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Washington, D.C., United States of America
5-8 September 1989

RESEARCH RESULTS OF THE FIRST PROJECTS ON HEALTH
PROFILES AND DEVELOPMENT OF NEW PROJECTS
ON THE SAME TOPIC

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HEALTH PROFILES

Background Information on Mortality Analysis Research Projects

Since the Seminar on Uses and Perspectives of Epidemiology (Buenos Aires, 1983), activities of the Pan American Health Organization (PAHO) have been aimed at strengthening national epidemiological capability in countries, and focused on promotion and support of health situation assessment of the population, including its determinants and trends, in order to strengthen a systematic analytical process capable of providing timely information and feedback at various administrative levels and thereby contributing to better-informed decision-making. Accordingly, the research policy formulated by PAHO in 1985 gave special importance to research on the determinants of the level and structure of health problems. One of the priority topics thus identified was research on health profiles, and activities for its support were entrusted to the Health Situation and Trend Assessment Program (HST).

The complexity of the topic, the diversity of possible approaches, and the limitations on human and financial resources motivated the decision to develop the health situation research process in a progressive manner, and to initiate it at the point at which the analytical process itself should begin: utilization of the available information having the best coverage and quality, and which so far has not been fully taken advantage of for health situation assessment.

Thus, the first research projects on health profiles were focused on the mortality component, with the objective of obtaining the best possible knowledge on the health situation based on analyses of existing mortality data. All projects had to include an assessment of the health situation based on study of the leading causes of death. In addition, each group could develop complementary lines of work.

These studies were to contribute not only to substantive knowledge on the health profile, but to enhancement of the analytical process itself in institutions of the official sector. For this purpose, active participation was required both from the staff involved in information production, and from those responsible for decisions concerning actions to be carried out in the health services system. Consequently, research groups were made up essentially of epidemiologists and statisticians linked to the Ministries of Health, although in some cases researchers from academic settings participated as well.

Teams from the following 11 countries participated in this line of research: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Mexico, Paraguay, Suriname, Uruguay, and Venezuela. The investigators from projects which already had concluded their analyses, as well as other experts selected from the fields of epidemiology, statistics, and demography, were invited by PAHO to the Regional Meeting on Guidelines and Procedures for Mortality Analysis, held in Washington, D.C., from 22 to 26 February 1988. At this meeting the conclusions reached in the research projects were discussed, and recommendations and guidelines were formulated for making better use of mortality data in analyses of the health situation in countries of the Region (see also the summary of the final report of the meeting, attached).

Since then a line of research is being promoted that focuses on the study of health profile differentials observable in distinct population groups. Although it is well accepted that health-disease processes present differently according to the particular living conditions prevailing in specific population spaces, it must be acknowledged that gaining a deeper understanding of the essence of those differentials has proven difficult. Abundant references to the epidemiologic mosaic in countries of the Region do exist but have been meagerly documented, in regard both to the reference population groups and to the pathologies studied. The sparsity of explicative analyses and the scant knowledge of the health services systems' impact on the population's health -- and living conditions -- have contributed to the organization of systems which, with the exception of a few specific programs, are almost exclusively based on economic-financial and demographic criteria.

Obstacles to the progression of knowledge on this subject appear to be due, partly, to difficulties in specifying the theoretical postulates, and partly to the fact that the repertoire of methods normally used may be insufficient for attaining satisfactory answers to problems as complex and ill-structured as those at hand. Many attempts at quantification of these issues have led to statistical models which may be used to support divergent propositions.

In view of the above, as well as to promote, expand and strengthen research on health profiles in general, a meeting has been organized to explore approaches and methods to study health differentials according to living conditions. Developed jointly by the Unit of Research Coordination (DRC), and the Programs of Health Manpower Development (HSM) and Health Situation and Trend Assessment (HST), this meeting will be held in Brasilia, Brazil, on 7-11 August 1989. It will convene epidemiologists with research experience and acknowledged interest in the subject, to facilitate the formulation of more and better research proposals.

