

WORKSHOP ON NATIONAL ESSENTIAL RESEARCH IN THE CONTEXT OF THE NATIONAL HEALTH RESEARCH SYSTEM

June 26-28 2001 City of Havana Cuba

FINAL REPORT

The workshop was organized by the National Science and Technology Division of the Ministry of Public Health Care under the sponsorship of the Council on Health Research for Development (COHRED) represented by Dr Yvo Nuyens and Pat Buttler in the event. The opening was made by Dr Yamila de Armas, Vice-minister of Medical Care of the Ministry of Public Health of Cuba.

Six working sessions with the participation of 53 professionals (40 from the City of Havana and 13 from other provinces) were held. The participants represented different age groups and specialties from a number of centers, areas and posts related to research & development and technological innovation in health care such as National Research Institutes, Medical Colleges, Centers of Biotechnology, community researchers, Ministry of Public Health decision-makers and National Health Science and Technology Division officials.

Six conferences were delivered and three debate sessions on previously selected topics for discussion were held. Participants were distributed into 4 working groups for debates; each of them was given different aspects with the topics of the workshop in question form.

In the first working session, the topic for discussion was "Science and scientists: values and principles"

The discussion focussed on the values that should characterize Cuban researchers and on the principles of the National Health Research System required for making the development of the country possible, contributing to the development of the poorest countries and "paying homage to the full dignity of man" as *Jose Martí, Cuban National Hero*, had stated over a century ago.

Reference was made to the historical and social context of Cuba and the example of preceding researchers like Dr Carlos J. Finlay, an example of dedication and commitment to Science. Key concepts were pointed out about the political willingness of the Cuban State in supporting the formation of scientists and the development of Science as an important way of increasing the quality of life of the population, its links with national culture and contribution to the development of other regions and countries in need.

Emphasis was made on the ideological basis of the formation of men and women of Science in our country, which underline values such as equality, altruism, dedication, social commitment, patriotic feelings, solidarity, honesty, humanism and modesty.

The participants stressed the importance of the respect for the ethical principles of research in the broadest sense, starting from the protection of subjects included in research projects to the use of scientific achievements for the benefit of humanity. All the working groups agreed upon the importance of the principles of equity, non-discrimination of races, sex, nationality or language as well as the free exercise of scientific criticism.

Regarding the position of scientists and Science in the face of globalization and monopoly of knowledge, the working groups stated some essential requirements that if not present may jeopardize the development of health research works.

- The responsibility of the states for the education of citizens, equality of opportunities and access to creation, production and use of scientific knowledge in any sphere of economic, geographic, ethnic, political development or cultural context.
- No restrictive measures to the access to information sources and to resources and financing for research.
- The lifting of restrictions to patents with the objective of their free use in facing diseases which are a scourge for mankind and the creation of areas of true inter-sector and inter-discipline integration and cooperation, based on mutual respect and solidarity and opposed to brain drain.

Finally, the participants shared their criteria on the powers vested in the scientific community by the development of the communication networks and their influence on results, the establishment of alliances, cooperation and facing up to the realities of the present world that affect the poorest countries.

During the discussion, the participants stressed the need of increasing socio-medical and educational research works which are not registered as such in almost any country and are also very limited in Cuba.

In the second working session, the topic for discussion was "National Health Research System (NHRS): Structures and Functions" Each working group discussed a sub-topic and its contributions are summarized as follows:

a) Facilitation

The National Health Research System (NHRS) must be inserted into the country's health policies and strategies which in turn must be in line with the real national health problems. The prioritization of issues to be researched is decisive to more efficiently use the resources and efforts and to have a greater impact, but prioritization should be seen as part of a system that assures the continuity of a process in a coherent and coordinated way.

The development of an efficient relationship among government, decision-makers, academicians, researchers and the community is essential to adequately identify health problems nationwide, health problems in each province and municipality and to make proposals of research-development programs with internal logic that strengthen the leadership of the NHRS within the national context by means of contributing feasible and measurable solutions. To this end, some premises are necessary such as the presence of communication channels, forums of analysis and the commitment to

permanently support the actions to find the solution to problems detected not only by the national government but by provincial and municipal governments as well. The decentralized analysis of local problems assure the appropriateness of the research programs and their results and strengthen the sense of being part of a community.

The socio-political environment may positively or negatively contribute to the development of the health care systems and the use of research works as a development driving force. At present, with the process of globalization, the poorest countries have undergone substantial changes, particularly the privatization of services, which hinder many health actions in favor of the needy people. This is a situation that represents a threat for Latin America.

