

PAN AMERICAN HEALTH ORGANIZATION

EXECUTIVE COMMITTEE OF THE DIRECTING COUNCIL



SPECIAL SUBCOMMITTEE ON WOMEN, HEALTH, AND DEVELOPMENT

13th Meeting Washington, D.C., 5-7 April 1993

Provisional Agenda Item 10

MSD13/9 (Eng.) 15 March 1993 ORIGINAL: SPANISH

PROPOSAL FOR A REGIONAL SYSTEM TO MONITOR AND EVALUATE THE HEALTH STATUS OF WOMEN AND SEX DIFFERENTIALS IN HEALTH

With a view to contributing to the design of a system to monitor the health status of women and sex differentials in health, the present document provides a summary of some of the characteristics of health situation assessment, in general, and of assessment of the health situation of women and of sex differentials in health, in particular. It is stressed that selection of the data to be gathered and analyzed should be preceded by a definition of the health problems on which action is to be taken. Three criteria are illustrated for the selection of health problems to be monitored. Certain general characteristics of the indicators are discussed.

Several procedures for analysis are suggested, including: the identification and improvement of indicators which, although specific, such as maternal mortality, may shed light on broader health issues; the use of statistics from health establishments to obtain an approximation of the amount of resources expended by broad diagnosis related groups, both in terms of hospitalization and outpatient care; monitoring based on procedures that do not involve coverage of the total population (household surveys, sentinel establishments); and analysis of avoidable or excess mortality.

Finally, lines of action are proposed to be carried out by the various technical programs in conjunction with the corresponding national groups, as well as at PAHO Headquarters in order to make the desired regional monitoring system a reality.

PROPOSAL FOR A REGIONAL SYSTEM TO MONITOR AND EVALUATE THE HEALTH STATUS OF WOMEN AND SEX DIFFERENTIALS IN HEALTH

BACKGROUND

During the Forty-fifth World Health Assembly, the Representatives of the Member States reiterated the need for paying heed to the health status of women, recalled the recommendations made in previous years, and manifested their concern over "the lack of feedback on results of the implementation of these resolutions; the lack of adequate gender-specific data; and the fact that there is insufficient knowledge of the gender-specific consequences of diseases in women(1)."

Taking into consideration the report of the Technical Discussions on Women, Health, and Development(2), held in conjunction with the Forty-fifth World Health Assembly, the Assembly, among other recommendations, urged the Member States to "establish a system for reporting on the extent to which key elements of existing resolutions have been implemented in their country, the gaps in implementation that still remain, the reasons for these gaps, and what assistance is needed for implementation."

In addition, in order to ensure that women's health is given maximum visibility and urgency, the Assembly made a series of requests of the Director-General concerning the topic of the present document, including:

- The establishment in 1992 of a Global Commission on Women's Health, the terms of reference for which would include making policy-makers aware of women's health issues by using gender-specific, disaggregated data on women's socioeconomic and health conditions.
- Support for the work of the Global Commission in establishing standards and criteria to permit regular monitoring of women's health status and monitoring the overall progress made in implementing key elements of past resolutions and strategies affecting women's health, using gender-specific data.

Based on the foregoing and on various resolutions of the PAHO Governing Bodies(3), the provisional agenda for the XIII Meeting of the Subcommittee on Women, Health, and Development of the Executive Committee includes an item concerning a proposal for a regional system to monitor and evaluate the health status of women and sex differentials in health (Provisional Agenda Item 7).

With a view to contributing to the design of such a system, a summary is provided below of some of the characteristics of health situation assessment, in general,

and of assessment of the health situation of women and of sex differentials in health, in particular. Three criteria are illustrated for the selection of health problems to be monitored. Certain general characteristics of the indicators are discussed, and several procedures for analysis are suggested.

HEALTH SITUATION ASSESSMENT IN PAHO

At the present time, health situation assessment in PAHO is organized into two broad axes: by country and by subject area. Assessment by subject area is the province of the programs responsible for providing technical cooperation in each area. Each technical program is responsible for collecting and analyzing relevant data and for strengthening mechanisms for this purpose at the national level. Certain information needed by practically all the programs--population and mortality statistics and some socioeconomic information, for example--is collected and managed by the Program on Health Situation and Trend Assessment, which provides it to the other programs through the Technical Information System (TIS).

This approach has the advantage of subordinating the selection of indicators and data to the characteristics of the problems themselves and also to the need for scientific, technical, and administrative knowledge on the part of those responsible for helping to solve these problems. Nevertheless, in many cases the quality of the analysis carried out is not as high as might be desired. This problem is particularly evident when an analysis-synthesis process is required in order to obtain a comprehensive understanding of health-disease processes that transcend program lines, as is the case with studies of the health situation as a whole and the health situation of women as compared with that of men.

The last of the many multiprogram groups convened to discuss how to improve health situation assessment in PAHO met in September 1989, under the coordination of the Program on Health Situation and Trend Assessment(4). This group used as a practical reference the experience of several of its members in preparing the 1990 edition of Health Conditions in the Americas(5), since this provided an example of health situation assessment in progress. The group did not explore any particular health issue or technical program in depth, but rather formulated general observations, all of which were valid for assessing the specific health status of women and comparing it with that of men.

Much the same as those who preceded them, the members of the group heard the familiar chorus of complaints that the failures to analyze and utilize data is due to the fact that "no data are available," the data available are of "poor quality" and do not respond to the essence of the problem, and that the data "are not conducive to action." Thus,

many of the documents proposing action to improve the health status of women also propose that the first step should be the collection of more information. Nevertheless, firmly convinced that a larger (or better) supply of data does not, in and of itself, improve the utilization of information, the group focused its discussion on the utilization and on the quality of the analyses and not on the data content.