It is hoped that this line of research may advance knowledge towards the formulation of more effective, efficient and equitable responses to the health needs of the differing groups that make up our countries' societies.



PAN AMERICAN HEALTH ORGANIZATION
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REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

22-26 February 1988
Washington, D.C.

SUMMARY OF FINAL REPORT

This summary is presented in three parts, as they are being published in the
Epidemiological Buletin, Pan American Health Organization.

REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

Washington, D.C., 22-26 February 1988

SUMMARY OF FINAL REPORT

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 - o Future Lines of Research on Health Profiles
- List of Participants

More detailed information on the Regional Meeting and the papers presented may be obtained from:

Health Situation and Trend Assessment Program, PAHO/WHO
Attn. Regional Meeting on Guidelines and Procedures
for Mortality Analysis
525 23rd. Street, N.W.
Washington, D.C. 20037, USA

REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

22-26 February 1988, Washington, D.C.

PURPOSE

To contribute to the broader utilization of mortality data in health situation analyses.

OBJECTIVES

To develop recommendations for analysis of the mortality structure by cause and the identification of leading causes of death.

Specifically, to make recommendations concerning:

- procedures to be used at regional level, for comparative analysis of leading causes of death in countries, and
- criteria to be used by countries for defining procedures for within-country comparisons and special studies.

REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS
22-26 February 1988
Washington, D.C.

AGENDA

1. Introduction

- 1.1 The purpose of the meeting and the analysis of the health situation.
- 1.2 PAHO's research policy.
- 1.3 Research on health profiles.
- 1.4 Mortality analysis as an element of a health profile.

2. Objectives and results expected from the meeting; organization of work.

3. Analytical procedures to be discussed; general concepts.

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5. Specific subjects.

- 5.1 The International Classification of Diseases (ICD), 9th Revision. Conceptual framework. Applications, uses and limitations for mortality analysis. Expected changes for the 10th Revision.
- 5.2 Groupings of causes (lists) for identification of leading causes of death.
 - Criteria for definition of groupings: objectives (questions) of the analysis, information content.
 - Objectives of regional-level analysis.
 - Groupings (lists) used in the projects (PAHO, NCHS, Argentina, Brazil).
 - Discussion and recommendations.
- 5.3 Indicators for characterizing the leading causes of death. Surveillance of premature mortality.
 - Years of life lost prematurely (YLLP). General concepts. Characteristics, advantages, limitations.
 - Calculation of the indicator; moveable and fixed boundaries.
 - Boundaries used in the projects.
 - Discussion and recommendations.
- 5.4 Proposals for strengthening mortality statistics systems. Approaches and general outline.

6. Future lines of work

- 6.1 Strengthening health situation analysis. The mortality component. Other components.
- 6.2 Research on health profiles; intra-urban differentials.
- 6.3 Strengthening the mortality statistics systems.

REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

Washington, D.C., 22-26 February 1988

RESEARCH ON HEALTH PROFILES

Background Information on Mortality Analysis Projects

Research policy at the Pan American Health Organization (PAHO) has been formulated so that the limited financial resources available for research may serve as a catalyst to help encourage countries to mobilize their own human and institutional resources around subject-matter areas identified as priorities. In support of this policy the Internal Advisory Committee on Health Research has been established; its functions include definition of research priorities and evaluation of proposals for funding by the PAHO Research Grants Program. In addition, an active role has been assigned to the Organization's technical programs and country representative offices in promoting research as well as providing technical support during design and execution. In keeping with this policy, research to be carried out in all countries must probe factors affecting or determining the level and structure of health problems. In addition, the interrelationship between health and development, and between types and styles of health services organization and operation must be studied in light of the specific political-economic-social context in each country. One of the priority topics thus identified is research on health profiles, and activities for its support were entrusted to the Health Situation and Trend Assessment Program.

