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**STRATEGIES FOR UTILIZATION OF SCIENTIFIC INFORMATION
IN DECISION-MAKING FOR HEALTH EQUITY**

Division of Health and Human Development (HDP)
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Strategies for Utilization of Scientific Information in Decision-Making for Health Equity

Introduction

Identifying and proposing governmental interventions to reduce health inequities is one of PAHO's priorities. As with other health issues, decision-making to support health equity requires the constant use of scientific evidence to orient interventions and policy-making at local, national, and regional levels. Therefore, to better identify appropriate action plans related to health equity, PAHO has subsidized several studies on this topic. Unfortunately, these studies generally have had limited impact on policy making.

This difficulty in utilizing research results for policymaking has puzzled researchers and decision-makers alike. In a series of case studies conducted in Mexico, Bronfman et al.¹ (2000) identified four main types of obstacles in the use of health research by decision-makers, specifically obstacles related to context, content, stakeholders, and process. Context obstacles include centralized power structures, lack of continuity in planning and policy-making, and lack of financial resources. Obstacles related to content include differences existing between researchers and decision-makers in their use of terminology, in their pace of work, and in their perceptions of the usefulness of each others' work. The lack of scientific education among decision-makers, the practice of decision-making without evidence, and the pressures exercised by interest groups are examples of obstacles related to the stakeholders. Finally, Bronfman et al. identified the obstacles of process as the lack of appropriate means of diffusion for reporting research results.

An examination of the studies on health equity funded by PAHO shows an additional obstacle in the research process. Traditionally, the participation of decision-makers and other potential stakeholders happens only after research results are published. This excludes proactive involvement by decision-makers and other key stakeholders at the beginning of the research process, in the identification of priority problems and the definition of themes to be studied. This problem represents one major obstacle in evidence-based policy-making that was addressed in a workshop on the "Utilization of Research Results in Decision-Making for Health Equity", convened by the Research Coordination Program and FUNSALUD (Mexican Health Foundation) in Cuernavaca, from June 5-7, 2001. This paper is an account of this workshop, preceded by a description of the theoretical framework upon which it is based.²

¹ Bronfman, M., et al., *De la investigación en salud a la política: La difícil traducción*, Santafé de Bogotá: Editorial Manual Moderno, 2000.

² The seminar *Health Sector Reform in the Americas: The Research-Policy Interface*, organized by PAHO and IDRC in April 2000, also discussed obstacles and facilitators in the dualistic relationship between researchers and decision-makers. However, its recommendations included the need for the countries to "invest in structures, processes and activities to bridge the gap between research and policy by increasing

The New Mode of Knowledge Production and the Application Context

Improving PAHO's support of research grants in equity issues requires exploring the trends occurring, particularly in the last two decades, in the production, dissemination and utilization of knowledge. To date most strategies proposed to improve the utilization of scientific information for decision making have consisted mainly of training researchers to better "translate" their results, training decision-makers to better understand these results, or using communication experts as intermediaries for the "translation."

However, in their study on the social distribution of knowledge, Gibbons and collaborators (1994) point out the need for a higher level of interaction between researchers, decision-makers, users, and funders in the identification and formulation of problems for research. Building alliances between these actors would create an "application context" for better utilization of research results.³ In this study, the authors describe a paradigm shift in the organization of research, identifying two different modes of knowledge production that currently occur separately or overlap. Mode 1 is the conventional approach to research that functions "within the walls" of traditional research institutions, following research agendas defined almost exclusively by researchers. This approach gained strength especially after the end of World War II. In Mode 1, a clear distinction is made between basic and applied research. Moreover, transfers of research results are unidirectional (from scientists to scientist or from scientist to developer or decision-maker) and take place *a posteriori* (usually after the publication in a peer review journal), and do not involve other stakeholders. Mode 1 research is traditionally organized within one discipline, and only peers evaluate its scientific merit. In addition, resources come mainly from public sources, and planning is centralized and based on an offer for knowledge production.

