

# HEALTH RESEARCH PROFILE

## ECUADOR

### BACKGROUND

Ecuador has undergone a deep economic, political, cultural and social crisis during the last 20 years. This situation has a strong influence on health research, mainly due to the lack of priority given to the issue by decision-makers.

According to the last living standards measurement survey of the National Institute for Statistics and the World Bank, 69% of Ecuadorians live in poverty and there is an important concentration of wealth. In 1998, the richest 10% of the population concentrated 42.5% of the national income and the poorest 10% obtained only 0.6% of the national income. Health status also reflects this situation. In 1996, crude mortality rate of the country was 4.5 per 1,000 in the country, but important differences linked with social conditions were found between the provinces. Figures were 8.0 per 1,000 in Cotopaxi and 1.7 per 1,000 in Galapagos. Infant mortality follows the same trend. In 1997 figures were 20.1 per 1,000 livebirths for the country but the range went from 33.1 per 1,000 in Cotopaxi to 6.3 per 1,000 in Galapagos.

The health profile of the country also reflects the consequences of poverty and inequality. Even though more than 10% of death do not have a well defined cause of death, cardiovascular diseases and violence are the leading causes of death and malnutrition, TB and other infectious diseases are still a cause of important burden of illness. In 1995, Chronic, non-transmissible diseases were the most important cause of burden of illness (42.2% of DALY's) and Transmissible, nutritional and reproductive were second (33.7% of DALY's)<sup>1</sup>.

The health system of Ecuador is the sum of public and private institutions without coordination. Public institutions cover 40% of the population. The private sector covers around 20% of the population and the poorest 40% of the population lacks of any access to health services.

Health research in the country responds to the priorities of international agencies. Even though there is not an explicit national policy on essential health research, USAID and the international banks have funded those studies considered as essential for the implementation of health reform plans supported by the same agencies.

### I. RESEARCH ON HEALTH INEQUITIES

A review of the last ten years of available information on research studies in the field of public health shows no explicit mention of equity as the driving force of such studies. There are no databases on health research in the country but a few studies were found dealing with provincial differentials on health indexes.

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<sup>1</sup> Burden of Illness in Ecuador. Center for Population Studies and Social Development, Partners for Health Reform. 1999, pages 23-26.

## **II. RESEARCH FINDINGS AS A BASIS FOR CHANGES IN HEALTH POLICIES**

Health policies are rarely if sometime based upon evidence arising from research. Policies change after each change of Health Minister or Central Government and research mentioned as important to better face health needs is rarely carried on. During the period going from 1995 to 1997, Dr. Alfredo Palacio proposed a policy for health reform including different areas of change in the health system. According to this proposal, health research was to be encouraged in order to increase knowledge about causes and effective interventions on relevant diseases. Health services evaluation was also considered important as a way to test demonstration projects addressed to the modernisation and autonomous management of public hospitals. Unfortunately, these purposes stayed as a political declaration after the change of government on office. After 1998, even tough new political statements have been declared emphasising the need of implementing demonstrative projects of health models and the importance of defining priorities and promote research and technological development in the fields of clinical medicine and epidemiology, only a few studies can be mentioned as examples of research addressed to sustain policy decisions.

- Measurement of Burden of Disease in the country represents one of such examples of research developed by the Ministry to sustain national health policies. A group funded by the World Bank developed this study in 1996. Results have been very important to have an actual picture of the most relevant health problems in the country and can be expected to influence investment decisions and attempts of structural change in the health system.

Between 1996 and 1998, 31 research projects on health issues were registered in records of the National Foundation for Science and Technology (FUNDACYT) and the Panamerican Health Organisation (PAHO). 15 of such studies were basic biomedical research projects, 11 addressed public health issues, 4 were focused on the evaluation of Health Services and 1 was a health economics study.

## **III. HEALTH RESEARCH MANAGEMENT**

Up until present, Ecuador doesn't have a national system for managing scientific research. The National Foundation for Science and Technology (FUNDACYT) started in 1996, has the intention of becoming a coordinating institution for research but its development is scarce. A data base on scientific research developed by the Universities and other sectors has been developed for the period 1996-98 but unfortunately the integrity of such a base is limited to those institutions willing to answer a survey sent by the foundation. As the Foundation doesn't have resources for funding research, leverage to obtain data from researchers is very limited. The National Council of Universities and Politechnical Schools (CONUEP) attempted to set an internal policy for University based research, but as of 1996 no public funding has been allocated to this activity inside of these institutions.

The Ministry of Health doesn't have a policy for scientific research and resources are limited to those managed by the projects with international funding.

#### IV. THE RESEARCH AGENDA

The absence of a national research agenda in Ecuador explains the influence of international agencies in setting priorities. Research centers usually devoted to specific areas of research change their scope and their structure to be eligible for funding<sup>2</sup>.