In this document, health "situation," "conditions", or "diagnosis" will be used synonymously, and the health situation will be understood to have three main components: (1) the health "status," "level," "structure," "profile," or "situation", as such; (2) the health services system or health "sector"; and (3) the context or environment--physical, demographic, socio-economic, cultural, and political--specific to the space and time in which a society is evolving.

It is understood that these three components are closely interrelated; each is cause and consequence of the other two, and it is impossible to comprehend the health reality by analyzing any one of them separately. Rather, this artificial subdivision seeks to orient the intentionality, and thus the approach, the emphasis and the criteria for analysis, according to whether the fundamental concern of the user is to better understand health-disease processes and their present and past determinants, or his principal interest lies in advancing development of the health services system as well

as sectoral and intersectoral coordination. In the first case, in addition to gaining knowledge on the range of health problems and determinants in a community, it will be necessary to know the infrastructure through which actions are expected to be delivered; in the second, in addition to knowing sector characteristics, the range of problems facing the human groups to be served should be known.

Since the Seminar on Uses and Perspectives of Epidemiology (Buenos Aires, 1983), PAHO activities aimed at strengthening national epidemiological capability in countries have focused on promotion and support of health situation assessment of the population, including its determinants and trends, in order to strengthen a systematic analytical process capable of providing timely information and feedback at various administrative levels and thereby contributing to better-informed decision-making. Initial efforts in this area were carried out in countries of Central America and Panama and promoted the establishment of national groups, with the encouragement and support of epidemiologists and statisticians. There were similar initiatives in several other countries, whether by interdisciplinary working groups which included staff from PAHO representations and other international agencies, or by specially hired consultants. It should be pointed out that, for the most part, these efforts were aimed more at improving the framework for programming Country-PAHO technical cooperation, than at strengthening analytical capability to be applied systematically by national teams as an integral part of planning, administration, and evaluation of their own activities.

The various assessments made in countries were quite dissimilar with regard to their motivation, approach, and quality. The scarcity of systematic and periodic assessments was frequently alleged to be due to absence of data, or to overwhelming deficiencies in the data with regard to type, quantity, or quality. However, in practically all the countries which participated in the exercise on updating their health situation analysis, it was confirmed that much more data were actually available than the staff--national and international--had assumed. Despite the fact that, in large measure, existing data were incomplete, seriously wanting in quality and timeliness, and scattered among a large number of institutions--not necessarily dependent on the health sector-- the data were nonetheless potentially useful for those who knew of their existence and were aware of how to use them cautiously. There is a vicious circle: data deficiencies serve as an excuse for progressive under-utilization and this in turn contributes to even greater deterioration, due to the low priority given to activities and resources necessary to improve data collection, processing, and analysis.

On the other hand, preparation of a good health profile is a multifaceted and complex enterprise for which there is no single approach or clearly superior set of procedures. It is necessary to learn how to select the most appropriate theoretical approaches, as well as the data and methods best suited to the subject and object of analysis. At the same time, subject areas and approaches for the study of which satisfactory methods or data are not yet available call for existing methods to be reviewed and adapted, or for new sets of data --and methods and procedures for their collection and analysis-- to be designed and carefully validated.

The complexity of the topic, the diversity of possible approaches, and the limitations on human and financial resources motivated the decision to develop the health situation research process in a progressive manner, and to initiate it at the precise point at which the analytical process itself should begin: utilization of the available information having the best coverage and quality, and which so far has not been fully taken advantage of for health situation assessment.

Thus, the first research projects on health profiles centered on the mortality component, with the objective of obtaining the most complete knowledge possible on the health situation, based on assessment of existing mortality data. At the same time, these projects were designed to help systematize procedures traditionally utilized in mortality analysis so as to facilitate and improve their use, and, finally, to test, validate, and confirm the usefulness of certain procedures not commonly used in these analyses. All projects had a component in common: health situation analysis based on study of the leading causes of death. In addition, each group could develop complementary lines of work.