Mode 2 is a more common approach to knowledge production, although elements of the first mode frequently permeate Mode 2. Instead of relying on "within walls" resources, Mode 2 favors networks of collaboration between different stakeholders in the research process. However, as Brown and Duguid (2000) argue, existing institutions play a fundamental role in promoting and nurturing these networks. The research agendas are said to be defined by an *application context*, i.e. an *ad hoc* issue-oriented coalition or a long-standing alliance between researchers, decision-makers, users, and funders interacting to solve problems identified collectively. In Mode 2, which is usually interdisciplinary, the various actors interact in a multidirectional way. For example, peers and non-peers evaluate the relevance of the research project. As a result, Mode 2 generates numerous opportunities for interaction among representatives from different sectors. Researchers, in addition, use a variety of information and funding sources, and the dissemination of results occurs not only in scientific journals, but in other media as well.

effective interaction among key stakeholders in health sector reform (researchers, policy makers, health care providers, civil society, and relevant private sector actors)."

³ Gibbons, M. et al., *The New Production of Knowledge*, 1994.

Research in Mode 2 has become standard practice, particularly amongst major corporations and in large, transnational research initiatives. In the health sector, this new mode of knowledge production, albeit permeated with elements from Mode 1, made possible the deciphering of the Human Genome. Use of the Mode 2 approach, with the concept of the application context, therefore describes actual trends in scientific knowledge production and not an idealistic proposal.

The Application Context and Research on Health Equity

The need to develop an application context to better use research results is particularly relevant in responding to complex issues on health equity that are influenced by a wide range of macro-determinants. Research on health equity requires the involvement of various stakeholders, such as those in the health and other social sectors, finance ministries, organizations of civil society, and the media. However, the studies funded by PAHO/WHO grants program on equity issues, have so far shown limited multisectoral collaboration in setting the research agenda.⁴

To flourish, the application context implies collaboration, power sharing and a democratic environment. One of the benefits of this approach is that it allows the scientific community to share with other stakeholders the burden of advocating for specific research agendas and funding resources. In addition, these new stakeholders in health research are likely to bring new networks of funders.

DECIDES: Democratizing Knowledge and Information for the Right to Health

To help promote the creation, strengthening and optimization of application contexts for health research in Latin America and the Caribbean, PAHO's Research Coordination has designed DECIDES, the Spanish acronym for Democratizing Knowledge and Information for the Right to Health. DECIDES is a technical cooperation strategy to reduce inequities in the access of scientific health information in the region of the Americas. Taking advantage of the opportunities opened by the new technologies of communication and information, DECIDES seeks to multiply interactions and collaboration among researchers, health professionals, decision-makers, citizens, journalists, legislators, and other social actors, through three basic components: *AGENDA* (Interactive Health Research Agenda); *REDIISAL*, (Network Researchers Exchange); and *APLICA*, (Application of Research Results for Decision making).

AGENDA promotes the interaction between various actors for the formulation and implementation of a research agenda that responds to priority health problems. *REDIISAL* promotes the training and exchange of researchers in health by strengthening collaboration mechanisms among the countries of the Region. Using new information and communication technologies (ICTs), *APLICA* facilitates the access of decision-makers,

⁴ HDR/HDP, *DECIDES: Democratizing Knowledge and Information for the Right to Health*. Technical Cooperation Strategy Document, PAHO-HDR/HDP, 2000.

journalists, and the general public to the information and knowledge necessary for the definition and implementation of health policies and programs.

It is within this specific framework of APLICIA that the workshop was convened on the “Utilization of Research Results in Decision-Making for Health Equity”. Its objective was to examine how the use of ICTs could help create application contexts for research and for decision making on health equity. In particular, it focused on the development of the Virtual Health Library - Equity and explored potential combination with other ongoing instruments to facilitate the use of scientific information in the decision making process, projects such as the Cochrane and Campbell Collaborative Review Groups and the Observatories for Health Equity.

Instruments for Evidence-Based Policy-Making

The Virtual Health Library – Equity

PAHO's Virtual Library of Health (VHL) is a technological platform and common virtual space that supports the development and implementation of the three *DECIDES* components. The VHL provides a decentralized and dynamic collection of information on various health issues, including health equity, targeted to the needs of researchers, health professionals, decision-makers, organizations of civil society, journalists, legislators, and other stakeholders in the Latin American and Caribbean countries.

