

WORLD HEALTH ORGANIZATION  
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No. 85

**FIRST INTERNATIONAL CONFERENCE  
OF NATIONAL COMMITTEES ON VITAL  
AND HEALTH STATISTICS**

**Report**

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# FIRST INTERNATIONAL CONFERENCE OF NATIONAL COMMITTEES ON VITAL AND HEALTH STATISTICS

## Report \*

### Introduction

The First International Conference of National Committees on Vital and Health Statistics, convened under the auspices of the World Health Organization in close collaboration with the United Nations, was held at the General Register Office, Somerset House, London, England, from 12 to 17 October 1953.

The following Member States and Associate Members of WHO sent delegates to the Conference: Australia, Belgium, Canada, Costa Rica, Denmark, Dominican Republic, Ecuador, Federal Republic of Germany, Finland, France, India, Iraq, Ireland, Israel, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Thailand, Tunisia, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela, and Yugoslavia.

Representatives of the International Labour Office and of the International Statistical Institute were also present.

The conference was opened by Dr. H. S. Gear, Assistant Director-General, Department of Central Technical Services, representing the Director-General of the World Health Organization, and was addressed at the opening meeting by the Minister of Health for England and Wales, the Right Honourable Iain Macleod, and by Sir Walter Russell Brain, President of the Royal College of Physicians, appointed Honorary President of the Conference by the Government of the United Kingdom of Great Britain and Northern Ireland.

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\* The Executive Board, at its thirteenth session, adopted the following resolution:  
The Executive Board

1. NOTES the report on the International Conference of National Committees on Vital and Health Statistics, held in London from 12 to 17 October 1953, under the auspices of the World Health Organization in collaboration with the United Nations;
2. AUTHORIZES publication of the report.

(Resolution EB13.R19, *Off. Rec. Wld Hlth Org.* 52, 7)

Professor A. Bradford Hill (United Kingdom) was unanimously elected Chairman of the conference ; Professor S. Somogyi (Italy) and Dr. N. Vejavisit (Thailand) were elected Vice-Chairmen.

The conference approved the provisional agenda and carried out its programme of work through two committees : the first one, with Dr. P. F. Denoix (France) as Chairman, Mr. J. Ros-Jimeno (Spain) as Vice-Chairman, and Dr. H. L. Dunn (USA) as Rapporteur, dealt with the general subject of the objectives, organization, and programmes of national committees or equivalent bodies, as well as with the types of health statistics and related vital statistics which would be of the greatest practical value to countries at different stages of development ; the second, with Dr. M. G. Neurdenburg (Netherlands) as Chairman, Mr. H. Geschwind (Sweden) as Vice-Chairman, and Mr. Fraser Harris (Canada) as Rapporteur, considered mainly the methods most suitable for improving the quality of health statistics and related vital statistics, and for securing wide appreciation of their value, and also reviewed the situation as regards national implementation of international regulations or recommendations.

The conference reviewed the antecedents, objectives, patterns of organization, and programmes of work carried out by the national committees on vital and health statistics or equivalent bodies existing in various countries, and amply discussed the progress already made and the possibilities for their work, as well as the important role which they might play for the development of vital and health statistics.

## **1. National Committees on Vital and Health Statistics**

### *1.1 Objectives*

(a) To help in assessing the needs for vital and health statistics, in evaluating the degrees to which the needs are met, and in providing vital and health records and statistics satisfactory and useful to the individuals and groups who use such records and statistics.

(b) To help to achieve essential uniformity in records, methods, and tabulations for the production of the minimum core of comparable vital and health statistics needed for national or international purposes.

(c) To assure a free flow of information and exchange of views, so that the needs and preferences of producers and users of vital and health records and statistics, at all levels, are given full expression and receive due consideration.

(d) To relate the activities and functions of diverse agencies or organizations that produce statistics, so that they work as a co-ordinated whole,

avoiding both wasteful overlapping of effort and important gaps in essential aspects of statistical data.

(e) To make vital and health statistics of greater practical use and appeal.

(f) To stimulate needed statistical studies by those persons or groups best able to undertake them.

(g) To stimulate the training and supply of an adequate number of skilled workers in the field of vital and health statistics, and to encourage the interest of the medical profession in the value of the statistical approach to their problems.

(h) To assist when desirable or necessary in the implementation of international recommendations in this field.

