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**ISOME INITIATIVES RELATED TO HEALTH IN HOUSEHOLD  
SURVEYS IN LATIN AMERICA AND THE CARIBBEAN**  
**With special emphasis on initiatives at the Pan American  
Health Organization (PAHO), Regional Office of the  
World Health Organization for the Americas**

Paper submitted by PAHO<sup>1</sup>

**Overview**

In Latin America and the Caribbean (LAC), in the past 15 years were fielded well over 120 household surveys including a health module. All but one of the countries with population over one million inhabitants have had at least one such survey in the past five years. Twenty five of these were Demographic and Health Surveys (DHS), twenty three were Living Standards Measurement Surveys (LSMS) eight were surveys similar to a DHS and twenty one were similar to an LSMS survey. The others are health surveys, usually with little information on socio-economic variables and special surveys in which a special module on health was introduced and health surveys in two countries.

The Demographic and Health Surveys have a common questionnaire with very few variations from one country to another but cover (usually) only women in reproductive age and children below age 5. In the other surveys the size, format and the phrasing of the health questions are very different from one country to another, and even in the same country have varied from one year to another, not necessarily to the better.

Table 1 presents a list of thirteen recent surveys, all but one fielded between 1997 and 1999, in twelve countries, with the number of questions related to health and a breakdown by

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group targeted by these questions. Among the questions for all respondents some ask about utilization of services, insurance, payment and others about health status. In some of these surveys there are only two or three questions about health status, usually asking about perceived illness, not being able to perform usual activities and in a few cases self-assessed health status (very good, good, fair, bad, very bad or similar).

**Table 1** – Number of questions in the health modules of recent household surveys in Latin America and the Caribbean according to target group.

Country	Year	Name of Survey	Items by target group			Total
			All	Reproductive health	Children	
Argentina	1997	Encuesta de Desarrollo Social	27	13	41	81
Bolivia	1999	Encuesta Continua de Hogares	7	3	12	22
Brazil	1996	Pesquisa sobre Padrões de Vida	55	61	5	121
Brazil	1998	Pesquisa Nacional por Amostra de Domicílios	88	11	0	99
Chile	1998	Encuesta de Caracterización Económica Nacional	17	2	2	21
Colombia	1997	Encuesta Nacional de Calidad de Vida	38	0	0	38
Ecuador	1998	Encuesta de Condiciones de Vida	26	22	36	84
El Salvador	1999	Encuesta de Hogares de Propósitos Múltiples	16	1	0	17
Nicaragua	1998	Encuesta Nacional sobre Medición de Niveles de Vida	21	14	22	57
Panama	1997	Encuesta de Niveles de Vida	26	20	28	74

Paraguay	1998	Encuesta Integrada de Hogares	18	13	22	53
Peru	1994	Encuesta Nacional de Hogares sobre Medición de Niveles de Vida	18	13	24	55
Peru	1998	Encuesta Nacional de Hogares – segundo trimestre	13	8	4	25

From the previous overview it can be seen that this Region is well covered in terms of surveys, some of countries in LAC have had (comparable) surveys of the same type now for over a decade, including two countries that have had surveys with panels. Nevertheless the number of health questions asked varies from fifteen to twenty in some surveys to well over a hundred in others, and in many cases certain questions are of poor quality and very little usefulness.

The number of studies using the health data of these surveys is still relatively small and many of them never get to be formally published.

### **Some of PAHO's Initiatives**

The data and several of the comments made in the introduction are based on information contained in the "Household Surveys Database" created and maintained by the Program on Public Policy and Health of PAHO. The database has information on household surveys that have a health module, realized in LAC since 1985, and is available on line at: <http://165.158.1.110/spanish/hdp/asp/encuestas.asp?L=E>

Another important source of information on the health modules of recent surveys has been published as Technical Report No. 72 of the same Program and is also available (in Spanish) on line at: <http://www.paho.org/Spanish/HDP/HDD/ferrer.pdf>

The use of household survey data for studies in health at P.A.H.O extends now for over a decade. Traditionally the utilization of this source of data was to estimate pocket expenditure in health care. Two formal rounds of estimation of health expenditures for the countries in LAC were performed and published in 1994 and 1998. The Program on Public Policy and Health has a database of processed information obtained from household surveys for most of the countries of the Region and this data base is periodically updated to reflect the information available from new surveys.

In the past three years the use of survey data has increased and the scope of the use has been extended to studies of inequalities. One large project was developed in six countries (Brazil, Ecuador, Guatemala, Jamaica, Mexico and Peru) from 1997 to 1999 to study "Equity in Health in Latin America and the Caribbean – EQUILAC." The final report of the project will be published in December of this year. The sources of data and the emphasis of the study were different in each country, with greater concentration in the utilization of survey data in Brazil, Jamaica and Peru. Some of the very interesting results demonstrated what was already expected, namely that the self-assessment questions and the health perceptions varied profoundly from one

country to another. On the other hand it was also possible to demonstrate that even in these conditions it is feasible to detect important inequalities, flagrant cases of unfair distribution.

In 1998 the Program on Public Policy and Health and the other programs in the Division prepared a protocol for a research project, again to study inequalities in health, using data from both LSMS and DHS surveys, as well as census data to create context variables. The work in this project extends from descriptive distributional analyses for several variables to the development of models for some outcome variables using linear and logistic regressions, as well as survival analyses and includes the fitting of one multi-level model in three levels using survey data for the individual and household levels and census data for municipal and state levels. The five countries in the project are the ones for which an LSMS (or QuasiLSMS) and a DHS survey was available for a year 1996 or later and are Bolivia, Brazil, Colombia, Nicaragua and Peru.