The Cochrane Collaboration

While VHL is a tool for strengthening and multiplying interactions and collaboration amongst the different stakeholders, the Cochrane Collaborative Review Groups, traditionally, draw evidence from systematic reviews for decision making within the specific area of clinical practice. In this context it can be viewed as a tool to reduce ambiguities that occur in the interpretation by decision-makers of different, sometimes contradictory, research results. Macintyre and others propose a wider application of this approach for research in areas beyond health care, i.e. fields such as education, social welfare, and others issues relevant to public policy, based on the Campbell Collaboration.⁵

Created in 1993, the Cochrane Collaboration aims to assist people in making well-informed decisions by maintaining, making accessible, and preparing systematic reviews of research on the effects of health care policies and interventions.⁶ The

⁵Macintyre, S., I. Chalmers, R. Horton, R. Smith. “Using evidence to inform health policy: case study”, *BMJ*, 27 January, 2001, 322: 222-225. For an example of a systematic research review about health equity promoted by PAHO, in the context of health reform and equity, see PAHO/IDRC, *Research for Health Sector Reforms in Latin America: Reflections on Potential Contributions to Policy*, edited by Patricia Pittman and Robereto Bazzani (2001).

⁶ This session about the Cochrane and Campbell collaborations draws extensively from Dr. Peter Tugwell's presentation at the workshop "Utilization of Scientific Information for Decision Making for Health Equity,"

Cochrane Collaboration provides a much-needed service for users of scientific information in health for several key reasons. For example, clinicians and researchers face great difficulties in staying abreast of the prolific literature in their fields of expertise. Other consumers of scientific information such as political decision-makers, legislators, journalists, and the general public lack the training or the time to sort through the flood of information provided by scientific journals and other published research results. Furthermore, reviews without systematic methods that are designed to orient decision making in health, are often biased and unreliable; research trials are usually too small to carry statistical significance and, therefore, run the risk of missing important results; and even high-quality systematic reviews become outdated. Finally, a great amount of research is out of reach, while MEDLINE and EMBASE, the most consulted databases of health literature, cover only half of the world's health sciences journals.

The Cochrane Collaboration develops its products within the framework of several characteristics of the Mode 2 of knowledge production: the collaboration is based on networks, it is transdisciplinary and multidirectional, involving decision-makers, researchers, users, and funders. Moreover, the approach is problem-based with problems identified and reviewed not only by researchers, but also by other stakeholders.

In the United Kingdom, the Cochrane Collaboration is currently used as a support mechanism for high-level policymaking. The National Health Service (NHS) requires NHS Trusts and Health Commissions to use Cochrane Library evidence to guide decisions related to health care provision. Furthermore, research agencies in the United Kingdom, Australia, and Denmark require Cochrane reviews of existing knowledge to justify needs for funding new research.

Currently fifteen Cochrane Centers are in full activity in the world including sites in Brazil, Canada, the United States (New England and San Francisco), and an Ibero-American center based in Mexico that and covers Argentina, Colombia, and Chile. None are totally dedicated to supplying information for public health decision-makers.

However, among the fifty Cochrane Collaboration Entities, several have potential for a health equity-orientation approach. Possibilities include Collaborative Review Groups on consumers and communication, drugs and alcohol, EPOC: effective practice and organization, infectious disease, and tobacco addiction. Of the Cochrane Collaboration's ten fields of concentration, complementary medicine, child health, health promotion and public health, and vaccines appear the most promising for handling equity-oriented issues. A search of the Cochrane Library under the key terms "equity, disadvantaged, and socioeconomic" shows thirty-one reviews/protocols.⁷

which took place at Cuernavaca, Mexico, June 5 - 7, 2001. See also <http://www.cochrane.org> and <http://campbell.gse.upenn.edu>

⁷ The themes that surfaced under the search are: Effects of systems of physician payment; Access to Breast Cancer Screening; Daycare for Preschool Children; Home Based Social support for socially disadvantaged mothers; Infectious Disease (HIV Prevention, TB therapy), Psychiatric Disorder Reviews, Adolescent Pregnancy, Smoking, Alcohol, Drugs.