## 1.2 *Functions and constitution*

### 1.2.1 The conference

#### RECOMMENDS

I. that any government which has not yet fully considered the formation of a national committee on vital and health statistics, or its equivalent,<sup>1</sup> should now review, having regard to the particular circumstances of its country, the practicability of setting up such a committee ;

II. that, in setting up a national committee, regard should be had, inter alia, to the following considerations :

(1) the functions of the committee would normally be advisory and consultative, in response to requests from the appropriate government authority. In exercising its functions it should be free also to initiate consideration of any other matters within the general scope of its terms of reference. It should also, in appropriate circumstances, stimulate the undertaking of analysis, research, and special studies ;

(2) the membership of the committee should include, as far as possible, persons (administrative, professional, and lay) among those concerned with the collection and analysis of health and vital statistics and with the various uses (medical and social) of such statistics ; for example,

(a) at the national level, persons from governmental and non-governmental institutions and agencies concerned, from the medical profession, from the universities, from research institutions ; and

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<sup>1</sup> See *Off. Rec. Wld Hlth Org.* 13, 304, section 6 (4).

(b) at the regional and local levels, persons from local and regional governmental and non-governmental institutions and agencies concerned with the collection and use of such statistics, and other competent persons concerned with the specifically regional or local aspects of such collection and use.

1.2.2 In the consideration of any special subject the committee may find it desirable to invite a person or persons competent in that subject to participate in its work.

### 1.3 *Relations with other bodies*

The conference

RECOMMENDS that the reports of a national committee should not only be forwarded to the national governmental authority for consideration and, if thought fit by that authority, for implementation, but should also be forwarded from time to time, at least once annually, either by the national governmental authority or by the national committee, to the World Health Organization and, simultaneously, when appropriate, to the United Nations.

### 1.4 *Role of the World Health Organization*

Realizing that the work of the national committees could be greatly enhanced by close co-operation with the World Health Organization,

The conference

RECOMMENDS

I. that the focal unit for national committees of the World Health Organization should not only circulate the information received from national committees on their activities, but should wherever possible and desirable summarize the information and point to significant developments in the field and to analogous activities in the different countries ;

II. that for aiding national committees to carry out their work more effectively the World Health Organization might consider the possibility of providing assistance to them for particular purposes or for facilitating visits, e.g., through fellowships for members of national committees carrying out joint investigations with other national committees ;

III. that, on the basis of information received from national committees or otherwise, the World Health Organization, through its appropriate organs, might periodically consider whether the developments in health and related vital statistics in the various countries call for corresponding action on its part ;

IV. that similar international conferences to the present one should be convened at such intervals as the World Health Organization deems fit.

## 2. Health Statistics and Related Vital Statistics Required by the Various Countries and Territories According to the Degree of Development of their Health and Administrative Services

The conference, while convinced that health and vital statistics were necessary to plan adequately the health protection of all peoples, realized that the collection and elaboration of their statistics had to be strictly adapted to their social and administrative development. The conference therefore considered separately the type of vital and health statistics which would be of the greatest practical value to areas where health and statistical services (a) had attained a high degree of development, (b) were still in a primitive condition, or (c) had reached intermediate stages of development between those two extremes.

The conference made the following recommendations regarding these three types of areas :

### (A) AREAS WITH HIGHLY DEVELOPED HEALTH AND STATISTICAL SERVICES

#### 2.1 General remarks

2.1.1 Having considered in succession the main elements of vital and of health statistics, the conference generally endorsed the United Nations publication entitled *Principles for a vital statistics system*,<sup>2</sup> which was approved by the United Nations Economic and Social Council with a view to the improvement and standardization of vital statistics.

The conference agreed with the definitions of vital events contained therein and on their relative importance and priority. From the health point of view, however, marriage and divorce statistics had a somewhat lower priority than they had for legal and social purposes.

The conference therefore

RECOMMENDS the application of the *Principles for a vital statistics system* wherever possible as a complement to WHO Regulations No. 1.<sup>3</sup>

<sup>2</sup> United Nations, Department of Economic Affairs, Statistical Office (1953) *Principles for a vital statistics system. Recommendations for the improvement and standardization of vital statistics*, New York (Document ST/STAT/SER/M/19)

<sup>3</sup> See *Off. Rec. Wld Hlth Org.* 13, 349.

2.1.2 While it is obvious that complete registration is essential for a number of legal and administrative purposes, the individual registration of vital events may usefully be supplemented by sampling procedures.