In both cases an integral part of the development of these projects is capacity building at the national levels. All the analyses are done by local groups selected in a competition. In the case of this second project the plan of analysis is the same for the five countries with expectations of being able to compare results across countries. Also in this second multicenter project each of the local teams had to include at least one economist and one epidemiologist – this has the double advantage of bringing into the analysis different perspectives and creating adequate conditions for professionals from these two areas to work together.

Adding to these previous initiatives two other major works are in progress.

In one of them, developed in the School of Social Sciences of the University of Chile, under the coordination and with PAHO's financial support, the project is to produce a series of "Summary Sheets of Inequalities in Health" using LSMS type surveys in LAC. A first prototype for Panama was published in March 2000, and five additional publications are expected between now and March next year: Chile (already published), El Salvador, Jamaica, Nicaragua, and Paraguay. Four more countries may be included in the study early next year: Bolivia, Colombia, Ecuador and Venezuela. These are short works with two main objectives: To increase awareness about inequalities in health at the country level and to demonstrate the usefulness of household survey data for these studies.

The second is a study using data from surveys of living conditions (LSMS or similar), for eleven countries, on inequalities in the distribution, utilization and expenditure with water according to (either) income or expenditure of the households and other variables. For those countries where the data are available these characteristics will also be associated to the prevalence of diarrhea in children below age 5. This is the first study of its kind in the Region. The countries in this study are Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Jamaica, Nicaragua, Panama, Paraguay and Peru. The work is being done in Lima by a national research group with PAHO's technical and financial support. The first results of this study are to be presented in December in a regional meeting of Sanitary Engineering. This will be the first time in the Region in which in this forum there will be a discussion with hard data and results on inequalities in water utilization and expenditure, using data from the demand side instead of only from the supply side.

## **The Program for the Improvement of Surveys and the Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI)**

Better known by its acronym in Spanish, MECOVI, this program's main objective is to adequately generate more reliable information-- in terms of its scope and coverage, accuracy, and most importantly, relevancy for policy making -- on the living conditions of the Region's population. It is hoped that the improved surveys and know-how fostered by the MECOVI program will serve to aid in the design, follow up, and evaluation of the programs, projects and policies aimed to reduce poverty and inequality. As of today the MECOVI Program is being implemented in Argentina, Bolivia, Guatemala, El Salvador, Nicaragua, Paraguay and Peru. The program expects to add two countries per year in the next three years.

The MECOVI program is jointly conducted and implemented by the Inter American Development Bank (IADB), the Economic Commission for Latin America and the Caribbean (ECLAC) and the World Bank, in partnership with the participating countries' specialized agencies.

The Program has two main components: (1) region wide activities; and (2) activities in the participating countries.

The regional activities are developed to improve the estimation and analysis of the social indicators obtained from the household surveys; and to maintain, improve and update a data bank of household surveys from all countries in the region, to be made accessible to users across the region.

These objectives will be achieved through the organization of regional workshops, designed to discuss methodological issues regarding the systems of household surveys

implemented in the region; organization of regional training courses dealing with best practices in the production and use of household survey data and the financing of the maintenance, improvement and updating of a user friendly data bank of household surveys. This data bank will include the data sets for the available surveys in the region and will be easily accessible to users.

The country specific activities are carried out in participating countries, and have the specific objectives of establishing and/or improving institutional capacity in the design, implementation and use of household survey data for the analysis and evaluation of policies aimed at the reduction of poverty and inequality as well as improving the use of the information derived from existing and new surveys, and improving the estimation procedures to generate social indicators; and creating and maintaining data bases with household survey data, in order to make the information easily and promptly accessible to users in the country.

These objectives are being reached through the implementation of the following activities in the beneficiary countries:

- Financial and technical assistance to improve the design and implementation of the household survey's systems.

- Financial and technical assistance for the creation, maintenance, improvement, and updating of a household surveys data bank, which should be accessible to users in a prompt and easy way.
- Financial and technical assistance for institutional strengthening in the use of the information obtained from household surveys for policy analysis. This assistance will be provided through: (i) contracting topic specific studies relevant to policies' impacts; (ii) local personnel training in the study and analysis of survey data; and (iii) the use of a "Studies Fund" to finance research by national professionals in topics dealing with poverty alleviation policies.
- Financial and technical assistance to improve the quality and timeliness of the publication and dissemination of household surveys summary results.
- Financial and technical assistance to develop training courses at the national level dealing with household survey methodology topics and data analysis.
- Financial and technical assistance to organize national workshops to discuss the results of the household surveys and the studies based on their information.

### **A Plan of Work**

The next MECOVI workshop will be held in November 2000. The workshop is in "Indicators of Social Development". One of the sessions in the workshop is dedicated to health and P.A.H.O has been invited to coordinated this part. This is foreseen as the strengthening of a process of joint collaboration between the Pan American Health Organization and the MECOVI project and its maintaining institutions in the area of health in household surveys.

The informal collaboration between these institutions already exists and the subject was discussed in one of the meetings on the Joint Agenda of PAHO, IADB and the World Bank in August. The participation in this workshop and the formal letter of intent of PAHO to the three institutions of MECOVI to become a new (associate) partner of the program, to work in the improvement of the health modules of future surveys as well as to promote the use of the data for analysis of inequalities in health status, is very promising.

It is expected that this will lead to the design of a proposal of a module with questions on health that is both reliable and useful for different objectives, including estimation of levels of disability, construction of indices of health needs, as well as the incorporation in future MECOVI regional courses of modules on the analysis of the health information in household surveys.