The aim here is not to detract from the need to improve the relevance, validity, and timeliness of information. However, before yielding to the temptation of attempting to define better (or more) indicators and information, it is necessary to question the assumption that problems at the decision-making level are due primarily to the lack of adequate information and that decision-makers know what information they need.

In the first place, the great majority of decisions are made without utilizing information, even in the few cases in which adequate information exists. Furthermore, a decision is not more correct simply because it has been obtained by means of an algorithm, since the process of validating a decision is the result of an evaluative analysis that explains the similarities and discrepancies between the resulting and expected outcomes. Finally, unpredictable circumstances always arise for which it is not possible to foresee the information that would have been required.

The principal impediments to action do not derive from a lack of information. Generally speaking, sufficient knowledge is available for the identification of major problems, and, in many cases, even for the initiation of remedial action. However, if this is not the case, it is essential first to identify the problems to be addressed, and then, and only then, to define the information that needs to be collected systematically.

Ensuring that decisions are made based on information requires a qualitative leap; however, that leap needs to be taken more in the decision-making realm than in the information system.

Information should be consonant with its intended use, which, in turn, should be based on an assessment of the major problems to be resolved. The difficulty lies in achieving a correspondence between the problems and the information that will make it possible to define them in a manner consistent with the actions to be taken in a specific situation and at a particular point in time. Systems applicable in other situations cannot simply be copied(6).

Experience has demonstrated that the information that PAHO succeeds in obtaining usually turns out to be less complete, valid, and timely than that existing on the subject matter in the country. This is true even in the case of such established and regulated systems as those that produce mortality statistics. It must not be forgotten that PAHO does not generate the information on the health status of the peoples in the

Region. With few exceptions, the Organization limits itself to collecting information recorded in the countries under their own mandates and with their own resources. PAHO cannot obtain from the countries information that they do not possess.

The foregoing underscores the need for the countries to continue to expand their knowledge of the problems that affect the health status of women, either through the organization or improvement of formal information systems or through research on questions that are not appropriate for inclusion in a systematic information process or that should not be included at the present time. Evaluation of these problems in the country requires an appraisal of their absolute and relative importance, their structure and changes over time, a critical analysis of their causes and of the circumstances that tend to aggravate or attenuate them, and an analysis of the effectiveness, efficiency, feasibility, and viability of the interventions aimed at solving them.

The data to which PAHO can aspire at the regional level is a by-product of the data available in the countries. It is hoped that this fact will serve as an incentive for PAHO to assist in strengthening national mechanisms with a view to producing data that will be progressively more relevant, valid, and timely on problems that have been identified as priorities.

In summary:

- The relevance and quality of data obtained at the regional level can be no better than that of the data existing in the countries.
- Selection of the data for which production is to be promoted and supported should be preceded by a definition of the health problems on which action is to be taken, and the characteristics of such information should be conditioned by the characteristics of the indicators required for monitoring the evolution of problems and the results of the actions that are carried out.
- The apparent lack of data should not serve as an excuse for postponing action.

MONITORING AND EVALUATION OF THE HEALTH STATUS OF WOMEN AND SEX DIFFERENTIALS IN HEALTH

Women face advantages and disadvantages with respect to men in various aspects of life, including health. Some of the health differences between women and men derive from the configuration of their chromosomes—that is, from the variable "sex," as such. Others, considered "gender" variables, reflect the consequences of differential treatment

stemming from the psycho-socio-cultural construct of the image of what is feminine and what is masculine, and from the roles assigned to men and women in a given society. Monitoring of women's health with a view to improving it means considering all the circumstances that affect the health of the population and focusing special attention on those that contribute to or result from the disadvantaged status of women.

At the regional level, monitoring efforts should look at the health situation in general terms and give specific attention to problems that are the object of technical cooperation, as well as to other problems which, although they are not targeted for such cooperation, are considered to be of key importance by virtue of their magnitude, their avoidability, their need for advocacy, or their ability to serve as indicators with respect to areas of interest that are otherwise difficult to measure.

Selection of Problems

The selection of problems that are to be given priority in the technical cooperation between PAHO and the Member Governments results from interaction between various national and international groups, and the PAHO technical programs possess abundant information on this matter. The official documents of the agencies concerned with this area also contain extensive lists of problems, and these will most certainly be expanded as progress is made in closing the gaps in knowledge about health in general and about women's health in particular.

The impossibility of resolving all the problems identified at the same time makes it necessary to rank them in order to choose those that must receive immediate or priority attention, before defining the indicators and information needed for monitoring them. In order to facilitate the studies and discussions that will assist in ranking the problems in the various national and international areas and levels, it is proposed that the circumstances and problems that affect the health status of women and the sex differentials in health be analyzed through the use of a combination of the following three criteria:

- Specific causes of disease and death.
- Stages of life.
- Living conditions of human groups.

The operational definitions to be used should be prepared jointly by professionals from national groups and the PAHO technical programs. A few examples are provided below, although this list is by no means exhaustive.

Specific Causes of Disease and Death

Up to now, concern for the health of women has focused almost exclusively on their reproductive life and reproductive organs. Sex-based differences in the pathological processes that affect men and women have been largely ignored, although interest in this area has increased in recent times. This is evidenced by the establishment of a specific office within the National Institutes of Health in the United States whose mandate is to promote and carry out research on women's health that is not limited to their reproductive role. This mandate is based on the following premises:

- Women will constitute the majority of the population and will be more susceptible to disease in the future.
- Overall, women have worse health than men.
- Certain health problems are more prevalent in women than in men.
- Certain health problems are unique to women or affect women differently than they do men(7).