In certain circumstances sampling methods might also provide a useful supplement or substitute for some of the tabulations relating to vital events, e.g., by providing data earlier than might otherwise be possible, by economizing in the resources needed for full tabulation, or by increasing the validity of the data collected.

## 2.2 *Population statistics*

As regards population statistics, which constitute the base for most specific vital and health statistics,

The conference

RECOMMENDS that detailed *censuses* be carried out at least once every ten years.

The conference also

RECOMMENDS that in intercensal years annual population *estimates* be made for each country or territory, giving not only global figures but also age and sex distribution. Such estimates could be based on the recorded births, deaths, and migration in the whole population or in suitable selected samples.

The conference realized that large intra-national migrations of which accurate records could not be obtained increased the need for censuses to be carried out at intervals shorter than ten years. Quinquennial censuses could be envisaged, if necessary on a less detailed basis than the decennial ones, perhaps limiting complete enumerations to age, sex, marital condition, and occupation, and supplementing such inquiries with additional data collected on a sample basis in conjunction with the census. Periodic sample surveys to provide population estimates by sex and age and, perhaps, other characteristics should be considered for national estimates or geographical sub-divisions of the nation.

## 2.3 *Birth and death registration and statistics*

Completeness of registration of births and deaths is of course a basic requirement and should be checked by suitable methods, including, when appropriate, sampling.

Even in countries where civil registration is practically complete, individual records, and consequently statistics, are often deficient as regards the social, occupational, and economic characteristics of the individuals concerned. Since it is undesirable to complicate the work of registrars by increasing unduly the number of questions on the birth and death certificates,

studies of such characteristics could, if necessary, well be carried out by special sampling investigations.

#### 2.4 *Health statistics*

2.4.1 The conference recognized that the *statistics of causes of death* remained one of the most important elements of health statistics, which in many countries served as the main basis for establishing health policies.

Although considerable progress had been made in past decades at both national and international levels in this respect, there was still room for improvement, particularly as to the accuracy of the diagnosis of cause of death.

In order to be accurate the causes of death had to be certified by physicians.

In order to be truthful the physician had in certain countries to be protected against the legal and psychological consequences of his certification of certain causes. The safeguarding of professional secrecy in certain countries was therefore definitely desirable.

The complexity of biological and pathological processes is such that many deaths do involve more than one cause; contributory causes have therefore to be recorded in their proper time and causal relationships. The universal adoption of the International Form of Medical Certificate of Cause of Death<sup>4</sup> recommended by WHO could greatly contribute to progress in this respect.

Countries should in addition develop tabulation of joint causes based on proper samples of death certificates.

Studies should also be carried out where possible to check the accuracy of medical certification at various ages and in various communities by comparison with post-mortem records and by other available methods.

2.4.2 The conference recognizes that the statistics of causes of death are inadequate in meeting all the needs of health planning and research and that such statistics need to be supplemented by *morbidity statistics*, making use of sampling methods where these are indicated.

Even in statistically advanced countries, there is still much room for the improvement and development of morbidity statistics even though their importance is becoming more and more widely recognized.

The conference wished in this connexion to refer to the report of the WHO Conference on Morbidity Statistics,<sup>5</sup> held in November 1951, which

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<sup>4</sup> See World Health Organization (1948) *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*, Geneva, 1, 345.

<sup>5</sup> *Wld Hlth Org. techn. Rep. Ser.* 1952, 53, Part I, p. 5

contains a description of the various types and sources of morbidity statistics and recommendations as to their use, which the conference endorses.

The conference wished to emphasize the social and economic importance of morbidity statistics, apart from their health significance: useful conclusions could be drawn from certain sickness surveys, statistics of absenteeism from work, etc., even when the causes of such absenteeism or the medical characteristics of the cases of sickness were not based on medical certificates.

2.4.2.1 The conference agreed that although *notifications of communicable diseases* represented in most countries a very small part of the true morbidity, they had an important public-health significance and should not be neglected.

As the completeness of notifications depended far more upon an understanding on the part of the medical profession of their practical value to their patients and to the community than upon the legal compulsion exercised to obtain them, it was desirable that health administrations, bearing this in mind, should review existing lists of notifiable diseases.

The task of the medical practitioner with respect to notification should be made as easy as possible.