The Campbell Collaboration

Created more recently in February 2000, the Campbell Collaboration has similar objectives and methods used by the Cochrane Collaboration. However, the Campbell Collaboration focuses its systematic reviews of research on the effects of social and educational policies and practices. It targets the need for societies to assess more rigorously the effects of the social and educational policies and practices that are introduced and promoted. This concentration has particular relevance for policies related to health equity. Reviews of randomized trials are the first priority of the Campbell Collaboration and nonrandomized field trials the second. The Collaboration uses principles that encourage ensuring transparency of evidence and standards, new information technologies, attending to consumers' interests, and updating information. The Campbell Collaboration capitalizes on and partners with the Cochrane Collaboration.

The Campbell Collaboration does not have yet as many established libraries as the Cochrane. It is organized in a mobile Secretariat Node, now based at the University of Pennsylvania, with an international and cross-disciplinary Steering group. The

Methods group analyzes statistics, nonrandomized trials, process, and implementation of analysis. The Review groups respond to specific areas such as education, crime and justice, social work and social welfare. The dissemination and technology group develops the distribution of information. There are plans to develop a user's network in the near future.

Both the Cochrane and Campbell Collaborations produce systematic reviews of studies of effectiveness that are easily accessible, based on transparent and high standards, and constantly updated and criticized. They strive to provide better information on what works, based on high quality evidence offered to decision-makers (both political or health professionals) and the general public. The Collaborations feed virtual libraries, databases, and registries that are accessible through the Internet. They promote systematic reviews and meta-analysis, randomized and non-randomized trials, new clinical trials, and evaluate the use of original study micro-records and unpublished reports. Additionally, the Collaborations advance methodological research on preparing and maintaining systematic reviews. Their guiding principles are also common, based on cooperation, building on the enthusiasm of individuals, avoiding duplication, minimizing bias, keeping up to date, continually improving the quality and continuity of work, ensuring relevance, and enabling wide participation and access.

The Health Equity Observatory

While the Cochrane and Campbell collaboration provide evidence for decision making from systematic literature reviews, public health observatories, such as the Health Equity Observatory in Bolivia, monitor the effects of health reform and other public health interventions on health equity, thereby enabling the evaluation of health policies and interventions.

Among a broad range of activities conducted by the observatories are the following: monitoring health and disease trends and highlighting areas for action; identifying gaps in health information; advising on methods for health and health inequality assessments; drawing together information from different sources in new ways to improve health; carrying out projects to highlight particular health issues; and evaluating progress by local agencies in improving health and cutting inequality looking ahead to give warning of future public health problems.

The Ministry of Health of Bolivia initiated the Health Equity Observatory (HEO), with World Bank support. The HEO monitors the implementation of policies and interventions designed in the context of the ongoing health sector reform in Bolivia, and proposes adjustments, particularly, at the local level. A flexible instrument, the HEO provides a mechanism to monitor and control inequities in the health situation of both large and small population groups.

At this stage of development, HEO primarily monitors local level variations of a few health indicators by income quintiles such as vaccine coverage, infant mortality, hospital births, resource allocation, access to health services, acute infectious respiratory diseases and acute diarrhea, and access to public goods. However, the HEO plans to broaden the scope of these indicators to include other social variables such as level of education, environmental situation, and employment. Another possible initiative is the creation of a fund for research in health equity.

In England, there are eight regional Public Health Observatories (PHO) organized around a national association. They operate independently, usually supported by a network of universities and public health agencies. Their goal is not only to provide regular, high quality public health information and surveillance for decision-makers, but also to facilitate its application to improve health at a local level.⁸ Besides providing, analyzing and interpreting data, and facilitating use of research results, the British PHO model considers the development of specific projects required by decision-makers and representatives of the community.

The British PHO are network-based organizations with a certain amount of independence from direct government administration, enabling them to serve as advocates for the public interest. However, the observatories engage actively with governmental agencies and with the public, striving to influence policymaking and not merely observing or monitoring policy implementation, as the term "observatory" would imply. PHO have modules representing different policy areas. Each module has a different sponsoring organization, but all modules share staff and expertise. Internet services link the modules through the use of email and the World Wide Web.

⁸ See Northern and Yorkshire Public Health Observatory Home Page, www.pho.org.uk/nandyork/. See also The South West Public Health Observatory at www.swpho.org.uk/ and the NorthWest PHO at www.swpho.org.uk/

Workshop on the Utilization of Research Results in Decision-Making for Health Equity

The workshop convened by the Research Coordination Program on the "Utilization of Research Results in Decision-Making for Health Equity" was designed to be inter-disciplinary and was attended by participants from several Latin American and Caribbean countries, as well as the United States, Canada, and Britain. The agenda was divided into three different phases to accommodate the diversity of issues and complexity of the theme.