Examples of pathologies that are more prevalent, more severe, or have more adverse consequences for women than for men are diabetes, high blood pressure, gallbladder disease, arthritis, and some depressive diseases. Other conditions require monitoring because, even though more prevalent in men, they are rapidly increasing among women. An example is cancer of the lung.

Finally, it is necessary to include the harmful factors to which women are more vulnerable or are exposed more frequently than men, either in the home or in the workplace--that is, factors that have more severe repercussions on women even though their exposure to them is equal to or less than that of men. These factors fall into categories as varied as exposure to toxic chemicals used in the home, and physical, psychological, and sexual abuse.

Stages of Life

The circumstances and problems that affect the health situation, as well as the differences deriving from the variables of sex and gender, produce a different profile in each of the different stages in the lives of women and men.

This criterion has been used for some time in PAHO, WHO, and other organizations, and it constitutes the other major thrust of research on women's health at the National Institutes of Health in the United States.

A possible list of the stages of life is presented below, including examples of the most serious or prevalent health problems in each:

- Infancy and childhood (malnutrition, mistreatment, abuse).
- Adolescence (early pregnancy, drug addiction, external causes of disease and death).
- Early and late childbearing years (problems deriving from inadequate family planning, and from pregnancy, childbirth and the puerperium; sexually transmitted diseases and their sequelae; neoplasms; occupational risks).
- Menopause (studied only to a limited extent, with the exception of osteoporosis).
- Old age, subdivided into two or three subgroups (bone and joint problems and others that start in previous stages but tend to become worse in old age; disabilities; mistreatment, abuse, loneliness, and abandonment; and others that may result in mental or physical illness).

Living Conditions of Human Groups

Monitoring of the health situation on the basis of living conditions focuses attention on human beings in general and does not limit itself to individuals or diseases as isolated biopathological categories. It seeks to understand epidemiology as it relates to overall social phenomena, rather than just adding social variables to the characterization of individuals.

The health situation of population groups is one of the means of concretizing, at a specific level, the most general processes that characterize a given society at a given time in its history, as well as the natural conditions in which the society exists(8).

The living conditions of a human group are an expression of the profile of opportunities open to the women and men who make up the group for satisfying their particular needs and aspirations in terms of access to the goods and services available in the society (housing, education, food, work, income, etc.). Health is viewed as a component and as an outcome that integrates and defines these living conditions.

Consequently, the health problems of human groups living in similar conditions reflect their exposure to the common adverse factors or risks they share as a consequence of biological, demographic, economic, and social determinants, as well as factors in the

physical, cultural, and political environment in which they live. Thus, the profile of health needs is linked to the profile of living conditions.

In practice, human groups exist in geographical spaces, called "population spaces" (or "geographic-population units"), and it is postulated that it is possible to identify population spaces that are relatively homogeneous within themselves, but that are heterogeneous between themselves in terms of the profile of their living conditions. One way of differentiating them would be to distinguish between rural and urban strata. In the rural area the criterion of greatest importance is the dispersion of the population. In cities, the strata might be distinguished on the basis of operational variables related to housing conditions, the availability of drinking water, excreta disposal, literacy levels, per capita income, consumption of electric power, and others that characterize neighborhoods as a whole.

This approach facilitates analysis of the characteristics of the set of problems that affect women and men in a human group with a certain profile of living conditions, and it makes it easier to identify the risk factors that may be conditioning this profile of problems, while at the same time making it possible to recognize circumstances that are conducive to health. Also included here are all the factors that encourage the involvement of women in development, in general, and in health development, in particular, not only in the formal sector but also through self-care and the care of their families. This approach helps to guide the formulation of control strategies aimed at population groups—that is, the type and structure of the actions that will be carried out to promote, protect, repair, and restore health and counteract the adverse circumstances associated with the living conditions of women and men in these groups, as well as whatever actions relating to advocacy and intersectoral negotiation that may be called for in the situation(9).

Malnutrition in preschool children, abuse and violence, maltreatment in the early and advanced ages of life, and the consequences of sexually transmitted diseases are examples of problems that are manifested in different ways and degrees in women and men who share the same living conditions, at the same time that they vary under different conditions. These problems illustrate the need to adapt control strategies to the living conditions of the population they target.

The three criteria presented are not mutually exclusive, but rather correspond to different but complementary approaches, and the sequence in which they are applied will be determined by the approach that is to be emphasized. The PAHO Governing Bodies have at different times formulated mandates aimed at ensuring that the health sector contributes to a reduction of the social and economic inequalities between the countries and between the human groups in each country(10), and that the sector helps to meet essential human needs (11). Logically, then, analysis of the health situation should

begin with the group criterion of living conditions and health, and it should subsequently be complemented by the two remaining criteria.

Indicators

A long list currently exists of measurements and indexes that are recommended as indicators of the health status of the population and of women, both in general terms and with regard to subgroups of women and specific health problems. These lists have been prepared and adopted by various national and international organizations and will not be reproduced here.

Many indicators used for monitoring health status suffer from serious defects as regards their validity; the great majority of them are based on incomplete and biased data, and in many cases they are ascribed an explanatory value that they do not possess. With a view to contributing to the best utilization of these indicators, some considerations on their general characteristics will be set out below.

The existence of indicators is the result of the desire to determine the magnitude of certain complex phenomena whose measurement is either difficult or impossible, as, for example, health, the quality of life, and well-being.

In order to get around this difficulty, simpler phenomena are used whose measurement is feasible, and these phenomena serve as auxiliary variables that are known or assumed to be closely correlated with the phenomenon whose magnitude it is sought to determine, and which constitutes the main variable. Measurement of the auxiliary variable is then used as an indicator of the main variable.

Example: Fever--that is, a measure of elevated body temperature--is used as indicator of the presence of disease.

