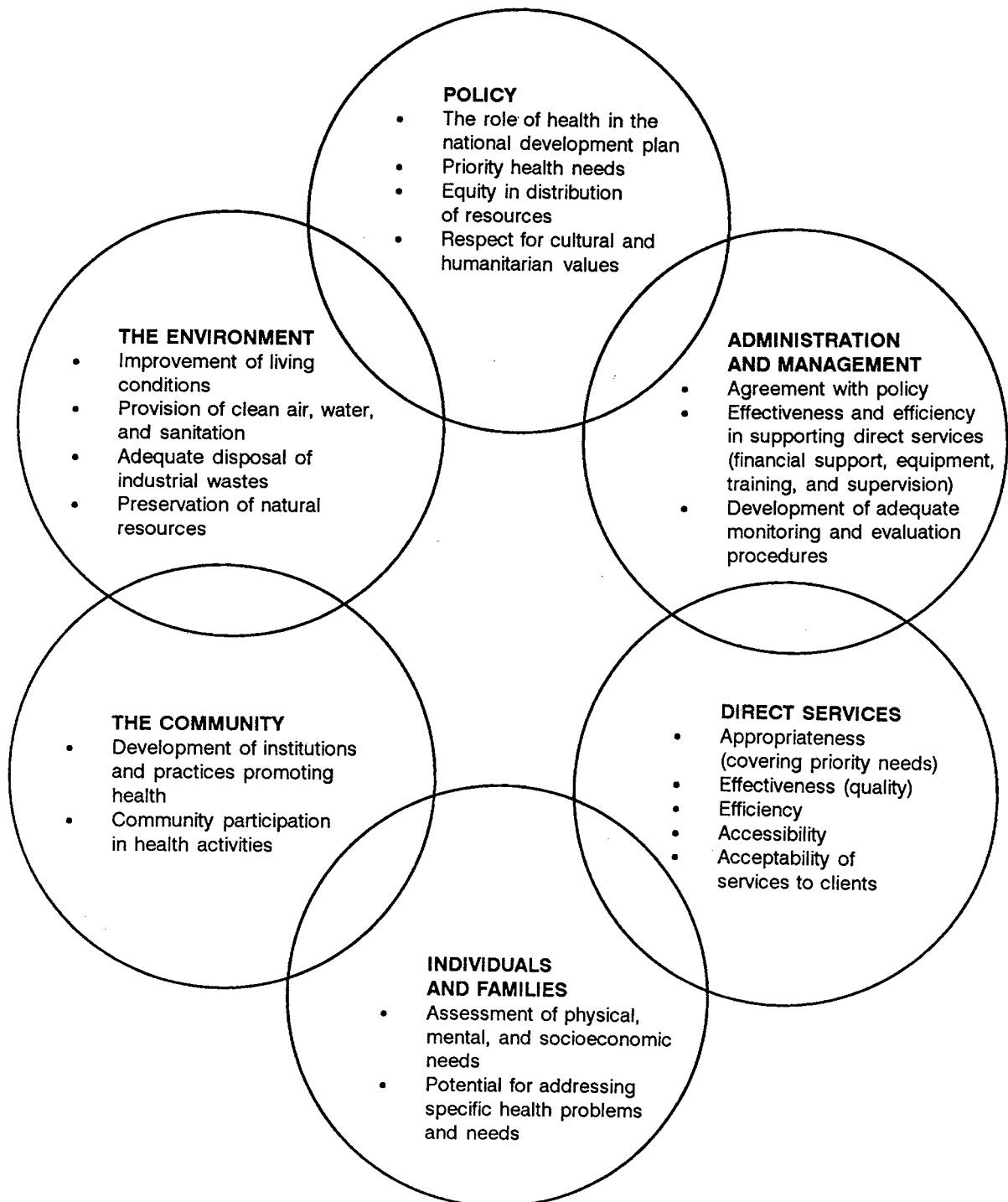
- What will be the effects of a cost-recovery program on drug costs and availability of drugs?
- How much community labour will be required to manage the new water system?

The **AIM OF HSR** is to provide health managers at all levels, as well as community leaders, with the relevant information they need to make decisions on problems they are facing.

We must be aware that problems at one level of the health system are usually connected with problems or deficiencies at other levels. HSR should address problems from the different perspectives of all those who are, directly or indirectly, involved. Otherwise, we run the risk of coming up with results that only

partly explain the problem and that are, therefore, insufficient to solve it. Figure 1.3 (adapted from Purola 1986) highlights some major areas of concern within the health system.

Figure 1.3. Areas of major concern within the health system.



Who Should be Involved in HSR?

HSR is multidisciplinary. It is evident that many of issues in one area of concern are interrelated and interact with issues in other areas. Research in health systems must recognize this. The research skills that are needed might need to come from a variety of disciplines (e.g., biomedical science, epidemiology, behavioural science, social work, environmental science, economics, political science, and operations research). Therefore, HSR is multidisciplinary in nature.

Even the simpler research that is done at the operational level may require research skills from different disciplines (e.g., epidemiology, sociology, and management) to provide sufficient and relevant information to support decision-making. Therefore, training in HSR includes relevant aspects from various research disciplines.

Researchers who will work in multidisciplinary teams will need to acquire a basic understanding of the concepts and approaches as well as the potential and limitations of research techniques used in sister disciplines.

HSR is not, however, the concern of scientists alone.

The participatory nature of HSR is one of its major characteristics. To ensure that the research is relevant and appropriate, everyone directly concerned with a particular health or health-care problem should be involved in the research project(s) focused on it. This could include policymakers, health managers from the health services involved, health-care providers, and the community itself. This involvement is critical if the research activities are to make a difference:

- If decision-makers are involved only after completion of the study, the report may just be shelved.
- If health staff are involved only in data collection and not in the development of the proposal or in data analysis, they may not be motivated to collect accurate data or carry out the recommendations.
- If the community is only requested to respond to a questionnaire, the recommendations from the study may not be acceptable.
- If professional researchers are not involved in the implementation of recommendations, they may have little concern for the feasibility of the recommendations.

The roles that various types of personnel will play in the research project will depend on the level and complexity of the particular study, as well as its area of focus. Some projects are complex and may need expertise from several disciplines. Others may focus on simpler problems.

Although complex research projects at the policy level may require heavy involvement of a multidisciplinary team of researchers, health-care decision-makers, health providers, and representatives from the community that will be affected by the policy should be involved as well. Also, although service personnel may take the major role in simpler studies focusing on practical problems in their own working situations, their projects may require assistance from researchers with skills in relevant disciplines, as well as the participation of health managers and the community.

Guidelines for HSR

HSR is undertaken primarily to provide information to support decision-making that can improve the functioning of the health system. Some essential guidelines for success are summarized below:

1. HSR should focus on **priority problems** in health care.
2. It should be **action-oriented**, i.e., aimed at developing solutions.
3. An integrated **multidisciplinary** approach is required, i.e., research approaches from many disciplines are needed because health is affected by the broader context of socioeconomic development.
4. The research should be **participatory** in nature, involving all parties concerned (from policymakers to community members) in all stages of the project.
5. Studies should be scheduled in such a way that results will be available when needed for key decisions. Otherwise, the research loses its purpose, i.e., research must be **timely**.
6. Emphasis should be placed on comparatively **simple, short-term research designs** that are likely to yield practical results relatively quickly. Simple but effective research designs are difficult to develop, but much more likely to yield useful results when needed.
7. The principle of **cost-effectiveness** is important in the selection of research projects. Program management and operational research should focus, to a large extent, on low-cost studies that can be undertaken by management and service personnel in the course of daily activities. (There is a need for some larger studies as well, however, that may require outside funding.)
8. Results should be presented in **formats most useful for administrators, decision-makers, and the community**. Each report should include:
 - A clear presentation of results with a summary of the major findings adapted to the interests of the party being targeted by the report;
 - Honest discussion of practical or methodological problems that could have affected the findings; and
 - Alternative courses of action that could follow from the results and the advantages and drawbacks of each.
9. **Evaluation** of the research undertaken should be not by the number of papers published but by its ability to influence policy, improve services, and ultimately lead to better health.

Thus, an HSR project should not stop at finding answers to the questions posed, but include an assessment of what decisions have been made based on the results of the study.

CHAPTER 2:

PROMOTING THE USE OF HEALTH SYSTEMS RESEARCH AS A MANAGEMENT TOOL

Better Decisions Through HSR

In a growing number of countries, policymakers and managers are beginning to realize that HSR can provide critical information for many of the decisions they must make. HSR can provide answers to questions that arise at a wide range of levels within the health system. For example:

- In one district in the state of Perak, **Malaysia**, health managers were concerned with the **low rates of immunization coverage**. A study was made of the health centre with the third lowest diptheria, pertussis, and tetanus (DPT) immunization and highest incidence of pertussis cases.

Results of the study revealed that factors contributing to low coverage included distance from the health centre, ignorance that the free immunizations were available, work demands (among estate labourers), and the staff's policy of delaying immunization of children with minor ailments.

Managerial decisions made as a result of the study included retraining public-health staff with an emphasis on contraindications; intensifying health education with special campaigns in low-coverage areas, sending reminder letters to parents, and making home visits; and requesting estate managers to allow daily labourers (mothers) to take their children to the clinic without loss of pay. The changes resulted in significant increases in coverage, with coverage for DPT, polio, and measles immunizations, for example, rising from an average of 64% to 83%.⁴

- In **Indonesia**, the problem of **low birth-weight babies** was identified as a major problem, as it reduces the potential for survival and future physical and intellectual growth. Health managers needed better techniques for identifying pregnant women with a high risk of delivering low birth-weight babies. A research project was conducted that followed over 1300 women from early pregnancy to delivery, collecting a wide range of data, to identify major risk factors associated with low birth-weight. Based on the data, a mother's card was designed on which weight is plotted on a graph against weeks of pregnancy and a curve, based on the research data, indicates which women are likely to deliver low birth-weight infants.

Results from feasibility trials in four provinces showed the card could be used easily by health workers at the grass-roots level.

Management decision. Based on the findings, the Ministry of Health decided to expand the use of the mother's card and, by 1988, 400,000 cards were in use in 11 provinces, with satisfactory results.⁵

- In **Ecuador**, a nationwide child-survival program was inaugurated in 1985 to reduce infant and child morbidity and mortality. The program, known by its Spanish acronym, PREMI, originally assumed its activities could be adequately evaluated using the existing Ministry of Health (MOH)

⁴ From Chee (1987).

⁵ From Loedin (1988).

information system. However, because PREMI's priority interventions were not included in the basic health-reporting form, each priority program added its own reporting system. As a result, staff at health centres and posts were responsible for some 16 different daily and weekly reporting forms! The system was fragmented, error-prone, and inadequate.

The MOH asked the Primary Health Care Operations Research Project (PRICOR) to assist it in developing and testing an alternative information system. PRICOR worked with the priority-program directors and advisors to develop basic evaluation indicators and replace the 16 separate manually tabulated forms with a single form designed for direct computer entry and analysis. The MOH then field tested the new form for 9 months in 35 units in 7 of Ecuador's 20 provinces. A matched control group of 35 units was selected, which continued to use the traditional system, and the results were compared.

Results indicated the integrated form was easily mastered, greatly reduced the administrative burden of reporting, increased data-entry accuracy, and provided priority-program indicators that were unattainable under the old system.

Management decision. Based on the findings, the MOH incorporated the design of an integrated reporting form into its master plan. In addition, several private voluntary organizations have expressed interest in using similar forms and evaluation indicators in their own child-survival activities.⁶

- In **Burkina Faso**, the Division of Family Health (DFH) within the health ministry needed information to determine the impact of its family-planning activities thus far and to plan for subsequent interventions. The DFH, in collaboration with Columbia University's Center for Population and Family Health, organized a research project that began with female and male knowledge, attitude, practices (KAP) studies and focus-group discussions. Based on results, which indicated vague knowledge of contraceptives and little use but, on the other hand, a strong desire for additional family-planning services, a second, intervention phase was developed. Phase II of the research project focused on improving the availability and accessibility of family-planning and other maternal and child health (MCH) services by developing a new system of integrated services and improving family-planning services in the MCH centres of Ouagadougou. The project, spearheaded again by decision-makers in the DFH, used a very practical research and program-development process that led to successful integration.

Results showed that all centres had attained their main objective of offering all services every day, client and staff satisfaction had greatly improved, waiting time decreased, and the level of attendance for all services had increased. In addition, the percentage of clients using modern contraception increased from 8.2% to 18.0%.

Management decision. Based on the findings, the Ministry of Health and Social Action is planning to integrate services throughout the country (a policy decision that can be linked directly to the influence of the research project). The 30 dispensaries in the capital are already converting to integrated service delivery using the process developed by the Project and plans are being made to replicate the process in other urban and rural areas, with strong support from bilateral donor agencies.⁷

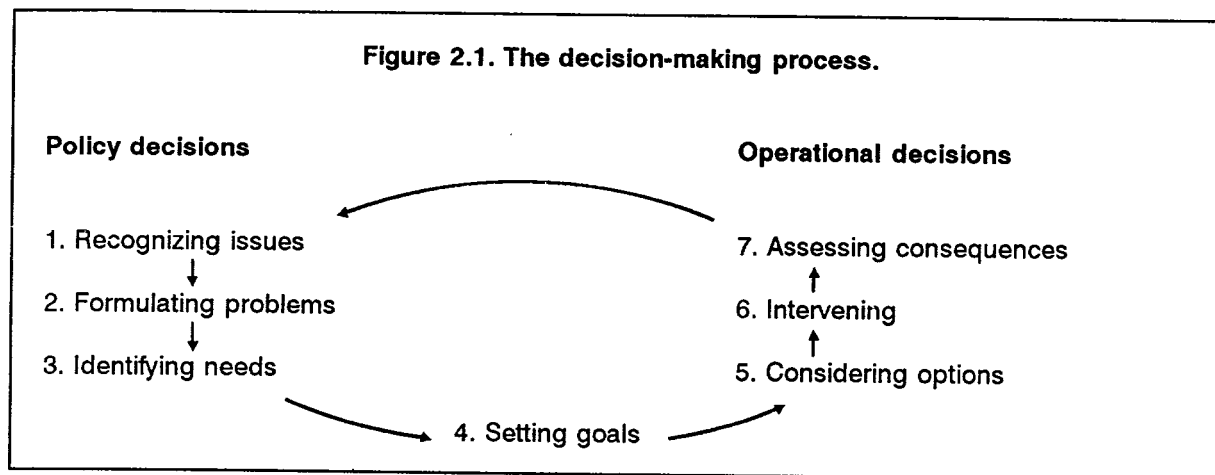
⁶ From PRICOR (1988).

⁷ Summarized from Brownlee (1990).

As the examples above illustrate, HSR can be a useful tool for providing managers with the information they need to resolve issues and solve problems from the local to the national level.

The Decision-Making Process

Both top-level policymakers and managers are faced continually with important decisions, as they attempt to set priorities, face issues, and resolve problems in the course of their work. The decision-making process can be seen as a series of steps that first focus on policy and then on operational considerations (Fig. 2.1).⁸



At each of these steps in the decision-making process, the use of pertinent information can improve the quality and output of the deliberations. Some of the information needed may be available already and assembled easily by the decision-maker's staff, but in many cases additional data are crucial and may be provided through HSR.

As the decision-maker seeks to pinpoint issues, formulate problems, and identify needs, research concentrating on problem analysis may be particularly useful. As managers move on to set goals and consider options for program interventions, studies that identify and analyze alternative program strategies may be of special assistance. Also, when programs are implemented and the consequences must be assessed, evaluation research that assesses the efficiency, effectiveness, and impact of both pilot programs and full-scale interventions can provide essential feedback.

The "decision-linked" approach to HSR is one in which decision-makers and researchers work together to identify:

- What key decisions need to be made regarding health-services issues,
- What types of information are needed to improve this decision-making process,
- What part of this information can be provided through currently available findings and routinely collected data, and

⁸ From WHO (1986b).

- What measures need to be taken to design and implement research for obtaining additional necessary data.⁹

Although a decision-linked approach to HSR can provide critical information for health-care managers, its implementation has far to go in many countries. The following¹⁰ is an example of the situation many countries may find themselves in.

Researchers: The research personnel in the country consist of local or foreign PhDs or MDs working in universities or specialized research institutions. They produce papers with the purpose of getting them published, preferably in international journals that will be recognized for purposes of promotion and prestige. Little thought is given to whether the findings will be used in their own country or how such utilization can be facilitated.

Policymakers: Policymakers are extremely busy people who seldom (if ever) read international or even local journals. It is usually 15-20 years since their last exposure to academia and the jargon of scientific literature puts them off. They commonly complain that "Research tells us about problems we know exist. It does not tell us what to do about these problems." Also, their common *modus operandi* is to arrive at decisions based on sociopolitical pressures and professional intuition.

Midlevel managers: Midlevel managers are also very busy. They are mostly involved in "crisis management," which is a daily fire-fighting exercise. The systematic process of decision-making is often viewed as a "luxury" that they will indulge in "when they have the time to do so."

Health (service-delivery) personnel: Health (service-delivery) personnel may be classified broadly into two categories. The first group works in larger, more urban institutions. They are overworked and understaffed and life is often a daily struggle to "clear" the waiting patients, or papers, or laboratory tests. The second group works in rural and fairly remote, isolated situations. They find their work boring, repetitive, and routine. Both groups are doubtful whether HSR can be relevant to their situations and doubt whether it can be effective or have any impact on the problems they face. In fact, they may perceive it as yet another burdensome and meaningless demand on their time.

The introduction of HSR into such situations must take into account the specific needs and potential of each of the groups that should be involved in the planning, conduct, and use of HSR, i.e., top-level decision-makers, midlevel managers, health personnel, and researchers.

Promoting HSR Among Top-Level Decision-Makers

This document focuses on strategies that have been found useful in promoting HSR as a management tool among the first of these groups — top-level decision-makers. Other documents in the series of materials to support training in HSR focus on the needs of the other three groups, as well as trainers.

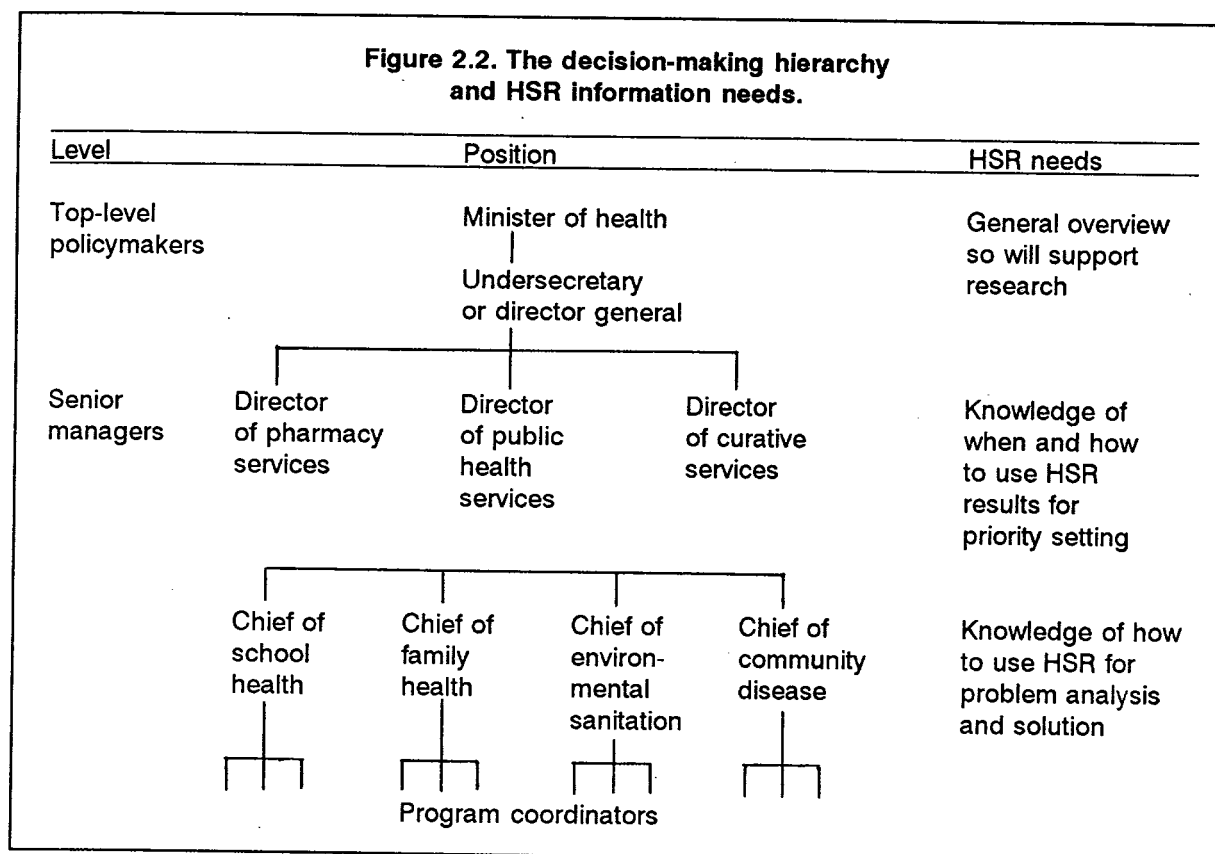
Top-level decision-makers can be divided into at least two sometimes overlapping groups:

⁹ From Brownlee (1986b).

¹⁰ From Pathmanathan (1987).

- **Top-level policymakers**, who may include ministers of health, and undersecretaries of health, directors general, or permanent secretaries (i.e., top appointed health officials and those immediately under them) and similar top officials from other relevant sectors; and
- **Senior managers**, who may include directors of health services and programs such as MHC, primary health care (PHC), health-personnel training, and planning; decision-makers from other sectors; directors of relevant academic and research institutions; and donor agencies.

The titles and responsibilities within ministries of health and health programs around the world vary, of course, but the decision-making hierarchy and what managers at different levels need to know about HSR is somewhat similar, as illustrated in Figure 2.2.



Note: Decision-makers from other sectors such as education, agriculture, planning, housing, and labour should be considered as well. In addition, community leaders or representatives from relevant community organizations may play a role in decisions affecting health care in their local areas. They may or may not have formal linkages with decision-makers in the ministry of health hierarchy.

Ministers and undersecretaries of health are concerned with a wide range of policy issues and have only a minimal amount of time to focus on the issues of HSR, but they need a general understanding of the

contribution HSR can make to decision-making so they will support its institutionalization in the managerial process.¹¹

Directors of the large departments and programs under an undersecretary of health need to be able to differentiate between situations that require research and situations in which adequate information is already available or in which political or socioeconomic considerations are so important that research results would have little or no impact on the decisions made. When it is appropriate, they need to be able to use information from HSR to assist with broad priority setting and general policy and operational decisions.

Senior program managers, such as the chiefs of family health, environmental sanitation, and communicable-disease control who might serve under a director of public health, and the program coordinators under them, should be able to use HSR to analyze the problems facing their own programs, identify solutions, and assess the consequences of options chosen.

Community leaders and representatives of relevant community organizations should also have an understanding of how HSR can be used to analyze and develop solutions to health problems facing their local areas.

Phases in the Institutionalization of HSR

As a country struggles to integrate the use of HSR for decision-making in its health-care system, there are at least three phases (Fig. 2.3; adapted from Pathmanathan 1987) that are part of the process.¹²

Phase I: Consensus building: Decision-makers and managers in the health systems need to recognize the value and importance of relevant research information to support rational decision-making, and researchers need to recognize the importance of aligning research to health needs and health problems.