Phase 1

In the first phase, several high-level, scientific and technical lectures and panels introduced a conceptual framework about health equity and the relationship between research and decision making. Juan Antonio Casas, director of PAHO's Division of Health and Human Development described major trends in health equity in the Region and presented PAHO's conceptual framework and approach to improve it. Jaime Sepúlveda and Guillermo Soberón mentioned, respectively, the role of the Instituto Nacional de Salud Pública (INSP) and of the Fundación Mexicana para la Salud (FUNSALUD, a co-organizer of the workshop) in supporting well informed decision making in Mexico.

Julio Frenk, the Mexican Minister of Health spoke about Mexico's experience in the last 20 years in developing an information base for decision making, working with the INSP and with FUNSALUD. He showed how scientific information has oriented major health policies and programs in Mexico, using amongst others the example of research done in indigenous health. Citing the three main goals of the Mexican National Health System (equity, quality, and financial protection from catastrophic private spending), Dr. Frenk described several research initiatives used to support each of the several stages of policymaking, from the identification of objectives of the health system to the analysis of performance determinants and policy implementation, including the design of the upcoming health session of the upcoming National Development Plan.

Sir Donald Acheson, Chairman of the International Centre for Health and Society at the University College, London, and former Chief Medical Officer for England, described his experience as coordinator of the "Acheson Report" a landmark policy proposal addressing health inequities in his country. The report presents a review of the evidence on inequities in health in England, with time trends and the identification of policy-areas likely to reduce inequalities. Put together after a 12 month work of scientific literature review and a broad public consultation, the Report issued recommendations not only to the National Health Services, but to a series of other government agencies and organizations of civil society on issues such as poverty and income, education, employment, housing and environment, transport and pollution, nutrition and agricultural policy, highlighting the multisectoral character of health equity. The report concludes that scientific evidence supports a socioeconomic explanation of health inequalities and that

the recommendations have implications far beyond the scope of the Department of Health.⁹

Two members of the ACHR, Mario Bronfman and Ichiro Kawachi participated in the workshop. In a discussion panel on “Macrodeterminants of Health Equity” - Kawachi pointed out relationships between the social capital, inequities, and the health of populations. George Kaplan, who discussed social classes and health inequities, followed him. In this panel Norman Daniels, as the moderator, underscored the need to examine health equity issues through an ethics, philosophical approach.

Mario Rovere, former Secretary of Public Policies of the Argentine Ministry of Social Development moderated the following panel, about “Translating Research Evidence into Policy.” In this panel, Bronfman discussed and systematized the main obstacles and facilitating factors he found on the study about interaction between researchers and policymakers in Mexico. Findings of this study functioned as a platform for the workshop's objective of identifying strategies to overcome the obstacles. In the same panel Sally Macintyre, director of the MRC Social and Public Health Unit in Glasgow, described her experience with a group of researchers commissioned by Acheson to examine the quality of the evidence supporting the Report's recommendations. One of the crucial recommendations of the evaluation group is the need to permanently assess the recommendations and policy implementation of the Acheson Report, using new information coming to light updated systematic reviews. Therefore, the evaluation group suggested the use of the Cochrane Collaboration principles to "provide additional infrastructure for preparing, maintaining, and publishing electronically systematic reviews of research in areas beyond health care."¹⁰

Phase 2

In the second phase participants attended group discussions and plenary sessions that analyzed the political implications of results of seven health equity research projects supported by PAHO. Participants in the groups analyzed the use of the results for policymaking to improve health equity and also assessed the existing obstacles and facilitating factors that would aid implementation of health equity policies.

Following presentations by researchers the groups met to discuss three key issues related to research results, policies, and dissemination of information:

- Research results: What are the most important results presented in these studies and why?

⁹ For more information see Donald Acheson et al. *Independent Inquiry into Inequalities in Health Report*. London: The Stationary Office, 1998; or at <http://www.official-documents.co.uk/document/doh/ih/contents.htm>

¹⁰ Iain Chalmers, Richard Horton, and Richard Smith, Sally McIntyre's co-authors of the "Using evidence to inform health policy: a case study," *BMJ*, op.cit.

