

Report on Health Research in Jordan

Major Developments 1990-2000:

Health research in general and guided health research in particular is relatively new in Jordan and only recently grabbed the attention of few health policy makers. In the recent plans to improve the health care system and delivery services, the Ministry of Health (MOH) focused on the following areas:

- coordination of primary, secondary, and tertiary care services;
- health manpower development;
- facility development.

These decisions were generally based on anecdotal evidence rather than on robust research.

Public health care institutions in Jordan are adopting a “follow the leader” type of policy in developing their health care plans, which have not usually included research. The main reasons for exclusion of HR from health care plans are:

1. Health decision-makers either lack an appreciation of the need to gather reliable data to support their decisions, or are unaware of the availability of data, or are under pressure that leads them to formulate their decisions based on anecdotal evidence.
2. The data available when decisions are made are unreliable or invalid.
3. Inadequacy of the infrastructure to accommodate health research; health care institutions lack good quality data primarily because there is no advanced health information system.
4. Scarcity of financial resources.
5. Lack of coordination between health research and health service institutions.

Health research plans sometimes appear in the bilateral agreements between the Ministry of Health (MOH) and various regional and international organizations such as WHO, UNICEF, UNFPA, USAID, and the Population Council; these agreements mainly support MOH plans and concomitantly serve the objectives of these organizations.

However, there are certain benchmark developments within public health care institutions in the area of health research. These developments are:

1. Involvement of health research professionals in the health decision-making process. During the past decade the office of Secretary General of the MOH was held by an academic health research specialist. This decision not only connotes appreciation of research, but also represents a step

towards coordinating the efforts of health research and health care institutions.

2. Development of a management information system (MIS).

One of the principal recommendations of the Jordan Health Sector Study (1997) is "Improve management of the health sector by developing and implementing at all levels of the system management information systems and appropriate information for decision-making ...". In response to this recommendation the MOH has developed and implemented the following strategies:

- a. Establishment of a management information training centre to build a cadre of employees capable of utilizing the computer software programs on data management.
- b. Selection of one large and one medium-size hospital in which to establish a computerized information system, including the use of ICD-10 for classification of diseases.
- c. Development and initiation of a more robust referral system within and between public health care institutions at the various levels..

A major development in health research on the part of the MOH is expressed in its agreement with Jordan University of Science and Technology/Faculty of Medicine since 1990. According to this agreement, faculty staff members provide services in their capacity as members of the health staff in all MOH hospitals and comprehensive health care centers in northern Jordan, while using these facilities as training sites for their undergraduate and postgraduate students This agreement has supported research by:

- preparing the facilities for high quality research;
- promoting planned research; and
- having faculty staff researchers as part of the health care planning body.

Since late 1998, through the Primary Health Care Initiative (PHCI) project, the MOH is in the process of upgrading the quality of care as well as establishing a reliable MIS at all of its comprehensive primary health care centers.

Academic institutions, by virtue of their mandate, are the main source of health research in Jordan. Researchers (faculty staff members and postgraduate students) have free access to the facilities and the Internet services of the institutions. The amount allocated for scientific research, including health research, in the 1999/2000 budget was about US \$4.5 million, compared with about US \$3 million allocated in the 1998/1999 budget. These

figures do not take into account the cost tied to the use of the facilities of the institution (equipment, computers, space, utilities).

At Jordan University of Science and Technology (JUST), for example, about 25% of the 1999/2000 research budget is spent on health research. The contribution of international health agencies to health research varies widely from one agency to other. The revised bilateral agreements between MOH and WHO, UNICEF, and UNFPA indicate that their equal share of health research funding is between US \$10 000 and US\$30 000 annually. USAID's contribution for HR during the last decade was about US\$1 million, including US \$500 000 for a national household survey (in process). The World Bank has supported the Jordan Health Sector study with a budget of US \$150 000.

Unfortunately, health research in academic institutions is strongly tied to the researcher's personal interest rather than to a preset national plan.

The newly established (1996) National Center for Diabetes, Endocrine, and Genetics (NCDEG) is another active site for HR, particularly in endocrinology and genetics.

The most productive health research institutions are:

- a. Faculty of Medicine
Jordan University of Science and Technology
P.O.Box 3030
Irbid 22110, Jordan
- b. Faculty of Nursing
Jordan University of Science and Technology
P.O.Box 3030
Irbid 22110, Jordan
- c. Faculty of Medicine
Jordan University
Amman, Jordan
- d. Faculty of Nursing
Jordan University
Amman, Jordan
- e. National Center for Diabetes, Endocrine, and Genetics
(NCDEG)
Jordan University

Amman, Jordan

The parties interested in HR are:

- public health care institutions;
- national population council;
- Jordan family planning and protection agency;
- higher council for science and technology;
- Nour al Hussien foundation; and recently
- NCDEG

However, the national research agenda is mainly driven by financial controllers and donor agencies.