This example may be used to illustrate several aspects of the relationship between the indicator and the phenomenon under study:

- It is accepted that there is a correlation between fever and disease.
- It is known that fever is not the cause of the disease; both are the consequence of a common cause that can be identified only with additional information.
- The presence and intensity of fever only indicate the presence of, and, at times, the severity of disease, but they do not explain its nature or its cause.

- The absence of fever does not indicate whether disease is present or not, since there are afebrile diseases. In other words, body temperature provides more information when it is elevated than when it is not.
- Measures may be taken to lower fever, so that the patient may feel better, but the disease will not necessarily have subsided.

Expressed in general terms, this means:

- The closer the correlation between the auxiliary variable and the main variable, the greater the validity of the indicator. In practice, validity also depends on how accurately the measurement has been taken.
- The correlation between the indicator and the phenomenon under study does not need to be causal; usually both derive from a common cause, which is frequently unknown.
- An indicator "indicates" but does not "explain."
- Frequently, however, the correlation between the indicator and the phenomenon under study only exists, or is more marked, within a certain interval in the range of possible numerical values of the auxiliary variable. If the result of the measurement falls outside that interval, the indicator loses part or all of its informational value with regard to the phenomenon under study. In such a case, it does not even indicate.
- The correlation between the auxiliary variable and the main variable may be destroyed artificially. This occurs when something is done to modify the values of the auxiliary variable without modifying the cause or causes that influence the chief variable.

Example: Maternal mortality rate provides an excellent example for illustrating certain advantages and limitations of public health indicators.

This rate is designed to measure the risk that a woman will die as a consequence of complications of pregnancy, childbirth, or the puerperium. The impossibility of determining the total number of pregnant women made it necessary to devise this measure in the form in which it is used at the present time, with a denominator that is limited by a definition that excludes any pregnancy that does not result in a live birth.

In practice, the greatest limitation of this measurement does not derive from its definition, but rather, from marked deficiencies in most of the countries, in the data corresponding to the numerator and, at least in the developing countries, to the denominator, as well. Normally, this produces a measurement that is lower than the real rate, because the defects of the numerator have more weight than the underregistration of the denominator. Special studies have shown that between 33% and 50% of maternal deaths are not diagnosed (nor are they coded) as such (12, 13).

Despite its imperfections as a measurement of maternal mortality, however, this rate, when high, is a very useful indicator with regard to various aspects of the health of women and the population in general.

First of all, a high maternal mortality rate is important because it reflects the persistence of problems that could be avoided, since with adequate care during pregnancy, childbirth, and the puerperium, it would be possible to prevent the majority of complications of this physiological process and to treat the remaining ones successfully, thereby practically eliminating the risk of dying.

Secondly, the significance of high maternal mortality derives from its correlation with other problems that affect the health of women and the population as a whole. Generally speaking, it can be used as an indicator of deficiencies in the coverage and quality of the health care provided, both preventive and curative. Thus, for example, when this rate is high, an excess number of cases of invasive uterine cancer may be expected among women who are hospitalized, owing to deficiencies in the policy on cytological examinations or follow-up of positive results.

However, as with the absence of fever, this rate does not provide much information when it is low; the absence of avoidable or premature mortality is not synonymous with health for women, whether they are pregnant or not.

Furthermore, although reducing maternal mortality is significant in itself because of its importance for the mother, her child, and the rest of her family, the impact it has on the health of the female population as a whole is limited. Even in countries with high maternal mortality, these deaths do not represent more than 2% of the deaths of women under the age of 65 (14), and only in a very few countries do they represent 10% or more of the deaths of women aged 15 to 44(15).

Finally, just as a single sign is not sufficient to characterize a disease, neither is a single indicator sufficient to characterize health status.

SUGGESTIONS

1. Although each program may define valid and easily obtained indicators to meet its specific analytical needs, it is suggested that attention should be focused on the identification and improvement of indicators which, although specific, such as maternal mortality, also shed light on broader health issues.

In particular, it would be desirable to identify indicators of this type for other stages of life. It might be interesting to explore indicators related to malnutrition in boys and girls during the early years of life, the frequency of pregnancy in girls under 15 years of age, violence and abuse, and occupational risks. For those countries that are experiencing a rapid increase in their elderly populations, an indicator relating to the capacity of women and men 65 years of age and older to be self-sufficient inside and outside the home might be useful.

2. It is suggested that a renewed effort be made to promote the use of health establishment statistics, not only for immediate administrative purposes, but also to estimate the amount of resources expended by broad diagnostic groups, both in terms of hospitalization (number of discharges and average length of stay) and outpatient care.

Given the state of the statistics on services in many countries, discharges could initially be grouped by area of specialization of the hospital departments, and diagnoses could be incorporated once the quality of the discharge reports is improved.

In both cases, demographic data should include the normal place of residence in order to permit coding according to the population-space from which the patients, both male and female, originate. This will allow the inclusion of hospital morbidity profiles in the health-disease profiles that are developed taking into account living conditions (16).

3. It is suggested that monitoring not be required to be based on information that covers the total population. It is not essential for coverage to be total, but it is important to know who is represented and who is not in the information obtained.

The <u>household surveys</u> that national statistics offices carry out to estimate employment and unemployment in most large cities of the countries in the Region provide a splendid potential opportunity for negotiating the inclusion of brief modules on key health aspects of the population. The health modules included in demographic surveys constitute another important source in wide use at the present time.

Another method to be considered is the <u>monitoring of specific pathologies in</u> <u>sentinel establishments</u> selected on the basis of their quality and the size of their clientele.

This procedure is being used in several countries in Europe to monitor certain diseases on the basis of reporting of cases treated by private physicians in their offices.