- Policies: What are the policy implications of these results on a national and a regional level? What obstacles would you identify in the implementation of these policies?
- Dissemination of information: To whom and how should these results be communicated? Can information technology be useful in this process?

During these discussion the groups assessed the limitations of the traditional process used by each researcher to identify the problem and define the research question. The obstacles for utilization of the results in policymaking identified by the groups correlated with those mentioned by Bronfman and collaborators, particularly obstacles to differences in communication and differences in timing among, decision-makers, and journalists. Contributing to the workshop's objective of identifying solutions to overcome these obstacles, the groups recommended alternative approaches to the research process in which various stakeholders would be involved at the onset in the identification of the research problem and question. In addition, the proposals included strategies for the transparency of results to decision-makers, the media, and the general public. These recommendations suggested the need for initiatives, such as the VHL and specific instruments designed to constantly analyze results, to translate them for the better understanding of different users, and to disseminate them broadly.

Phase 3

In the third and final phase of the workshop, participants continued with the format of discussion groups and plenary sessions. Discussions and presentations promoting in the Region the use of the Cochrane and Campbell Collaborative Review Groups and the experience of the Bolivian Observatory for Health Equity in the context of DECIDES and the Virtual Health Library (VHL).

Outcomes of the Workshop

The workshop attempted to simulate, in the group discussions, the potential interaction of the application context among key stakeholders--researchers, political decision-makers, journalists, representatives of civil society organizations concerned with health equity issues, representatives of international organizations, and other experts. This exercise required explaining the complex concept itself of “application context” to the participants, which was not an easy task. However, the workshop did succeed in simulating an application context, albeit with much difficulty, given the large number of participants (70). This probably reflects the complexity of implementing a real context of application.

Building an application context

One of the problems of the simulation was an imbalance in the composition of the participants. Although various groups of actors were represented researchers were in overwhelming majority. The invited representatives of funding agencies did not attend the workshop, debilitating the discussion of this essential component of the application context. Several last minute cancellations by key decision-makers was indicative of how

different their priorities are from the researchers, and of their greater time constraints. The difficulty in recruiting non-governmental organizations (NGOs) to participate was also revealing. As part of their preparation to the workshop, researchers were asked to identify NGOs concerned with the subject they had studied. Few researchers complied with the request, reinforcing our initial assumption that most researchers funded by PAHO had had little interaction with organized sectors of civil society before or after the conclusion of their studies. Therefore, the success of an application context, especially in examining problems related to health equity, require finding ways to develop and nurture the researcher/NGO relationship. Another inference that can be made is that genuine participation in an application context requires time.

In spite of this imbalance in the composition of participants, one of the most positive results of the workshop was the evident interest, amongst the different actors, in networking for health equity research. One of the recommendations was that PAHO should help promote this networking, through the development of the VHL-Equity and other initiatives.

Interaction

In mode 1, the relationship established for the utilization of information is often reduced to an interface ("two faces") between the researcher and the decision-maker. The workshop encouraged the new paradigm based on multiple, intersectoral interactions.

The workshop reproduced a natural tendency of bonding among peers, in spite of the objective and dynamics to encourage intersectoral interaction among different actors. This was most noticeable amongst the journalists, who were the quickest in forming their own network. The result of their connection was a manifesto, presented at the closing session, calling for an improved interaction with the media in the dissemination of research results. The bond between the researchers was also very strong and showed in their constant interest to share their professional experience with each other.

It is obvious that people sharing common interests will interact more easily. The challenge of technical cooperation is precisely to identify common interests in the development of a research agenda. Therefore, the context of application must meet this challenge by allowing space for interaction between peers, while simultaneously, developing mechanisms for cross-pollination in order to stimulate intersectoral interaction.

Communication of research results

In the second phase of the workshop, each workgroup sessions started with the communication of research results by the researchers. In many groups, the presentations were not very concise and often too technical, indicating the researchers' lack of experience in communicating results to a non-academic audience. This issue was pointed out by the journalists. Therefore, training researchers to better "translate" their results, decision-makers to better understand these results, or using communication experts as intermediaries for the "translation" is a relevant strategy not only in the traditional mode,

Mode 1, of knowledge production, but in Mode 2 as well. Furthermore, an increased interaction within an application context would require an even better level of communication between all stakeholders than in the traditional model of communicating *a posteriori* the information to decision-makers.