There are no reliable mortality and morbidity data to prioritize health problems in Jordan. Results of the 1994 national morbidity and mortality survey failed to provide the necessary information. The 1995 national health financing study indicated that 50% of mortality data were lacking the cause of death. The findings from the other 50% indicate that the leading cause of death is cardiovascular disease. Other important causes include accidents and pneumonia.

Health research is not given a priority by the Government of Jordan. To my knowledge the research results that have influenced a change in health policy are:

- 1994 health sector study;
- 1995 health services evaluation study;
- 1998 census of type I diabetes mellitus (DM) which led to the establishment of the type I DM registry and free treatment.

However, no health research data have been used to overcome inequities in health.

Health research priorities have not been set yet. The proportion of research that addresses priorities in health needs is difficult to calculate but estimated to be about 10-20%.

There is no mechanism at the national level to coordinate health research in Jordan. The Higher Health Council, through its Technical Committee, is supposed to be responsible for developing mechanisms to ensure that health research is of high quality and coordinated rather than fragmented and duplicated. It is also supposed to ensure the availability of research results for utilization in planning and provision of health services. Unfortunately, this committee has not been formed yet.

In 1993, public universities together with the Higher Council for Science and

Technology agreed to coordinate their efforts in developing and implementing mechanisms and standards to fill the gaps in scientific research including quality, fragmentation in research and in resources. Again, this proposal did not lead to concrete action.

External Collaboration:

Various external agencies are involved in health research in Jordan. The nature and extent of collaboration, however, differ among those agencies. For while the nature of collaboration with agencies, such as WHO, UNICEF, UNFPA, and USAID, is regular and based on mutual biennial agreements with the MOH, with other agencies such as the World Bank it is an irregular or one-time activity.

However, the low level of funding allocated to health research reflects the low priority given to investing in HR.

<u>Health research project</u>	<u>Collaborating agency</u>
Cardiovascular disease and diabetes study	WHO
Anemia among women	UNICEF
Family Health Survey	UNFPA
Morbidity and mortality survey	USAID
Household health survey/ primary health care initiative project	USAID

It is clear that these external agencies play an effective role in supporting health research.

Plan to strengthen capacity for health research in the coming decade

At the individual level

1. *Incorporation of research in the national education policy:* A major problem in research in general and health research in particular is strongly related to a drawback in the education system of the country. Throughout their education, school students and undergraduates are never involved in any appreciable educational activity directly or indirectly related to research. Future health service providers, health decision-makers, and health researchers are members of this population group. One approach to strengthen health research capacity would be to

develop a national education policy that produces graduates who have an appreciation of high quality data and of the use of these data in the decision-making process. Such a policy would also enable future postgraduates and research scholars be more critical of the research they conduct and its results.

2. *Training of health manpower in health research*, whether through in-service training or scholarships.

At the institutional level

1. Health service and health research institutions have to develop and implement strategies that focus on the quality and utility of research as well as on research-driven decision-making. Health service institutions have to include research in their plans and in priority manner.
2. Health research can be strengthened through:
 - collaboration between research institutions through networks or other mechanisms to ensure complementary and cost-effective efforts and to overcome fragmentation.
 - collaboration between health research and health service institutions

At the national level

1. Coordinate the plans and activities of health research and health service institutions.
2. Coordinate the plans and activities of health institutions and other public institutions.
3. Develop a health policy that highlights the importance of research for health services development.
4. Give research a higher priority in the bilateral agreements with external agencies.
5. Support efforts or initiatives that help to establish regional health research networks.

Major constraints facing further development of health research

1. Lack of appreciation of the results of health research among some health decision makers resulting in research getting a low priority in their health policy agenda.
2. Lack of coordination between health research and health service institutions
3. Lack of a reliable MIS as well as of trained staff who can use this system.

4. Scarcity of financial resources.
5. Inappropriateness of a considerable amount of the information available for use in health care decision-making.

To overcome these constraints I do suggest the following:

1. To expose health care decision-makers, through workshops, to the results of research that has the potential to influence health care policy.
2. To have a national official body that coordinates the efforts of health research and health service institutions. The Higher Health Council has the capability to play this role through its technical committee. Guided by the health policy agenda, this committee can liaise between health research and health service institutions. In this case research institutions will be informed about the kind of research needed and can prioritize the support of research proposals. At the same time the health service institutions will be exposed to the research being carried out.
3. To upgrade the available MIS through use of computer health management programs, development of more concise health policies and procedures, and development and implementation of MIS training programmes.
4. To involve health research professionals in academic health institutions in public health care plans, in order to arouse the interest of those professionals in research that can inform those plans.