4. It is suggested that greater use be made of the indicators of avoidable or excess mortality, which result from comparing actual mortality with that which would have theoretically occurred if the population had been exposed to lower risks of death than those observed.

These lower risks are expressed in terms of age- and sex-specific mortality. It is possible to use the rates observed in a country that is more advanced in terms of health or a combination of the best rates observed at different times and in different countries(17, 18). The risk of dying changes slowly, which means that the same set of reference rates may be used during a given period, possibly up to five years.

It is recommended always to include analysis for all causes combined, although specific analyses by cause of death may also be carried out. The latter should be approached with great caution, given the deficiencies in data on mortality by cause of death.

Two useful applications of this approach are based on analysis of the sex- and age-specific excess risk of death by sex and age and of the standardized mortality ratio and excess mortality.

4.1 Sex- and Age-Specific Excess Risk of Death

For each sex a comparison is made of the mortality rates observed with the theoretical rates used as a reference for the different age groups. Table 1 and Figure 1 of the Annex show the reference rates for men and women, and Figures 2 to 9 show the rates observed in two different periods in relation to the reference rates for eight countries in Latin America. This makes it possible to visualize the progress made between one observation time and another, and the excess risk that still remains to be overcome.

4.2 <u>Standardized Mortality Ratio and Standardized Excess Mortality</u>

The impact that excess mortality risk has on mortality in a country or region depends not only on the magnitude of the difference between the actual rate and the theoretical rate, but also on the size of the affected population group. Relatively small differences in risk may have a great impact if they affect a large portion of the population, and vice-versa.

The standardized mortality ratio (SMR) takes this fact into account. It is the quotient of the number of deaths observed in a population and the number of deaths expected in the same population based on theoretical reference rates. These are usually multiplied by 100 in order to express them as a percentage(19).

Standardized excess mortality (SEM) is obtained by dividing the differences between the actual and expected number of deaths by the expected number of deaths or by subtracting one unit from the SMR, or from 100 if it is expressed as a percentage.

4.3 Monitoring sex differentials

In monitoring the differences between sexes it is recommended that the actual situation be compared with the theoretical situation for each sex separately, followed by analysis of which of the two is better or worse off with respect to what the situation might be. This is preferable to comparing the rates of men and women directly.

It is obvious that the various measures of mortality continue to provide extremely useful health indicators, not only because they "indicate" deficiencies in the health situation when they are high, but because it is possible to obtain them with a coverage and quality which, although certainly open to improvement, are more acceptable than those obtained through many other measures. It is also obvious that these indicators are insufficient to characterize current health-disease processes, which are less and less fatal but more prolonged and disabling. In any case, it should be recalled that mortality indicators are not health targets, since it is not sufficient to merely postpone death.

Finally, the next stages in implementing the desired regional monitoring system should include:

- 1. <u>In the various technical programs, together with the corresponding national groups:</u>
 - A review of the selection of the problems and risk factors to be monitored and then of the indicators and the data necessary for obtaining them. The greatest caution should be taken to keep data collection at a minimum and to avoid duplication of already existing information.
 - Identification of the needs for technical cooperation to enable the countries to produce data and make optimum use thereof in national decision-making processes.

2. At PAHO Headquarters:

- Establishment of a coordination mechanism in order to achieve comprehensive analysis of the health situation. This transcends both the responsibility and the competency of any of the technical programs singly and must therefore be dealt with by the institution as a whole.
- Establishment, within the Program on Women, Health, and Development, of a documentation system on women's health through the organization, classification, and indexing of all the information available in each of the PAHO technical programs, including a description of the contents of their data bases.

The Program on Health Situation and Trend Assessment will advise the Program on Women, Health, and Development with regard to technical and methodological issues that fall within the sphere of its competency.

Annex

REFERENCES

- 1. World Health Organization. Women, Health, and Development. In: Collaboration within the United Nations System. General Matters. 45th World Health Assembly. Geneva, Document WHA45.25, 14 May 1992.
- 2. World Health Organization. Women, health and development: Progress report by the Director-General. Geneva, Document WHO/FHE/WHD/92.5, 1992.
- 3. Pan American Health Organization. Report of the Special Subcommittee on Women. Health, and Development. 109th meeting. Washington, DC, Document CE109/6, 22 May 1992.
- 4. Fortalecimiento de la capacidad de análisis de la situación de salud en la OPS. Working document, Program on Health Situation and Trend Assessment, Pan American Health Organization. Washington, DC, 1989.
- 5. Pan American Health Organization. <u>Health Conditions in the Americas. 1990</u> Edition. Vol. I. Washington, DC, Scientific Publication No. 524, 1990.
- 6. Migliónico, A. <u>Información, decisión y políticas nacionales de información sanitaria</u>. Buenos Aires, Pan American Health Organization, PAHO/WHO Representative Office, Argentina, 1988.
- 7. Report of the National Institutes of Health: Opportunities for Research on Women's Health. Washington, DC, USDHHS (PHS/NIH), Publication No. 92-3457A, September 1992.
- 8. Sistemas nacionales de vigilancia de la situación de salud según condiciones de vida y del impacto de las acciones de salud y bienestar. Working document prepared under the coordination of Dr. Pedro Luis Castellanos, Program on Health Situation and Trend Assessment, Pan American Health Organization. Washington, DC, June 1991.
- Barrenechea, JJ, Trujillo, E, and Chorny, A. <u>Salud para todos en el año 2000</u>. <u>Implicaciones para la planificación y administración de los sistemas de salud</u>. PAHO/Universidad de Antioquia. Medellín, Editorial Universidad de Antioquia, 1990.
- 10. Health for all by the year 2000. Strategies. Washington, DC, Pan American Health Organization, Official Document No. 173, 1980.