The establishment by health administrations of panels of specialists or of general practitioners, constituting as far as possible a representative sample, and undertaking voluntarily to report one type or other of disease, communicable or otherwise, might often be more effective than a blanket obligation laid on all practitioners to report a large variety of conditions.

#### The conference

RECOMMENDS that WHO undertake a critical study of the results of such procedures, the conclusions of which should be communicated to health administrations and national committees on vital and health statistics, bearing in mind the principle that no single list of notifiable diseases fits the needs of all countries and that no single form of notification is satisfactorily applicable to all diseases.

#### 2.4.2.2

##### The conference

RECOMMENDS that WHO continue or initiate statistical studies of diseases or conditions, such as cancer, tuberculosis, rheumatic conditions, circulatory diseases, accidents, etc., which are major elements in the morbidity or mortality in highly developed countries.

#### 2.5 *Statistics of health institutions, personnel, and activities*

While fully aware of the difficulties involved in compiling internationally comparable statistics of health and medical institutions and of their faci-

lities, personnel, and activities, because of the lack of generally applicable definitions and standards, the conference recognized that there was a definite need and demand for that type of information which related to an important element of living standards as well as to a major factor of health work.

The conference therefore

RECOMMENDS that WHO pursue its efforts to collect and publish basic statistics in this field, and to develop, wherever possible, uniform definitions and norms applicable in areas having reached various degrees of development.

(B) AREAS WITH UNDERDEVELOPED HEALTH AND STATISTICAL SERVICES

2.6 *Health statistics*

2.6.1 In areas where at least a skeleton health service exists, the conference agreed that every effort should be made to maintain full records and to produce summarized figures of the cases of the various diseases treated at hospitals, clinics, etc., even though such summaries might give, at times, a misleading picture, e.g., denoting an increase of cases under certain headings when increased facilities, such as the establishment of treatment centres or survey teams, were made available to treat them.

2.6.2 Similarly, in areas, such as main towns, where compulsory registration of births and deaths exists, constant efforts, directed both to the local population and to the administration, should be made to improve the completeness of registration and the quality of the details recorded as to causes of death.

2.6.3 In areas where full information on the health conditions of the population cannot readily be obtained by fixed health and administrative machinery, medical surveys should be organized, possibly by using mobile medical teams.

These survey teams should record total populations and all vital events occurring during their survey period, and should aim at obtaining some details of causes of deaths.

Their work on morbidity rates may have to be limited to certain diseases only. If possible, the sample surveyed should be representative and large enough to enable reasonably accurate morbidity estimates for the whole territory to be calculated.

2.6.4 When a health programme is to be conducted in an area for the control of a particular health problem, the statistics needed for the evaluation

of its results should be made an integral part of the plans of such a programme.

The designing, collection, and analysis of the statistics should be entrusted to a qualified health statistician working in close collaboration at all stages with the technical officers in charge of the programme.

### 2.7 *Vital statistics*

2.7.1 In some territories or areas, compulsory registration cannot be introduced with any chance of success much before the corresponding certificates are required at various stages of an individual's life, e.g., age conditions for education, employment, or insurance, or inheritance claims requiring proof of death.

It is advisable in these cases to have legislation on compulsory registration of births and deaths in a form which enables the government to extend the areas of compulsory registration step by step as circumstances in any area may warrant.

A registration system is almost certain to be deficient in the first years after its introduction, and it will need steady pressure on the part of the government to make it more complete. Sampling inquiries may well be needed to estimate the degree of under-registration.

2.7.2 In view of the need for data on the rate of natural growth of the population for a territory considered as a whole—and also, perhaps, for its main sub-divisions—a sample survey in the absence of, or to supplement, a census to establish total population and the level of births and deaths is required.

In the territories or areas considered in section 2.7.1 the demographic survey should be on a much larger scale than the medical survey referred to in section 2.6.3; in fact the medical survey might well be a sub-sample of the demographic inquiry. It is possible to undertake an investigation into the level of births and deaths by inquiring into what has happened in a past period, but a more thorough method (which is, of course, likely to be more costly as well) is to make arrangements for recording events as they occur. In either case, the demographic survey will require active field work to ensure that the coverage of the inquiries is complete.

2.7.3 In some territories or areas the social background may make a system of compulsory registration of births and deaths an immediate possibility, although its introduction on a large scale may not be practicable in view of limited resources, particularly in trained registry staff. In these circumstances the most advantageous course would be to start with a well-designed scheme of sample registration districts, and the scheme could be expanded as available resources allow.