The sociopolitical systems are the basis for the development of the NHRS. If there are not adequate and stable sociopolitical conditions, then it is very difficult to organize a NHRS that in addition to assisting in giving an adequate and equitable service, is capable of having inner potentialities of permanent development, although the pace may be quicker or slower, and to direct research toward the solution of priority problems and to focus them on action and search for an impact that will be shown in changes and modifications of these problems.

Part of this development process of an efficient NHRS lies in the creation of a fundamental mass of professionals with adequate formation and capable of boosting the change of the national panorama. However, "brain drain" has a very negative effect because it often results in important drawbacks and loss of resources and expectations.

This is a phenomenon caused by a number of factors, but the loss of these professionals could be lowered if:

- Social responsibilities and national commitment to the health care problems of the country are encouraged in researchers.
- Incentive policies are set to recover researchers or prevent brain drain.
- The responsibilities of the governments in creating an effective space for research as a health care investment from which important results are expected to modify the national health care picture are strengthened.
- Self-esteem and the feeling of membership of scientific societies are encouraged on the basis of recognition at national level, economic support, internal exchange of experience and the possibility of serving as a scientific platform for the exchanges with other related societies.
- The communication with the scientific world is assured so as to avoid isolation and lack of confidence in the possibilities of changing the national realities by resorting to knowledge generated in other parts of the world.

On the other hand, knowledge is a resource of the institutions of every country and should rely on the new technologies to get access to concrete knowledge applied to the solution of specific problems. For achieving even more, we should advance in a balanced way in knowledge and financial management. To access to the accurate information at a lower cost, even in terms of time, has an impact because it contributes to a more efficient use of resources and a higher effectiveness of given solutions.

From its inception, the conception of INFOMED (Cuban Telematic Health Network) as

a system and the development of its resources in networks have been a decisive factor in this stage of development, yet it should be strengthened.

Even more to face up to the challenges of the information society in which we are living.

b) Generation of knowledge

The epidemiological changes have modified health care problems. This should be taken into account when identifying the research priorities, with an approach to health status and not to disease. This helps to save efforts and resources.

In this epidemiological context, the demographic approach and the identification of the particularities of population groups are increasingly important and may be significant in the impact of results and the efficient use of resources. The population should participate as an actor in the provision of solutions to their problems and should be trained to make the accomplishments sustainable once the intervention is over.

The analysis of health care problems should be increasingly inter-sectoral. Sharing knowledge and information with different sectors and receiving information from them also contribute to more efficient, equitable and harmonized programs.

The Latin American region shows more similarities than differences in many of its problems and health care problems are not the exception. Therefore, internationalization of the identification of the most important health care problems, the search for solutions and sharing of positive experiences may help in finding mechanisms for better communication with financing bodies, thus creating a common language among those who facilitate the understanding of these problems by these bodies whose contributions could be more effective.

The well-aimed approach of the national science and technology bodies is important to obtain economic support to meet the priority objectives and an effective influence on the national and regional bodies which are depositaries of funds of the financing agencies.

c) Development of capacities

The development of human and technological capacities is essential to carry out research programs in any country. The development of research works inevitably results in the development of medical care and of teaching and the improvement of the health status of the population. The outcome of research works generate new needs for development of human and technological capacities, which closes a cycle and starts another one at a higher level of development.

It is possible that at the starting of this cycle, the underdeveloped countries do not have the required total capacities to guarantee the continuity of the process and then some external assistance is needed to develop such capacities. But this external assistance will be truly effective in developing capacities if priorities are already set and protected from the scientific mercantile system.

Therefore, a long-term strategy is required to develop and keep human and

technological capacities for: establishment of priorities, research techniques, project management, dissemination of results and impact assessment among others.

In Cuba, the existence of systems of graduate education for decision-makers, professionals and researchers is presently added to the establishment of the Department of Science and Technological Innovation in the National Public Health School as part of the support to a comprehensive formation and its curriculum comprises the above-mentioned aspects.

The development of human capacities is a multidisciplinary and multisectorial activity in which governments, decision-makers, academicians and researchers should participate. Their coordinated actions should take into account the global social objectives as a source of entrance to promote research. Each country and region should define their own indicators that allow the evaluation and comparison of the development of these strategies.

d) Financing

The strengthening of the capacities in financing management may be accomplished by the coordination of the four levels (government, decision-makers, academicians and researchers) that interact within the NRHS.