As far as methodology was concerned, it was recommended that country-wide data be used and that comparisons be made between geographic subunits. The assessments were to begin with a discussion--as fully documented as possible--on the coverage and quality of the information, including an assessment of the relative size of the group of deaths due to ill-defined causes and the coverage and quality of medical certification. To determine the leading causes of death, the most recent three years of data available were to be used and analyzed by means of indicators based on proportional mortality and years of life lost prematurely (also referred to as years of potential life lost or potential years of life lost), in order to evaluate their respective informative content and complementarity.

In order to illustrate the effects of various criteria for grouping causes on the determination of leading causes of death, each research team was to apply the grouping and criteria generally used in their country, in addition to the ranking list used by PAHO ("R List"), the Basic Tabulation List of the 9th Revision of the International Classification of Diseases, and the list of 72 Selected Causes of Death used by the National Center for Health Statistics (NCHS) of the United States. Furthermore, and so as to gain experience and understanding of the indicator based on years of life lost prematurely (YLLP), various definitions of the indicator with regard to lower and upper age limits, and their effect on the determination of leading causes of death, were to be studied. Finally, the health situation was to be analyzed based on mortality structure by cause, as described through indicators for proportional mortality by cause, YLLP by cause, and YLLP by cause and by death, utilizing in each case the procedure found in previous stages to be the best.

These studies were to contribute not only to substantive knowledge on the health profile, but to enhancement of the analytical process itself in institutions of the official sector. For this purpose, active participation was required both from the staff involved in information production, and from those responsible for decisions concerning actions to be carried out in the health services system. Thus, the research groups were made up essentially of epidemiologists and statisticians linked to the Ministries of Health, although in some cases researchers from academic settings participated as well.

Teams from the following 11 countries have participated in this line of research: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Mexico, Paraguay, Suriname, Uruguay, and Venezuela. The investigators from projects which already concluded their analyses, as well as other selected experts in epidemiology, statistics, and demography, were invited by PAHO to the Regional Meeting on Guidelines and Procedures for Mortality Analysis held in Washington, D.C. from 22 to 26 February 1988. At this meeting the conclusions reached in the research projects were discussed, and recommendations and guidelines were formulated for making better use of mortality data in analysis of the health situation in countries of the Region. A summary of the meeting is presented below.

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REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

Washington, D.C., 22-26 February 1988

SUMMARY OF DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

The meeting was convened by the Pan American Health Organization (PAHO) to contribute to broader utilization of mortality data in health situation analyses. Its objectives were to develop recommendations for analysis of the mortality structure by cause and for the identification of leading causes of death. It was specifically intended that recommendations be made concerning procedures to be used at regional level for comparative analysis of the leading causes of death in countries, and concerning criteria to be used by countries in defining procedures for within-country comparisons and special studies. Formulation of these recommendations would be enhanced by the experience gained through the research projects on health profiles/mortality analysis carried out in countries with the technical support of the Health Situation and Trend Assessment Program and the financial support of the PAHO Research Grant Program.

Participating in the meeting, and reporting the results of their research, were the principal investigators of the projects. Other experts in the fields of epidemiology, statistics, and demography also attended, from the countries as well as from PAHO and the World Health Organization (WHO). Recommendations were formulated after discussions at plenary and group sessions.

The meeting was opened by the Director of the Pan American Sanitary Bureau, Dr. Carlyle Guerra de Macedo, who emphasized its importance in regaining visibility for the topic, underscoring its significance, promoting analysis and utilization of the available data and, finally, strengthening the capability to carry out health situation analysis at country level, as one of the elements in planning, monitoring, and evaluation of health actions and services.

The background for this meeting dates from the Seminar on Uses and Perspectives of Epidemiology, held in Buenos Aires, Argentina in 1983; its recommendations included promoting analysis and research on the health situation and trends among different population groups. The changes in the health profiles of the population of the Region of the Americas add relevance to this activity.