Phase II: Capacity building: There is a need to create critical masses of people who can do research to support decision-making at the different levels of the health system, i.e., the operational level, the program-management level, and the policy level. Also, there is a need for critical masses of managers at these various levels who are able to use scientific information in decision-making.

Phase III: Consolidation: There is a need to create mechanisms for continuing interaction of decision-makers and managers with researchers to prioritize problems, identify research needs, support relevant research, and disseminate and utilize research findings. Also, there is a need to create institutional mechanisms to sustain suitable training, align policy and funds to support relevant research, and monitor, sustain, and evaluate the process of integrating HSR into the health-management and research processes of the country.

¹¹ Undersecretaries of health, directors general, and similar officials should ideally have a general knowledge of when HSR is useful, be able to formulate questions for research, and utilize results. In the future, they will gain this more detailed understanding of HSR earlier in their careers, at lower levels of the hierarchy. At present, however, it may be useful to involve these top-level policymakers in some of the activities targeted at senior managers, such as short workshops, if they have the time and interest.

¹² From IDRC (1989).

Figure 2.3. Phases in Institutionalizing HSR.

Phase I: Consensus building

Phase II: Capacity building

Phase III: Consolidation

Different countries are at different points in this process. The three phases, although sequential in nature, are somewhat overlapping and must be sustained or reemphasized from time to time because of staff turnover and competing demands and priorities.

Strategies to Promote HSR Among Policymakers and Senior Managers

A number of strategies can be used to promote the support and use of health-services research among top-level policymakers and senior managers during the various phases of institutionalization mentioned above. An analysis of experiences in developing countries in the last decade has led to the identification of a number of key strategies that have been developed and used successfully to promote the use of HSR as a decision-making tool. Strategies for promoting HSR among policymakers are presented in Chapter 3. Strategies for promoting HSR among senior managers are presented briefly in Chapter 4 and then described in detail, for those that want to use the strategies, in Annexes 1-11.

In the **consensus-building phase**, strategies focused on key decision-makers that promote a recognition of the potential and uses of HSR in management are particularly important. At this stage, for example, organization of an intercountry conference or workshop focused partially or entirely on HSR may be particularly helpful. In some countries, leaders may decide to designate a task force to assess the current research situation and recommend policy changes. In others, where at least a few key top managers understand and support the concept of HSR, organization of a national consultative meeting may help increase awareness and encourage the development of concrete country action plans. Efforts may be made to increase the awareness of top-level policymakers by including references to research results in prepared policy statements or arranging for short sessions on HSR in high-level management meetings.

In the **capacity-building phase**, target groups include health personnel at all levels, as well as researchers. At this stage, activities that strengthen the skills of managers in using research for decision-making are important. A case-study workshop that provides senior managers with practice in using HSR-related skills, based on well-designed cases, may be helpful. An institution or individual may be designed as a focal point, working on a part-time basis to organize research-training activities and to coordinate and promote HSR. Training activities that focus on strengthening the capacity of both researchers and midlevel managers and health service personnel to conduct research may be particularly important.¹³

¹³ See Volume 2 of the *Health Systems Research Training Series* for a course for midlevel managers and health-services personnel, and Volume 3 for a discussion of capacity-building strategies to use with researchers.

In the **consolidation phase**, mechanisms for coordinating and utilizing research within the ministry of health, such as HSR units and interdisciplinary advisory committees, may be organized or strengthened. Networking among institutions involved in HSR at both the national and international levels may be strengthened. Sessions may be held with key donor agencies to convince them to solidly support HSR through redirection of their funding policies. Strategies for systematically disseminating results among policymakers and promoting their application may be helpful.

Efforts to Foster HSR at the Country Level

A few countries have already had considerable experience using HSR as a management tool. The experiences of three of these countries (Botswana, Kuwait, and Malaysia) are summarized in Chapter 5, after strategies for promoting HSR among both top-level policymakers and senior managers are presented. These examples provide good illustrations of how various strategies described in this document have been used to promote the integration of HSR in the managerial process. As the examples indicate, each country's circumstances are somewhat different and the choice and sequencing of strategies vary, but similar approaches have proved helpful in a number of settings.

CHAPTER 3:

STRATEGIES FOR PROMOTING HEALTH SYSTEMS RESEARCH AMONG TOP-LEVEL POLICYMAKERS

Summary of Strategies Focused on Policymakers:

Top-level policymakers generally have limited time to focus on the issue of HSR, so those selecting strategies to influence their opinions must be aware of this constraint. Strategies may include:

1. Including sessions on the use of HSR as a decision-making tool in national or international health-management meetings attended by top-level policymakers;
2. Preparing briefings that use HSR results to support policy and program decisions for policymakers to use in high-level meetings;
3. Preparing answers for questions asked in government forums that quote research results to support the ministry's position;
4. Asking policymakers to give opening or closing statements and preside over key sessions at HSR consultative meetings and workshops;
5. Asking policymakers to preside over the national research council or health-research advisory committee that sets HSR research agendas and reviews results for potential application;
6. Presenting policymakers with the results of major in-country HSR projects and options for action through activities such as:
 - Distribution of one-sheet summaries of important HSR results,
 - Preparation of booklets or newsletters that include short abstracts of HSR results and managerial follow-up measures,
 - Presentation of key findings during meetings that policymakers attend, and
 - Invitation of policymakers to key sessions during short workshops that present key findings of major studies and provide a forum for managers and researchers to work together to apply results.

Introduction

Policymakers can play a critical role in fostering the use of HSR; however, they are very busy. If successful strategies are to be devised to promote the use of HSR among these top officials, they must take little time and strongly emphasize the practical benefits of problem-oriented research.

What Should Policymakers Be Able To Do Once the Orientation Is Completed?

Once the policymakers have been oriented to HSR, they should be able to:

1. Identify the types of information needed to make better decisions on health policy and program issues,
2. Determine when HSR can be used as an effective source of information and pose appropriate research questions,
3. Use HSR results when making policy- and program-level decisions, and
4. Support the development of research structures that can provide information that can be used to help solve priority problems, streamline operations, and provide health care more cost-effectively.

Orientation Strategies

A number of potential strategies for orienting top-level policymakers to HSR are described below. These strategies are by no means the only ones that may be effective, but give an idea of the types of approaches that have been successfully used in a number of countries in the past few years.¹⁴

1. Including sessions on the use of HSR as a decision-making tool in national or international health-management meetings attended by top-level policymakers

Organizers of management meetings or seminars for top-level policymakers and managers can devote at least one session to the use of HSR in the management process. The session might focus, for example, on the decision-making process, the importance of information for decision-making, and the role of HSR in providing relevant and timely information.

A case-study approach can be useful in sessions of this type. Cases can be prepared in which a health-management problem is briefly described, the decision-maker is asked what information he or she will need to solve it, and must then make certain decisions concerning the development of HSR studies and use of their results. (See the presentation on the Case Study Approach, page 85, for a more complete description of the use of case studies.) If cases are developed, they can be useful with policymakers who tend to think in practical terms and learn easily by reviewing realistic examples. Cases can be prepared, if desired, by the senior managers working under the policymakers, based on real-life health-management problems facing the country.

2. Preparing briefings that use HSR results to support policy and program decisions for policymakers to use in high-level meetings

Ministry staff who are asked to prepare the briefings that ministers or other top-level policymakers will use when making presentations in international health gatherings or other high-level meetings can emphasize key research findings that have helped inform recent national health policy and program decisions. Although top-level officials may not have time to stay informed about recent HSR

¹⁴ Some of the more time-consuming strategies described in Chapter 4 for use with senior managers can also be used with top-level policymakers if they have the time and interest to participate.

results, use of briefing material that shows how research results have been used for key decisions may help convince them of the importance of HSR as a management tool and the need to provide on-going support for HSR activities.

3. Preparing answers for questions asked in government forums that quote research results to support the ministry's position

When ministry staff are asked to prepare answers for questions that have been asked in parliament (or similar government forums), they can mention research results that help substantiate or support the ministry's position in the responses they develop. The addition of research results will add credibility to the ministry's position and also serve to alert top-level policymakers to the importance of HSR in the decision-making process.

4. Asking policymakers to give opening or closing statements supporting HSR at HSR consultative meetings and workshops

Organizers of HSR consultative meetings and workshops can ask top-level policymakers, such as the minister of health, undersecretary of health, or another official, to deliver the opening or closing statement for the gatherings. Even if the text of the speech must be prepared by the official's staff or the meeting organizers themselves, because the official lacks the time or the detailed knowledge, or both, to do so, delivery of the statement will help familiarize the policymaker with the nature and scope of HSR and its potential as a management tool. When a high-level consultative meeting is organized to assist in development of the HSR policy and programs at the national level, top-level policymakers should be asked to preside over key sessions or to serve on a panel, listening, and reacting to essential recommendations.

5. Asking top-level policymakers to preside over the research council or health-research advisory committee that sets HSR research agendas and reviews key results for potential application

If there is a key research advisory council or steering committee that has control over setting research priorities, selecting major projects for funding, or reviewing key results for potential application at the national level, top-level policymakers can be asked to serve either as titular or acting chairpersons. Involvement either in a titular or more active capacity will assist in keeping policymakers informed of HSR needs, current projects, and the potential use of results to improve the health system.

6. Presenting policymakers with the results of major in-country HSR projects and options for action

Ministry, research institute, and university staff involved in major HSR projects that have yielded important results should plan carefully to present the results to top-level policymakers in ways that will increase the likelihood of their use. Strategies, for example, could include:

- **Distribution of one-sheet summaries of important HSR results**, with options for action clearly described.
- **Preparation of booklets or newsletters** with pleasing formats that include short abstracts of HSR results as well as descriptions of managerial follow-up measures implemented as a result

of HSR projects. Booklets or newsletters can familiarize the policymaker quickly with a range of HSR projects recently completed. The descriptions of follow-up measures illustrate the importance of HSR as a management tool. If the newsletter format is used, other "HSR news" in addition to results of specific projects (such as development of mechanisms to insure "decision-linked" HSR, initiatives to improve the relevance of HSR to managerial needs, etc.) could also be presented.

- **Presentation of key findings during meetings** that top-level policymakers attend, if possible with well designed graphics and pictures or slides to enhance the impact. HSR results, for example, might be presented at short management conferences or meetings held either nationally or at an intercountry level.
- **Organization of short workshops (1 day or less) that present the more important findings of major studies** and then provide an opportunity for health managers to work together to analyze the implications of the results for their programs and prepare plans for their application. Top-level policymakers may not have time to attend the entire session, but could be invited to hear a short presentation of the findings or resumés of the plans for applying the results.

Examples

In Chapter 5, several examples are provided of how countries have used strategies aimed both at top-level policymakers and at senior managers in efforts to strengthen the use of HSR as a management tool. As the examples illustrate, the choice and sequencing of promotional activities vary, but the use of strategies such as those described above have been helpful in several countries.

CHAPTER 4:

STRATEGIES FOR PROMOTING HEALTH SYSTEMS RESEARCH AMONG SENIOR MANAGERS

Summary of Strategies Focused on Senior Managers:

Directors of health services, health programs, and academic and research institutions can be encouraged to support HSR and use its results in their work through the use of:

1. Intercountry workshops on HSR,
2. Task force on health research,
3. National consultative meetings on HSR,
4. HSR projects with intensive involvement of decision-makers,
5. Sessions on HSR in more broadly focused workshops,
6. HSR consultants,
7. Orientation sessions preceding HSR proposal-development workshops,
8. Case-study workshops on HSR,
9. Health manager/funding agency representative working sessions,
10. HSR focal points, health research units, and advisory committees, and
11. National and international HSR networks.

Introduction

The understanding and support of senior managers is essential if the use of HSR as a problem-solving tool is to be adopted throughout the health system. Senior managers, however, unless they have transferred into their positions from academic settings, usually have little experience with research: even those with academic backgrounds often have little understanding of the concept of decision-linked HSR and the role it can play in informing the decisions they and others under them must make.

Like the top-level policymakers above them, senior managers are very busy. Thus, strategies to promote HSR must begin by focusing on the issues and problems they face every day and then show them how research results can provide practical information leading to significantly better management decisions. Senior managers, however, can play a larger role than policymakers in fostering and coordinating research efforts and utilizing results in a broad range of situations. Their support is essential if the use of HSR for problem-solving is to be institutionalized at the provincial and district levels. Thus, the

strategies found useful in promoting HSR at the senior management level are somewhat more time-consuming and involved than those suggested for top-level policymakers.

Who Are the Senior Managers?

Senior managers include professionals such as directors of health services and programs such as MCH, PHC, health-personnel development, and planning; and directors of academic and research institutions. An effort should be made to involve managers from other sectors as well (e.g., senior managers in sectors such as education, agriculture, planning, housing, and labour). Individuals should be selected who occupy key positions for promoting the implementation of HSR and effective use of its results. In addition, they should have the power within their own organizations to develop effective structures to support health-services research.

What Should Senior Managers Be Able To Do Once the Orientation Is Completed?

Once the senior managers have been fully oriented to HSR, they should be able to:

1. Recognize the types of decisions for which additional information from research is needed,
2. Utilize research results in making health-management decisions,
3. Develop research policy and prioritize research needs,
4. Evaluate research proposals in relation to research priorities and available resources,
5. Support the development and institutionalization of research structures that can effectively respond to on-going informational needs at all levels of the health system,
6. Develop mechanisms for on-going training of health personnel and junior researchers in HSR,
7. Assign or promote the assignment of a separate budget for on-going support of HSR and mobilize and manage additional support from donor agencies, as needed, and
8. Develop mechanisms for ensuring that research results reach potential users in a form and time-frame useful for decision-making and that relevant results are applied.

Promotional Strategies

In this chapter, summaries of 11 strategies that have proved particularly useful at the senior managerial level are presented. The first nine strategies focus on training, learning-by-doing, or use of consultant teams. The last two strategies discuss the development of mechanisms or structures that will foster and sustain an on-going decision-linked HSR program. Finally, in Chapter 5, three examples are presented that illustrate how countries have used various strategy combinations to institutionalize HSR in their health systems.

A more detailed description of each of the 11 strategies is provided in Annexes 1-11 for readers who wish to consider using the strategies in their own programs. The pages on which the full descriptions can be found are listed after the summaries.

Each full strategy description in the Annexes starts with a brief summary and an example from a country that has already used the strategy successfully. Then, essential information concerning the strategy is listed, including who the participants, organizers, and facilitators are; the duration, objectives, and process or content of the activity; products produced as a result; follow-up measures; potential impact; limitations; references; and supplemental materials. Many of the reports from past workshops and other references listed at the end of each strategy can be obtained from HSR and Development, Division of Strengthening of Health Services, World Health Organization, Geneva, Switzerland.

Summaries of Major Strategies

1. Intercountry workshops on HSR

An intercountry workshop on HSR provides an opportunity for representatives from several countries to come together and share their experiences in HSR and HSR training and work to develop plans of action to strengthen country strategies and programs. If some of the participating countries are further advanced than others in institutionalizing a decision-linked HSR approach, the workshop provides a valuable opportunity for them to pass on information concerning successful HSR development strategies to their colleagues who are just beginning. **(See detailed description of strategy in Annex 1.)**

2. Task forces on health research

A multidisciplinary task force composed of well respected professionals with a high level of expertise in health research can be asked to assess the HSR situation in a country. The team would work with senior health management and research personnel to identify current strengths and weaknesses in the research program and make recommendations concerning the development and implementation of a national health-research policy with emphasis on priority issues. The task force members, usually three or four in number, can either be chosen from within the country or include outside consultants, depending on the preference of the country. **(See detailed description of strategy in Annex 2.)**

3. National consultative meetings on HSR

A national level consultative meeting or workshop can be held to identify the types of HSR needed to support policy and program development, review past and current HSR studies and their deficiencies, and develop new strategies for promoting and coordinating HSR so it will provide relevant and timely information. The meeting, which would bring together senior managers in government ministries, health programs, research institutes, health-training institutions, and donor agencies could conclude with the preparation of a plan for developing more appropriate structures for coordinating and supporting HSR at the national and possibly subnational levels. **(See detailed description of strategy in Annex 3.)** It is important that top-level policymakers be involved in the national level consultative meetings as well. (See Chapter 3, strategy 4, for a discussion of their role in these meetings.)

4. HSR projects with intensive involvement of decision-makers

A well designed HSR project that is planned and conducted with the full involvement of key decision-makers and provides results of real use to managers can help demonstrate the value to HSR. Decision-makers from both the health system and community can be asked to identify priority issues or problems and then participate in the design and implementation of studies to resolve them. A

major emphasis can be placed on utilization of the results, with workshops or other forums organized in which policymakers, senior managers, and community leaders work with the researchers to plan program and managerial changes based on the results. "Learning-by-doing" can be a powerful tool to convince decision-makers of the general utility of HSR. (See detailed description of strategy in Annex 4.)

5. Sessions on HSR in more broadly focused workshops or conferences ("Piggyback workshops")

A module on HSR and its use as a management tool can be integrated into a more broadly focused workshop or conference for senior health-management professionals. "Piggyback workshops" of this type can be used to present the concept of HSR to a much wider audience and at less cost than would be possible through specialized workshops alone. (See detailed description of strategy in Annex 5.)

6. HSR consultants

Consultants, either individually or in teams, can be used for a variety of short-term technical-assistance tasks related to strengthening a country's capacity for planning, conducting, and using HSR. (See detailed description of strategy in Annex 6.)

7. Orientation session for decision-makers preceding HSR proposal-development workshops

An orientation session can be held for health-care decision-makers immediately before an HSR proposal-development workshop. During the orientation session, decision-makers can be introduced to the decision-linked approach to HSR and then asked to help guide the research activities that will be developed in the workshop that follows. The decision-makers can indicate the questions they would like addressed by research and collaborate with the researchers in the proposal-development workshop to design and implement HSR projects that will provide timely and practical answers to the questions raised. (See detailed description of strategy in Annex 7.)

8. Case-study workshops on HSR

A workshop can be held for decision-makers, health administrators, and researchers that uses case studies to illustrate the importance of HSR for attaining PHC goals and provides practice in deciding when and how to use HSR, designing appropriate studies, and utilizing results. (See detailed description of strategy in Annex 8.)

9. Joint health manager/funding agency representative working sessions

Senior health managers can work together with representatives of major research-funding agencies to develop criteria for research funding and other joint strategies that will encourage the development of decision-linked HSR. (See detailed description of strategy in Annex 9.)

10. HSR focal points, health-research units, and advisory committees

A variety of strategies can be used to strengthen the institutionalization of HSR at the national level. Strategies that have been particularly useful in a number of countries include the designation of HSR focal points, organization of HSR units, and appointment of HSR advisory committees.

When HSR activities are just getting underway in a country, the ministry of health may designate either an individual or organizational unit with other responsibilities to serve on a part-time basis as a focal point for coordinating HSR activities.

As HSR becomes a recognized tool for problem-solving and its scope of activities grows, a formal Health Research (or HSR) unit may be organized. The focal point or HSR unit may be responsible for a variety of activities including assisting with the formulation of a national research policy and priorities for research; promoting, coordinating, and conducting health research; serving as an HSR clearinghouse; and assisting with needed HSR training activities.

A multidisciplinary HSR Advisory Committee including key health decision-makers and researchers should be appointed to develop health-research policy, set research priorities, evaluate research proposals, monitor problems, and insure that relevant results are considered for application. A key health policymaker should be appointed to chair the committee and the head of the HSR unit can serve as its secretary (staff). **(See detailed description of strategy in Annex 10 and a description of the role of the policymaker under strategy 5 in Chapter 3.)**

11. National and international networks for HSR

HSR networks can be developed that link research producers and users in ways that enhance the opportunities for sharing knowledge and pooling resources. Networking mechanisms can be organized that coordinate a variety of institutions and individuals, enhancing both the capacity to produce high quality, relevant research and the likelihood that its results will be effectively utilized for health development. The organization of a series of intercountry workshops (Strategy 1) and national consultative meetings (Strategy 3) can be particularly helpful in developing and strengthening HSR networks. **(See detailed description of strategy in Annex 11.)**

CHAPTER 5:

EXAMPLES OF EFFORTS TO FOSTER HEALTH SYSTEMS RESEARCH AT A COUNTRY LEVEL

A few countries have already had considerable experience with HSR. It may be helpful to briefly summarize the experiences of three of these countries. These short case studies illustrate how the strategies presented in this document have been used to promote the integration of HSR into the managerial process. As the examples suggest, each situation is somewhat different and the choice and sequencing of strategies vary, but similar approaches have proved helpful in a number of settings.

Malaysia¹⁵

Recognizing the need for HSR	In Malaysia, by the early 1980s, public demand for health care was rapidly increasing but, because of a slow-down in economic growth, there was little prospect of increased resources for the health sector. Thus, the major thrust was for improved effectiveness and efficiency and better use of available resources. In the Fourth Malaysian Development Plan (1981-85), the Ministry of Health adopted a policy to strengthen health management, which included using HSR as a management tool.
Stimulating interest through HSR projects with intensive decision-maker involvement	At the time, only a few major HSR projects had been carried out, but they had contributed significantly to management policy decisions. The Public Health Institute of the Ministry of Health, for example, had conducted a "Study of Hospital Utilization in Peninsular Malaysia" that was planned and implemented with close collaboration with decision-makers and resulted in a series of managerial changes. This study and others like it helped convince managers that HSR could contribute meaningful information for decision-making.
Creating an HSR unit	The Public Health Institute was asked to play a leading role in strengthening HSR capabilities, coordinating and conducting studies, and promoting use of findings.
Organizing a national consultative meeting	In 1985, a national workshop (consultative meeting) was held for senior managers and researchers that focused on sensitizing managers to HSR and encouraging them to adopt it as a management tool. Participants identified priority problems in their work situations and then developed plans for HSR projects that would provide information to solve these problems. The workshop used the "Study of Hospital Utilization in Peninsular Malaysia" as an example of effective decision-linked HSR.
Using earlier HSR as examples	
Involving managers in proposal workshops	Later that year, the Public Health Institute organized an HSR methodology workshop for health-service personnel who had been identified at the earlier workshop. The participants worked to develop research proposals that addressed the priority problems their managers had identified, then collected data during a 6-week interworkshop period, and returned to analyze the data and prepare reports in a final workshop. The managers who had nominated the participants

¹⁵ Summarized from Pathmanathan and Sahan (1988).

served on a panel during which findings were presented, and made suggestions concerning the utilization of the results.

Conducting studies whose results are applied

Eleven projects were conducted, including, for example, a study of low attendance at child health clinics, that resulted in important changes in clinic procedures; a study of the factors contributing to low measles-immunization coverage that resulted in new policies that raised coverage from 44% to 60%; and a study of the records of hypertensive patients that showed that 50% of the patients had not received appropriate treatment.

Additional workshops were held and projects implemented and applied as the process continued. About 25% of the managers and health personnel who participated in the training activities continued to use HSR as a management tool.

Disseminating HSR results to decision-makers and actively encouraging application

The Public Health Institute initiated an annual publication to report on the findings and also provide summaries of how the results were utilized by managers to make recommended changes. The publication serves as a stimulus to decision-makers already active in using HSR as a management tool and encourages others to do the same. In addition, the Director General of Health began to use his meetings with program directors and other senior staff to keep informed about the use of research findings and their impact on health status.

