

**PAHO AND THE DEVELOPMENT GOALS FOR PUBLIC HEALTH
IN THE 21ST CENTURY:**

**SCIENCE, TECHNOLOGY, AND STRATEGIC HEALTH INPUTS
CONTRIBUTIONS FROM THE MINISTRIES OF HEALTH OF BRAZIL AND CHILE**

At present, there are sound arguments demonstrating the importance of scientific research in health as a fundamental element of the science, technology, and strategic inputs agendas of international organizations, as well as of the Ministries of Health responsible for crafting those agendas.¹ These arguments include:

- a) The growing awareness of the key role of health, science, and technology as requirements for, rather than simply consequences of, the social and economic development of peoples;
- b) The need to improve the health status of poor and marginalized populations, which is essential for the attainment of the Millennium Development Goals set by the United Nations;
- c) The disconnect between the disease burden of disadvantaged populations and the concentration of global investment in health research on the problems of industrialized nations;
- d) The limited resources available for health research on the diseases of poverty, a situation that makes it necessary for financing agencies to select and prioritize programs;
- e) The speed of scientific advances and discoveries in the biomedical field, mainly in genomic science, and the enormous potential for their application to human and animal health;
- f) The growing participation of the private sector and philanthropy in financing and conducting health research;
- g) The limited participation of less-developed countries in the worldwide production of scientific and technological knowledge;
- h) The “brain drain,” which depletes the limited human health resources in poor countries, exacerbating inequality;
- i) The difficulties faced by the most disadvantaged populations in gaining access to drugs, vaccines, diagnostic tools, and other medical needs because those items are protected by intellectual property mechanisms;
- j) The recent emphasis on bioterrorism and biodefense, which has overshadowed urgent public health issues;
- k) The need to understand the various national health research systems in order to gear them to the needs and requirements of each country.

In recent decades, the Pan American Health Organization has provided significant support for health research in the countries of the Region and for future actions that can, and should,

¹ Morel, C. M. A pesquisa em saúde e os objetivos do milênio: desafios e oportunidades globais, soluções e políticas nacionais. *Ciencia & Saúde Coletiva*, 9(2):261-270, 2004.

mark the beginning of a new PAHO policy in science, technology, and innovation in health. That policy should be based on:

- a) Leadership capacity, initiative, and cohesion, acting as a spokesman and advocate for meeting development needs related to new interventions and for the search for new knowledge;
- b) Establishing agreements with institutions specializing in health research in the Hemisphere;
- c) Motivating institutions capable of providing new human and financial resources for health research and institution building to take an interest;
- d) Convincing countries of the need for greater investment in technological innovation and the development of new health interventions;
- e) Promoting actions that encourage countries to understand and evaluate their health research systems² so that they will adopt agendas of research priorities, guaranteeing financial resources and managerial capacity.

In the 21st century, PAHO should direct its efforts to contributing to the following areas of development:

- 1) Increase the visibility of national health authorities in the countries of the Region in scientific and technological efforts. The absence or marginal presence of those authorities hinders harmonization of health research activities with the needs of national health policies. The disconnect between these two components is one of the main obstacles for most countries of the Region to putting excellent knowledge at the service of best practice in health.
- 2) Promote the preparation of national policies in health science and technology, under the leadership of the Ministries of Health, in keeping with the national and regional health needs of the population as defined by health objectives. This policy should be firmly supported by a commitment to combat inequality in health, contributing in this way to raising standards of equity in the health systems, based on ethical principles in health research. This policy will face the challenge of increasing the effectiveness and efficiency of national systems and promoting the advancement of scientific knowledge in the health sector, especially in fields neglected by scientific centers that are more developed in terms of the production, absorption, and use of scientific knowledge and technology and the training of human resources for health research.
- 3) Increase the selective and catalytic capacity of the system for the promotion of science and technology to set a national agenda of health research priorities. Assembling this agenda should be a technical political process with democratic participation. The priorities should approximate the health needs of the population. However, they will not necessarily be superimposed on them, since addressing health needs does not depend directly on the solutions proposed by scientific research, just as there are not always adequate concepts or methodologies in terms of scientific and technological knowledge and practices. The agenda will also include research on the full range of knowledge in health, from basic research to operations research.
- 4) Propose guidelines to advance scientific knowledge in technology development and innovation in the industries that produce drugs, immunobiologicals, equipment, and other

² World Health Organization: *National Health Research Systems. Report of an International Workshop, Cha-am, Thailand, 12-15 March 2001*. Edited by Pang, T. Geneva: World Health Organization; 2001.

basic health inputs (the health industrial complex). These guidelines should directly follow the principles of the Doha Declaration, which states that public health considerations should prevail over industrial intellectual property rights. Each of these inputs has its own industrial and marketing characteristics, but what they have in common is the fact in recent decades they have been the areas of industry marked by tremendous technological advances and high profits. In terms of setting priorities, the institutional agreements and promotion mechanisms most appropriate for each objective should be evaluated in each situation. Institutional agreements between the public and private sectors should always give special importance to the scientific and technological excellence necessary to produce innovations.

- 5) Promote the adaptation of national legislation to take better advantage of the anticipated flexibility in international patent agreements to reach bilateral accords on the procurement of drugs and inputs and the expansion and evaluation of the productive capacity of the countries of the Region. This adaptation can effectively ensure that guarantees negotiated internationally are fully enforced. Among other measures, the purchasing power of national governments can be used, whenever possible, as a tool for training in technology and for reducing dependency.
- 6) Promote national policies and multilateral relationships that foster the procurement, development, and internalization of technologies for the production of inputs with a heavy financial impact on the health systems of the countries of the Region. Regional exchange initiatives that improve the managerial capacity of governments with regard to research, access, and the production, distribution, dispensing, and rational use of drugs and health inputs should be strengthened.
- 7) In terms of regulatory activities, the regional development and harmonization of clinical protocols and therapy guidelines should be promoted as a way to make good use of technology in the health services. Similarly, the development of cooperative systems to conduct health technology assessments in the countries in the Region should be promoted.
- 8) Promote the adoption of public policies on sustainable national development, including support for the production of scientific and technological know-how in health linked to the economic, social, cultural, and political needs of each country.