The topics covered in the meeting revolved around two basic aspects facilitating characterization of the leading causes of death: the grouping of causes, or short lists; and indicators for surveillance of premature mortality.

Short lists for analysis of mortality structure by cause.

To introduce the subject, the origin and conceptual bases of the International Classification of Diseases (ICD) were described, as well as its uses and limitations in mortality analysis and the expected modifications for the 10th Revision. The need to disseminate knowledge about the ICD and the devices it contains (rules, standards, provisions, and concepts which regulate its use) among those who analyze information was pointed out.

With respect to the 10th Revision of the ICD it was reported that its structure will be alpha-numeric, the number of categories will increase, and various classification criteria will be modified. At the last meeting of the Expert Committee on the ICD a short list of 77 categories was proposed, which was developed taking into account six principles suggested by the WHO Collaborating Center for Classification of Diseases for North America: hierarchy, comparability, expandability, consistency, possibility of detecting leading causes of death, and awareness of public health needs. It was made clear that this proposed list could be modified on the basis of the results of research conducted by the countries of the Region, since one of the purposes of such research was to develop a better instrument for describing the principal health problems.

Whether or not the tabulations should include deaths without medical certification was discussed in light of a WHO provision which specifies that when deaths without medical certification are under 2% they should be included in tabulations under the category "unknown cause," and when they exceed this percentage, they should be tabulated separately. Some countries tabulate total deaths by cause regardless of the proportion lacking medical certification. It was felt that studies need to be undertaken to ascertain the effect of their inclusion or exclusion on mortality structure by cause, before formulating suggestions concerning the existing provision.

The need to be able to analyze causes of death according to various epidemiological criteria was assessed and the way causes might be grouped according to avoidability criteria --according to the type of technology available for their prevention-- was discussed, this being a grouping method utilized in several of the studies presented at the meeting. This type of grouping was originally designed in Chile to analyze infant mortality in that country; subsequently, it has been adapted for studying mortality in other age groups.

Upon discussion of the desirability of having a single list, the need for a regional short list facilitating comparative between-country mortality analysis was acknowledged. It was also recognized that different objectives may require different groupings. Short lists on mortality should be pertinent for their various intended uses and thus may differ depending on whether the purpose of the analysis is to generate knowledge, to identify the leading causes of death and study their trends, or to define priorities and identify key ideas for orienting actions, at political as well as technical levels. The need to have several lists for use at national level was emphasized, since

within the countries of the Region mortality analysis also constitutes a fundamental tool for defining and monitoring policies, strategies, plans, and programs. It was pointed out that intentionality, required in any effective analysis, implies that no grouping criterion can be free of subjectivity.

It was concluded that, in addition to meeting the six criteria already adopted by the Expert Committee on the ICD, short lists should be appropriate for mortality analysis using a variety of epidemiological criteria; and they should be easy to construct and have good informative capacity and specificity in relation to their proposed use. The lists should also be dynamic, that is, able to be modified in accordance with changes in prevalent pathologies and in available preventive and therapeutic technologies.

Finally, PAHO was entrusted with the construction of a new short list based on the 9th Revision of the ICD, utilizing the results of the research projects and the criteria discussed, in order to facilitate comparisons between countries of the Region.

It was noted that any short list for regional use based on the 9th Revision must be compatible with the data collection form used by PAHO and WHO, but that this restriction would no longer apply once the 10th Revision is in use.

Surveillance of premature mortality: years of life lost prematurely.

Specific death rates and proportional mortality are indicators traditionally used to highlight causes having a significant impact on health; the indicator based on years of life lost prematurely (YLLP) is a supplementary one which takes into account age at death. Proposed more than 35 years ago in Canada, it has only recently begun to be widely used in countries of the Region, and it is also known under other names, such as potential years of life lost or years of potential life lost. It is a useful indicator for calling attention to causes of death at an early age, since its magnitude depends on the numerical importance of a cause of death and on the age at which it occurs.