Organizing an intercountry workshop to encourage HSR in neighbouring countries

In 1987, Malaysia hosted an intercountry workshop for decision-makers from eight countries in the western Pacific region. The workshop reviewed country experiences in using HSR and explored how HSR could be institutionalized in the managerial process. Participants developed country-specific plans for integrating the use of HSR in their own health systems. The workshop served to encourage the development of decision-linked HSR programs in these neighboring countries that were, in many cases, just beginning the process.

Kuwait¹⁶

Recognizing the need for HSR

The Ministry of Public Health (MoPH) in Kuwait established a Health Research Committee in 1975 and then a Health Research Department in 1976. Interest in HSR in Kuwait can be traced back to 1979 when three of the MoPH staff participated in the WHO/Eastern Mediterranean Regional Office (EMRO)-Institute of National Planning, Cairo "Orientation Course in Health Services Research" held in Alexandria, Egypt, in January 1979. The long-term 1985-2000 health plan included a number of HSR activities but unfortunately was shelved, partially because of unrealistic objectives and minimal involvement of concerned departments in the proposed HSR projects.

Participating in an intercountry HSR workshop

Stimulating interest through HSR projects identified by decision-makers

In November 1983, the MoPH appointed an HSR expert to develop a health profile for Kuwait. This was the biggest HSR project that has been implemented thus far in Kuwait. The sample size was 3358 families, representing 1.4% of all families in Kuwait.

¹⁶ Summarized from a description prepared for this document by W.A. Hassouna, Health Planning Advisor for the Ministry of Public Health, Kuwait, 31 May 1990.

Visit of Task Force	In September 1986, Kuwait was the first EMRO country to be visited by a Task Force to assess the health research policy of the country.
Organizing a case-study workshop on HSR for senior and midlevel managers	During the last week of the Task Force's visit, a 6-day workshop was held for senior and mid-level managers from all major health programs. Case studies were used in the workshop to demonstrate the use of HSR in health labour projections for primary care and health-services utilization patterns. The workshop was used by the Task Force to identify the existing health-research and HSR situation, discuss problems, and elicit recommendations. Many of the developments described below can be traced to the influence of the Task Force.
Appointing an HSR consultant/ advisor	In June 1987, the MoPH appointed W.A. Hassouna, an expert in health planning and HSR, first as a consultant for HSR and later as Health Planning Advisor to the MoPH, with HSR activities as a major focus of his terms of reference.
Creating an HSR division	In September 1987, the Department of Planning and Follow-up was reorganized and a special division for HSR was established, on the recommendations of the Task Force. Its terms of reference included conducting HSR studies, improving the utilization of HSR results in health planning, encouraging the use of HSR at all levels within the MoPH, and training of HSR personnel.
Strengthening local capacity in HSR through intensive training	A month after the appointment of the HSR consultant, five Kuwaiti nationals working in the Department of Planning and Follow-up were given intensive training to form a nucleus HSR team. One of the training activities involved design and completion of an HSR case study in a primary health care centre focused on problems in the provision and utilization of services.
Conducting studies focused on problems of concern to decision-makers	During the final months of 1987, the HSR team increased to 10 members and implemented two small studies on the request of decision-makers. In December 1987, on the request of the Director of the Al Farwaniya Hospital, the team began a large project in collaboration with hospital staff to explore causes of unnecessary utilization of the Casualty Department. Results were presented as the main event at the hospital's Scientific Day. This presentation triggered demand for similar studies in other district general hospitals, which are being pursued.
Organizing HSR workshops for managers	In November 1987, a 1-day seminar on HSR was held for directors of Health Regions and a number of hospital directors. In February 1989, an HSR workshop was held by the MoPH in collaboration with the Kuwait Institute for Medical Specialization (KIMS) and the Community Health Department of the Faculty of Medicine for top- and midlevel managers in these organizations. The opening and first sessions were attended by the Minister of Health who expressed his great interest in using HSR to improve the management of health services. A follow-up workshop was held in May 1990.
Involving top-level policymaker in HSR workshops	
Organizing and managing HSR	One of the recommendations of the HSR workshop held at the end of the Task Force visit was to reorganize the Health Research Department and establish an organizational unit responsible for HSR. However, in June 1988, the Department of Health Research, which had been established in 1976, was canceled and replaced by an administrative unit in KIMS. Unfortunately, despite repeated recommendations by several groups, a clear organizational structure for HSR has still not been realized. None-the-less, many studies are being completed, although with minimal coordination, and the 1990-1995 health plan includes a reasonable

number of HSR training activities and projects. A suitable organizational structure for HSR, including the appointment of a full-time senior Kuwaiti researcher to direct HSR activities with the assistance of a technical advisor group, is still needed.

Botswana¹⁷

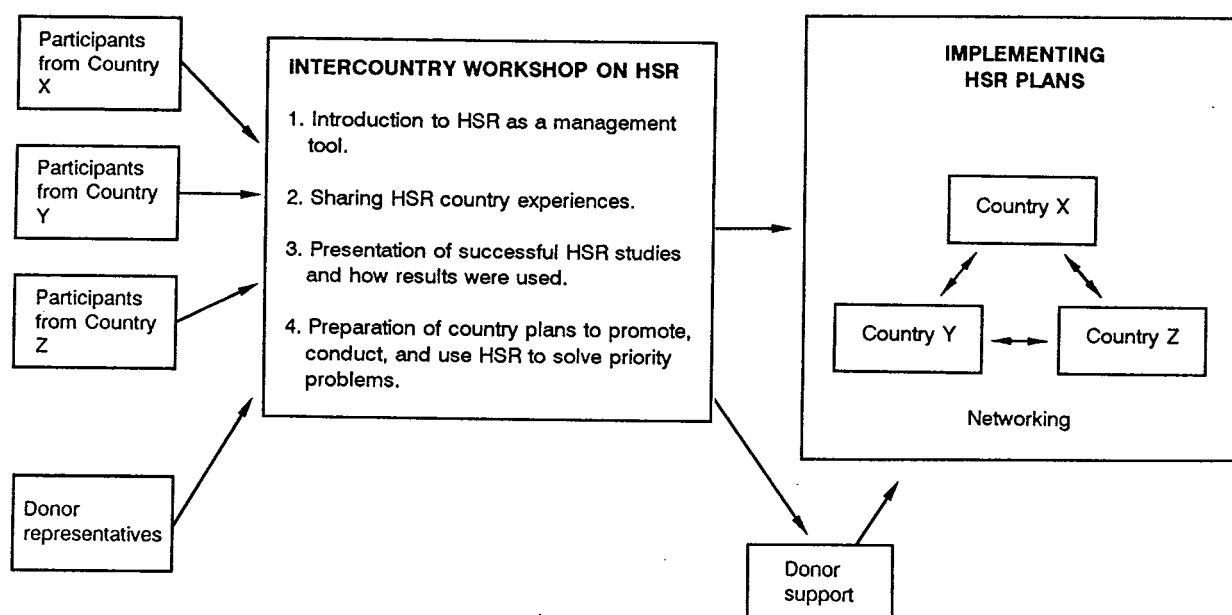
Recognizing the need for HSR	After independence, Botswana adopted a PHC approach to development of its health services. As the organization of the basic system of PHC was completed in the early 1980s, the Ministry of Health began to focus on extending coverage, improving the quality of care, securing full community involvement, and improving efficiency. This effort brought into sharp focus the need for HSR to assist in defining priorities, suggesting options, and evaluating the impact of measures taken.
Stimulating interest through HSR project with intensive decision-maker involvement	Between 1983 and 1985, three major studies were made that evaluated the implementation of PHC and established indicators that would be used to monitor the effects on health status of various programs. Through these studies, which were executed in close collaboration with key Ministry of Health officials, a number of senior managers and researchers gained experience and interest in utilization-focused research.
Organizing a national consultative meeting	In 1984, a conference, or consultative meeting, was organized by the Ministry of Health that brought together policymakers from government, major institutions involved in HSR, and important donor agencies. The conference sensitized policymakers to the potential of HSR as a management tool and resulted in a coordinated approach to using HSR to support the national development process.
Organizing a health-research committee	That same year, a health research and development committee was established that identifies research priorities, strengthens research capabilities, coordinates research, and encourages practical application of findings. Many of the decision-makers who served on steering committees for the earlier studies were nominated as members of this committee.
Establishing a health-research unit	A health-research unit was established in 1985 that, serving as the secretariat of the Health Research and Development Committee, initiates, coordinates, and supports training and research. It has spearheaded strategies to encourage the use of HSR in the management of health services. A major initiative has focused on developing the capacity of district health teams to carry out HSR and use findings as part of their daily work.
Organizing HSR training workshops	An HSR methodology workshop was held in 1985 to create a pool of research expertise. Participants carried out a number of studies. A second workshop was held in 1986 for tutors of the National Health Institute, who then began incorporating HSR in the curricula of various training programs and provided technical support for district-level research efforts.

¹⁷ Summarized from Owuor-Omondi (1988).

Conducting studies whose results are applied	HSR has been used to resolve a number of important issues over the past few years. Projects, for example, have focused on making family welfare workers more community based, identifying risk factors in home and hospital deliveries, increasing the effectiveness of village health committees, and improving the rate of clinic utilization.
Disseminating results to decision-makers	One strategy to promote the dissemination and utilization of results involved the launching of the Botswana National Health Bulletin, which provides information on current and completed research projects and is distributed to policymakers, managers, and other health professionals.
Creating a network of divisions and units involved in HSR	A network of divisions and units in the Ministry of Health and related ministries and agencies is being created that will serve as a nucleus for promoting HSR and ensuring that findings will be used. Some members of the network will serve as instructors in future district courses.
Organizing working sessions with donor agencies	The Ministry of Health has met with major donor agencies and obtained their cooperation in providing well coordinated support for HSR studies focused on the priority needs of the country.
Creating a network of external collaborating institutions	Plans are at an advanced stage for developing a network of external collaborating institutions that will work together with various national institutes and units involved in HSR and exchange ideas and experiences. The main components of such collaboration include training, technical cooperation, funding, and evaluation.

1. INTERCOUNTRY WORKSHOPS ON HEALTH SYSTEMS RESEARCH¹⁹

BRIEF SUMMARY OF STRATEGY: An intercountry workshop on HSR provides an opportunity for representatives from several countries to come together and share their experiences in HSR and HSR training and work to develop plans of action to strengthen country strategies and programs. If some of the participating countries are further advanced than others in institutionalizing a decision-linked HSR approach, the workshop provides a valuable opportunity for them to pass on information concerning successful HSR development strategies to their colleagues who are just beginning.



¹⁹ The description of the strategy for this workshop is based on the experience of two intercountry workshops on HSR held in Harare, Zimbabwe (1987 and 1989), and the *SHDS-WHO/AFRO Conference in Applied Research in Africa* held in Dakar, Senegal (1984).

EXAMPLE (see WHO 1989 for details): An Intercountry Workshop on HSR was held from 26 to 30 June 1989 in Harare, Zimbabwe, for the countries of southern Africa. The 1989 workshop was attended by representatives from 10 countries that had been present at an earlier workshop in 1987, two more countries from the region, and four more countries from other areas of Africa that wanted to benefit from the experiences in HSR gained in southern Africa.

The 1st day of the workshop was devoted to discussions concerning the **development of national structures and mechanisms for HSR** and reports from several countries on progress they had made in institutionalizing HSR, as well as problems and constraints.

On the 2nd day, four **HSR studies that had been conducted** were presented. Besides describing the objectives, methodology, findings, and recommendations, the presenters also discussed the degree to which recommendations had been implemented. It became evident that where ministries had been involved from the beginning, and where the research team included higher level health managers, implementation proved relatively easy.

On day 3, the major issue was **training in HSR**, with several facilitators describing their experiences as facilitators in different HSR training courses. The last 2 days of the workshop were concentrated on presentations and discussions of the **plans of action** of each of the 12 countries of the region. A tentative plan of action for the Joint WHO/DGIS/KIT Project was discussed as well and, finally, **recommendations** were discussed and finalized. The Joint Project, which is scheduled to continue through 1991, is continuing to assist the countries that participated in the workshop in implementation of their plans. Many are quite active in strengthening institutional support for HSR, training staff, and implementing projects.

PARTICIPANTS

Senior professionals from several countries from organizations that should work together at a country level to promote, conduct, and use the results of HSR. Country teams could include, for example:

- Ministry of health officials who have or could have responsibility for coordinating HSR activities and decision-makers who could promote the use of HSR as a management tool;
- Directors of research institutions or units and senior researchers involved in major HSR projects; and
- Directors of training institutions such as medical and nursing schools that could both provide training in HSR and assist with HSR projects.

The "country teams" should include key decision-makers who have or could work together on return to foster the development of decision-linked HSR programs at national and institutional levels.

In addition, representatives from donor agencies and international organizations interested in supporting HSR activities could be invited.

ORGANIZERS

The WHO Regional Research Officer, or personnel from regional projects supporting HSR, as well as directors of ministry of health divisions or institutes from the country hosting the workshop. The country

hosting the conference, if possible, should be one in which the ministry and other organizations have already begun to use HSR as a management tool, so its HSR program can serve as an example.

FACILITATORS

High-level research and management professionals with practical experience in HSR and its use in the decision-making process and skill in facilitating workshops. If possible, most of the facilitators should be from the region on which the workshop focuses. Facilitators could also include WHO personnel (such as the WHO Regional Research Officer) and other consultants, as needed.²⁰

DURATION

5 days

OBJECTIVES

The objectives of the workshop are to enable country teams to:

1. Explore the role and importance of HSR as a tool for assisting in the resolution of priority health problems;
2. Review country activities and programs in HSR, including experience in using HSR as part of the management process;
3. Identify priority needs for information for decision-making and develop plans of action for strengthening HSR at all levels of the health system, utilizing a collaborative approach involving health managers, researchers, and trainers;
4. Discuss approaches to increasing utilization of research for decision-making in health systems and staff development;
5. Indicate where additional support from donor agencies or international organizations would be helpful to supplement national resources; and
6. Explore how an intercountry HSR network might be organized that could support country HSR activities.

CONTENT OF THE WORKSHOP

This type of intercountry workshop provides an opportunity for participant teams from several countries to meet together, share and report on their experiences related to HSR, and work to develop plans to strengthen HSR country strategies and programs. Teams attending the workshop should be asked to prepare and bring with them short reports summarizing their countries' activities and accomplishments in HSR. If several of the participating countries have had good experience in promoting and utilizing HSR as a management tool, they can share their approaches and encourage other countries just beginning.

The agenda or program for a 1-week intercountry workshop could include:

²⁰ Workshop organizers, trainers, and facilitators can also refer to Volume 5 of the *Health Systems Research Training Series* for further information on how to organize and conduct workshops and other training activities.

1. An introduction to HSR and recent international developments in HSR;
2. A description of a general approach to development of HSR and management at national level;
3. Presentations by country teams describing national structures and mechanisms for HSR and progress in promoting HSR, based on the reports prepared before the workshop;

(If some countries have not yet developed HSR programs or activities, teams from these countries need not give presentations, but should have an opportunity to pose questions to teams with more experience.)
4. Short descriptions of HSR studies conducted in several of the participating countries, and how results have been used;
5. Presentations on HSR training activities within the region and discussion of training issues;
6. Working sessions in which country teams develop country plans of action to promote, conduct, and use HSR to solve priority problems; and
7. Presentation of national plans and discussion of strategies to obtain donor support needed and to develop a regional HSR network that will support country activities.

If it seems useful, one additional set of working sessions could be organized before the country teams develop plans of action. This first set of working sessions (which would come between steps 5 and 6 above) could bring together participants by the types of institutions to which they belong (ministries of health, research institutes, training institutions, and donor agencies). Each group could discuss HSR-related strategies and activities appropriate for its type of institution, thus learning from colleagues from similar institutions but different countries. Results from these discussions could be reported in plenary.²¹

PRODUCTS

Reports from all countries that have prepared presentations on their current HSR activities and accomplishments would be available to all participants and be included in the workshop report.

Plans of action would be produced during the workshop by each of the country teams that describe 1) how HSR can be used to solve health development problems, 2) how national mechanisms and strategies to promote HSR can be developed or strengthened, 3) what priority research projects should be undertaken, and 4) what financial and technical support is available what support is and still needed.

In addition, the workshop should produce a set of recommendations focusing on actions that can be taken at a regional or international level to support country activities, and types of donor support needed.

FOLLOW-UP MEASURES

It is useful if follow-up visits can be made to countries attending the workshop to meet with participant teams and assist them with implementation of their country plans of action, offering whatever technical support and encouragement may be helpful. If the WHO Regional or Subregional Office is involved in supporting HSR within the region, the Research Support Officer could be involved in the follow-up visits.

²¹ This type of working session was used successfully in the *Dakar Conference on Applied Research in Africa*. See the agenda for that workshop in the supplemental materials at the end of this annex.

If facilitators or participants from countries further along in the HSR-development process could provide useful assistance, they might also be involved in providing follow-up assistance.

It is useful to hold a series of intercountry workshops if the aim is to foster national HSR program development and international networking to support that process. The first workshop, for example, can introduce the concept of HSR as a management tool and provide an opportunity for participants to develop their preliminary plans. During the same time period, countries may be convening consultative meetings at the national level as a means of broadening awareness and strengthening the mechanisms needed to support HSR (see Annex 3). In further intercountry workshops, country teams can report on progress and update their plans.

POTENTIAL IMPACT

The intercountry workshop allows an opportunity for professionals from several countries in a region to meet together and exchange experiences and ideas related to the use of HSR as a problem-solving tool, and to develop country strategies for the future. The process of bringing together participants from ministries, research institutes, training institutions, and donor agencies provides an opportunity for participants to become familiar with the viewpoints and goals of colleagues in different organizational settings; this fosters the development of HSR strategies that involve genuine collaborative effort among relevant institutions at the country level.

The optional working session in which participants are grouped by similar types of institution but with colleagues from different countries allows for a useful sharing of ideas between countries, which can serve to enrich the country strategies that are finally developed. The country reports near the beginning of the workshop also foster cross-fertilization of ideas.

LIMITATIONS

The workshop will only be successful in fostering further development of decision-linked HSR programs at the country level if the participant teams are well selected. If the teams do not include key professionals who can work together to develop or strengthen programs of this type, the influence of the workshop will be limited.

It is helpful if the workshop can be held in a country with successful experience in using HSR as a management tool or if at least some of the country teams attending the workshop have strong HSR programs and can share their approaches, serving as an inspiration to countries with less HSR experience. If all teams are from countries just beginning the process of HSR development, cross-fertilization of ideas may be less successful.

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Note: Additional final reports or summaries of workshops held in various countries are available from sponsoring organizations, some of whom are listed in the Preface.

SUPPLEMENTAL MATERIALS

Samples of agendas from two intercountry workshops are presented on the following pages.

Examples of two agendas for intercountry workshops on HSR

Program of Work for the Second Intercountry Workshop on Health Systems Research, Harare, Zimbabwe, 26-30 June 1989

Day 1	DEVELOPMENT OF NATIONAL STRUCTURES AND MECHANISMS FOR HSR
09.00-09.15	Welcome Address, Director of WHO Subregional Development Office
09.15-09.30	Official Opening by Deputy Minister of Health, Zimbabwe
09.30-10.30	International developments in HSR
10.30-11.00	Coffee break
11.00-11.45	Development of HSR Unit and HSR Networking, Malawi
11.45-12.30	Development of HSR Unit and HSR Networking, Tanzania
12.30-13.45	Lunch
13.45-15.15	Development of HSR units and HSR networking in the subregion and the role of the Joint Project
15.15-15.30	Coffee break
15.30-17.00	Working groups: planning of country activities, HSR units, and networking
18.00	Reception
Day 2	PRESENTATION OF HSR STUDIES CARRIED OUT: PROBLEMS, OBJECTIVES, METHODS, FINDINGS, AND RECOMMENDATIONS
08.00-09.30	Discussions in working groups on structure and mechanisms for promoting HSR
09.30-12.30	Presentation of case studies of three HSR projects: Botswana, Malawi, and the Seychelles
13.00-14.00	Lunch
14.00-15.00	Presentation of one additional case study of an HSR project in Mauritius
15.00-15.30	Coffee break

15.30-17.00 Panel of representatives from Angola, Cameroon, Comoros, Ethiopia, Ghana, and Kenya posing questions to other participants on HSR developments

Day 3

TRAINING IN HSR

08.30-09.15 Training in HSR: Seychelles and Tanzania

09.15-10.00 Training in HSR: Botswana and Zimbabwe

10.00-10.30 Coffee break

10.30-11.15 Joint project experience with training in HSR

12.00-13.30 Lunch

13.30-14.45 Preliminary plans of action of the Subregional Health Development Office Joint Project 1989-1991 and discussion

14.45-17.00 Working groups on individual country plans of action

Day 4

PLANS OF ACTION

08.30-10.30 Presentation of plans and priorities for HSR action for Angola, Botswana, Comoros, Lesotho, and Malawi

10.30-11.00 Coffee break

11.00-12.00 Presentation of plans and priorities for HSR action for Mauritius, Mozambique, and the Seychelles

12.00-13.00 Lunch

13.00-18.00 Field trip to Mashonaland East

Day 5

PLANS OF ACTION, DISCUSSION OF FINAL REPORT, AND EVALUATION

08.00-10.00 Presentation of plans and priorities for HSR action for Swaziland, Tanzania, Zambia, and Zimbabwe

10.00 Coffee break

10.30-11.30 Tentative plans of action for the Joint HSR Project

11.30-12.30 Discussion of final report and evaluation

12.30-13.00 Official closing ceremony with address by the WHO Country Representative

**Program of Activities for the First Annual *SHDS-WHO/AFRO Conference*
on *Applied Research in Africa*, Dakar, Senegal, 3-7 December 1984**

Day 1	OPENING CEREMONY, ORIENTATION, AND ROUND TABLES
09.00-10.30	Opening ceremony Speeches by the Director of SHDS, WHO Country Representative, Minister of Public Health
10.00-10.30	Coffee break
10.30-11.30	Orientation to the conference
11.30-11.50	The applied research program of WHO/AFRO
11.50-12.30	The HSR program of WHO/Geneva
12.30-14.00	Lunch
14.00-15.30	Round table: The role of institutes and units of research and planning in applied research Presentation of experiences of research and planning institutes, discussion among round-table members, general discussion, and synthesis
15.30-16.15	Coffee break
16.15-17.45	Round table: Technical and financial resources to support applied research activities in West and Central Africa Presentation of the policies of international donor agencies, general discussion, and synthesis
Day 2	ROUND TABLES
08.30-10.30	Round table: Applied research and health services Presentations by researchers of study results from HSR studies in Bénin, Burkina Faso, Côte d'Ivoire, Mali, and Senegal
10.30-10.45	Coffee break
10.45-12.15	Round table: Health training institutions and applied research Presentations of experiences of the schools of medicine in Bénin, Burkina Faso, Côte d'Ivoire, Guinea, Mali, Senegal, and Togo; discussion among round-table members; general discussion; and synthesis
12.15-14.15	Lunch

14.15-15.40 Round table: Experience of ministries in using applied research as a tool for resolving priority health problems
 Presentations of experiences of the Ministry of Scientific Research of Senegal, the Ministry of Health of Mali, and the Ministry of Health of Burkina Faso

15.40-17.20 Round table: Technical and financial resources to support applied research activities in West and Central Africa
 Presentation of the policies of additional international donor agencies, coffee break, general discussion, and synthesis

Day 3

WORKING GROUPS: BY INSTITUTION

08.30-09.00 Orientation to the working groups:
 Group 1: Ministries
 Group 2: Institutes and units of research
 Group 3: Researchers
 Group 4: Training institutions
 Group 5: International organizations

09.00-10.30 Group work

10.30-10.45 Coffee break

10.45-12.00 Group work (continued)

10.00-14.15 Lunch

14.15-18.15 Plenary session with group reports and discussion, including coffee break, and synthesis

Day 4

WORKING GROUPS: BY COUNTRY

08.30-14.00 Free

14.00-17.00 Orientation to the country working groups and group work, with coffee break

17.00-18.00 Reports of recommendations from the working groups (by institution)

Day 5

GROUP REPORTS ON COUNTRY PLANS OF ACTION, RECOMMENDATIONS, EVALUATION, AND CLOSING CEREMONY

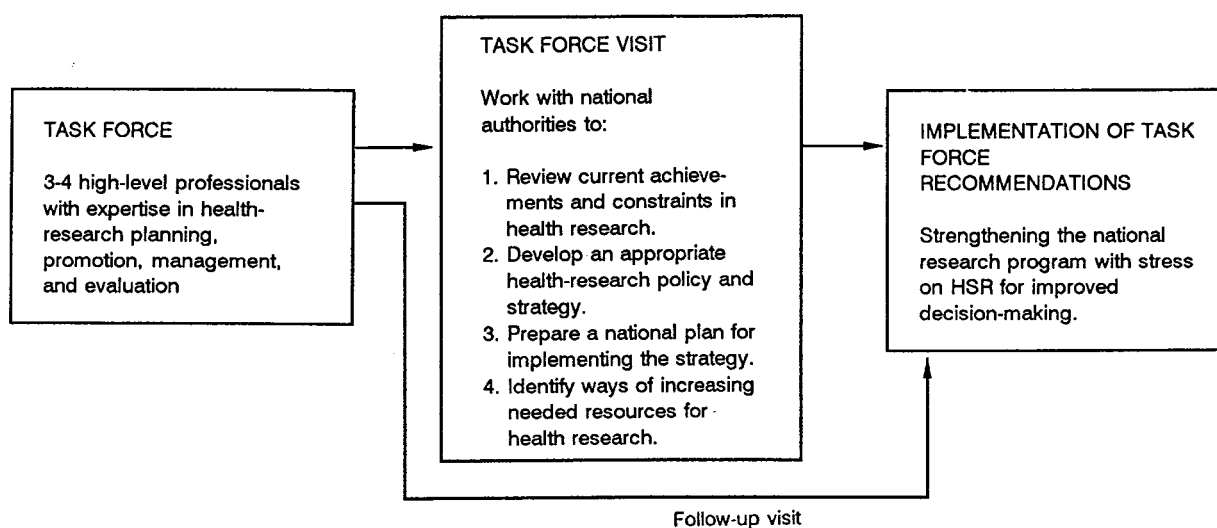
08.30-12.30 Reports, presentations, and discussion of country plans of action with coffee break and synthesis

12.00-14.30 Lunch

14.30-16.00	Plenary session: Recommendations and evaluation of the conference
16.00-17.00	Coffee break
17.00-18.00	Closing ceremony

2. TASK FORCES ON HEALTH RESEARCH²²

BRIEF SUMMARY OF STRATEGY: A multidisciplinary task force composed of professionals with a high level of expertise in health research can assist in assessing the HSR situation (as well as other aspects of health research) in a country. The team would work with senior health management and research personnel to identify current strengths and weaknesses in the research program and make recommendations concerning health-research policy. The task-force members, usually three or four in number, may be either external consultants or selected from within the country itself, depending on the preference of the country.