2.7.4 It is to be noted that a demographic survey involving fertility and natality inquiries is urgently needed to obtain vital statistics in those countries in which vital registration systems are not yet sufficiently effective to provide adequate data, and also that such a survey is urgently needed in areas with reasonably good registration systems to provide population data for the calculation of vital statistics rates.

In instances where both a vital registration system, whether on a partial, complete, or sample basis, has been initiated and a sample survey is feasible, better vital and demographic statistics could be obtained through matching studies of the data obtained by registration and those obtained from the survey.

2.7.5 Detailed fertility studies are certainly practicable in the more restricted sample of the medical survey, but some fertility data may also be obtained in the larger demographic survey.<sup>6</sup>

2.7.6 In some areas the demographic survey may need extension to cover migration movements as well as natural growth.

2.7.7 In areas where no registration machinery is functioning one may envisage the establishment of a sample registration district in a zone in which health programmes are contemplated, and another in a zone where such programmes are not contemplated; continuous operation of such areas could yield significant information on the natural trend of vital events.

(C) AREAS IN AN INTERMEDIATE STAGE OF DEVELOPMENT OR OF UNEQUAL DEVELOPMENT

The conference realized that many countries and territories have areas with highly developed health and statistical services co-existing with others less advanced or even undeveloped.

2.8 The conference was of opinion that the *Principles for a vital statistics system* approved by the United Nations Economic and Social Council would be particularly useful in such countries and territories, in view of the priorities contained therein for the collection of statistics.

2.9 With respect to health statistics, countries in this category should consider which of the various types of health statistics envisaged for the more developed areas could be usefully and possibly collected.

<sup>6</sup> United Nations, Department of Economic Affairs and Department of Social Affairs (1949) *Population census methods*, New York (Document ST/SOA/Series A; *Population Studies*, No. 4)

United Nations, Department of Social Affairs (1949) *Fertility data in population censuses*, New York (Document ST/SOA/Series A; *Population Studies*, No. 6)

### 3. Methods of Improving the Quality of Health Statistics

Increasingly heavy demands for adequate vital and health statistics in recent years have attracted the interest of many national statistical offices to the possible advantages that could be derived from applying modern *sampling techniques* to the traditional methods of collecting and compiling health statistics. While sampling methods cannot be expected to solve all the problems of vital and health statistics, they nevertheless offer a means of obtaining reliable statistical information, in many cases more cheaply and more quickly than by conventional methods. Sampling techniques are capable of being applied to a considerable range of health inquiries in countries of widely differing stages of development of statistics and registration. Their use in countries without highly developed statistical systems offers particular promise in the direction of fuller utilization of limited resources. Accordingly,

The conference

(1) RECOMMENDS that the United Nations and WHO encourage the more widespread use of sampling methods, whenever appropriate, in the collection and preparation of the various types of vital and health statistics ; and that, as a first stage, the appropriate international agencies undertake the collection and dissemination of information on the methods employed by countries which have accumulated experience in the application of sampling techniques in the field of vital and health statistics.

(2) ENDORSES the recommendation embodied in the third report of the Expert Committee on Health Statistics, particularly the statement referring to the need for " experts in sampling theory, in the planning and the operation of field surveys, and in the analysis of morbidity data ", and to the recognition " that close co-operation between these experts and the administrators who are to use and properly interpret the data collected would be highly desirable ".<sup>7</sup>

#### 3.1 *Problems of confidentiality*

Vital and health statistics require extensive use of individual records of a confidential nature whose contents are ordinarily safeguarded by professional medical secrecy. The freedom of statistical access to such data, and the possible effects of concepts of confidentiality on the accuracy of the data supplied, vary considerably between countries by reason of differing social attitudes and dissimilarities in legislation.