This indicator is attractive primarily because it uses current real data and is easy to calculate. Its principal disadvantage derives from the arbitrary nature of its construction, which requires definition of premature death and the accompanying age limits. Selection of age limits depends on the purpose of the indicator, as the causes of death which will stand out will depend, to an extent, on the limits selected. As is the case in proportional mortality by cause, the YLLP indicator is affected by the age distribution of the population. For the preceding reasons, interpretation of this indicator is not simple.

There was also discussion of some indicators derived from life table models which eliminate the effects of the age distribution of the population.

They make it possible to study various aspects of the probability of survival, based on different assumptions about the reduction or elimination of specific causes of death and consequent changes in life expectancy. This type of indicator also has limitations, as it is calculated using a theoretical mortality structure based on data reflecting past risks. Nevertheless, it is an excellent means of analyzing and summarizing survival experience when the quality of the basic data justifies its utilization.

It was recommended that countries incorporate indicators derived from the YLLP into their publications, in view of their usefulness in calling attention to problems which cause death at an early age. However, it was emphasized that this indicator must be interpreted with care and used jointly with other indicators such as death rates from specific causes, proportional mortality, and life expectancy at birth and at other ages.

With respect to its construction it was recommended that birth (age "0") be used as the lower age limit; this limit was widely preferred to that of 1 year of age due to the importance of deaths under 1 year in countries of the Region. There was no consensus as to the upper limit, but age 65 was taken to be appropriate for purposes of general analysis. It was noted that this age must not imply a limitation, either biological or of economic productivity.

During the course of the meeting the participants from countries involved in the "Health Profiles" project presented the results of their research. This made it possible to compare the leading causes of death among the countries represented, which provided participants with valuable knowledge. In general, researchers found that the short list specific to each country was the one best reflecting its own health conditions. In relation to the YLLP, the great majority used birth as the lower limit, but otherwise set the upper limit in accordance with various criteria judged to be suitable for their country.

Strengthening the mortality statistics systems.

Different strategies for strengthening health situation analysis were also discussed at the meeting; prominent among them, the strengthening of mortality statistics. Participants reported on the current status of vital statistics systems in their countries, and considerable heterogeneity in the existing problems and the alternatives for overcoming them was evident.

Among the principal problems mentioned in regard to mortality statistics were coverage and completeness, as well as quality of the basic data. Whereas in some countries the completeness and quality of the data are satisfactory, in others less than half the deaths are registered. Other problems mentioned were inadequate information processing, limited utilization of mortality statistics and failure to realize their importance, as well as a lack of motivation to register events, both in the population and among health personnel. These problems vary among countries of the Region, which are at different stages in the development of their vital and health statistics systems. In addition, situations that correspond to different historical periods may coexist within the same country.

It was also pointed out that efforts to improve an instrument such as the International Classification of Diseases have not been accompanied in this Region by similar efforts to improve the mortality data which constitute both its subject and object. In addition, little has been done at national and international levels to improve medical certification of cause of death, underregistration of deaths, and deficiencies in the collection instrument itself.

The participants concluded that in order to strengthen vital and health statistics it is necessary for countries of the Region to promote and support the following activities: preparation of an assessment of the current status of existing statistical systems; reactivation of national committees on vital and health statistics, their convening and functioning; promotion of intersectoral cooperation for improvement of health statistics; facilitation of periodic dissemination of these statistics and promotion of their use through research at different levels; promotion of processing and use of statistics for analysis of the health situation at the local level, as well as training of personnel involved in the production of data; and, finally, promotion of more training and participation in this subject-matter area of epidemiologists and statisticians who work at different levels of the health services system.

