Health Research for Policy, Action and Practice

Resource Modules

Version 2, 2004

Module III

Promoting the use of knowledge in policy and practice

Unit 1

Introduction

We welcome readers' comments to enable us to continually update and improve this material.

THE COLLABORATIVE TRAINING PROGRAMME

Alliance for Health Policy and Systems Research
Council on Health Research for Development
Global Forum for Health Research
INCLEN Trust

Acronyms

INCLEN	International Clinical Epidemiology Network
UNDP	United Nations Development Programme

Module III. Promoting the use of knowledge in policy and practice
Unit 1. Introduction

This unit sets the stage for this module by providing:

- an overview of the explosion of information
- the rationale for improving the management of knowledge
- definitions of key terms.

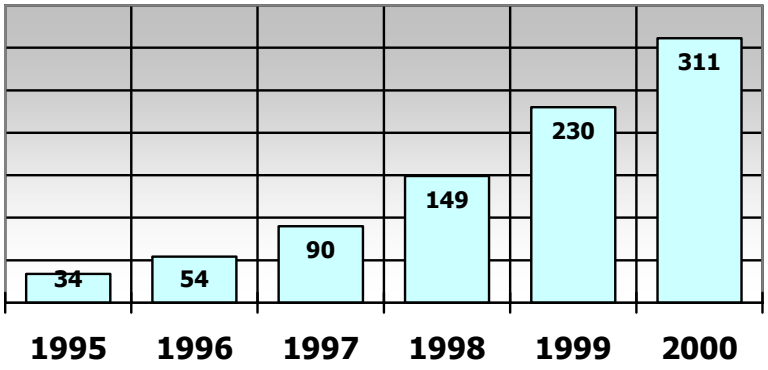
Knowledge is a critical tool for health, and knowledge management is the capacity to translate research results (knowledge) into policies, programmes and practices that can improve the quality of life and lengthen survival. Perhaps in no other sector does knowledge management have such a high promise.

A fundamental shift has taken place in the world of information and knowledge during the last two decades of the 20th century. The "information age" — built on the social phenomena of mass literacy, education and communication — has produced inventions (chiefly the computer) and a dazzling array of applied technologies. Joined to these social and technological developments, the business community has come to recognize the importance of the "knowledge economy", and several industrialized countries now refer to themselves as "knowledge societies".

The features of this remarkable change include the following.

- An increasing **quantity** of information. There are now more than 100 000 scientific journals that publish 7 000 articles per day. Japanese medical researchers publish 109 700 scientific papers a year — about one "scientific paper every minute of the working day". Interestingly, 10% of the journals in any given library account for 80% of usage, and at least 50% of the journals are never even consulted once (Weiss, 1986)!
- Increased **availability** of information and communication technology. Global Internet connectivity increased 10-fold between 1995 and 2000 (see Figure 1). It is estimated that there are now more than 100 search engines, which provide access to more than two billion unique, publicly accessible web pages. The available pages are increasing at a rate of 7 million per day. Many databases, accessible through an introductory website, have additional "deep web" electronically-accessible libraries. It is estimated that when these "deep web" repositories are included, there are now 500 billion documents that can be accessed from anywhere in the world.
- The emergence of a new economy that is "global, highly competitive, fast-changing and based, to an extent never before experienced, with knowledge

Figure 1. Global Internet connectivity, 1995-2000 (millions)



Source: Philippe Capitaine, Chief of External Affairs, International Telecommunications Union, November 2001.

as a key asset" (Don Simpson, Innovation Expedition, 2001: http://www.innovationexpedition.com/iemainframeset.html, (accessed August 2004). Knowledge management has become a major emphasis in the private sector, and business scholars have produced many books and articles on how knowledge management is understood and practised in a business setting.

- The World Bank is attempting to shift its image from that of a financial institution to a "knowledge" institution. This change was heralded in the *World development report 1998/99*, entitled *Knowledge for development* (World Bank, 1999).
- Similarly, the United Nations Development Programme, with its focus on human development, has recently studied the role of information technologies in the context of human development. The 2001 issue of UNDP's annual *Human development report* is entitled *Making new technologies work for human development* (UNDP, 2001).

The digital and information "revolution" presents a remarkable opportunity for developing countries to move quickly to develop their own capacities, and become part of the global "virtual" economy. But Internet density (users as a percentage of population) is much higher in high-income countries, and among the educated sectors of developing countries. Internet density is now more than 50% in Canada and the United States of America, but less than 1% in Africa. In fact, the information revolution threatens to magnify the social and economic disparities between the rich and the poor.

Some analysts are now using the term "information poverty" to describe not simply the gap in access to information and communication technology (ICT), but also the gaps in access to services and information (knowledge) and awareness of how these services and knowledge can be used. This discussion is elaborated in a chapter by Stiglitz (1999) in the recent book *Global public goods.*

Knowledge management and health research

The field of health research for development, and health in general, provides examples of the importance of knowledge management.