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<sup>7</sup> *Wld Hlth Org. techn. Rep. Ser.* 1952, **53**, 10

The conference discussed various devices at present employed to satisfy secrecy requirements, such as the identification of individual records by number rather than by name, or the transmission of such records in sealed envelopes. It was also recognized that there are instances in which confidentiality cannot be maintained, as, for example, the prompt identification of a person incurring a communicable disease. The conference felt that the intimate relationship between this problem and deep-rooted traditions and legal conditions in many countries required that further study be undertaken before any specific recommendation applicable to all countries could be made. Accordingly,

The conference

RECOMMENDS that the World Health Organization continue to study this matter on the lines suggested in the third report of the Expert Committee on Health Statistics, i.e., "with a view to the development of practical measures and procedures that would satisfy both the ethics of medical practice and the essential needs of scientific research and of medical planning".<sup>8</sup>

### 3.2 *Instruction of medical practitioners and students with particular reference to certification of cause of death*

Recognizing the fundamental importance of accuracy and preciseness in the diagnostic information used in compiling all types of vital and health statistics, the conference agreed on the need to keep this basic statistical requirement constantly before the attention of medical practitioners through a continuing programme of orientation and instruction of physicians on the purposes and methods of meeting it.

While improvement in the quality of medical information supplied by physicians is desirable for all individual records of illnesses, accidents, hospitalization, etc., the conference considers that a particular need exists for additional efforts in developing suitable materials and methods for improving the accuracy of the certification of causes of death.

The conference noted the useful guidance which could be obtained in this respect from the methods used by countries which have had considerable experience in dealing with the problem. It felt that there was definite value in providing formal instruction for undergraduate medical students in elementary statistical methods, in the value of health statistics, and in the principles and purposes of medical certification of causes of death. A more immediate improvement, however, was likely to be obtained by efforts directed towards medical practitioners actually concerned with certifying causes of death. Accordingly,

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<sup>8</sup> *Wld Hlth Org. techn. Rep. Ser.* 1952, 53, 23, section I.4.8

#### The conference

(1) RECOMMENDS that countries allocate the resources necessary for the educational instruction of medical practitioners to be carried out through any convenient channel of communication (pamphlets, instructions, explanations on death certificates, articles in the medical press, group talks, etc.). Particular attention is called to the promising results obtained by some countries from inquiries directed by official agencies to certifying physicians regarding unsatisfactory entries on death certificates.

(2) FURTHER RECOMMENDS that WHO, through the WHO Centre for Classification of Diseases, or otherwise, compile and evaluate the experience acquired with various methods of improving medical certification; distribute this information to countries for information, study, and eventual application; take an active role in producing suitable educational material; and suggest methods of approach in evaluating and improving the quality of medical certification.

### 3.3 *Training of statistical personnel*

The conference agreed unanimously on the need for adequate educational and service training of personnel engaged in the collection, presentation, and interpretation of vital and health statistics. In view of the material difficulties with which a number of countries are confronted in securing training facilities, it was considered desirable that the appropriate international agencies prepare simple statistical training material designed to assist countries to train certain types of statistical personnel.<sup>9</sup> A further way of facilitating the training of statistical staff would be the preparation of a set of test material for coders to be circulated to all countries, thus offering the additional advantage of obtaining greater uniformity in coding of diseases, injuries, and causes of death.

The conference reviewed the training activities carried out so far by the World Health Organization and by the United Nations, and expressed satisfaction with the way in which this programme has been executed through fellowships, assistance to educational institutions, training centres, and seminars; a notable example is the co-operative project which resulted in the recent establishment of a permanent Inter-American Center of Biostatistics in Santiago, Chile.

The respective responsibilities of WHO and the United Nations in conducting training programmes was considered, and the need for a conti-

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<sup>9</sup> The conference was informed that the Statistical Office of the United Nations was currently preparing a handbook on vital statistics methods which would provide a manual or textbook for operating statistical personnel.

nuation of the present close collaboration was emphasized. In this connexion, the conference learned with gratification that discussions had taken place at a technical level between representatives of both organizations to ensure the closest collaboration in this and other fields.

The conference also noted and endorsed the recommendations of the Expert Committee on Health Statistics at its first session on the teaching of health statistics and the training of personnel in health statistics,<sup>10</sup> and those on training embodied in the third report of the same committee.<sup>11</sup>

The conference

RECOMMENDS that WHO and the United Nations continue and possibly expand their co-operative training activities in health and vital statistics.

The conference

FURTHER RECOMMENDS that national committees on vital and health statistics assist in securing the training of statistical staff for their own countries through the appropriate administrative channels, recognizing the constitutional limitations on the ability of international agencies to initiate training fellowships.

#### 3.4 *Co-operation with persons concerned with supplying needed data*

The conference accepted the importance of establishing and maintaining the co-operation of persons concerned with supplying source information for the various types of statistical investigations in the field of health. A number of different methods of achieving these objectives was discussed, and it was generally agreed that the following points, among others, should be considered in seeking these objectives :

(a) The investigation should be preceded by a preliminary review designed to ensure that maximum use is made of information already existing.