In addition, participants requested that PAHO emphasize the urgent need to improve vital and health statistics; and that it provide greater support to countries of the Region for strengthening their statistical systems, especially in the following areas: coordination with other international agencies for utilization of resources and mobilization of national institutions and resources; development of projects in selected areas of countries, which may be extended to other areas and could serve for motivating health personnel to improve the collection, processing, and utilization of mortality data; development of research on mortality analysis at intermediate levels (provinces, counties, programming areas); and coordination of further research aimed at gaining knowledge of the real status of mortality statistics in countries of the Region, so that corrective measures may be applied. Finally, it was recommended that there be increased dissemination of the publication "Health Conditions in the Americas", in view of its usefulness in training and as an information source for health agencies.

Future lines of work.

PAHO will continue to support country activities conducive to health situation analysis and, in order to strengthen this analysis, will employ the strategies of information dissemination, training, and research.

With regard to the research strategy it was reemphasized that mortality is not the only component of health situation analysis, nor has it been fully developed through the line of research currently being carried out. Several

future lines of research were specified which, it is hoped, will constitute epidemiological contributions to improved organization and monitoring of the health services. These future lines of work will require participation by technical and professional staff from research centers and universities, in addition to the Ministries of Health.

It was pointed out that in order to strengthen analytical capability and improve decision-making, working groups of statisticians and epidemiologists must be expanded to include demographers and health planners, so as to share with other areas of the Ministries of Health and other Ministries the experiences resulting from the approach being followed. The regional meeting is a milestone within a process that must continue to unfold.

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Washington, D.C., 22-26 February 1988

FUTURE LINES OF RESEARCH ON HEALTH PROFILES

Health Differentials Based on Living Conditions

The need to adapt the responses of health sector institutions to the health problems of different population groups makes it essential for health situation assessment to be carried out at the local level, disaggregated by different levels of living conditions as well as by types and levels of risk for the most prevalent health problems. Thus, in order to supply criteria for improved design, staffing, equipment, and surveillance of health care delivery services aimed at tending to the needs of these different groups, research proposals on health profiles will center on studying the heterogeneity in morbidity and mortality profiles and the health needs of different local population-areas.

Since the speed and intensity of the urbanization process in most countries has contributed to increasing disparities in levels of living and health, special attention will be paid to those projects which study intra-urban health differentials. Based on the premise that health needs are closely linked to living conditions of the population, and that it is easier to describe the latter than the former, the studies will explore the possibility of utilizing easily obtainable indicators based on the characteristics of living conditions to construct a map of poverty, and to infer from it the characteristics of the health profiles of different population groups. These indicators--and the map--will be based on the assumption that there is a spatial distribution of poverty, and they should be able to reflect differences in living conditions between various neighborhoods, residential areas, or other geographical subdivisions of a city. Knowledge thus acquired should constitute a contribution of epidemiology to health services planning and evaluation.

This line of research will include, but will not be limited to, projects on the following specific topics:

- Differential mortality profiles based on living conditions and other environmental and genetic risk factors among different population groups in large urban areas. Comparison of the mortality map with that on poverty will make it possible to study differences in the level and structure of mortality among different population strata, as related to their living conditions.

- The structure of discharges from large urban hospitals, by cause and place of residence. These projects will make it possible to obtain a first approximation to the morbidity structure of the inpatient population of public sector establishments. The tabulations of discharges by cause and permanent residence will make it possible to link the results of this line of research to those of the previous one. In addition, it is hoped that the evaluation and possible reformulation of hospital record-keeping systems will be one of the by-products of these projects.
- Application of epidemiological thought to the design and validation of an instrument for surveillance of distortions in the utilization of health services in urban areas. This surveillance should enhance understanding of the factors behind the underutilization of some services and the overutilization of others, be this because they involve distortions in demand inherent to the population itself, or distortions resulting from the organization and functioning of health care services, including their problem-solving capacity.

Note: Information on how to apply for technical or financial support for future research projects may be obtained from:

Office for Research Coordination
PAHO/WHO
525 23rd. Street, N.W.
Washington, D.C. 20037, USA.

REGIONAL MEETING ON GUIDELINES AND PROCEDURES
FOR MORTALITY ANALYSIS

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