- 11. <u>Strategic Orientations and Program Priorities, 1991-1994.</u> XXIII Pan American Sanitary Conference. Washington, DC, Pan American Health Organization, 1990.
- 12. Mortalidad materna en áreas seleccionadas, año 1985. In: <u>Análisis de datos</u>, <u>Programa Nacional de Estadísticas de Salud</u>, Serie 8, Número 13. Buenos Aires, Dirección de Estadísticas de Salud, Secretaría de Salud, Ministerio de Salud y Acción Social, PAHO/WHO, January 1992.
- 13. Mutarelli, MA de. Director of Statistics of the Ministry of Health, Uruguay, 1992 (Personal Communication).
- 14. Pan American Health Organization. <u>Health Statistics from the Americas.</u> 1991 <u>Edition. Mortality since 1960</u>. Washington, DC, Scientific Publication No. 537, 1991.
- 15. Maternal mortality in the Americas. In: <u>Epidemiological Bulletin</u>, <u>Pan American Health Organization</u>, Vol. 14, No. 1, pp. 1-9, March 1993.
- 16. Health differentials based on living conditions. Future lines of research on health profiles. In: Epidemiological Bulletin, Pan American Health Organization, Vol. 9, No. 3, pp. 1-2, 1988.
- Chackiel, J and Plaut, R. Demographic trends: An overview with emphasis on mortality. In: <u>Causes and prevention of adult mortality in developing countries</u>.
 <u>Report from a seminar in Santiago</u>, <u>Chile</u>, 7-11 October 1991. London (in press). Oxford University Press.
- 18. Uemura, K. Excess mortality ratio with reference to the lowest age-sex-specific death rates among countries. World Health Statistics Quarterly Vol. 42, No. 1, pp. 26-41, 1989.
- Plaut, R and Roberts, E. Preventable mortality: Indicator or target? Applications in developing countries. <u>World Health Statistics Quarterly</u> Vol. 42, No. 1, pp. 4-15, 1989.

TABLE AND FIGURES

TABLE 1 Reference rates for estimating avoidable mortality

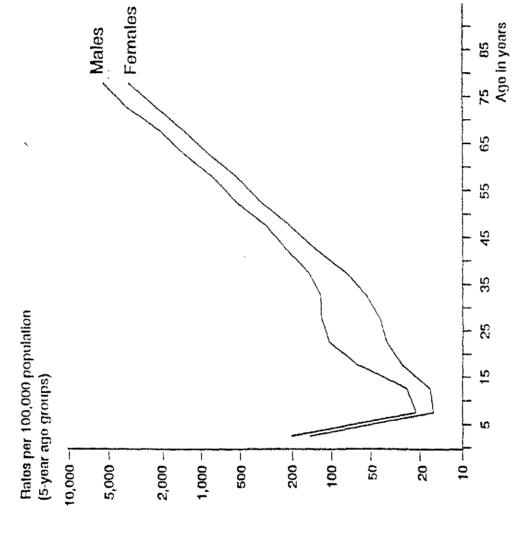
Age in years	Men			· · · · · · · · · · · · · · · · · · ·	Women	
	Country	Year	Rate	Country	Year	Rate ^c
Under 5 5-9	Canada Puerto Rico	1988 1986	200.2	Canada Puerto Rico	1985 1989	144.4
10-14	Canada	1989	26.4	Puerto Rico	1987	13.2
15-19	Costa Rica	1986	64.1	Costa Rica	1987	28.8
20-24	Costa Rica	1986	103.3	Costa Rica	1985	38.4
25-29	Uruguay	1985	107.3	Canada	1987	43.0
30-34	Costa Rica	1983	119.3	Canada	1987	55.1
35-39	Canada	1985	15 5.5	Canada	1987	78.8
40-44	Canada	1989	222.0	Canada	1988	130.9
45-49	Costa Rica	1983	328.9	Costa Rica	1986	207.7
50-54	Costa Rica	1983	542.1	Canada	1989	342.3
55 - 59	Costa Rica	1988	807.7	Costa Rica	1988	522.7
60 - 64	Costa Rica	1987	1,327.1	Canada	19 8 9	869.6
65 - 69	Cuba	1978	2,177.9	Canada	1989	1,354.8
70 - 74	Cuba	1983	3,763.5	Canada	1989	2,206.6
75 - 79	Puerto Rico	1979	5,479.3	Canada	1989	3,678.1
80 +	Cuba	1983	12,174.0	Canada	1989	9,713.3

a Lowest values for sex- and age-specific mortality rates, reported since 1978 in countries of the Americas with at least 5000 deaths reported per year, and underregistration estimated to be less than 10%. Age-specific rates per 100,000 men.

Source: PAHO Technical Information System.

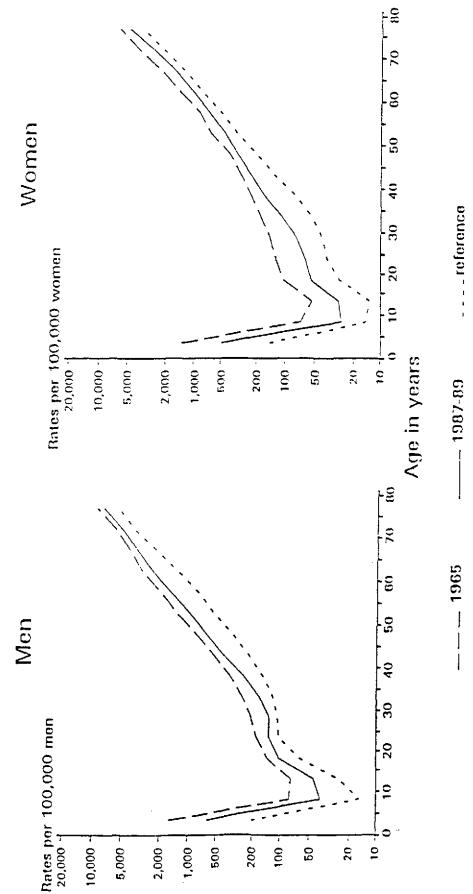
Age-specific rates per 100,000 women.