Most discussion groups agreed on the need for a marketing strategy (or “attack plan”, as one researcher called it) to disseminate important research results. In this plan, the media would play a key role. Before the workshop, an attempt to publish newspaper articles with human-interest stories about one of the research results was very successful. A proposed VHL project, the Press Gateway (Portal), would facilitate a constant flow of information that could be easily accessed by the media for dissemination.

Discussion-Group Recommendations

The workshop reinforced our initial perception in the Region of Latin America and the Caribbean, conditions are ripe for working on, within the framework of DECIDES, the electronic exchange of systematic reviews of research studies in health equity, as well as monitoring and evaluating policy implementation. As a result of the workshop's wealth of discussions and recommendations, from which detailed proceedings will be published, some key follow-up activities are suggested.

The following is a summary of the main recommendations made by the discussion group at the meeting:

- Develop observatories in health equity:
Countries should be encouraged to develop their own observatories , like the one in Bolivia. In this context, PAHO should continue to assist the countries in the development of the core indicators.
- Diversify sources of data and promote transparency:
VHL could play an important role in collecting health-related information from a multitude of sources, both traditional (e.g. Ministries of Health, universities, research centers) and non-traditional (e.g. NGOs, patient groups, media). Data should include indicators on socioeconomic determinants of health such as income distribution, education, housing, employment, etc. By comparing reliable data from different sources, the VHL would promote transparency and accountability on the part of governmental agencies.
- Ensure quality control of research in health equity
A Cochrane-Campbell review group on health equity could provide a useful means of evaluating and thereby controlling the quality of research studies done on health equity in the Americas. This initiative must be supported by a network of centers of excellence, galvanized by PAHO.
- Market research results on health equity

The promotion of health equity requires very aggressive marketing policy. Here, the media could play an important role in generating interest and social pressure about these studies.

- Consider legal and ethical issues in the use of ICT for disseminating research results on health equity

Many concerns were expressed over the impact of developing *application contexts* on intellectual property.

Follow-up

Overall, there seemed to be a consensus that a combination of activities held within the frameworks of the VHL-Equity, the Cochrane/Campbell Centers, and the Observatories on Health Equity, would be beneficial to member states of PAHO in their efforts to utilize research results for policy-making on health equity. Considering this outcome, the Research Coordination Program will hereafter undertake the following lines of action:

- Centers of excellence on health equity

The Research Coordination Program proposes to select at least 2 countries of the region, in which to develop pilot projects that will combine the Cochrane - Campbell Collaboration, and the Health Equity Observatory. The VHL in the two selected countries will serve as platform to disseminate the information produced by the host institutions.

- Workshops about application contexts

To support the implementation of Cochrane - Campbell Collaboration and Health Equity Observatory, the Research Coordination Program proposes to organize local workshops in the two selected countries with the purpose of developing networks of institutions such as universities, research centers, and governmental agencies, and organizations of civil society.

- Public dissemination of research results

To improve dissemination of health information to the general public, PAHO will continue to cooperate with the CONACYTs and societies for the improvement of science to strengthen their health research components of dissemination.

Recognizing the importance of the media in disseminating information to the public and to decision-makers, PAHO will support the development of the Press Gateway (Portal) within the framework of the VHL.

The objective of the workshop on the "Utilization of Research Results in Decision-Making for Health Equity" was to discuss ways of capitalizing on the networking opportunities provided by ICT to create a new mode of knowledge production involving the development of multisectoral alliances, i.e. application contexts, for research in health equity.

With the existing ICT, holding virtual discussions is always an option to convening meetings. However, the live human interaction that was provided by the workshop succeeded in generating the interest and commitment required for developing application contexts and instruments (i.e., the VHL-Equity, Cochrane/Campbell review groups and observatories) to facilitate the development of evidence-based policies on health equity. As a result, the meeting has created a critical mass of individuals keen on following-up on the discussions that were held.

However, there is no single recipe for evidence-based policies, whose development varies with national contexts. To achieve health equity, the discussions must ultimately ensue at the level of the countries to adapt the proposed strategies to their own contexts, while PAHO cooperates in the process.

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