To reach the efficiency of the financing budgeted by the Government and the Central Administration Bodies of the Cuban State, it is necessary that not only the decision-makers but also academicians and researchers know about the availability of funds and the prioritization of objectives. Respect for and differentiation to the financing of Science and Technological Innovation activity with the integration of the actors of the National Economy are also necessary. The obligations should be according to projects and not in an open manner by the state budget devoted to institutions doing research work and other Science and Technology centers, which favors awareness and economic thinking of the actors as well as the obligation of reporting on the adequate use of these resources in each project.

The analysis of costs can help in a more adequate use of health resources because it encourages the economic thinking from the researcher to the different management levels, make the planning of resources and the systematic control of costs more objective, allows to give systematically account through surveillance and supervision of research works even if it is referred to state budget, facilitates the economic and financial analysis of the projects and contribute to appropriately identify the priorities in terms of needs from every dimension, with a vision of efficiency and effectiveness.

Good financing management also requires an adequate flow of information. It is important that decision-makers, academicians and researchers know the different inter-governmental agreements that are signed in the field of health care so that actions be well-aimed and more effective.

Regarding relationships among governments, it is necessary to fulfill cooperation and financing agreements, provide details and terms of reference of these agreements to the rest of managing levels which are finally those in a position to implement them, and to include the specifications of the obligations of the Parties in the cooperation agenda.

Similarly, this should be complied with in relationships among institutions and of other kind.

More frequently it is observed in the region that funds granted to Science and Technology bodies, which are depositaries of financing agencies, are higher than those donated to the health care sector, so there is a risk that these funds be used in “elitist” research works that have little or nothing to do with the prioritized health problems of a country.

It is necessary to develop a culture of mobilization of resources for research and innovation. There are many international “donor” organizations that support the research work in the “developing” countries, so, it is necessary to know the purposes of each of them, the principal activities related to the development research and the activities for strengthening the institutional capacities. The modern world makes the participation of companies in the co-financing of research-development projects (“Joint ventures” and technological innovation projects possible and necessary on the basis of the products of Science.

The agreements with these organizations and enterprises should be clear, with accurate ethical and legal definitions that should include patents, copyright, authorship of publications, use of results, respect for standards and customs of a country, protection to the environment, among other issues. The development of capacities included in these agreements should cover the strengthening of the infrastructure of the institutions and their human resources, with explicit provisions about avoiding young talented brain drain.

For interacting with domestic and external financiers and avoid scientific mercantilism in Cuba, it is required:

- To preserve the national identity and the respect for the principles and values of our social system.
- To collectively approve the projects through the Scientific Boards which should be aware of the national and territorial priorities according to the case.
- To develop a culture of international cooperation, information in research, and cooperation surveillance in the different actors.

In the third working session, the following reflections were made on the basis of the discussion of the topic “Use and management of knowledge”.

The political willingness of the governments for the formation and development of the human capital should be increased by promoting education, culture and social commitment: *the development of the Structural Capital* for sustainability of infrastructure and equipment and that of the *Information Capital* for the development of informational culture and handling of networks.

Scientific knowledge derived from research works should be accessed to by everybody: the scientific community, general public and mainly the decision-makers, which should be taken into account by the organizational structures of Health Science and Technology. This will serve as a premise to establish the relationship among government, decision-makers, academicians and researchers in favor of management of knowledge, better use of results and evaluation of impact. On the other hand, indicators

such as cost-benefit and effectiveness, among others, should be incorporated into the evaluation of results.

It is not possible to close the research-action in health care cycle within the National Health Care System without having the participation of the Primary Health Care , thus losing a wonderful opportunity for achieving a significant impact that contributes to improve the health of the population.

The telematic networks favor the socialization of knowledge based on the contacts among specialists. However, cultural inequalities and unequal access to information and communication technologies of the Third World are insurmountable barriers that require supranational political and financial willingness to generate equal opportunities in areas of unequal development. On the other hand, the barriers that hinder the prioritization of health research aimed at the poor are not only those related to the access to information and informatization technologies. Although it is true that these technologies allow access to diverse sources of financing, in the long run decisions are conditioned by the interests of the financing sources that are not always match the needs of the country.

On the basis of the different topics discussed in group, the submission of the reports in plenary session and the conferences delivered, the participants agreed as general conclusions of the Workshop that in order to obtain More Health, More Equality and Higher Human Development, it is necessary:

- Greater social commitment
- Better recognition of problems and establishment of priorities.
- Incorporation of the community
- Greater positive approach to health in terms of public health
- Continuous monitoring and research on Equality, Health of Populations and Human Development.

Dr Niviola Cabrera Cruz and Dr Adolfo Alvarez Blanco from the National Science and Technology Division of the Ministry of Public Health of Cuba closed the Workshop.