Reference rates to estimate avoidable mortality.*



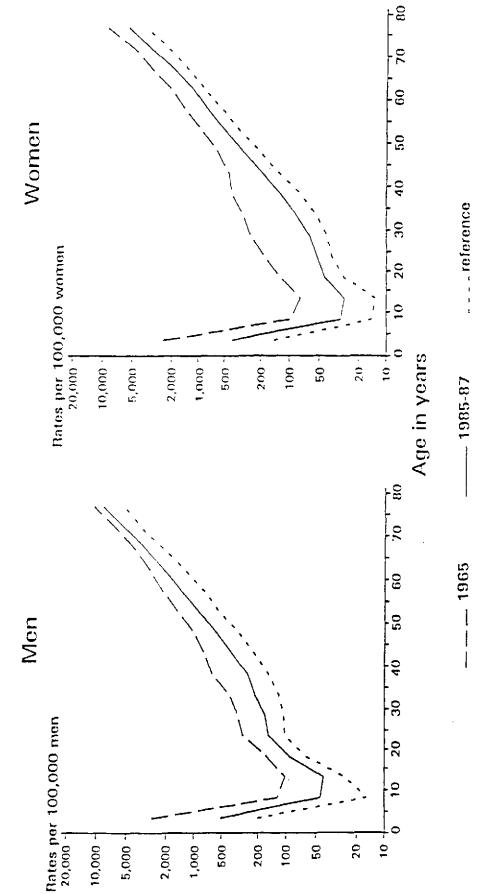
 Lowest age-specific rates reported by countries in the Americas Source: PAI IO Technical information System

Age Specific Mortality Rates Argentina



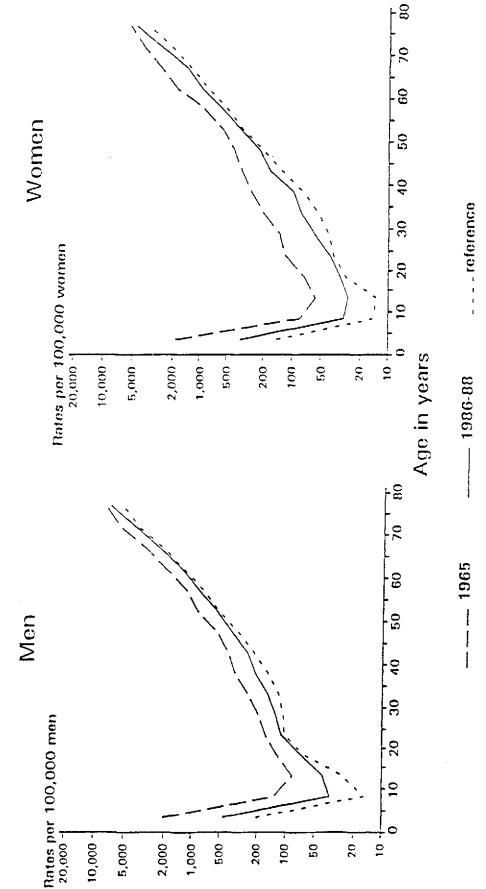
Source: PAHO Technical Information System