²² The description of the strategy for the Task Force is based partially on Bishop (1989).

EXAMPLE (from Abdussalam 1989): The Advisory Committee on Health Research of the Eastern Mediterranean Region of WHO recommended at its meeting in Kuwait in 1986 that a task force be established that would visit interested countries and work with national groups to develop rational health-research policies and make recommendations concerning their implementation. The strategy evolved from the WHO-initiated Country Health Review Mission and the Regional Office's identification of HSR as a key mechanism for promoting Primary Health Care (PHC) in member states. Between September 1986 and December 1988, the Task Force visited Iran, Jordan, Kuwait, Pakistan, and Saudi Arabia.

The use of the Task Force in Iran is described to illustrate this strategy. In December 1988, a Task-Force visit was made to Iran by a three-member team, two of whom were from the eastern Mediterranean region. The visit was scheduled because the Minister of Health and Medical Education strongly supported the idea of promoting health research as part of the managerial process. The health-research structure was already quite well organized, but the country wanted to improve its output. The Task Force, accompanied by the Undersecretary for Health Research, met with the Minister, visited universities and research institutes in Teheran, and then traveled to three provinces where discussions were held with authorities in the health services and universities.

The Task Force identified some quite positive developments in Iran that created a highly favorable situation for the further development of health research (e.g., an Undersecretary for Health Research and a strong Division of Health Research within the Ministry, the integration of universities of medical sciences with departments of health services within the provinces, and a vigorous effort to extend health-care coverage in rural areas, supported by wide-scale research). It identified problems that still needed to be tackled as well, including the need for a well defined health-research policy based on the national health policy, for directing university research toward HSR, for training in HSR for health-services managers and university staff, and for strengthening information systems and libraries. The report recommended improvement in these areas.

Since that time, the Undersecretary and Division of Health Research have prepared a list of national research priorities with HSR prominently featured; the Division has acted as a coordinating body for health research, bringing together research workers and academics in almost all major universities of medical science; five national HSR proposal-development workshops have been conducted and more than 150 people have completed their projects; universities have both trained faculty in HSR and, in some cases, integrated HSR into the school curriculum; a Central Medical Library has been established; and the Department of Health Information has been reorganized and provided with computers to facilitate its work.

TARGET GROUP

High- and midlevel professionals who are charged with the planning, promotion, management, and utilization of health research at the national level.

ORGANIZERS

The official within the ministry of health responsible for health research in the country in collaboration with the Regional Advisor for Health Research or another representative, if appropriate.

TASK-FORCE MEMBERS

The Task Force should include three or four senior, well respected, health or health-research professionals with high-level expertise in health-research planning, promotion, management, and evaluation. The Task- Force members can either be all from within the country itself, or partially or entirely from other countries, depending on the preference of top officials in the country in which the activity is being arranged. External consultants may be able to ask questions, open discussions, and confront differing views in a way that may be difficult for a national group, but use of national experts who will remain to assist in implementing of Task-Force recommendations has advantages as well. It is very helpful if the national official within the ministry of health who is responsible for research affairs can accompany the task force throughout its work.

DURATION

The Task-Force agenda usually takes 2 weeks to complete.

OBJECTIVES

The Task Force should work in collaboration with national authorities in the country to:

1. Identify a national health-research policy and research strategy with emphasis on priority issues, especially those affecting the delivery of PHC;
2. Develop a feedback mechanism to keep national authorities informed concerning community needs and priorities;
3. Prepare a national plan of work for implementing the research strategy, including a plan for cooperation of all concerned groups and coordination of their activities for the promotion of health research;
4. Identify ways of increasing resources needed for the implementation of research at the national level; and, if appropriate,
5. Identify areas of collaboration of the member state with the WHO Regional and Global Advisory Committees on Health Research.

PROCESS

The method of work proposed for a task force for health research includes these steps:

1. The first step is for a country to decide if it wishes to use the task-force mechanism to examine the country's health research system and how it can be improved. It must decide whether the Task-Force members should all be from the country itself or whether some or all of the team should be from the outside.
2. A program of work should then be drafted by the official responsible for research at the national level and arrangements made with all individuals and organizations who will be visited by the Task Force.

3. The Task Force should meet with a wide range of people during its assignment, including policymakers and directors of health services at the national, provincial, and district levels; key staff at hospitals, faculties of medicine, research institutes, and training institutions active in health research; and decision-makers in other relevant sectors as well. Community leaders or representatives of important community organizations should also be consulted. In addition, available written information should be gathered.
4. The Task Force should look for answers to a range of questions in areas such as health-research policy, planning of national research, funding of research, and research workers and health-service managers.²³ The Task Force often focuses on "health research" in general, but may place a particular emphasis on HSR, if it is less developed than other components.
5. The Task Force should then prepare a report describing the current health-research situation and its achievements as well as current constraints. Finally, a series of recommendations should be prepared focusing on areas such as:
 - Establishment of a policy for health research,
 - Organization of health research within the ministry,
 - Development of a feedback mechanism between relevant organizations in the community and the ministry,
 - The need for training,
 - Funding of health research,
 - Provision of incentives, and
 - Responsibilities of universities and research institutions.
6. If appropriate, plans for follow-up work by the Task Force should be prepared before the initial assignment is over. Activities could include a review of progress made after a period of several months, what difficulties have been encountered, and what solutions might be explored.

PRODUCTS

A detailed report should be prepared by the Task Force that presents the current health-research situation in the country, including accomplishments and constraints, outlines a proposed national health-research policy and research strategy, presents a national plan of work for implementing the research strategy, identifies ways of increasing resources needed, and, if appropriate, suggests useful areas for collaboration with other countries and international networks.

POTENTIAL IMPACT

At times, simply the assignment of a Task Force to focus on health research appears to have produced benefits in itself. It may have the effect of placing the issue of organization and development of research potential on the national agenda. The Task Force encourages meetings and discussions between people who do not habitually meet, such as university research staff and ministry officials. The discussion of ideas and difficulties, and, at times the ventilation of resentments and prejudices, takes place in a presence of a neutral team in ways that often cannot happen otherwise (Bishop 1989). The fact that the

²³ A list of the questions that could be asked related to these areas is provided in the Supplemental Materials section at the end of this Annex. A list of issues to be explored in an HSR review is also reproduced, providing an alternative set of guidelines for the Task Force's work.

Task Force will also follow up its initial assignment with a look at what has happened several months later encourages the ministry to take recommendations seriously and attempt to institute needed changes.

LIMITATIONS

The total cost for a Task-Force activity varies. If part or all of the team come from outside the country and are paid as consultants both for an initial and follow-up visit, the cost may be quite considerable. If, on the other hand, most or all of the Task-Force members come from the country itself and, when possible, professionals are loaned by their organizations to work on the team without charge, the cost would be much less.

Whether the Task-Force members should come from inside or outside the country would depend on what a particular country believes is most appropriate. In the Eastern Mediterranean Region (EMR), task forces from outside the country (but with a majority of members from other countries within the region) appear to have been used quite successfully. An evaluation of the EMR experience suggests that countries in that region hosting task forces have appreciated the impartial and fresh view of the countries' research situations that can be provided by outside experts. In many countries, however, it may be more appropriate for some or all of the Task-Force members to be from the country itself. National participation in the data gathering and analysis process is likely to enhance commitment to implement the Task Force's recommendations and will certainly decrease costs.

FOLLOW-UP MEASURES

After the initial work by the Task Force is completed, the officials responsible for health research at the national level should study the report in detail. If the report is acceptable and recommendations appear appropriate, it may be useful to hold a national-level workshop or working meeting at which officials or organizational representatives who would be responsible for the proposed program examine the report and develop a plan of action to implement its recommendations. The Task-Force report could be a background document for a "National Consultative Meeting on HSR". (See the description of this strategy in Annex 3.) Task-Force members may be requested to assist with follow-up activities or implementation of specific portions of the plan.

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SUPPLEMENTAL MATERIAL

Two lists that can be used as guidelines concerning the issues that can be explored by a task force are presented on the following pages.

Types of Questions Explored During the EMRO Task Force Visits²⁴

Health-research policy

Is there an explicitly stated policy for health research? If there is a policy, is it widely published so that all who may be concerned are fully aware of it?

How was this policy decided? Is it based upon or related to a national health policy? Who contributed to the national research policy? Is it representative of the views of all sections of the Ministry of Health? Alternatively was it largely prepared from the ideas of research workers? Were the views of health managers at provincial and district level taken into consideration? Did other sectors such as education, agriculture, transport, and economics contribute ideas to the policy?

What form does the policy take? Is it set out in detail or stated in general terms?

²⁴ From Bishop (1989: 8-11).

Planning national research

Is there a program to promote the desired research actively? Alternatively, is the plan to publish the priorities and then await proposals from individual research workers? Is there any special provision made for HSR in this respect? How was the balance established between biomedical and HSR?

Do universities and research institutions have any plan for promoting and conducting research? Is there any plan to develop research in the directions indicated by national policies? To what extent has the choice of research topics been left to the preferences and interests of individual staff members? To what extent have university regulations regarding appointments and promotion been seen as determining the kind of research undertaken? Is greater credit given to single-author publications in international journals than to multi-author publications or publications in the form of reports for mainly local use?

Funding of research

What share does health research receive of the total national expenditure on research? What proportion does health research form in the total health budget? What are the processes for allocating funds for research? Have the available funds been fully utilized? What are the criteria for judging a proposal and how have decisions been reached between competing claims? Has any priority been given to HSR?

How long does this decision-making procedure take? What proportion of research applications have been funded? Have the unsuccessful applications been refused because there is insufficient money available or on grounds of irrelevance or poor scientific quality?

How are research funds in universities and research institutes allocated? Does each department have research money to use as it wishes? Is all funding centrally controlled, with individuals competing for what is available? If so, how are decisions reached between competing claims?

Research workers

Which groups of health-care professionals are active in research? How and where have they been trained? What career structures have been open to them? What incentives are there to make a career in research? How are the topics for research selected? To what extent do research workers try to relate their work to the health needs of the country? How do research workers obtain the necessary resources? What particular problems do they have in conducting research? What is their burden of teaching and how much time do they devote to private medical practice?

How much do research workers know of HSR and what is their attitude toward this kind of research? What are the relationships between research workers and service managers? What are their attitudes toward each other?

Health-service managers

Do health-service managers receive any formal managerial training? Do they hold the budget and have full control of it? Are they free to vary the way in which the budget is allocated? Have they had training or experience in HSR methods and how to use them? Do they have any budget for research?

How do managers view research in relation of their work and responsibilities? What is their attitude toward research work done in universities? Is research seen as a luxury indulged in by others without much

relevance to service needs? Is it seen as an important tool for a manager? Do they have an understanding of HSR and its value to them? Do they feel any responsibility for applying the results of research in the services under their control and for keeping their staff informed of useful findings?

Issues to be Addressed by a Review of HSR at the National Level²⁵

1. Review of health research

- Research institutions under the responsibility of the ministry of health: their programs and budgets; their orientation to biomedical, clinical, and health-systems research; the position and role of this ministry in the board of these institutions;
- The existence and function of research coordinating bodies within the ministry of health, e.g., standing committee on research, research coordinator, or research coordinating unit; their orientation to the various branches of health research;
- The presence of a national health-research policy, or national health-research program, as developed by the ministry of health, or within the framework of an overall research policy or program coordinated by the ministry of science and technology; the priorities, if any, set by these agencies;
- The role of other agencies in promoting health research, e.g., other ministries, such as the ministry of education, the ministry of socioeconomic planning, the universities, and faculties of medicine;
- Funding mechanisms for health research, e.g., the ministry of health, other ministries, medical research councils, or international donor agencies.

2. Review of HSR development

2.1. Strengthening the national capability for HSR

2.1.1. Strengthening the HSR process

- Awareness of the need for HSR and political commitment;
- Existence of a national policy for HSR, in line with the national health policy, and as well as the policy for science and technology;
- Identification of priority areas for HSR;
- Establishment of a focal point for health-systems or health research in the ministry of health;

²⁵ This list of issues is summarized from Van Etten (1989). This checklist can be used by a task force, consultant team, or other mechanism used for a national HSR review.

- Functions of a focal point, ranging from more traditional ones, such as the approval of research protocols for grants to a policy-oriented function, such as the formulation of a research program;
- Staffing of a focal point, whose personnel ideally is of a multidisciplinary character to balance the expertise in biomedical research, as well as epidemiology and public health;
- Location of a focal point in the ministry of health;
- Integration of HSR into the major programs of the ministry of health;
- Provision of support from the ministry of health to HSR activities, either at research institutions under the responsibility of the ministry of health, or at other research institutions, e.g., of universities;
- Integration of HSR into the managerial process, e.g., by supporting programs aiming at the improvement of quality of patient care in hospitals or PHC institutions;
- Provision of linkages with agencies outside the ministry of health pertaining to HSR, such as health-related ministries, council for science and technology, medical research council, and universities;
- Arrangements for the collection and dissemination of information on ongoing and completed HSR projects;
- International collaboration in the field of HSR;
- Mechanisms for securing financial support for HSR.

2.1.2. Training for HSR

- The development and implementation of training programs in HSR;
- Training needs in HSR for different target groups;
- Availability of training institutions and trainers;
- Integration of HSR into the curricula of relevant training institutions;
- Availability of training materials;
- Training activities through training workshops, attendance at national and international conferences, etc.;
- Provision of incentives to encourage participation in training activities.

2.1.3 Institutional strengthening

- Review of existing health-research institutions, their major programs, and their staff's expertise;

- Review of the role of the ministry of health and the universities in creating HSR capability; with regard to the universities, attention should be paid to activities of both the faculty of medicine and other faculties;
- Identification of a lead agency for HSR;
- Provision of linkage between the ministry of health and the research institutions involved in HSR, e.g., on an ad-hoc basis, through a joint advisory group on HSR, or within a medical research council;
- Existence of collaborating centres at the WHO regional level to be used as a resource for countries in the development of national HSR capability.

2.2. Promotion, information, coordination, and utilization

Promotion

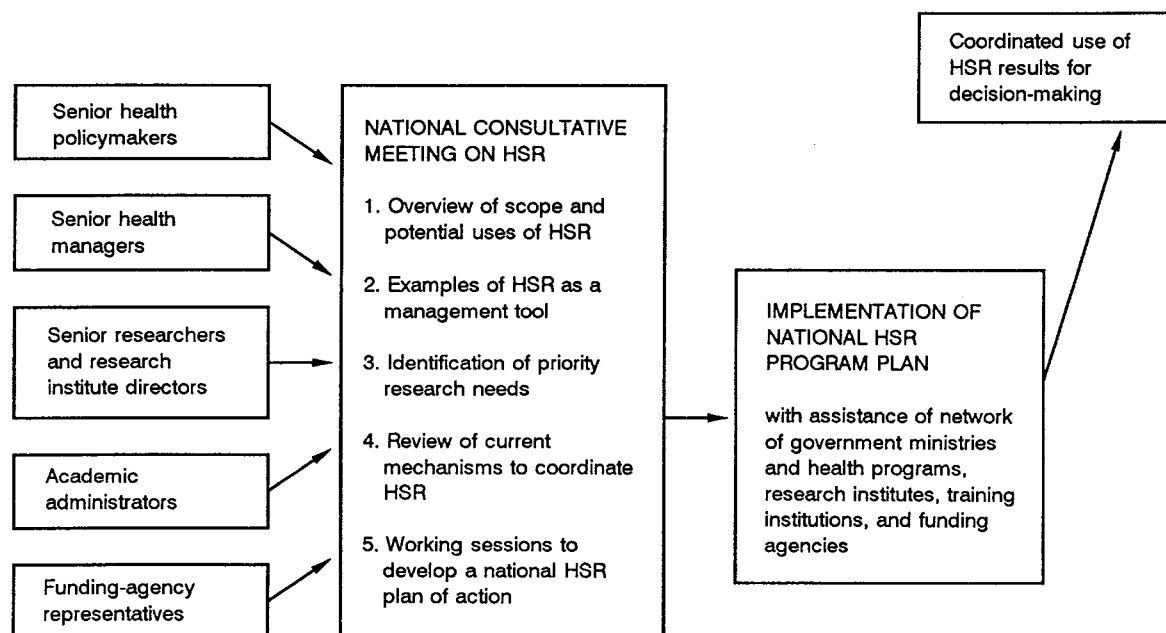
- Identification of officials and agencies interested or already active in the promotion of HSR;
- Formulation and publication of a national policy or program on HSR;
- Existence of networks at the national level to encourage the initiation and continuous application of HSR;
- Funding of substantive research by the ministry of health or other agencies;
- The availability of promotional activities for HSR by the ministry of health.

Information, coordination, and utilization

- Existence of a directory of HSR and training centres;
- Publication of research reports;
- Mechanisms for disseminating research findings into policy and health practice;
- Compilation of a collection of case studies to help potential users in their application of HSR;
- Publication of newsletters or bulletins on developments and activities in the field of HSR.

3. NATIONAL CONSULTATIVE MEETINGS ON HEALTH SYSTEMS RESEARCH²⁶

BRIEF SUMMARY OF STRATEGY: National-level consultative meetings or workshops can be held to identify the types of HSR needed to support policy and program development, to review past and current HSR studies and their deficiencies, and to develop new strategies for promoting and coordinating HSR so it will provide relevant and timely information. The meetings, which would bring together senior decision-makers in government ministries, health programs, research institutes, health-training institutions, donor agencies, and relevant community organizations could conclude with the preparation of plans for developing more appropriate structures for coordinating and supporting HSR at the national and possibly subnational levels.



²⁶ The description of the strategy for this workshop is based on the experiences of the *National Workshop on the Integration of Health Systems Research and Management* held 11-16 February 1985, Fraser Bukit, Pahang, Malaysia, and consultative meetings on HSR held in Swaziland, Tanzania, and Zimbabwe in the last couple of years. Reports from these meetings are listed in the reference section.

EXAMPLE (see PHI 1985 for details): A *National Workshop on the Integration of HSR and Management*, sponsored by the Malaysian Public Health Institute and Ministry of Health, was held in Pahang, Malaysia, on 11-16 February 1985. The participants were 25 high- and middle-level managers from the health services, selected on the basis of their potential interest and involvement in HSR, and 5 experienced researchers. The workshop focused on 1) an overview of the scope and potential of HSR as a management tool, 2) the identification of priority problems for research, and 3) the formulation of strategies for developing the HSR program, addressing HSR training needs, and strengthening linkages between researchers and managers. The workshop used a deductive approach through which managers first identified priority managerial problems they needed to resolve and then identified the contribution HSR could make to the process. One series of sessions focused on the presentation and utilization of the results of a large-scale study recently completed in Malaysia, thus providing the participants with a real-life example of research used to make managerial changes.

By the end of the workshop, the participants had identified a number of strategies and activities to strengthen the development of HSR in Malaysia. Its recommendations included 1) the implementation of five research projects on priority problems, 2) the institution of several strategies to enhance the use of existing HSR resources, 3) the organization of a regular orientation and training program in HSR, 4) the allotment of budgetary support for research at various levels, and 5) the strengthening of mechanisms for enhancing coordination between senior managers in the health-care system and researchers.

The Ministry of Health took the recommendations of the workshop seriously and proceeded to implement many of them in the months that followed. To help sustain the momentum generated by the initial workshop, a follow-up workshop was organized for 1987 to evaluate progress and devise further strategies.

PARTICIPANTS

Senior policymakers, health managers, researchers, and academicians with decision-making power in institutions or organizations that wish to work together to plan a national HSR program (25-50 participants).

Participants could include directors or senior decision-makers in organizations such as government ministries (from planning, evaluation, and statistics divisions); research institutes and units; health-training institutions (such as medical, nursing, midwifery, and public-health schools); management-training institutions; regional, provincial, or district health offices; and relevant community organizations.

ORGANIZERS

The ministry of health or an other government organization that has (or will have) primary responsibility for HSR at a national level, possibly with the assistance of an international organization such as the WHO Regional Office.