(b) Care should be taken not to burden the respondent unduly by asking non-essential questions or questions to which a reliable answer cannot reasonably be expected.

(c) The draft form of the questionnaire should be discussed with a small group of those who will be required to complete it and should be subjected to a preliminary trial before its final form is determined.

(d) The respondent should be clearly informed as to precisely what is required.

<sup>10</sup> *Wld Hlth Org. techn. Rep. Ser.* 1950, 5, 10, section 8

<sup>11</sup> *Wld Hlth Org. techn. Rep. Ser.* 1952, 53, 26, section I.6.2

(e) Some incentive should, if possible, be provided, and if notifications of compulsory character are required, care should be taken that they are duly carried out.

(f) Incomplete or incorrect forms should be followed up promptly to demonstrate that the data are examined critically.

(g) The results of the inquiry should be published as promptly as possible to demonstrate that practical use has been made of the data supplied.

(h) Personal and informal contacts with respondents should be maintained to the fullest possible extent.

(i) In discussion and correspondence, respondents should be approached at an appropriate level and in appropriate language.

In the particular case of securing co-operation from the medical profession, the importance of some elementary statistical training for medical students was stressed. The conference also noted that the task of securing co-operation from persons concerned with supplying needed data is essentially a problem in human relationships requiring an understanding of the motivations, attitudes, and behaviour of respondents. Accordingly,

The conference

RECOMMENDS that, in the administration of operations concerned with the collection of health statistics, the importance of these relevant considerations be recognized.

### 3.5 *Role of the WHO Centre for Classification of Diseases*

The conference reviewed the work of the WHO Centre for Classification of Diseases and noted the number of highly useful projects carried out by the Centre since its establishment in 1951.

The work consisted of advice and assistance in the application of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*<sup>12</sup> through correspondence, consultation with national offices, preparation of guides and instructions, organization of a training course for coders, and basic studies on certain problems affecting the comparability of statistics. Results of these activities having wider international significance and practical application were incorporated in four pamphlets published as supplements to the *Bulletin of the World Health Organization*.<sup>13</sup> The Centre is also taking an active part in the preliminary

<sup>12</sup> World Health Organization (1948-9) *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death*, Geneva, 2 vol.

<sup>13</sup> World Health Organization (1952) *Medical certification of cause of death. Instructions for physicians on use of International Form of Medical Certificate of Cause of Death*, Geneva (*Bull. Wld Hlth Org.*, Suppl. 3)

World Health Organization (1952) *Comparability of statistics of causes of death*

work leading up to the Seventh Revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death in 1955.

The conference noted with satisfaction the valuable contribution of the Centre since its inception in dealing with problems arising in the application of the International Statistical Classification of Diseases, Injuries, and Causes of Death.

The conference

RECOMMENDS

- (1) that the work of the Centre be continued along similar lines ;
- (2) that, in view of the importance of making available to all countries the experience accumulated thus far in the actual application of the International Statistical Classification, WHO continue the present programme of dissemination of the results of the special studies undertaken by the Centre.

### 3.6 *Securing appreciation of the value of health statistics*

The conference agreed generally that useful returns could be expected to result from positive efforts on the part of statistical organizations to increase public and professional appreciation of the value of health statistics. It was considered that the most effective methods of doing so would be to ensure that the statistics produced were, in fact, of practical value, to stimulate the more widespread utilization of health statistics, and to make freely available consultative statistical services to the persons or agencies whose appreciation was being sought.

The special importance of securing wider appreciation by the medical profession for various types of vital and health statistics is evident. The types of activity appearing to be most successful in this respect with the medical profession might be summarized as follows :

- (a) Promotional measures through education at both undergraduate and postgraduate levels.
- (b) Promotional measures by publication of articles on biostatistical and biometrical studies in widely read medical journals.

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*according to the Fifth and Sixth Revisions of the International List, Geneva (Bull. Wld Hlth Org., Suppl. 4)*

World Health Organization (1953) *Amplification of medical certification of cause of death. Inquiries to certifiers concerning incomplete or vague statements*, Geneva (Bull. Wld Hlth Org., Suppl. 5)

World Health Organization (1953) *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death : Addendum 1. Supplementary interpretations and instructions for coding causes of death*, Geneva (Bull. Wld Hlth Org., Suppl. 6)

(c) Promotional measures through freely extending statistical advice and collaboration in medical research projects.