Inside of the most important Universities, there is not an agenda of priorities for health research. At the School of Medicine of the Universidad Central, for instance, research questions for graduate and undergraduate students are proposed by the students in accordance to their personal preferences or (exceptionally) according to the priorities of national and international funding agencies.

#### V. NATIONAL RESEARCH POLICY

Back on 1998, the Ministry of Public Health established the Department of Science and Technology as the continuation of the former Institute for Social Medicine Research. In the context of the Governmental Health Plan for 1998-2002, the Ministry has assigned to the Undersecretary of Health the responsibility for fostering research and technological development “through an Institute under its dependency”. Moreover, the same plan authorized the Institute of Health Science and Technology (ICT) for establishing the Ecuadorian Association of Health Researchers. Emphasis on the importance of implementing such policies has diminished after the change of political authorities of 1998.

#### VI. RESOURCES FOR HEALTH RESEARCH

Resources for research in Ecuador are very scarce and generally come from international organisations such as the World Bank, PAHO, IDB, USAID or other countries co-operation agencies. National resources are very limited and hard to identify. Table 1 shows the distribution of resources for research at the Ministry of Health for the period 1996-98.

**TABLE 1**  
**RESEARCH EXPENDITURES AT THE MINISTRY OF HEALTH AND OTHER**  
**INSTITUTIONS. Ecuador 1996-98**

	1996	1997	1998
<b>General expenditures of the MOH (Thousands of Sucres)</b>	627.571.804	735.506.748	749.949.962
<b>Research Expenditures of the MOH (Thousands of Sucres)</b>	3.879.213	3.138.000	7.719.000*
<b>Percent</b>	0,62	0,43	1,03
<b>IGP (Millions of Sucres)</b>	10.916.719	14.680.476	18.084.193
<b>Research Expenditures in Medical Sciences (Thousands of Sucres)*</b>	3.903.945	1.194.973	1.115.907
<b>Percent</b>	0,036	0,008	0,006

- Data base of FUNDACYT. Includes funding of research at Universities, Public and Private Companies, Public Institutions and other institutions. Sources: MOH, FUNDACYT, and Central Bank of Ecuador. Author: Merino, C.
- Figures are expressed in local currency due to the huge fluctuations of the Dollar during the period. Comparisons are valid for the percentages inside of each column.

In regard to the kind of research funded inside of the “medical sciences”, the only data available is that of the 31 projects analyzed for the period 1996-98. The total amount of resources allocated to these projects adds to US\$ 2,325,370. 57.5% of such sum correspond to biomedical research, 29.9% to health services research, 12.3% to public health and 0.3% to health economics.

<sup>2</sup> The National Center for Studies on Population and Social Development changed name and structure in order to develop the Project on Analysis and Promotion of Health Policy funded by USAID.

## **VII. QUALITY ASSURANCE OF RESEARCH**

Quality of research in Ecuador cannot be judged due to the lack of reliable information.

In regard to publications, most of research developed at Universities stays as technical documents or reports for the interest of funding institutions. A review of the results of 31 research projects sponsored by PAHO or included in FUNDECYT records from 1996 to 1998, found only 3 papers published in journals with editorial committees.

## **VIII. STATUS OF RESEARCHERS**

Influence of researchers in national research policies is null or scarce. Recently, the National Institute for Science and Technology of the Ministry of Health appointed a group of researchers proposed by their peers as representants to the National Advisory Council of Health Researchers. A personal interview to a group of 20 members of this group from the area of Pichincha, resulted in 4 or 5 researchers admitting some influence on research policies, mainly while they acted as governmental officials or as short time consultants for PAHO. Most of these researchers do biomedical research. Researchers with dedication to Public Health are a minority in this "selected" group of researchers.

## **IX. POLICY EFFORTS IN REGARD TO HEALTH PRIORITIES**

Even though there is not an explicit research agenda addressed to health priorities, collaboration projects sponsored by USAID, such as the previously mentioned Project for the Analysis and Promotion of Health Policies and projects funded by the World Bank for strengthening Basic Health Services (FASBASE) and Hospital Management (MODERSA) are examples of initiatives including research components focused in national priorities in terms of facing relevant health needs. These initiatives have a strong influence in health policies but the results of research funded by them have not been evaluated.

## **X. POLICY EFFORTS IN REGARD TO FUNDING OF ESSENTIAL HEALTH RESEARCH**

There is no such thing as a fund for research addressing health priorities. The MOH funds mainly biomedical research. The only fund available is that of the above mentioned projects resulting of bilateral or multilateral agreements. Research projects funded by these initiatives are assigned to national or international research institutions according to the policies of the funding institutions.

In regard to research training, FUNDECYT support a system of scholarships that help researchers to obtain Master's or PhD's. Back on 1996, 31 professionals were funded by this system funded with resources from an agreement with the Interamerican Bank for Development (IDB).