FACILITATORS

A senior-level official from the ministry of health could serve as meeting moderator and several senior professionals, with both an understanding of how to use HSR as a management tool and skill in leading

groups, could serve as facilitators. One or two outside experts, possibly from neighbouring countries with successful HSR programs, could be invited to assist as facilitators, if useful and feasible. Many of the presentations will be made by the participants themselves.²⁷

DURATION

2 to 6 days

OBJECTIVES

The consultative meeting is designed to:

1. Sensitize policymakers, health managers, and researchers to the value of HSR in health planning, management, and evaluation;
2. Identify ways in which HSR can support policy and program development and assist in solving operational problems;
3. Review current HSR activities and coordination mechanisms at the national level and problems or deficiencies in the use of HSR as a policy development and management tool;
4. Identify potential mechanisms to promote and coordinate HSR both within the ministry of health and between the ministry and other relevant organizations and the community so as to provide relevant and timely information for decision-makers;
5. Identify orientation and training needs for the development of HSR and strategies for meeting the needs thus identified; and
6. Prepare a plan of action for developing more appropriate structures for coordinating and supporting HSR at the national and possibly subnational levels.

PROCESS

The exact format for the consultative meeting will vary, depending upon the HSR mechanisms already in place within the country, the types of participants who attend and make presentations at the meeting, and the type of agenda that will work best, considering local politics and circumstances. It is best if presenters are asked to prepare papers, in written form, well in advance of the meeting. The general type of program agenda that has seemed to work best in past 2- to 3-day consultative meetings includes:

1. An overview of the scope and potential uses of HSR;
2. Presentation of two case studies that illustrate how HSR has been used to support policy development and solve health-system problems;
3. An exercise in which participants identify and prioritize research needs to support policy and program development and solve operational problems within the health system;

²⁷ Meeting organizers, trainers, and facilitators can also refer to Volume 5 of the *Health Systems Research Training Series* for further information on how to organize and conduct meetings, workshops, and other training activities.

4. Presentations by key participants that review current HSR activities and coordination mechanisms at the national level, and problems or deficiencies in the use of HSR as a policy-development and management tool;
5. Working sessions in which participants identify potential mechanisms to promote and coordinate HSR both within the ministry of health and between the ministry and other relevant organizations so as to provide relevant and timely information for decision-making; and
6. Working and plenary sessions in which a plan of action is agreed upon for developing more appropriate structures for coordinating and supporting HSR at the national and possibly subnational levels.

Several additional elements can be added to the agenda on an optional basis. Manager-participants can each be invited to bring to the course an example of one managerial problem identified by the ministry of health's or their own institution's planning process. These problems can be examined in Step 3, during which participants identify and prioritize research needs.

If a longer version of the workshop is planned (4 to 6 days), several additional tasks or exercises might be considered:

- The Nominal Group Technique could be used to prioritize problems for research, as part of Step 3 above;
- Time can be spent, as part of Step 5, identifying and doing preliminary planning for a few key research projects, after general mechanisms to promote and coordinate HSR are developed; and
- Training needs for HSR and mechanisms for addressing these needs can be identified before proceeding to Step 6, the development of a comprehensive HSR plan.

Agendas from sample meetings of this type are included in this annex.

PRODUCTS

A plan of action for developing more appropriate mechanisms for coordinating and supporting HSR at the national and possibly subnational levels. If the meeting is 4 to 6 days long, plans for addressing HSR training needs and preliminary proposals for HSR projects to address priority health problems or management needs may also be developed.

FOLLOW-UP MEASURES

If formal approval for the plan developed during the meeting is necessary, this should be a first priority. Hopefully, key decision-makers will have attended the meeting itself and thus be inclined to provide the necessary support.

It may be useful to schedule a formal review of progress made on implementation of the plan after a period, for instance, of 6 months. The knowledge that a review is imminent may encourage faster action on the plan. In certain countries, it has been found useful to hold a series of consultative meetings, a year or so apart. At follow-up meetings, progress reports can be presented, problems resolved, and action plans updated.

POTENTIAL IMPACT

The consultative meeting is a useful mechanism for planning how to coordinate and support a decision-linked HSR program at the national and subnational level. The scheduling of consecutive meetings of this type serves to strengthen networking among national organizations and individuals who should work together to implement the national HSR program.

The order of the meeting agenda is an important element in encouraging effective planning and a commitment to the changes proposed. The type of format discussed above first gives the participants an overview of the scope and potential of HSR, with case studies to provide concrete examples of its effective use as a management tool, and then guides the participants through a process of identifying HSR needs, reviewing current HSR activities and coordination mechanisms and becoming aware of their deficiencies, and finally developing plans for more appropriate HSR structures.

LIMITATIONS

The consultative meeting strategy will only be fully effective if the ministry of health and other relevant organizations are committed to the use of HSR as a management tool and to the development of structures to support this. Also, it is essential that participants be carefully chosen and thoroughly briefed and that presenters be encouraged to prepare papers that honestly assess the current HSR situation and propose realistic plans for the future. If the meeting is hastily put together, or real commitment is lacking, objectives are unlikely to be achieved.

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SUPPLEMENTAL MATERIALS

Sample agendas from two meetings are presented on the following pages.

Agenda for the National Workshop on the Integration of Health Systems Research and Management, Fraser Bukit, Pahang, Malaysia, 11-16 February 1985

Evening before

17.00-19.00 Registration

Day 1

08.20 Opening by Minister of Health

09.00 Coffee break

09.30 Overview of workshop

09.45 Keynote address by Director General, Minister of Health: "Scope and potential of HSR in health services development in Malaysia"

10.15 Questions and discussion

Theme 1: Prioritization of problems for research

10.30 Group Work: Session 1
 Identification of areas of concern in the health-care system

13.00 Lunch

14.00 Examples of HSR studies:
 1. Illustration of HSR on coverage and accessibility of services.

14.30 Questions and discussion

14.45 Group Work: Session 2
 Identification of projects for HSR

15.15 Tea break

15.45 Group Work: Session 2 continued
 Identification of projects for HSR

18.00 Meeting of Recommendations Committee

Day 2

- 08.15 Examples of HSR studies:
2. Decision-linked approach to HSR
- 08.45 Questions and discussion
- 09.00 Examples of HSR studies:
3. Illustration of the terminology and the potential uses of economic analysis and cost-effectiveness analysis in health care
- 09.30 Questions and discussion
- 09.45 Examples of HSR studies:
4. Illustration of application of HSR in development of a health program
- 10.15 Questions and discussion
- 10.30 Coffee break
- 11.00 Group Work: Session 2 continued
Identification of projects for HSR
- 13.00 Lunch

Theme 2: Operationalization of HSR

- 14.15 Introduction to HSR process
- 14.45 Questions and discussion
- 15.00 Administrative framework for HSR
- 15.30 Questions and discussion
- 15.45 Tea break
- 16.15 Group Work: Session 3
Strategies for the implementation of HSR

Day 3

- 08.00 Plenary Session
Presentation before a panel of decision-makers from the ministry of health of
Group Reports on:
i) Research projects for 1985-87; and
ii) Strategies to implement HSR
- 10.30 Coffee break
- 11.00 Illustration of HSR process: A Malaysian example:
1. Study of utilization of hospitals

11.45	Questions and discussion
12.00	2. Strategy for utilization of findings of study of hospital utilization
12.30	Questions and discussion
12.45	Lunch
14.00	3. Application of findings of hospital-utilization study to development of surgical services
14.30	Questions and discussion
15.00	Tea break
	Theme 3: Utilization of HSR to strengthen management
15.15	Major findings of study on utilization of hospitals in peninsular Malaysia
16.00	Questions and discussion
18.00	Meeting of Recommendations Committee
Day 4	
08.00	Group Work: Session 4 Strategies to utilize the findings of study on utilization of hospitals
10.00	Coffee break
10.30	Plenary Session Presentation of group reports on "Strategies to utilize findings of study on utilization of hospitals," with the Director of Medical Services chairing the session
12.30	Lunch
	Theme 4: Training needs for HSR
14.00	Conceptual framework on training needs to support the HSR program
14.30	Group Work: Session 5 Plan of action for training to support HSR program
15.15	Tea break
15.30	Group Work: Session 5 continued Plan of action for training to support HSR Program

Day 5

- 08.15 Universities and health research
- 08.45 Questions and discussion
- 09.00 Plenary Session
Presentation of group reports on "Training needs for HSR program" before a panel of universities and public health officials
- 10.30 Coffee break
- 11.00 Plenary Session continued
Presentation of group reports on "Training needs for HSR program"
- 12.15 Lunch
- 14.45 Meeting of Recommendations Committee to draft recommendations of workshop
- 15.45 Tea break

Day 6

- 08.00 Plenary Session
Recommendations of Workshop before a panel of decision-makers from the Ministry of Health, universities, and WHO

Agenda for the Consultative Meeting for Health Policy Makers, Managers, and Researchers on Health Systems Research, Kadoma, Zimbabwe, 2-3 March 1988

Day 1

- 09.00-09.30 Opening: Director, WHO Subregional Health Development Office, Harare
- 09.30-10.30 Introduction to HSR
- What is HSR
 - Achievements and constraints
 - Mechanisms in support of HSR
- 10.30-11.00 Coffee break
- 11.00-12.30 Presentation of two case studies on the use of HSR in Zimbabwe
- 12.30-14.00 Lunch
- 14.00-15.00 Examples of HSR needs within the Ministry of Health; present research activities; existing (or nonexisting) mechanisms to coordinate research within the Ministry, and between Ministry and research institutions
- 15.00-16.00 Needs, achievements, and constraints of HSR at provincial and district level
- 16.00-16.15 Coffee break
- 16.15-17.15 Contributions from the university to HSR and use (or nonuse) made of study results by health policymakers and managers

Day 2

- Proposals for HSR structures and activities in Zimbabwe
- 09.00-10.00 National Health Development Network
- 10.00-10.30 Coffee break
- 10.30-11.30 Collaborating centre for HSR in maternal and child health
- 11.30-12.30 Joint WHO-Dutch project on HSR for southern Africa
- 12.30-14.00 Lunch
- 14.00-15.40 Discussion in three groups
- How can the district level profit from these three proposals: suggestions for adjustments and for future action
 - How can the Ministry of Health best implement the three proposals: suggestions for adjustments and for action
 - How can the university and related research institutes optimally contribute to the implementation of HSR at ministerial, provincial, and district levels?

15.40-16.00

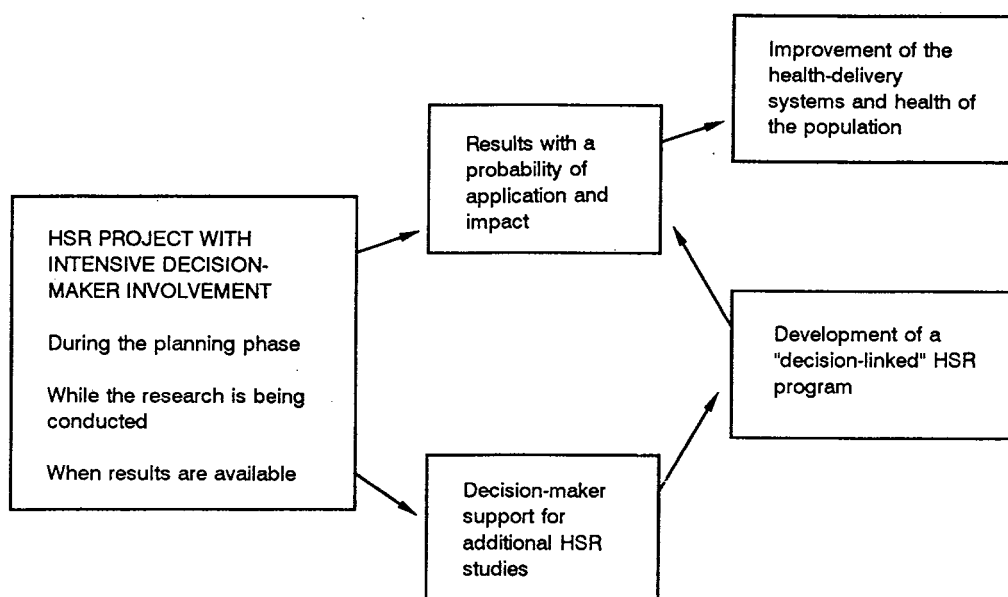
Coffee break

15.00-17.00

Presentation of summaries of group discussions: conclusion

4. HEALTH SYSTEMS RESEARCH PROJECTS WITH INTENSIVE INVOLVEMENT OF DECISION-MAKERS

BRIEF SUMMARY OF STRATEGY: Well designed HSR projects that are planned and conducted in close collaboration with key decision-makers and provide results of real use to managers can help demonstrate the value of decision-linked research. Decision-makers from both the health system and community can be asked to identify priority issues or problems and then participate in the design and implementation of studies to resolve them. A major emphasis can be placed on utilization of the results, with workshops or other forums organized in which policymakers, senior managers, and community leaders work with the researchers to plan program and managerial changes based on the results. "Learning by doing" can be a powerful tool to convince decision-makers of the general utility of decision-linked research.



EXAMPLE (summarized from Pathmanathan 1985): During the development of the Fourth Malaysian Plan (1981-85), a number of problems were identified by the Ministry of Health related to underutilization of inpatient hospital services at the district level — personnel shortages, inappropriate referrals, and poor management. The Ministry asked the Public Health Institute (PHI) to coordinate and conduct a research project focused on the problem.

The study was conducted in a sample of 11 hospitals and 95 government and private clinics in the districts where the hospitals were situated. To collect data, linkages were established between the PHI and directors of medical and health services at the state level, and managers at the hospital and health-centre level. All of these health-service managers served as field research directors. Hospital staff were designated as data collectors. Because of a series of initial meetings with all levels of managerial staff which established that they were partners in the research venture, excellent cooperation and support continued throughout the study.

Results indicated that the smaller district hospitals were the most underutilized and that a number of factors contributed to the problems, including poorly trained staff with little experience in surgery, obstetrics, or anaesthesia; poor supervision from the larger hospitals; and a tendency to refer rather than treat conditions requiring surgical intervention. Many other findings emerged from the study, as well.

The findings were discussed with high-level managers responsible for the hospital services and recommendations were prepared that were eventually formally presented to the Planning Committee of the Ministry (chaired by the Secretary General). The Committee delegated responsibility to the Hospital Division and other groups for detailed analysis and utilization of findings. Actions taken included the development of management-training programs for hospital managers, a better recognition of the managerial role of clinical heads of departments, and the upgrading of clinical skills of doctors in smaller peripheral hospitals.

This major study was used as an example of decision-linked research in a national HSR workshop focused on high- and midlevel managers. This project and other manager-initiated studies helped create a favourable climate for the use of HSR as a management tool in Malaysia.

PARTICIPANTS

Participants in the research process can include:

- Senior-level managers who are interested in using HSR as a management tool and could be key advocates for HSR, if they become convinced of its utility;
- A multidisciplinary team of researchers whose composition would depend on the particular skills needed for the HSR project selected. Senior members of the research team should be skilled in decision-linked research, so that the project will have a high likelihood of resulting in significant managerial changes;
- Health personnel of various levels whose program or area of expertise is the focus of the study; and
- Community leaders and members, when the project focuses on a community health problem or involves substantial study activities in the field.

ORGANIZERS

High-level managers or researchers who are committed to the concept of decision-linked research and wish to develop an HSR project to provide information needed for decision-making. The organizers may be ministry of health officials or members of an HSR unit who wish to promote the use of HSR in the health system and believe that well designed projects will help convince other decision-makers that HSR can provide relevant information.

DURATION

The project may vary in length, from several months to 1 or 2 years, but should not be so long, costly, or complicated that similar studies would seem impractical in the future.

OBJECTIVES

The objectives of this strategy are to:

- Give decision-makers experience in planning and supervising HSR focused on priority issues and in utilizing the research results; and
- Convince decision-makers of the general utility of HSR as a management tool, through experience with well designed, decision-linked research.

PROCESS

When an HSR project is developed, it is essential that the research team collaborate closely with health managers from the planning phase onward and that the study selected be one that has a high probability of producing information of significant use in decision-making.

Strategies for involving senior- and midlevel health managers, as well as other potential users during the research process, which will greatly increase the likelihood that results will be applied, are listed below. Strategies for three phases of the research process are reviewed — planning, implementation, and when the results are available.

Strategies for involving managers in HSR projects and encouraging use of results

During the research-planning phase:

- Meeting with managers and other potential users (health staff, community members) to identify:
 - what key decisions need to be made,
 - what types of information are needed,
 - what information is already available, and
 - what measures are needed to design research to obtain additional data;
- Jointly identifying priority topics for research;
- Asking managers to assist in analyzing the research problem, developing study objectives, and determining the scope of the study;
- Asking managers to commit resources for the study (personnel, budget, logistical support);
- Determining together when specific results are needed for decision-making; and
- Including budget in proposals for disseminating results and encouraging application.

During the research itself:

- Asking managers, staff, and community to serve on advisory groups or act as project consultants;
- Integrating managers and other potential users into the research team (as appropriate);
- Asking managers and other users to work on tasks such as:
 - assisting in problem analysis,
 - estimating values for missing data,
 - evaluating and selecting solutions to be tested, and
 - participating in exercises such as "Nominal Group" or "Delphi";
- Asking managers to make necessary administrative arrangements for the research and assist in resolving any operational problems;
- Asking managers, staff, and community to assist in designing and implementing field tests; and
- Presenting potential users with progress reports and preliminary results.

When results are available:

- Thinking seriously about what types of presentations will best encourage and give needed information for the application of results;
- Designing reports that provide practical information needed for decision-making, such as options for action based on results;
- Presenting results using a variety of media (written reports; oral presentations with graphics; slides; posters; radio, TV, or film presentations; etc.); and

- Organizing workshops in which managers and other users review study results and plan how to apply them in their own programs.

One of the objectives of HSR projects such as those described above is to provide managers with HSR experience that will increase the likelihood that they will support future HSR activities. Major studies that provide an opportunity for the involvement of influential decision-makers and provide results that are seen clearly to be of national significance for policy or operational decisions are best for this purpose. Major emphasis should be placed on dissemination of the results, application of the results, and assessment of how effective the changes were in improving the health system.

Involvement of decision-makers in HSR courses that have a field-research component

An additional strategy that provides an opportunity for decision-makers to gain experience in HSR is to include health policymakers or managers in HSR courses that include a "learning-by-doing" component. Two examples of courses of this type are described below.

1. An HSR course can include three parts or stages. Part I involves a workshop focused on an introduction of HSR methodology and development of proposals for HSR projects. The field work for the projects is then completed by the participants in Part II. In Part III, a second workshop is held in which participants concentrate on analyzing and interpreting the data gathered during the field study, developing the final report, and planning for dissemination and application of results. (See Volume 2 of the HSR Training Series, *Designing and Conducting Health Systems Research Projects*, for training materials for this type of course.)
2. An HSR course can include a field-research exercise of several days, right within it. After a number of sessions on study design and methodology, participants can be asked to design and conduct a short HSR study in a field setting near the course. (See the *Report of the Orientation Course in Health Services Research, Alexandria, 3-19 January 1979* and the paper by Mary T. Taylor and W.A. Hassouna [no date] for a description of this type of strategy.)

These "learning-by-doing" strategies are very useful for courses targeted at health workers, midlevel managers, and researchers who will later be involved in HSR projects as part of their work. If higher-level decision-makers have the time and interest, they can also profit from participation in these types of training activities and the HSR experience they provide.

FOLLOW-UP MEASURES

Projects of the type described above, if successful, can be used as effective examples of decision-linked research in HSR orientation sessions or consultative meetings.

Influential policymakers, senior managers, and community leaders who have gained HSR experience through one or more of these projects can be asked to serve on committees for planning future HSR programs, play leading roles in national consultative workshops, or serve as chairpersons or members of permanent HSR advisory committees.

POTENTIAL IMPACT

An analysis of experiences of countries that have been successful in developing utilization-focused HSR programs shows that often one of the initial activities was a major, highly visible, and successful HSR study that was designed and implemented in close collaboration with key health managers. The case studies from Botswana and Malaysia, summarized in this document and listed in the reference section (Owuor-Omondi 1988; Pathmanathan and Khalid bin Sahan 1988) illustrate the importance that practical

experience with real HSR projects can have in convincing decision-makers to support development of a major national HSR program.

LIMITATIONS

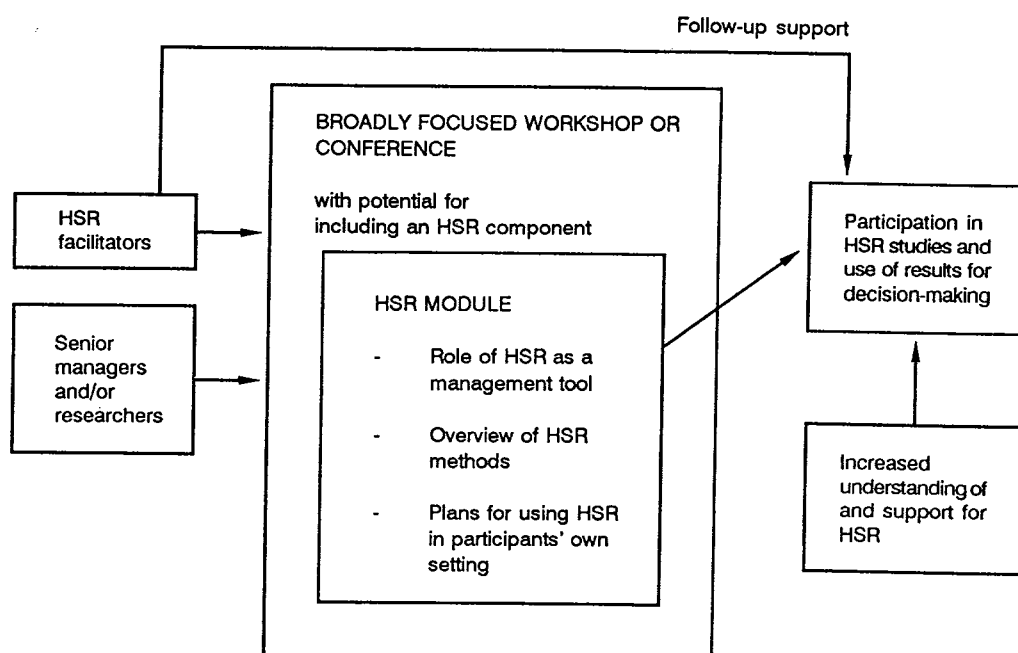
Although a major, highly visible HSR project, if successful, can be a catalyst for program development, a large-scale study that is poorly managed and unproductive can have the opposite effect. Thus, when efforts to integrate HSR as part of the managerial process are just beginning, it is particularly important to do whatever possible to ensure the success of initial research efforts.

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5. SESSIONS ON HEALTH SYSTEMS RESEARCH IN MORE BROADLY FOCUSED WORKSHOPS OR CONFERENCES²⁸

BRIEF SUMMARY OF STRATEGY: Modules on HSR and its use as a management tool can be integrated into more broadly focused workshops or conferences for senior health- management professionals. "Piggyback workshops" of this type can be used to present the concept of decision-linked research to a much wider audience and at less cost than would be possible through specialized workshops alone.



²⁸ Adapted from WHO (1986).

EXAMPLE: The National Council for International Health (NCIH) in the USA holds an annual conference for health professionals from both Western and developing countries each year focusing on a different theme. The theme of the June 1986 Conference was *Applications of Biomedical and Health Research in the Developing World*. WHO/Geneva decided to sponsor a series of sessions within the conference focused on decision-linked research to promote the use of HSR in the managerial process among the wide range of health managers and other health professionals attending the conference.