The conference noted the fact that the role of vital and health statistics as essential tools for the formulation and administration of public-health programmes is frequently underestimated. Accordingly,

The conference

RECOMMENDS that national committees on vital and health statistics continue to work on the lines that the demonstration of the practical uses of vital and health statistics and the provision of efficient and competent advisory statistical services are the most effective methods of securing appreciation of their value.

#### 4. Implementation of International Regulations or Recommendations

##### 4.1 *Application of WHO Regulations No. 1*<sup>14</sup>

The conference reviewed the extent to which the various provisions of the WHO Regulations No. 1 are at present being applied by countries, as illustrated by a summary of national replies to a questionnaire on the subject. While noting the variation among countries in adherence to several Articles of the Regulations covering the publication of statistics of causes of death by areas and by age-groups, the conference expressed general satisfaction with the demonstrated value of Regulations No. 1 in ensuring international comparability of mortality statistics.

The conference therefore

RECOMMENDS

(1) that WHO gradually build up additional information on the national practices and procedures affecting the ability of countries to apply the various Articles of Regulations No. 1, and to distribute this information periodically to each country. WHO might similarly explore the possibility of securing information on unpublished national mortality statistics tabulated in greater detail than is required by the Regulations; and

(2) that WHO examine the significance of the diversity in the application of Articles 3 to 7 inclusive for possible consideration in connexion with the Seventh Revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death.

##### 4.2 *Application of WHO definitions of "live birth" and "foetal death"*

The conference examined a summary, based upon national replies to questionnaires, indicating the present status with regard to the adoption

<sup>14</sup> *Off. Rec. Wld Hlth Org.* 13, 349

of the international definitions of live birth and foetal death in different countries. Although several factors affecting the acceptance of the definitions were recognized, e.g., the difficulties of securing legal implementation and of obtaining data on foetal deaths occurring in the early stages of gestation, the conference nevertheless endorsed the adequacy of the definitions and their importance in achieving a greater measure of international comparability in related statistics. The conference recalled the recommendation of the WHO Subcommittee on the Definition of Stillbirth and Abortion of the Expert Committee on Health Statistics for registration of foetal deaths occurring after the twenty-eighth week of gestation as a minimum with gradual extension of registration to include "foetal deaths" occurring before 28 weeks of gestation.<sup>15</sup>

The conference

RECOMMENDS

(1) that countries which are unable to change the legal definitions for registration purposes should attempt to publish statistics of live births and foetal deaths in accordance, so far as possible, with the international definitions by adjusting for the differences in the definitions. (In this connexion, attention is drawn to the useful tabulation procedures employed in certain countries in distinguishing for statistical purposes between "true" foetal deaths and live-born infants dying before registration.)

(2) that WHO compile information on national experience in applying those definitions, for study on the occasion of the Seventh Revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death.

#### 4.3 *Principles for a vital statistics system*

As mentioned in section 2.1.1 (see page 7), the conference examined the *Principles for a vital statistics system* prepared by the United Nations, and endorsed the *Principles* as an aid to countries now in process of organizing or reorganizing their vital statistics system, as well as to countries appraising their systems with a view to improving the quality and comparability of their existing statistics. The use of the document as an aid in teaching applied statistics was also noted.

The conference noted the resolution (469(XV)D) of the United Nations Economic and Social Council which suggested, inter alia, that "as facilities and resources permit, governments review and appraise their procedures for registering vital events and compiling vital statistics, taking into consi-

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<sup>15</sup> See *Wld Hlth Org. techn. Rep. Ser.* 1950, 25, 13.

deration the principles for a vital statistics system, and introduce such changes as are feasible to improve national statistics and their international comparability in this field".<sup>16</sup> Accordingly,

The conference

RECOMMENDS that the United Nations give assistance, on request, to countries in the use of the *Principles for a vital statistics system*, and that, from time to time, the United Nations compile information on their implementation in the various countries, and transmit such information to the responsible administrations and arrange for its transmission to national committees on vital and health statistics.

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<sup>16</sup> United Nations, Economic and Social Council (1953) *Economic and Social Council. Official Records: Fifteenth Session, 31 March-28 April 1953. Supplement No. 1. Resolutions*, New York, p. 12 (Document E/2419)

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