Age Specific Mortality Rates
Chile



Source: PAHO Technical Information System

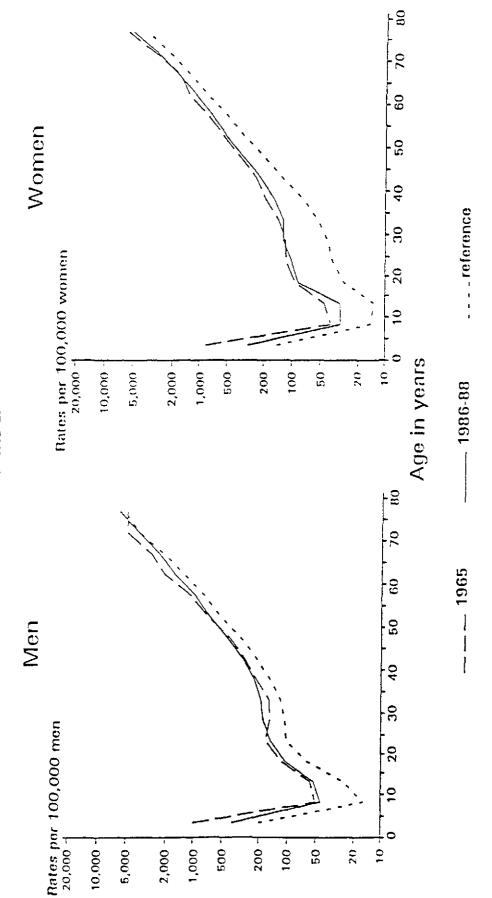
Age Specific Mortality Rates Costa Rica



Source: PAHO Technical Information System

FIGURE 5

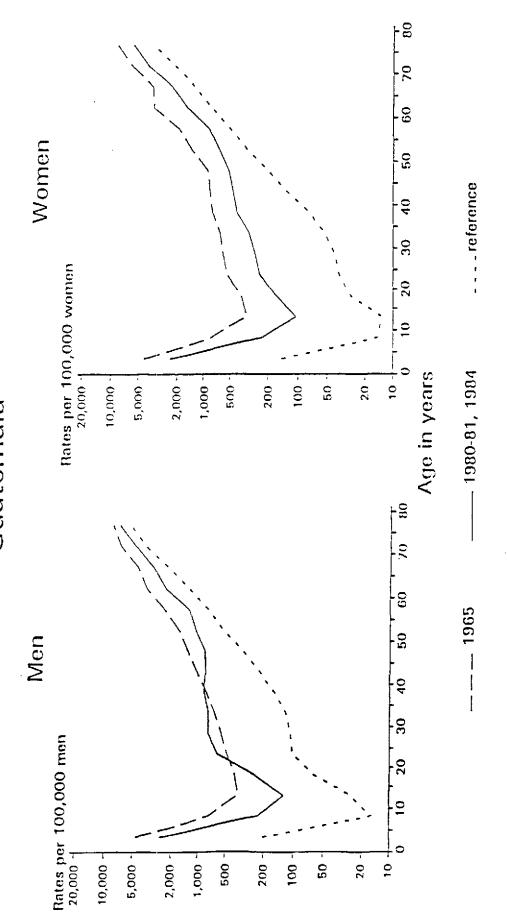
Age Specific Mortality Rates Cuba



Source: PAHO Technical Information System

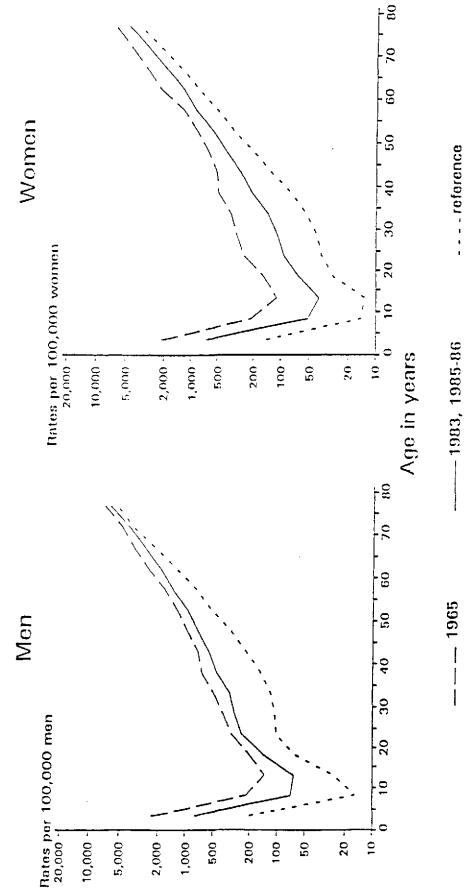
FIGURE 6

Age Specific Mortality Rates Guatemala



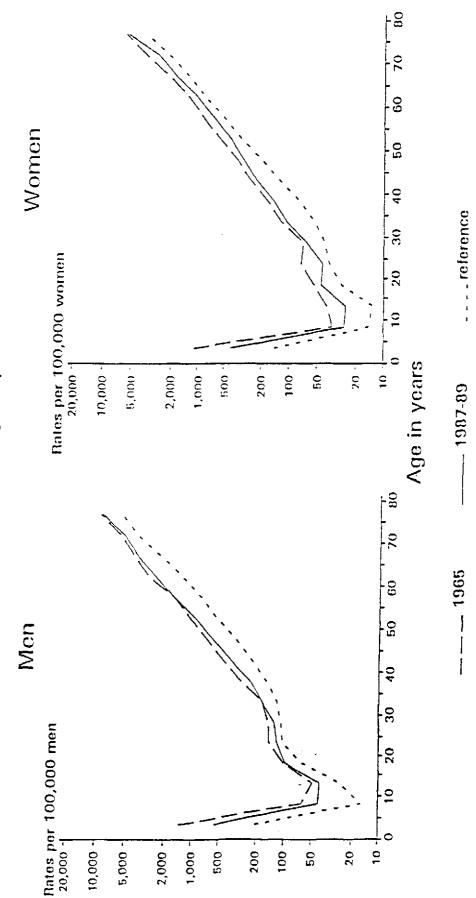
Source: PAHO Technical Information System

Age Specific Mortality Rates
Mexico



Source: PAHO Technical Information System

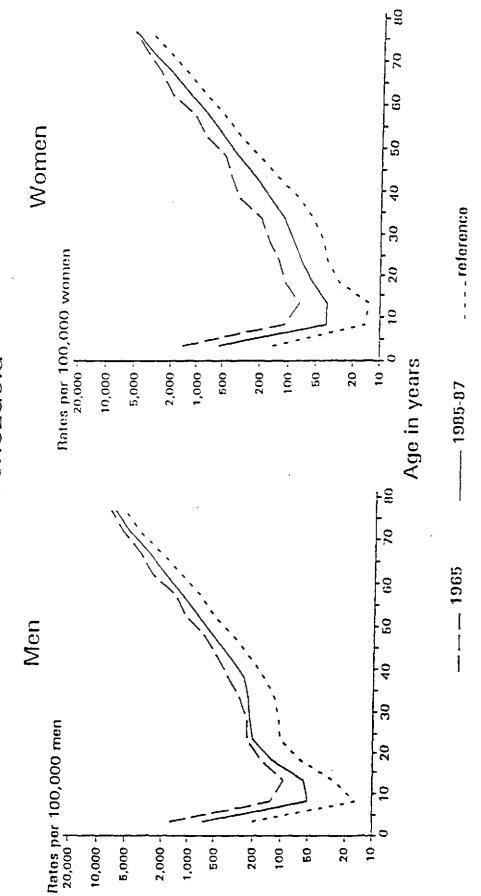
Age Specific Mortality Rates Uruguay



Source: PAHO Technical Information System

FIGURE 9

Age Specific Mortality Rates Venezuela



Source: PAHO Technical Information System