The "WHO Track" of the conference included sessions on the uses of HSR, improving health care through research, how to use HSR as a problem-solving tool in managers' own health programs, and strengthening institutional capabilities in research. WHO identified a number of health professionals with particular interest and expertise in decision-linked research during the conference and asked this group to serve as an advisory group for the global initiative.

The series of sessions on decision-linked research required only a small budget from WHO to sponsor the attendance of a few key facilitators that took part in the sessions. By "piggybacking" the WHO sessions on the larger conference, its sponsors were able to reach a much wider audience than would otherwise have been possible.

PARTICIPANTS

Senior health-management professionals or researchers, or both, who are attending a more broadly focused workshop or conference.

ORGANIZERS

Health ministry, research institute, or donor agency officials who wish to promote HSR and are in a position to work with the organizers of a more general workshop to include a component on HSR.

FACILITATORS

High-level research and management professionals with practical experience in HSR and its use in the decision-making process and with skill in facilitating workshops.

DURATION

Will vary, depending on the time available in the workshop for HSR. The HSR component could vary from one short session to a segment of 0.5 day or longer.

OBJECTIVES

The objectives of the HSR component of the larger workshop are to:

1. Orient workshop participants to the role and importance of HSR as a management tool,

2. Provide participants with some understanding of the methods of HSR, and
3. Identify a subset of participants who are interested in using HSR as a management tool in their own settings.

Specific objectives will vary, depending on the focus of the larger workshop and the needs and interests of participants for knowledge and skills related to HSR.

PROCESS

1. **Exploration of possible opportunities.** Opportunities for including HSR components in more broadly focused workshops or conferences can be found in situations where the theme of the workshop is consistent with the inclusion of a component on HSR, and the sponsors of the workshop are willing to allocate time for it.

Opportunities for "piggyback workshops" of this type can be found at global, regional, national, and subnational levels.

2. **Delivering the HSR component.** Once a possible opportunity has been identified, steps must be taken to implement the initiative. They include:
 - Determining the **objectives** of the HSR component. The objectives should be adapted to the general theme of the workshop and the characteristics of the participants. For example, if the workshop's general theme is management of the health-care system and the participants are high-level policymakers and managers, the HSR sessions could begin with an examination of the need for information within the management process and then emphasize the particular role HSR can play in providing timely and relevant information. If the workshop focuses on decision-making, the HSR component might stress the ways in which HSR can be successfully used at different steps in the decision-making process and how decision-makers can manage HSR projects to obtain the most useful results;
 - Developing an **instructional module** to facilitate the attainment by participants of the objectives set;
 - Arranging for a **facilitator** and insuring that the necessary logistical and financial arrangements have been made; and
 - Delivering the HSR module and evaluating its effectiveness.

FOLLOW-UP

It is expected that some of the participants in the workshop will be interested in exploring the feasibility of using HSR as a decision-making tool in their own settings. Follow-up of the workshop can be directed toward assisting participants with implementation of their HSR plans of action. Technical assistance and including these participants in future HSR training activities are two possible follow-up strategies. If a larger HSR initiative is underway in the country, these participants can also be linked into the process.

POTENTIAL IMPACT

"Piggyback workshops" provide a mechanism for presenting the idea of using HSR as an effective management tool to a much wider audience than would be possible through specialized workshops alone. Cost-effectiveness is high because the general expenses associated with the workshop are covered

by the sponsors of the workshop. Only the increment attributable to the HSR component is charged to its organizers.

Follow-up can be highly targeted. Resources available after the workshop can be used selectively to support the efforts of participants who have indicated a real desire to integrate the use of HSR as a management tool in their own organizational settings. Thus, this type of workshop is an inexpensive tool for identifying where further support can most productively be focused.

LIMITATIONS

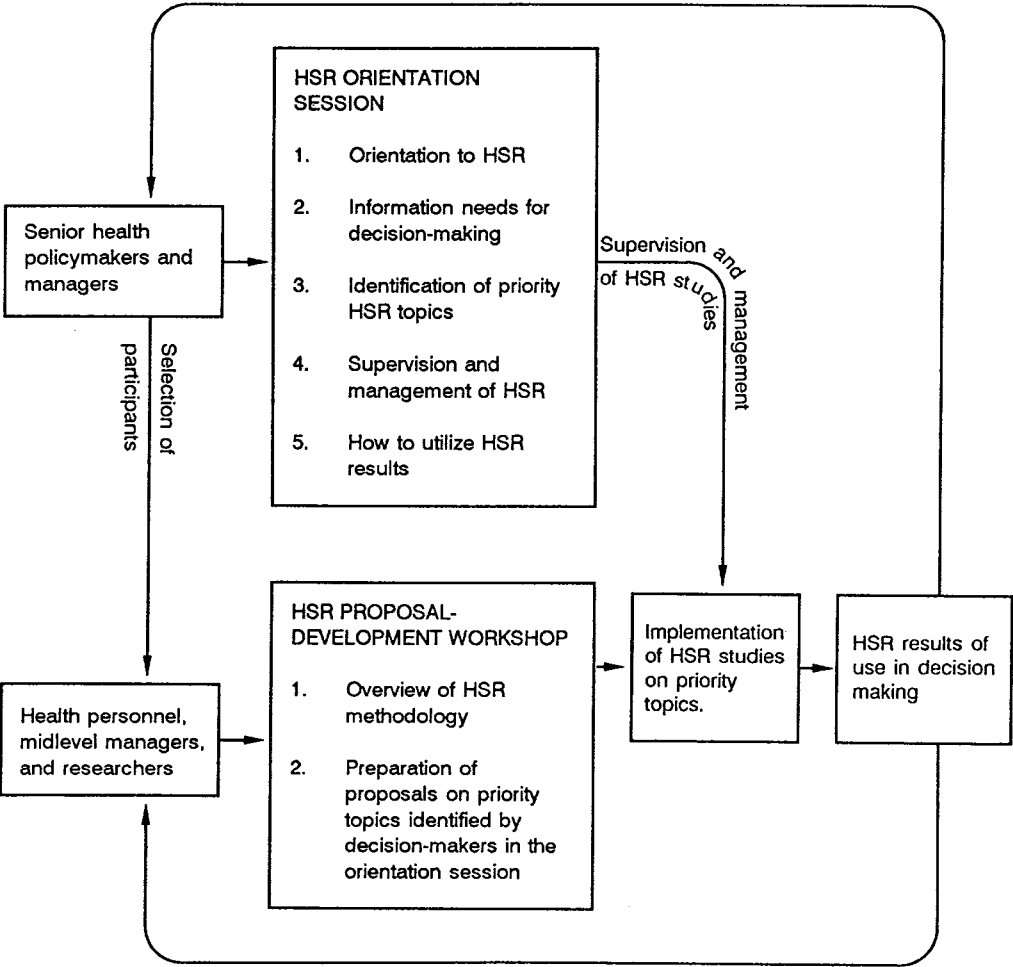
Interest generated in HSR through workshops of this type may exceed the resources available for follow-up support. On the other hand, unless the HSR module is carefully structured to meet the participants' needs, its impact may be lost, especially if it is just one item in a much large agenda.

REFERENCE

WHO (World Health Organization) 1986. Decision-linked research components in more broadly-based workshops. *In* Improving health care through decision-linked research: application in health systems and manpower development: IV - Initiatives to introduce change. Health Manpower Research, Division of Health Manpower Development, WHO, Geneva, Switzerland. HMD/86.4.4, pp. 10-12.

7. ORIENTATION SESSIONS FOR DECISION-MAKERS PRECEDING HEALTH SYSTEMS RESEARCH PROPOSAL-DEVELOPMENT WORKSHOPS

BRIEF SUMMARY OF STRATEGY: An orientation session can be held for health-care decision-makers immediately before an HSR proposal-development workshop. During the orientation session, decision-makers can be introduced to the decision-linked approach to HSR and then asked to help guide the research activities that will be developed in the workshop that follows. The decision-makers can indicate the questions they would like addressed by research and collaborate with the researchers in the proposal-development workshop to design and implement HSR projects that will provide timely and practical answers to the questions raised.



EXAMPLE (adapted from Brownlee 1986b): The *Project for Strengthening Health Delivery Systems in West and Central Africa* held an orientation workshop in applied research for decision-makers in Bamako, Mali, in collaboration with the Institute of Public Health Research (INRSP). The 3-day workshop, directly preceding an applied-research course for staff from the INRSP, several ministries of the Government of Mali, and the School of Medicine and Pharmacy of Mali covered the utility of applied research to management, selection of priority topics for research, and development of a research policy, as well as other issues. These sessions were followed by training activities of a more technical nature for the researchers themselves, including development of HSR proposals focused on priority issues identified by the decision-makers. In the months that followed, members of the INRSP staff reported that the decision-makers' workshop appeared to have had quite a positive effect on the attitudes of ministry decision-makers - they were much more interested in supporting research projects focused on their sectors' problems and more inclined to collaborate on research development than before the workshop.

PARTICIPANTS

Senior health policymakers and managers who would be potential users of results from the research projects designed during the proposal-development workshop. If a proposal-development workshop is planned for teams that will conduct HSR studies, the orientation session can first be held for higher level personnel in their own organizations or other health programs who can help guide the research toward relevant and timely topics, supervise or monitor the studies, and utilize the results. If research projects are likely to focus on health or health-care delivery problems in particular communities, leaders or representatives from those communities could also be involved in the orientation sessions.

ORGANIZERS

The ministry of health or other government organization that has primary responsibility for HSR at a national level or a health program or organization that wishes to encourage the development of HSR studies focused on providing information its managers need.

FACILITATORS

High-level research or management professionals with practical experience in HSR and its use in the decision-making process, and with skill in running a workshop for high-level management personnel.

DURATION

The length of the session may vary from half a day to a maximum of 3 full days, depending on the time high-level participants have for this type of activity and the importance to the organizations or communities involved of the HSR studies being developed.

OBJECTIVES

The objectives of the orientation session are to enable top-level health policymakers and managers to:

1. Explore the role and importance of HSR as a tool for assisting in the resolution of priority health problems,
2. Identify information needed to solve priority problems that can be provided through HSR and identify research topics related to these issues for consideration in the proposal-development workshop that will follow,
3. Participate effectively in the monitoring and management of research projects under their supervision, and
4. Utilize research results in the decision-making process.

CONTENT

The content of the session will vary, depending on participants' prior exposure to HSR and the roles they should play in selecting and guiding the research that will be designed in the research proposal-development workshop.³⁰ The agenda for the orientation session could focus narrowly on identification of information needed for decision-making and the selection of research topics for the up-coming proposal-development workshop, or provide a broader orientation to the roles of decision-makers in research. Potential topics for the session are listed below.³¹

1. The nature and scope of HSR and how it can be used as a decision-making and problem-solving tool to improve health and health care. Examples of useful studies within the region and how their results have improved management and decision-making.
2. Types of health-care and management decisions that participants must make in their jobs. Development of criteria for selection of priority topics for HSR that would be useful in the decision-making process and identification of priority topics for research using these criteria.
3. The management of HSR programs. The roles that decision-makers should play at each step in the research process to ensure that studies focus on priority problems and provide useful results in a timely manner. Typical problems that arise in research management and possible solutions.
4. The dissemination and utilization of research results. Typical reasons that decision-makers may not utilize results. How research can be conducted and results organized and presented (or "marketed") so they are more likely to be used in the decision-making process.

³⁰ The proposal-development workshop can use the training materials presented in the *Health Systems Research Training Series, Volume 2: Designing and Conducting Health Systems Research Projects*.

³¹ Adapted from Brownlee (1986a)

PRODUCTS

Because one objective of the session is to provide participant teams in the up-coming HSR proposal-development workshop with guidance on the selection of their research projects, one valuable output of the orientation session would be a list of research topics, with background information on the problems to be addressed, the type of information needed by the decision-makers, and when it is needed.

FOLLOW-UP MEASURES

The senior health policymakers, managers, and community leaders who have attended the orientation session and identified research topics may be asked to participate in one or more of the sessions of the proposal-development workshop. They could be asked to present the research topics that they have identified, assist in guiding the development of the projects, and assess the proposals developed, providing feedback to the research teams on whether the research plans appear likely to yield timely and relevant information.

This collaborative approach to research development will hopefully continue during the research process itself. Continued involvement of the decision-makers and potential research users should, if possible, be formally built into the research projects themselves.

POTENTIAL IMPACT

The development of coordinated orientation and proposal-development sessions should strongly encourage decision-linked HSR. Large organizations such as the ministry of health and major health programs may be encouraged to develop permanent mechanisms for fostering a decision-linked approach to HSR if the process of producer-user collaboration yields useful information.

LIMITATIONS

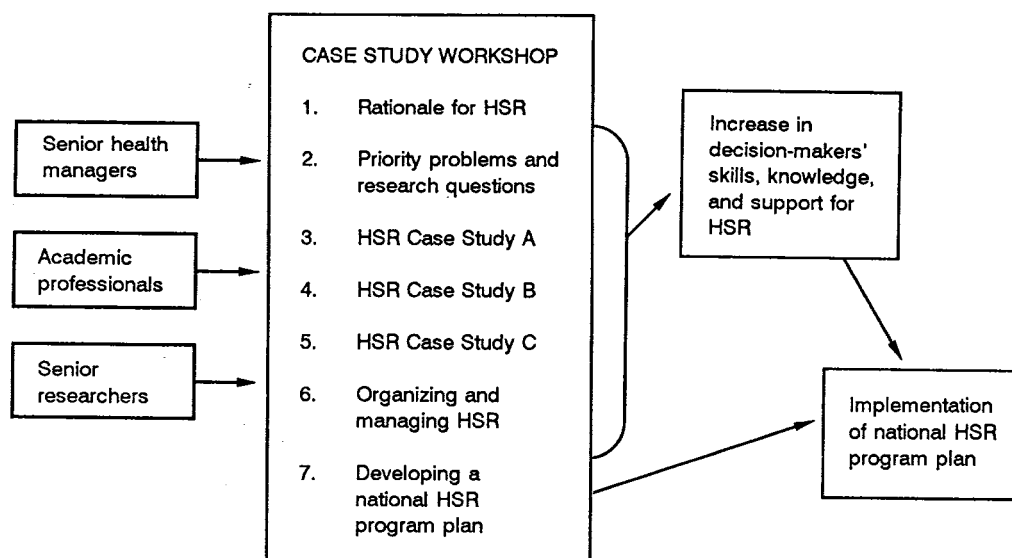
The combination of an orientation session and proposal-development workshop will only be successful if participants in both activities are well chosen. The research teams selected must have the skills and support they need to undertake research on topics identified by the decision-makers, and the decision-makers must be committed to encouraging and supervising HSR and using its results.

REFERENCES

- Brownlee, A.T. 1986a. Applied research as a problem-solving tool: strengthening the interface between health management and research. *Journal of Health Administration Education*, 4 (1), 31-44.
- _____. 1986b. Examples of activities in six action areas. *In* Brownlee, A.T., ed., *A guide for planning training and research programmes in health systems research*. Health Systems Research, Division of Strengthening of Health Services, WHO, Geneva, Switzerland. Pages 197-202.
- _____. 1986c. Orientation workshop on health systems research and the decision-making process. *In* Brownlee, A.T., ed., *A guide for planning training and research programmes in health systems research*. Health Systems Research, Division of Strengthening of Health Services, WHO, Geneva, Switzerland. Pages 131-133.

8. CASE-STUDY WORKSHOPS ON HEALTH SYSTEMS RESEARCH³²

BRIEF SUMMARY OF STRATEGY: Workshops can be held for decision-makers, health administrators, and researchers that use case studies to illustrate the importance of HSR for attaining PHC goals and provide practice in deciding when and how to use HSR, designing appropriate studies, and utilizing results.



³² The description of the strategy for this workshop is based on the experience with the case-study approach in the eastern Mediterranean region. It is summarized from the report by Sajid et al. (1989).

EXAMPLE (summarized from Sajid and Bishop 1986): The Government of Kuwait invited WHO's regional office for the eastern Mediterranean (EMRO) to organize a workshop on HSR for its senior health officials. A five-person team organized by WHO met with various officials in the ministries, research institutes, and academic institutions to identify educational needs as well as local resources to support HSR.

The workshop was held 27 September-2 October 1986 in Kuwait. Its general goal was to enhance HSR by informing decision-makers, high-level administrators, and academics about its value, to identify critical areas where HSR was needed, and to develop a long-term plan for conducting research on high-priority needs. Participants included five regional directors, six senior officials from the Ministry of Public Health (MoPH), two representatives from the Faculty of Medicine, and three officials from the Ministry of Planning.

The workshop, which ran for 5.5 days on a part-time basis, began with a session on the rationale for HSR with examples of how HSR could assist in the resolution of critical problems. Then, a brainstorming session was held that focused on identifying priority issues facing Kuwait for which HSR would be needed. Participants were asked to select a problem from the list of priority topics and formulate the most important research questions related to it.

The participants then spent three afternoon sessions working on case studies. The first case, on research-based personnel projections, asked participants to formulate ideas about the type of research needed to determine staff needs. The second session focused on the lack of standards to measure personnel productivity in Kuwait, factors that needed exploration, and the variety of research methodologies that could be used. Finally, a case study on health-service utilization patterns gave participants further practice in formulating research questions and selecting appropriate study methods. A general overview of HSR methods was then provided.

Toward the end of the workshop participants were asked to identify, first, barriers that would impede HSR in Kuwait and, then, facilitating factors (to set the stage for building a organizational plan for HSR). Small groups were then assigned the task of preparing a brief memorandum to the MoPH on the development of a plan to organize, implement, and promote HSR. These group reports were later synthesized in the form of a preliminary proposal to the government for strengthening the organizational framework for HSR, implementing a long-range HSR training plan, providing incentives and support for HSR, and increasing interagency collaboration.

PARTICIPANTS

Decision-makers and health managers from ministries of health and major health programs and senior researchers from health research and training institutions.

ORGANIZERS

WHO, the ministry of health, or a donor organization, possibly with the assistance of consultants skilled in use of the case-study method with health-care decision-makers.

FACILITATORS

If a country is holding this type of workshop for the first time, the chief facilitator could be an outside professional who has led the workshop elsewhere. Eventually, all facilitators could be nationals. They should be high-level health professionals or researchers with skills in HSR, health planning and management, and the use of experiential training techniques.³³

DURATION

5 days (on a full- or part-time basis, depending on time participants and facilitators can devote to the workshop).

OBJECTIVES³⁴

The workshop is designed to ensure that participants will be able to:

1. Identify those aspects of current problems that are susceptible to solution through research, and those that are not;
2. Formulate questions so that answers provide a solution to the initial problem or, alternatively, provide options from which a choice can be made;
3. Recognize the importance of reviewing current relevant knowledge through systematic study of published literature, "fugitive" literature, and national statistical information;
4. Determine the approximate cost in terms of time, money, and staff needed for a particular research project;
5. Recognize the need to balance the precision and completeness of the answers against the costs and time taken in each situation;
6. Design a research study and prepare a plan of action;
7. Evaluate a research report so as to decide upon the validity of the results and their relevance to current problems;
8. Understand how to make use of valid research results, and how and to whom to communicate the findings;
9. Contribute with others to the design of national systems for promoting HSR;
10. Convince other managers of the importance of HSR for providing critical information for decision-making; and

³³ Workshop organizers, trainers, and facilitators can also refer to *Volume 5: Training Trainers* of the *Health Systems Research Training Series*, for further information on how to organize and conduct workshops and other training activities.

³⁴ The first nine objectives are those listed by Sajid et al. (1989).

11. Recognize the importance of multidisciplinary and intersectoral approaches to solving health and health systems problems.

PROCESS

The format for the workshop is highly experiential. It is conducted around problems and issues relevant to the prevalent conditions in the country and of interest to participants.

The workshop often begins with a session on the rationale for HSR, a brainstorming session to identify priority problems for which research is needed, and then practice in generating appropriate research questions for the problems identified.

Two or more "cases" are selected for detailed discussion in each workshop after considering the types of participants involved, their interests, and the types of HSR-related skills they will most need on the job. In addition to using one or more of the 20 cases presented in the manual, *Health Systems Research Case Studies* (Sajid et al. 1989), at least one additional detailed example should be prepared, based on a research project within the country or a neighboring country with similar conditions.

Each case should consist of a brief presentation of **background** information concerning the country, its population and health situation, a description of the **problem** to be addressed by the decision-maker (possibly through HSR), and a series of **questions**, some of which are posed after additional information is provided.

Each of the cases requires use of one or more of the skills listed in the **objectives** for the workshop. For example, some cases ask the participants to consider whether plans to solve the problem described should be made immediately or whether additional information is needed. After deciding that additional information is needed, the participants may be asked to decide whether it is all available from existing sources and, if not, what additional information must be gathered and what research plan should be devised. Some cases ask the participants to react to research designs proposed by other local professionals or outside research groups that may not be appropriate. Other cases address issues related to how decision-makers should use the research results to make appropriate changes.

Notes are provided for the trainers that review the salient points that should be brought out in the discussion of each question posed in the case. These notes assist the trainer in guiding the small groups to consider all essential issues in their discussions.

The workshop usually continues with a session on organizing and managing HSR that begins by asking participants to identify barriers to and facilitating factors for development of an effective HSR program, and ends with development of a plan to organize, implement, and promote HSR within the country.

PRODUCT

The workshop should result in new skills and a clearer understanding of the role of HSR in decision-making. The workshop participants are expected to respond to the questions posed in each case study and then work together in the final workshop session to produce a preliminary plan for developing or strengthening the national HSR program.

FOLLOW-UP MEASURES

Participants should be encouraged to actively use HSR as a problem-solving tool once they are back on the job. Lines of communication should be established, if they have not been already, with HSR units, research institutes, or other groups that can provide HSR expertise and assist former participants in utilizing HSR in the management process.

Periodic meetings could be scheduled between managers and decision-makers (some of whom have taken the workshop) and HSR resource groups that could collaborate in designing and conducting research on critical health-care problems. If possible, a small-grants program should be developed with funds available for HSR.

POTENTIAL IMPACT

The case method helps participants to practice their judgment in selecting the best alternatives for possible action. It encourages them to think independently, deciding which of the possible answers to the problem are the best and later defending their opinions.

The case studies allow participants to become familiar with a range of real-life examples of HSR projects focused on providing timely solutions to health-system problems. They provide an opportunity for practice of a wide range of HSR-related skills that will be useful to health policymakers and managers.

LIMITATIONS

Some participants may have trouble transferring skills they have employed to solve "hypothetical" problems in the workshop for use in their own work situation. The authors that developed and used the cases described below, however, have not found this to be a major difficulty.

It may be useful to combine the case-study approach with use of one or more of the other strategies described in this volume that focus on problems and HSR issues specific to the country in which the workshop is being conducted.

REFERENCES

- Sajid, A.W., and Bishop, J.B. 1986. National workshop report on health systems research held in Kuwait, 27 September-2 October 1986. WHO, Regional Office for the Eastern Mediterranean, Alexandria, Egypt.
- Sajid, A.W., and Nadim, A. 1987. Workshop on health systems research, Qatar, Doha, Qatar, 2-10 December 1987. WHO, Regional Office for the Eastern Mediterranean, Alexandria, Egypt.
- Sajid, A.W., Bishop, J., Sullivan, P.S., and Danko, R. 1989. Health systems research case studies. World Health Organization Collaborating Center for International Health, Medical Branch, University of Texas. Galveston, TX, USA.