- The World Health Organization has, in the last few years, created an administrative cluster entitled "Evidence and Information for Policy". This group combines a number of existing functions, and "mainstreams" the use of research by national ministries of health. One major example is the assessment of health system performance.
- The International Conference on Health Research for Development was held in Bangkok, Thailand in October 2000. In the documentation prepared for the conference, and at the conference itself, there was a major focus on knowledge generation, management and utilization as an essential ingredient in all efforts to increase the health and well-being of people everywhere. The conference summary and other relevant documents can be found at the following website: http://www.conference2000.ch.

In July 2001, the then Director-General of the World Health Organization, Dr Gro Harlem Brundtland, met the senior executives of the six largest medical publishers to announce that the publishers will give those in low-income countries electronic access to their material for free, or at very low cost. This scheme began in January 2002 as the HINARI programme (Health InterNetwork Access to Research Initiative).

Much of the challenge of knowledge management in the context of health research is not new. Indeed, the problems of too much information, not enough information and filtering out "the bad from the good" and the relevant from the not useful still persist. However, as the topics of the module units attest, there are some new twists on old challenges. These include:

- the availability of new information and communication technologies and the implications of this availability, given the goal of equity in health and development — an issue sometimes referred to as the "digital divide"
- the process of appraising available knowledge in terms of "quality" (validity), relevance and equity.

Some definitions

It may be useful at this point to clarify certain terms that are used in addressing the challenge of the way knowledge is produced, managed and used.

Knowledge production (or generation): this is the actual process of conducting research and producing new knowledge.

Knowledge management: knowledge management is a variety of activities in place to improve knowledge utilization — activities aimed at enhanced task performance through the creation, sharing and application of knowledge. Effective knowledge management solves a problem, the bottom line being that decisions are only as good as the experience and information that fuel them. People are enabled to act and

decide by the knowledge that is available to them. Effective sharing and use of knowledge can reduce mistakes, provide better quality interactions between collaborators, allow better implementation of best practices and speed the decision-making process.

Evidence: this term usually refers to information (or knowledge) that has been validated through some agreed standards or criteria.

Knowledge transfer: this is the process of passing available knowledge along to specified "audiences". These could include students, policy-makers, professional organizations and individual practitioners (both clinical and public health). Of course, a whole "discipline" is attached to each of these knowledge transfer processes. An example is the role of INCLEN faculty members as educators — a role that demands expertise in the "science of learning".

Knowledge use: this is the ultimate step in the research process — the use of knowledge for specific functions — such as policy-making, resource allocation, programme management, professional practice or various kinds of "action" groups (for example, by nongovernmental organizations and community groups). Perhaps the most dominant and crucial function of knowledge use is of course its impact on individual behaviour. Other terms are used for this same idea, often interchangeably, including "knowledge translation", "research use", "implementation" and "uptake" (of knowledge or research).

This important step is sometimes referred to as "demand creation" — that is, the processes involved in ensuring that potential users of research findings are involved appropriately in the research process, and eventually **use** and integrate research into policies, programmes and action. This theme is expanded in Unit 3 of this module, entitled "Advocacy: a new skill for the research community".

Such definitions aside, we recognize that the term "knowledge management" has become so widely used of late that it is sometimes in danger of being dismissed as simply the latest "bandwagon". It has come to mean a number of different things to different people and organizations, as the deluge of recent books and articles on the topic attests. Our intention in this overview is to introduce those engaged in health research to the idea that they need to think about knowledge management in relation to the challenge represented by the title of this set of modules — "Health Research for Policy, Action and Practice". We hope that this focus is adequately represented in the five remaining units in this module.

A road map for users of this module

This module is composed of four units in addition to the present introduction. It starts with an overview of communicating knowledge (Unit 2), covering ways of enhancing the use of knowledge in policy development and health system management, health care practice and in direct action by health service users.

The concept of advocacy is addressed in Unit 3, as this is often considered to be a new skill for the research community. The unit provides a view of advocacy in the context of interaction between actors, as well as an introduction to advocacy

challenges and strategies. It explores the processes and competences in building advocacy coalitions.

Knowledge networks are the subject of Unit 4. The concept of knowledge networks within health research is introduced and their features are described. Tools to assess knowledge networks are provided.

Although electronic tools are not the only way to manage knowledge (and we aim at a later date to provide a broader overview including non-electronic tools as well), Unit 5 provides an overview of the use of electronic tools to communicate (using various methods of e-dialogue), work together (using digital work-spaces), disseminate knowledge (using the Internet, CD-ROM and DVD), and locate and access information.

References and further reading

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