SUPPLEMENTAL MATERIALS

Sajid et al. (1989) present an excellent series of case studies that have been designed for use in the eastern Mediterranean region (EMR) in the type of 1-week workshop for decision-makers described earlier. Although the cases are designed to cover the range of country conditions found in this region, many of the cases could be adapted for use elsewhere. The format used for case presentation could also be easily followed for development of additional, locally relevant cases.

The 20 cases presented by Sajid et al. (1989) are listed below. Case Number 1 is then presented as an example of the types of cases developed for the EMRO workshops. A sample agenda from a case-study workshop is also presented after the sample case study.

- Case 1: Community Health Worker Follow-Up
- Case 2: Maternal and Child Health Clinic Utilization
- Case 3: Maternal Mortality
- Case 4: Hypertension: A National Plan of Action
- Case 5: Anemia: A Study at the Village
- Case 6: Physician Reluctance to Work in Rural Areas
- Case 7: Health-Service Utilization Patterns
- Case 8: Tuberculosis
- Case 9: Adoption of Health Education for Control of Coronary Heart Disease
- Case 10: The Dilemma in the Role of a Doctor in Primary Health Care
- Case 11: The Use and Misuse of Pharmaceutical Drugs
- Case 12: Evaluation of a Health-Education Campaign to Promote the Usage of Oral Rehydration Therapy
- Case 13: Reduction of Deaths from Acute Respiratory Infection in Infants
- Case 14: Care of the Elderly
- Case 15: Setting National Priorities for an Island Country
- Case 16: Urban Population Stratification
- Case 17: Bilaterally Initiated Research: Who Benefits?
- Case 18: Childhood Malnutrition
- Case 19: The Impact of Expatriate Nurses on a National Health System
- Case 20: Rehabilitation for Physically Disabled

Example used in a case-study workshop for decision-makers

CASE 1: COMMUNITY HEALTH WORKER FOLLOW-UP³⁵

BACKGROUND

A large country situated in Africa, with a climate that ranges from desert or near desert in the northern areas to tropical conditions in the south that is almost on the equator.

The total population is estimated at about 4.9 million, spread over an area of 638,000 km² so that much of the country is thinly populated. A large proportion, at least 50%, of the people, are nomadic, traveling with their flocks of sheep, goats, and camels according to the seasons. It is generally the men and older boys who travel with the flocks, the women and other children living under more static conditions and remaining on their own for many months at a time.

The average per-capita income is very low, about US\$280, mostly derived from agriculture and animal husbandry. The literacy rate above the age of 15 years was about 11% for males and 3% for females in 1980. The proportion of children of primary school age attending school was 38% for boys and 21% for girls.

Of the total population, 900,000 or 18% were children of 4 years of age or younger. The infant mortality rate was about 150 per 1000 live births. The crude birth rate was 48 per 1000 and the annual growth rate of the population was 2.8%.

The total number of doctors in 1983 was 326, giving an average of one doctor for about 15,000 population. The striking feature was the uneven distribution of these doctors over the country, with 242 or 74% of them in the capital city or its near surroundings where only about 10% of the population live. There were 3166 nurses and assistant nurses in the country, again with a markedly uneven distribution so that 42% were working in the capital area.

Health services are planned and funded centrally by the Ministry of Health, but some degree of administrative control is developed in Regions. There are 16 Regions, each consisting from three to seven Districts. The static population lives mainly in villages with an average of 6000 residents and also in smaller settlements.

Services for health care, both curative and preventive, are organized as a series of vertical but parallel activities. These reach out to a varying extent toward the periphery and include mother and child care and provision for the control of malaria, tuberculosis, and other infectious and parasitic diseases. More recently another vertical program for primary health care (PHC) has been started. Although the government is committed to the PHC approach as a means of delivering health care to all of the people, so far there has been no move to integrate the existing services in line with this concept.

The key importance of community or village health workers (CHWs) to this approach has been recognized and a start has been made to their recruitment and training. With the assistance of several bilateral and international agencies, some CHWs have been trained and deployed in villages of several Regions. Deployment of CHWs started 5 years ago. The approach and the methods used in recruitment,

³⁵ From Sajid et al. (1989).

training, and employment have been determined locally in the Regions, and they probably differ considerably. There has been no central control. As seen from the Ministry of Health, there are doubts about the effectiveness of the programs. It is believed that there has been a high drop-out rate both during and after training, but this is not based on firm evidence, only on hearsay.

THE PROBLEM

The Ministry wishes to increase the number of CHWs and institute a standard pattern of training and utilization. It is uncertain which, if any, of the current systems in use in the Regions are effective, whether they differ much, and if they do, whether in that case any one of them has been more successful than the others.

Question 1

The Minister of Health says, "This is a matter of urgency if we are to progress toward the target of *Health for All 2000*. We need to take prompt action. We understand the problems of our country, and the reasons that such slow progress has been made in increasing the numbers of CHWs in the field. We should now sit down and make a plan to correct the situation and implement it without delay."

Please consider this statement and say whether you agree or disagree, giving your reasons. If you disagree, please suggest an alternative course of action.

Leave rest of page blank when used in workshop.

Question 2

It has been decided that this is a suitable subject for research. As the responsible official, your task is not necessarily to carry out the research, but to formulate the questions for research. In relation to the background and the problem as stated, what are the questions to which you would most like to have answers?

Leave rest of page blank when used in workshop.

Question 3

With the researchable questions defined, it is necessary next to design an investigation.

Relatively little firm information is available. In 1984, it was believed, but the evidence was not very secure, that the following numbers of CHWs had been trained during 1982-83.

Region A - 80 trained with assistance of UNICEF;

Region B - 100 trained with the assistance of WHO and perhaps UNICEF as well;

Region C - 33 trained with the assistance of an NGO, which has now withdrawn from this activity.

It is hoped that the names of the CHWs who have completed basic training and the villages from which they came will be available from the records of the organizations that provided the training.

With this amount of information available to you, what general form would the research take? Omitting for the present the details, what would be its structure?

Leave rest of page blank when used in workshop.

Question 4

How would you design the data collection?

Prepare your response to the following questions:

- a. What would be the cost of this project you have designed?
- b. How long will you allow for its completion?
- c. Who will be in charge and who will do the work, including the data collection and analysis?
- d. Will you instruct or try to persuade one of your staff to do the work, commission someone from the university to do it, or use some other method?
- e. To what extent will you try to maintain control over the work?
- f. How will you make use of the results?

Leave rest of page blank when used in workshop.

SUMMARY

This case deals with a wide range of issues in the use of research to improve health-care delivery. It is concerned with aspects of the provision of staff for the PHC system to which the country is committed. It helps to define research and HSR in particular, and emphasizes that simple but well planned research usually provides a better base for action than working from supposed comprehensive local knowledge. It demonstrates the need for great care when formulating questions so that, when answered, they provide solutions or options for action. The case also considers the cost of such an investigation, how it should be managed, and how utilization of the results can be ensured.

REFERENCE

Ofosu-Amaah, V. 1983. National experiences in the use of community health workers. WHO, Geneva, Switzerland. Offset Publication 71.

COMMUNITY HEALTH WORKER FOLLOW-UP: SALIENT POINTS FOR DISCUSSION

General

1. The case allows discussion of what is research, establishing that it comprises HSR as well as research carried out in laboratories. Whether this issue is emphasized will depend in part on the background of the workshop members and their experience, and also on whether the case is used early or late in the workshop program.
2. We seek comment on the grossly uneven distribution of physicians and nurses and the heavy concentration around the capital.
3. We would expect comment on the problems of training CHWs by several agencies, apparently without much regard for the views of the ministry, without reference to the national plan for health-care delivery, and not according to agreed national standards.

Question 1

1. Here we are trying to develop the idea that immediate decisive action is not always the best or most effective procedure to follow. Research can provide a more secure base for decisions, and it can be done quickly and cheaply if carefully planned.

Question 2

1. Here we are looking for questions that are well formulated, and identifying what makes them good questions. We would compare those to which useful answers can be obtained by research with those that are either unanswerable or only answerable to a limited extent. Some questions are essentially not researchable at all. We need also to have regard to whether the questions if answered could form the basis for useful action.
2. We would select some questions designed to discover what the CHWs who have been trained are now doing, and what factors in selection, training, and subsequent employment were important in determining success or failure in the work situation.

Question 3

1. Here we would hope that participants would come up with the idea that they should take a sample of trained CHWs and try to discover where they now are and what they are doing. They would try to find out what were the factors associated with a successful outcome, having regard to selection, basic education, position in village society, and the pattern and place of training. They would explore the manner of subsequent working to include whether paid in money or kind, whether supervised, whether supplied with basic drugs and equipment, and whether supported by the community and its leaders. We would expect the design especially to exploit the regional variations in many of these factors, in the full knowledge that the differences were unplanned.
2. Success is to be judged not only by whether the CHW is still in-post and working, but also by the quality of his or her work as measured by observation. It would also be important to learn the opinions of members and leaders of the community as to how the CHW performs his/her duties.

3. It will also be essential to interview CHWs who are not working in the role to establish why they dropped out. Some will still be in their village whereas others will have left but may be located with the help of local inquiries.

Question 4

1. Here we are not only asking them to construct a set of data items to which they want answers, but also we want them to conclude that they need to make some preliminary inquiries and have discussions with people closely concerning in the issues before finalizing the data sets.
2. They will need to make field visits to training institutions and villages to interview members of the community, working CHWs, and CHWs who have dropped out. Decisions cannot be based purely on impressions gained at a distance.
3. Always they should have in mind the usefulness of any data item they may collect, and not add to the list unless the item really seems likely to be useful rather than just interesting.
4. Discuss what would be the cost of the project that has been designed, in terms of money, staff, and other resources. How long should be allowed for its completion?
5. Consider who will be in charge and who will do the work, including the data collection and analysis. The merits and disadvantages of instructing or trying to persuade a member of staff to do the work, of commissioning someone from the university to do it, or using some other method should be discussed.
6. How can full use of the results be ensured? This vitally important issue will require consideration of the need for full involvement of health-service managers at all stages of the work, if they are to have sufficient confidence in the results to make the considerable effort to apply them.
7. Would the results have been more reliable, and therefore more useful, if the research design had been more elaborate? Discussion should elicit reasons for and against a more elaborate approach.

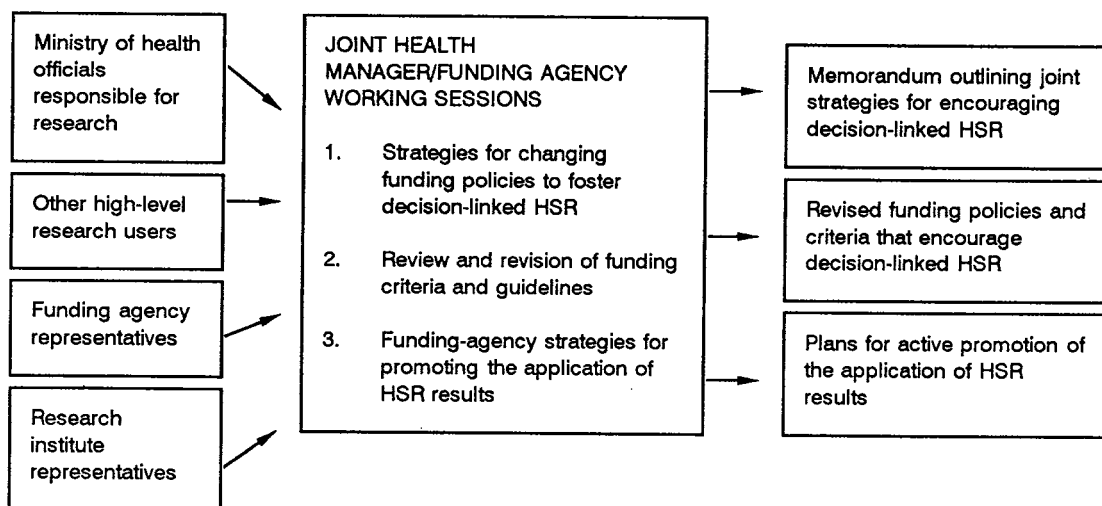
Sample agenda from a case-study workshop

Agenda from *National Workshop on Health Systems Research* held in Kuwait, September 27-October 2 1986

Day 1	08.30-09.00	Opening
	09.00-09.30	Goals and objectives
	09.30-10.00	Background and rationale for HSR
	10.00-10.15	Coffee break
	10.15-11.30	Critical issues demanding HSR
	11.30-12.30	Selection of key research problems and issues
Day 2	17.00-19.00	Formulating appropriate research questions
	19.00-19.15	Coffee break
	19.15-21.00	Manpower Research Case Study (1)
Day 3	17.00-19.00	Case Study (1) continued
	19.00-19.15	Coffee break
	19.15-21.00	Manpower Productivity Case Study (2)
Day 4	17.00	Case Study (2) continued
	19.00	Coffee break
	19.15-21.00	Health Care Utilization Case Study (3)
Day 5	17.00	Case Study (3) continued
	19.00	Coffee break
	19.15-21.00	Organizing and managing research
Day 6	20.30-22.00	Developing an action plan for HSR, recommendations, and evaluation

9. JOINT HEALTH MANAGER/FUNDING AGENCY REPRESENTATIVE WORKING SESSIONS

BRIEF SUMMARY OF STRATEGY: Senior health managers can work together with representatives of major research-funding agencies to develop criteria for research funding and other joint strategies that will encourage the development of a decision-linked approach to HSR.



EXAMPLES: Ministries of health or other government organizations may convene meetings with major funding agencies and donors to encourage development of funding policies that foster a decision-linked approach to HSR. In Malaysia, for example, the Ministry of Health held a series of working sessions with major funding agencies and donors to develop a joint approach to research funding that emphasized support for research on specific priority issues. This change in policy caused a major shift toward research that the country felt was of most importance.

Donor agencies may also begin the process. The Primary Health Care Operations Research Project (PRICOR), funded by the US Agency for International Development, for example, worked with an advisory board that included health-care managers and researchers from both developing countries and the USA to develop guidelines for funding its small-grants program that clearly encouraged the design of research projects focused on solving operational problems. Guidelines for proposal development and criteria for evaluating proposals submitted required that decision-makers be involved in the research process and that projects focus either on problem analysis, solution development, or solution testing, or a combination of several of these operations-research components. Most projects, as a result, involved active decision-maker participation and often led to policy and program changes related to the issues studied. PRICOR also encouraged application of results through systematic dissemination of research findings among potential users.

PARTICIPANTS

Participants who could work together to develop funding policies that would enhance a decision-linked approach include:

- Ministry of health officials responsible for research and evaluation,
- Other high-level health policymakers and managers who need the information HSR can provide and have an understanding of how research activities can be structured to yield relevant and timely information,
- Officials from the major HSR funding agencies³⁶ who have responsibility for formulating agency policy, and
- Representatives of major research institutions (optional participants).

ORGANIZERS

The organizers will vary, depending on the local situation. For example:

- If the ministry of health is actively committed to promoting a more decision-linked approach to HSR, its representatives would be appropriate conveners of a meeting of this type;

³⁶ "Funding agencies" may include international or bilateral donor agencies and national governmental and nongovernmental funding agencies that support health research.

- If the ministry of health is not yet active in this field but funding agencies are conscious of the need to fund research of greater use to decision-makers, one or more of the funding agency representatives may propose to the ministry of health and other major health institutions that a working session be held; or
- Alternatively, a multilateral organization such as WHO, which actively promotes the concept of decision-linked HSR but may not be one of the larger research funders, may organize the meeting.

FACILITATORS

The best facilitator for a meeting of this type will depend on local personalities and individual and institutional relationships. Most likely one of the organizers will chair the meeting. An alternative is for key representatives from the ministry and the major funding agency to jointly chair the session.

DURATION

The "meeting" could range from one session of 2-4 hours to a series of working sessions over a longer period, or a formal workshop of 1-2 days.

OBJECTIVES

The objectives of the working meeting are to enable participants to:

1. Identify changes in the funding-agency policies and criteria that would encourage the development of HSR projects whose results would be more likely to be utilized by health-care decision-makers;
2. Draft new funding guidelines that would encourage closer collaboration between decision-makers and researchers in the research process and result in more relevant and timely research results; and
3. Identify other funding agency or funding agency/health program strategies that would encourage the decision-linked approach to HSR and make plans for their implementation.

PROCESS

1. **Exploration of possible opportunities.** The first step in organizing a meeting of this type is to determine if adequate interest and understanding of the issues involved exists for such a meeting to be successful. Both top-level health managers and funding-agency officials must have some understanding of the advantages of decision-linked HSR and how it can be fostered. If they do not, a meeting of this type should be postponed until the level of awareness can be raised. (One strategy for raising awareness would be organization of a national consultative meeting on HSR, with both top-level managers and funding agency officials as participants. See Annex 3.)
2. **Organizing the meeting.** Before the meeting takes place, a well organized agenda should be prepared. If possible, draft funding policies and criteria for evaluating research proposals should

also be prepared that foster decision-linked HSR and can be considered by the participants. The program should be flexible, with all those involved understanding that, if the first meeting is productive and there is a need for further work to finalize approaches agreed upon, additional meetings or subcommittee work will be scheduled.

3. **Content.** The types of funding-agency policies and strategies that should be considered during the meeting will depend on the local situation, including current funding policies and criteria, how well they foster decision-linked HSR, and the degree of freedom that funding agencies have to make changes. If funding agencies do have flexibility, they can be powerful agents for change.

Examples of some of the potential strategies that could be considered in these meetings are listed below.

- a. Funding agencies could consider including key health managers and other potential users of research on the committees or advisory groups that review proposals and award research grants.
- b. Criteria for funding proposals could be revised so that proposals are required to clearly demonstrate that results are likely to be relevant and timely for use in the decision-making process. Criteria that could be considered include that:
 - The research protocol indicates how the information or results produced can be used for decision-making;
 - The research design is structured so that it is likely to provide guidance for decision-makers, either for immediate action or for considering alternative approaches to problems;
 - The research plan takes account of when the information it will produce is needed and provides evidence that results are likely to be timely;
 - Decision-makers (research users) will be involved in the research process in a significant way. Involvement could include, for example:
 - assistance or leadership in posing the research problem,
 - collaboration in research design,
 - serving on a research advisory committee,
 - participating in the research itself, for example, by serving on "expert panels" or participating in techniques such as "Delphi" or "Nominal Group,"
 - providing of financial support,
 - donating staff time for the project,
 - reviewing preliminary results and providing feedback, and
 - participating in meetings focused on the application of results;
 - The proposal's style of presentation indicates that reports are likely to avoid too much technical or discipline-specific jargon and provide the practical information needed for application; and
 - Plans are included for active dissemination of results and for participation with decision-makers in considering potential application of findings.

- c. Funding agencies should consider using some of their funds to actively promote the application of results and more effective communication between producers and users of research. Possible activities could include:
- Distribution of one- or two-page summaries of interim findings and final results from projects supported by the funding agency, with emphasis on information of most relevance to potential users;
 - Publication of newsletters that include information on research findings and, if possible, updates on how results from earlier projects have been used; and
 - Initiatives that involve editing or "translating" valuable research reports that are too technical for general distribution, so they are presented in a manner most useful to decision-makers. (For example, scientific jargon could be eliminated, information on variables amenable to manipulation by decision-makers emphasized, and options and recommendations for action clearly articulated.)

PRODUCTS

The written outcomes of the health manager/funding agency meeting could include:

- A memorandum of understanding outlining what measures the group has agreed upon to encourage decision-linked HSR;
- Revised research funding policies and criteria for evaluating research proposals that give greater priority to decision-linked HSR; and
- Plans for active promotion of the application of results.

FOLLOW-UP MEASURES

The representatives at the meeting should decide before disbanding how they will follow up on the agreements made during the meeting. It may be useful to schedule a follow-up meeting after several months, to review progress and adjust plans, as necessary. Alternatively, or in addition, it may be helpful to plan to formally evaluate the initiative. The evaluation could assess whether the plans agreed upon during the meeting have been implemented and also assess to what extent the initiative has been effective — that is, the extent to which the changes in agency policies and funding criteria have resulted in funding agencies supporting a greater percentage of decision-linked HSR projects.

POTENTIAL IMPACT

The strategy of revising funding-agency policies and criteria for awarding grants to clearly encourage decision-linked HSR has the potential of serving as a powerful incentive for change. If funding agencies that provide the major support for HSR projects are involved in the initiative, the effects can be quite striking, because monetary support is critical for a great majority of research projects.

Researchers working in academic settings are not often given many incentives to pursue decision-linked HSR. Their research is often directed at illuminating and expanding the paradigms of their own disciplines, rather than contributing knowledge that decision-makers can use. Changes in funding criteria can quite

speedily lead to closer collaboration between health managers and researchers. Attitudinal changes in academic circles may then follow gradually, as the rewards of helping solve real-life problems are realized and a collaborative approach becomes second nature.

LIMITATIONS

Making changes in funding policy to encourage decision-linked HSR is somewhat analogous to legislating changes in health practice. Although outward changes can be mandated, the thoroughness of the transformation is likely to be much more complete if those involved understand the reasons for the new rules. Thus, it is wise, if necessary, to include an educational component within the initiative, so that both researchers and managers understand both the assets of decision-linked HSR and how it can be designed.

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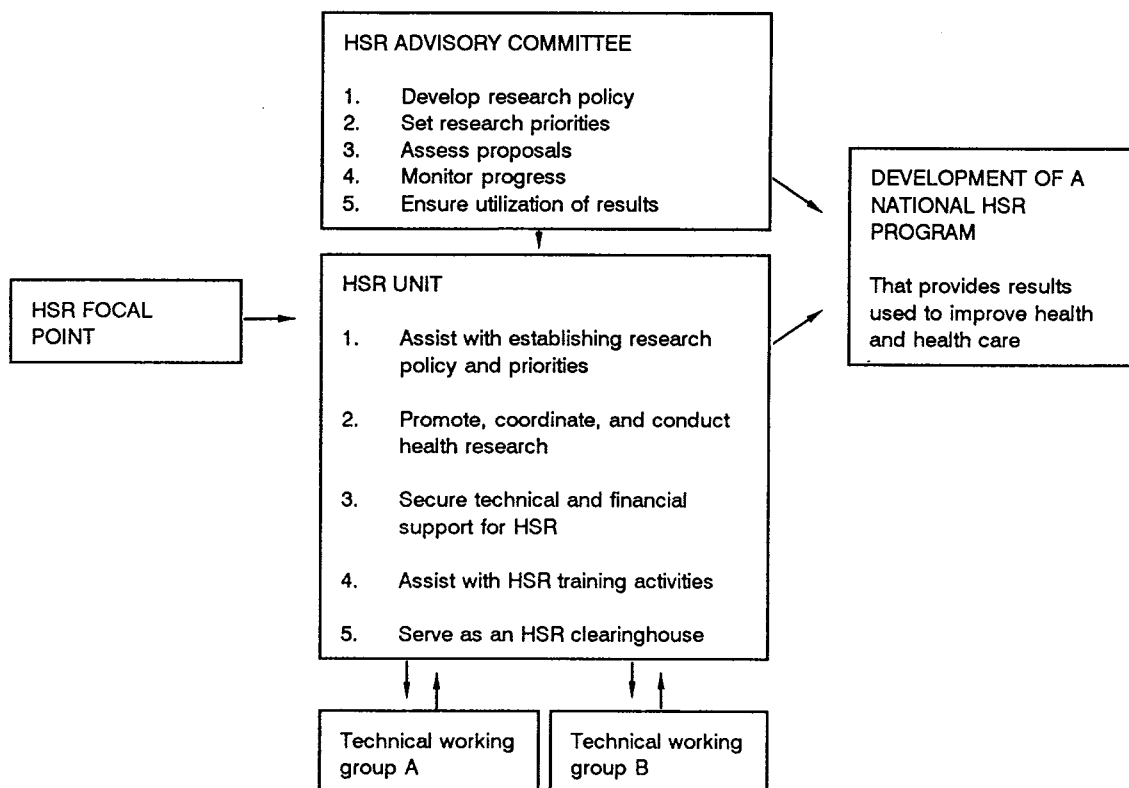
10. HEALTH SYSTEMS RESEARCH FOCAL POINTS, UNITS, AND ADVISORY COMMITTEES

BRIEF SUMMARY OF STRATEGIES: A variety of strategies can be used to strengthen the institutionalization of decision-linked HSR at the national level. Strategies that have been particularly useful in a number of countries include the designation of HSR focal points, organization of HSR units, and appointment of HSR advisory committees.

When HSR activities are just getting underway in a country, the ministry of health may designate either an individual or organizational unit with other responsibilities to serve on a part-time basis as a focal point for coordinating HSR activities.

As HSR becomes a recognized tool for problem-solving and its scope of activities grows, a formal health research (or HSR) unit may be organized. The focal point or HSR unit may be responsible for a variety of activities including assisting with the formulation of a national research policy and priorities for research; promoting, coordinating, and conducting health research; serving as an HSR clearinghouse; and assisting with needed HSR training activities.

A multidisciplinary HSR advisory committee including key health decision-makers and researchers should be appointed to develop health-research policy, set research priorities, evaluate research proposals, monitor problems, and ensure that relevant results are considered for application. A key health policymaker should chair the committee and the head of the HSR unit can serve as its secretary (staff).



EXAMPLE (from Varkevisser et al. 1990: The Joint WHO/DGIS/RTI Project on *Health Systems Research for the Southern African Region* has been working since 1987 to assist the countries of WHO Subregion III to develop "a more appropriate organization and effective operation of comprehensive Primary Health Care activities, by integrating health systems research in the decision-making process at all levels." One of the Project's specific objectives is to "strengthen structures and mechanisms to promote health systems research in the countries of Subregion III."

So far, the Project has adopted the following strategy:

- Identifying the possibilities for institutionalizing HSR during country visits;
- Having these possibilities discussed in greater detail by all those concerned during consultative meetings;
- Assisting ministries of health, at their request, in the development of 4-year action plans for HSR. Such plans contain specific requests for funding of equipment, fellowships, temporary advisors, and research to donor agencies such as IDRC, EEC, and USAID. These agencies are also approached to alert them to the forthcoming country requests (Malawi, Mauritius, Tanzania, and Zimbabwe);
- Assigning associate professional officers to the newly developing health-research units, at the request of countries (e.g., a doctor/social scientist in Mauritius and a health economist in Tanzania); and
- Providing fellowships in HSR for specialized training of new members of health-research units (e.g., two 3-month fellowships have been provided).

In July 1989, only one country (Botswana) had a research unit within its ministry of health and one more country (Lesotho) a focal point. By the end of 1989, five countries of the Subregion had health research units (Botswana, Malawi, Mauritius, Seychelles, and Tanzania) and five more had focal points for HSR (Angola, Mozambique, Swaziland, Zambia, and Zimbabwe). Lesotho had a focal point but lost it due to restructuring of its ministry of health. The number of countries with multidisciplinary health research advisory groups has increased from three to six, and there were multidisciplinary task forces for specific projects in at least three countries (Botswana, Mauritius, and Tanzania).

However, the constraints in establishing structures and mechanisms for promoting HSR are many, the most important being the scarcity of skilled personnel, equipment, and funds.

DESCRIPTION OF STRATEGIES:³⁷

1. Focal Point

When HSR activities are just getting underway in a country, one of the first steps in coordinating HSR at

³⁷ Suggestions regarding the establishment of HSR focal points, units, and advisory committees are based on material from Varkevisser et al. (1988) and other documents listed in the references.

a national level may be the designation of a "focal point."

A **focal point for HSR** may be designated by the ministry of health to assume a coordinating role for HSR. The focal point individual is often the head of another unit within the ministry (such as planning, epidemiology, or evaluation) who has been given responsibilities related to HSR. "In some countries so little connection exists between research and training institutions relevant for HSR that it may be advisable to also have such a focal point for the coordination of training and implementation in HSR in the university" (Varkevisser et al. 1988: 14). However, designation of the primary focal point within the ministry of health is most appropriate, considering the key role the ministry should play in coordinating HSR at a national level.

It may be wise to designate a unit or institution as the "focal point" for HSR rather than a particular individual; thus, if the individual leaves, activities can continue without major adjustment.

The focal point's responsibilities may include (Varkevisser et al. 1988: 14):

- Making an inventory of research needs in the ministry and in the field;
- Promoting HSR and linking with research institutions such as faculties of medicine, sociology, and economics, and institutes for development studies;
- Collecting research results and promoting their utilization; and
- Promoting training of health staff in HSR.

Because the professional designated as the focal point usually has many other competing tasks, he or she usually only becomes active when the ministry of health, research institutes, or donor agencies request support in organizing or coordinating research projects or research training activities.

2. Health (Systems) Research Unit³⁸

As HSR becomes recognized as a valuable tool for problem-solving within the health system, the ministry of health may decide to establish a formal health-research unit. The title of this unit may vary. It has been designated in various countries, for example, as the HSR Unit, Health Research Unit, Health Research Division, or Health Research and Evaluation Unit.

Where the Unit is placed in the organizational structure may vary quite widely also. The Unit, for example, may be attached to a planning, research, or epidemiology department or division, attached to a major service department such as PHC, be organized as an independent unit within the ministry of health, or be developed within a national health institute. Because the research coordination function should cut across the various divisions in the ministry, it is best that the Unit be clearly identifiable and that the head of the Unit be directly answerable to the director general or another top-level executive (WHO 1989: 23).³⁹

³⁸ Some discussions of HSR structures use the term "focal point" to describe both individuals or units that play a part-time role in organizing and coordinating HSR activities and units that have full-time responsibility in this area.

³⁹ There are some advantages to having a single unit responsible for both evaluation and research. Evaluation involves the routine collection of information whereas research is usually both complementary and supplementary, focused on the collection of additional information not available through the regular data

The Health Research Unit usually has at least one full-time or two part-time researchers. Staffing of the Unit should be multidisciplinary in composition and be headed by a senior-level professional with substantial background in HSR, who has direct access to top-level executives. All the tasks mentioned for the "focal point" should be carried out, but usually are conducted more intensively and systematically, and other responsibilities may be added. The tasks of the Health Research Unit, for example, may include (WHO 1989: 21-22):

- Assisting in the formulation or adaption of a national research policy, in line with the national health policy;
- Assisting in setting priorities for HSR that are relevant to the health needs of the country;
- Promoting, coordinating, and conducting health research in conformity with national research policy and priorities;
- Assisting in identifying appropriate research institutions within the country, delegating research, and following up on progress and results;
- Assisting in the development of research proposals;
- Facilitating and coordinating interaction between the government and organizations interested in conducting studies, informing these organizations about priority health research needs, and identifying the necessary additional expertise and funds needed;
- Developing a network within the country to promote HSR, the exchange of information, and the utilization of research findings;
- Acting as a clearing house by collecting and disseminating information on planned, ongoing, and completed HSR projects;
- Assisting in the development and implementation of training programs in HSR for health workers, health-related staff at all levels, and research workers; and
- Developing mechanisms for securing technical and financial support for HSR projects carried out at provincial and district level.

3. Health (Systems) Research Advisory Committee

As HSR becomes an important part of the health-research agenda, an advisory committee may be organized to oversee developments and activities in this field. The Committee may function on its own or serve as a subunit of a larger health-research council. The official name for the Committee may vary from country to country. In countries with a well developed health-research infrastructure, there may be more than one advisory body with responsibilities in this area.

collection system. When the unit is involved in both activities, managers who understand the value of evaluation can be carried a step further and shown how research strengthens evaluation when additional information is needed. A possible disadvantage with this arrangement would be that the evaluation activities could take up all the available resources if clear arrangements are not made to focus a certain percentage of staff time and funds on research.

The Advisory Committee is ideally composed of representatives of the main research and academic institutions that are involved in HSR, the decision-makers in the ministry of health, other ministries with responsibilities for conducting or utilizing HSR (such as education, agriculture, and planning), at least one representative of health managers at provincial or regional level, and WHO or other major donor agencies supporting HSR.

A top-level representative of the ministry of health should preferably head the Committee to ensure that research needs arising in the health system get adequate attention and that relevant research results are disseminated and used. The Health Research Advisory Committee is usually considered an advisory body for the ministry of health.

The Committee's functions may include:

- Developing a health research policy;
- Setting priorities for research, taking needs and resources into account;
- Pooling local research resources, spotting gaps, and soliciting additional funds to carry out desired research;
- Evaluating the relevance and quality of proposed research projects;
- Monitoring the progress of major research projects; and
- Discussing the relevance of research results for decision-making and ensuring that relevant results are considered for application.

The focal point for HSR or the head of the Health Research Unit usually does the preparatory work for the Committee's meetings and acts as secretary (staff). The Health Research Advisory Committee meets according to need, but rarely more than three or four times a year (from Varkevisser et al. 1988: 15).

4. Technical working groups or task forces for HSR

The Health Research Advisory Committee may delegate the technical planning, monitoring, and implementation of specific research projects or groups of projects to small task forces formed on an ad-hoc basis. If particular health problems need special attention, working groups may be formed to focus more intensely on them and develop appropriate research agendas. Working groups or task forces usually meet far more regularly than the Advisory Committee, for example, once or twice a month, depending on the group's assignment and when its output is needed.

PRODUCTS

The mechanisms or structures described above may produce a number of written products that can be helpful to both decision-makers and researchers in the area of HSR. Products may include, for example:

- Statements of national health-research policy;
- Lists of priority areas for research;
- Criteria for selection of research projects and guidelines for proposal development;

- Curricula for HSR orientation and training activities;
- Inventories of ongoing and completed HSR projects;
- Lists of potential sources of research support both at the country and international levels;
- Progress reports and summaries of HSR results; and
- Newsletters, research bulletins, and journals providing current information on HSR projects, research results, and research training activities and meetings.

FOLLOW-UP MEASURES

The ministry of health should plan for periodic evaluations of the work of HSR mechanisms such as HSR units and advisory committees. If the unit or advisory committee is not fulfilling its mandate, strategies for improving its performance should then be explored. In many countries, HSR is not yet fully linked to the health management process in a way that it best serves decision-makers' needs for information. Formal evaluations can provide decision-makers with a chance to examine both the utility and rate of utilization of HSR results, and make adjustments in the HSR program, if needed.

POTENTIAL IMPACT

HSR mechanisms or structures such as focal points, research units, and advisory committees can play a critical role in coordinating HSR at a national level, encouraging researchers to focus on problems of major importance to national health, and facilitating the application of relevant results.

It is critical that high-level decision-makers within the ministry of health, research institutes, universities, and other appropriate institutions serve on the national HSR advisory committee, so that they can steer research toward the areas of greatest need, and develop a commitment, as a result of their involvement, to utilizing the results that emerge. Active participation by high-level ministry personnel in development of the national HSR program is also likely to help ensure that they provide the program with the financial and administrative support it needs.

LIMITATIONS

One of the greatest difficulties affecting the development of sustainable mechanisms for promoting and coordinating HSR activities within developing countries is the high turnover of personnel and often rapid "brain drain" of highly trained professionals to Western nations. If a particular individual is designated as the "focal point" for HSR within a country, his or her departure may mean beginning again from point zero. Thus, it may be wiser, as mentioned earlier, to designate a ministry of health department or institution rather than an individual within the ministry of health as focal point and to give some responsibility for the activity to more than one person from the beginning.

There is often no career structure within the ministry of health for researchers from outside the medical profession, such as that which exists in universities. Thus, health economists or medical sociologists who are often in short supply, for example, may not remain for many years within an HSR unit in the ministry. They may be lured away by attractive and prestigious positions either at the university, in private industry, or abroad. Serious consideration should be given to development of appropriate career structures within the ministry. In addition, the universities should be encouraged to train a sufficient number of the type

of specialists who are needed for HSR studies.

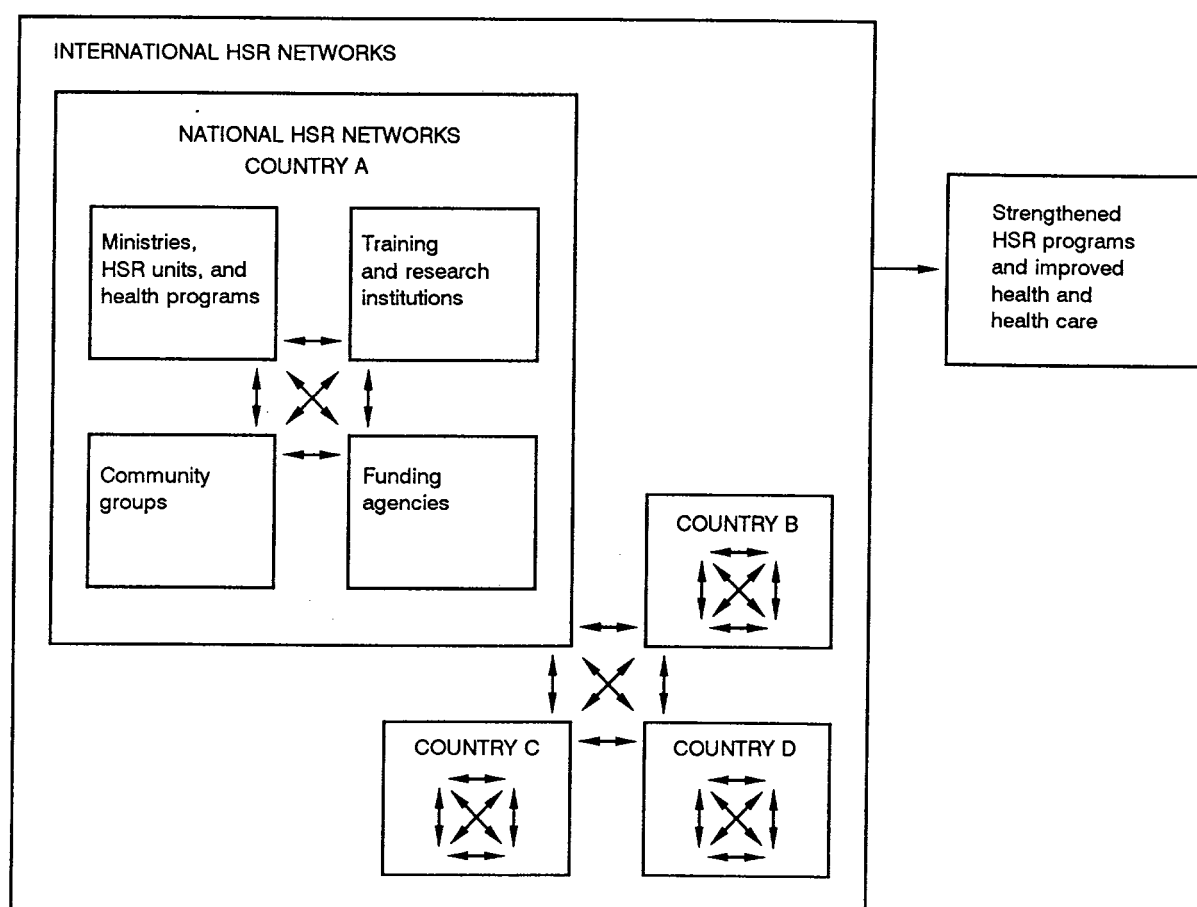
In countries where national health or medical research councils already exist whose major role is review of research proposals submitted to them (often in the area of biomedical research), HSR advisory committees may tend to concentrate on this same set of activities as well. It is important to encourage both types of groups to play a bigger role in setting research priorities, managing major research efforts, and promoting the implementation of relevant research results.

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11. NATIONAL AND INTERNATIONAL NETWORKS FOR HEALTH SYSTEMS RESEARCH

BRIEF SUMMARY OF STRATEGY: HSR networks can be developed that link research producers and users in ways that enhance the opportunities for sharing knowledge and pooling resources. Networking mechanisms can be organized that coordinated a variety of institutions and individuals, enhancing both the capacity to produce high quality, relevant research and the likelihood that its results will be effectively utilized for health development.



DESCRIPTIONS OF NETWORK MECHANISMS AND STRATEGIES

Networks can be developed that facilitate sharing both within and among organizations that should be involved in HSR, including:

- Health-research units and institutes with HSR programs or projects;
- Both governmental and nongovernmental health service delivery organizations and programs that could profit from participation in HSR and the use of HSR results;
- Universities and health schools involved in HSR and research training;
- Community organizations or representatives of communities that are either involved in HSR projects or should profit from their results; and
- Donor or funding agencies supporting HSR programs and projects.

Networks can be developed both at national and international levels. Networks at the national level, for example, may include:

- Arrangements facilitating collaboration and exchange between national and subnational research institutions, and ministry divisions or units involved in HSR.

EXAMPLE: In Botswana, efforts are underway to create a network of focal points in various divisions and units of the Ministry of Health and related ministries and agencies that will serve as a nucleus for promoting HSR and ensuring that findings are used.

- Associations linking universities and the health-sciences schools within them with ministries of health, health service delivery organizations, and communities that may wish either to develop joint HSR projects and training activities or request that the academic institutions provide them.

EXAMPLES: In Nigeria, the Federal Ministry of Health has requested that University College Hospitals (UCHs), departments of Community Medicine, and other university groups collaborate with it and with the local government authorities (LGAs) to support the development of a strong primary health care (PHC) system within the country. University researchers have worked closely with the Federal Ministry and LGAs on a number of HSR and operations research (OR) projects, designed to improve PHC delivery. For example, UCH researchers in several states collaborated with local authorities and communities, with support from Columbia University, on OR projects focused on community-based contraceptive distribution. These joint PHC and HSR activities have helped solve priority problems and created a network of managers, researchers, and community leaders with collaborative HSR experience that can be easily tapped in the future.

An IDRC/Rockefeller Foundation supported project entitled *University Partnerships in Essential Health Research* aims "to have students and faculty members participate in health research in a systematic way and as an integral part of their training. The framework for this training is a new system of partnerships among universities, governments, and communities" focusing on "essential national health research."

- Mechanisms linking donor agencies providing HSR-related support with each other and with ministry research units, research institutes, and universities that should be the recipients of this support. (See Annex 9 for a discussion of this strategy.)
- The designation of WHO Collaborating Centres for HSR that encourage networking and provide technical support for HSR-development activities both at a national and regional or international level.

EXAMPLE: The development of a network of Health Systems Research Centres in Pakistan (Islamabad, Karachi, Lahore, and Peshawar) with the National Health Research Complex, Lahore, acting as the coordinating institution and designated as a WHO Collaborating Centre for HSR.

Networks at the international level, for example, may include:

- Regional HSR development projects that support the HSR program-development process at the country level and facilitate the exchange of information and expertise among countries.

EXAMPLE: The Joint WHO/DGIS/RTI Project on *Health Systems Research in the Southern African Region* promotes the development of a decision-linked approach to HSR in member countries through a series of intercountry workshops and training activities, technical assistance at the country level, and promotion and support of intercountry networking and exchange.

- The "twinning" or "pairing" of research institutions and universities in developed and developing countries that can increase the pool of funds and expertise available to developing country researchers and provide mutual benefits and research opportunities otherwise unavailable to developed country researchers.

EXAMPLE: A program jointly funded by the Rockefeller Foundation and WHO currently supports research twinning between 16 developing and developed country partners.

Mechanisms that may facilitate communication, exchange of information, and development of joint activities among network members include:

- The designation of "focal points" or representatives in each of the collaborating institutions in an HSR network that meet as part of a network coordinating council or advisory group on a regular basis and actively pursue network goals in the interim.

EXAMPLE: One common type of "network" organization is the HSR advisory committee or similar group that has been formed in many countries to coordinate HSR activities on a national basis. The composition and functions of these committees are discussed in Annex 10 (page 119).

- Production and distribution of network newsletters that facilitate the exchange of HSR-related information, featuring reports on national and international HSR studies and their results, HSR program-development activities, HSR-related international initiatives, training courses, conferences and other events, HSR publications, and organizational profiles.

EXAMPLE: *Bridge: An International Newsletter Linking the Producers and Users of Health Systems Research and Clinical Epidemiology* produced by the Health Systems Research and Development Programme of WHO, the International Clinical Epidemiology Network (INCLEN), and the Foundation for Health Services Research, with support from the Rockefeller Foundation and IDRC.

- Programs and funding mechanisms that provide opportunities for exchange of personnel among network institutions for activities such as joint research projects or training activities.

EXAMPLE: An intercountry workshop on HSR and management was held in Malaysia in December 1987 with participants from eight countries. As a result, a network was formed to share information and staff to support various HSR activities in the Region. One of the first network exchanges was a colleague from Seoul helping with research projects in Papua New Guinea.

- Organization of a series of consultative meetings or scientific conferences that involve network institutions and other researchers and decision-makers and provide opportunities for both intellectual exchange and development of collaborative activities.

EXAMPLES: The International Clinical Epidemiology Network (INCLEN) provides training for staff of 26 medical schools in Africa, Asia, and South America that are building clinical epidemiological units. Each year, a scientific meeting is held in the member countries that brings together fellows from the 26 units, research experts, and representatives of international funding agencies, providing a major forum for presentation of research results, continuing education, information exchange, and joint planning sessions.

Intercountry workshops and national consultative meetings on HSR, particularly if they are held several times for the same countries, provide an excellent opportunity to foster both intercountry and national networking on HSR. (See Annexes 1 and 3 for descriptions of these strategies.)

- The involvement of network members as facilitators for HSR orientation sessions or consultative meetings for decision-makers and as training staff for HSR methodology courses.

EXAMPLE: Members of the HSR network being developed at the national level in Botswana in the Ministry of Health and related agencies will take part as instructors or facilitators in future district-level HSR workshops and courses.

- The use of new appropriate technologies to increase communication among network members.

EXAMPLE: Use of telecommunications technology such as international computer conferencing — a strategy being used by *The Network of Community-Oriented Educational Institutions for Health Sciences* (described by Neufeld 1990, p. 19).

POTENTIAL IMPACT

Networks, if well organized and maintained, have great potential for maximizing the exchange of information and expertise and the coordination and utilization of scarce resources. Networks that bring together producers and users of research are particularly helpful in promoting development of user-relevant studies with a high potential for application.

LIMITATIONS

One of the greatest limitations of the network strategy is the difficulty in maintaining functional and productive networks once they have been developed. If networks are to be successful, network organizers and members must spend substantial time and, in some cases, funds, on a continuing basis. There is often danger that, once the novelty of the network fades and other priorities press for attention, the network-maintenance activities necessary of effectiveness may slowly (or precipitously) decline. It is helpful if a means can be devised for assuring necessary financial and organizational support for the network on an on-going basis.

It is important, when possible, to foster the development of strong national networks before developing international networks. If international linkages are formed with relatively weak national networks, the arrangement often only benefits the international level.

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ANNEX 12: REFERENCES AND BIBLIOGRAPHY:

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