

As was to be expected, the flow of queries on specific coding problems has decreased as those using it have become more familiar with the *Manual* and with the supplementary interpretations and instructions, and as their initial problems have been solved. During this first period the Centre has been building up a file of decisions made and rulings given, of errors discovered and amendments proposed : all material to be considered at the time of revision. In some of the more recent projects the emphasis has shifted from advice on the present Classification to preparation for revision.

In the immediate future, therefore, the work of the Centre will become more and more concerned with the preparations for the next revision of the Classification; at first with the completion of the work still in hand on the "exception" inquiries and the residual categories, later with the preparation of documents from the revision material in a form suitable for the use of the Advisory Group and eventually of the Revision Conference. Indeed, if the Centre is to become a permanent feature of the Organization, it is evident that its role will inevitably alternate between these two functions of advice on the application and interpretation of one revision and of help in preparation for the next.

TRAINING OF STATISTICAL PERSONNEL : ROLE OF THE WORLD HEALTH ORGANIZATION *

The policy of the World Health Organization for the training of statistical personnel emerges from the "general programme of work covering a specific period" which the Executive Board of the Organization laid down early in 1951.¹ This stipulates that each country must have at least a nucleus of health workers who have acquired the necessary modern skills and knowledge to impart to their colleagues and students. It also recognized that the expansion of technical education by such methods as the granting of fellowships and the promotion of wider teaching facilities is an investment which gives returns out of all proportion to the original outlay. Further, international co-operation is regarded as a useful stimulant to, and component of, national effort. The development of training centres and seminars on such subjects as biostatistics, conducted in collaboration with the United Nations and specialized agencies, was also recognized as being in keeping with the policy of WHO.

In pursuance of this broad policy, the programme of WHO for the training of statistical personnel has consisted largely of the award of fellow-

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¹ *Off. Rec. Wld Hlth Org.* 1951, 33, 55

ships in health statistics, and of the conducting of several seminars or training centres in vital and health statistics in conjunction with the United Nations and with the governments of the host countries concerned.

Award of WHO fellowships in health statistics

The following figures show that the number of WHO fellowships awarded in health statistics, including those granted to fellows attending seminars and training centres, has been increasing in recent years :

<i>Year</i>	<i>Number of WHO fellowships in health statistics</i>
1947	5
1948	1
1949	—
1950	3
1951	24
1952	22

It is hoped that the WHO fellows thus trained will be able to exercise an influence in the expansion of training facilities for statistical personnel to suit national requirements and in improving statistical systems.

Seminars or training centres in vital and health statistics

During the years 1950-52 WHO collaborated with the United Nations and with the governments of Chile, Egypt, Ceylon, and Japan in organizing and carrying out training programmes for the regions of the Americas, the Eastern Mediterranean, South-East Asia, and the Western Pacific, respectively. In all these cases the chief objective of the training activity was to invite responsible statistical workers of the various countries in each region to participate in a programme designed to give them such training as would tend to improve national vital and health statistical services, so that the data collected by each country could better fulfil both national and international needs. Specifically, various activities in the training programmes were directed towards one or more of the following aims :

- (a) training personnel in organizational, methodological, and analytical techniques and practices of vital and health statistics;
- (b) familiarization of participants with the aims and working programmes of international agencies in regard to vital and health statistics;
- (c) dissemination of information on international standards, and recommendations to improve national statistics and international comparability;
- (d) development of close working relationships and co-ordination of effort among national agencies concerned with the registration of vital events, public-health services, and statistical services—the three agencies responsible for the various phases of vital statistics and health statistics systems;

(e) exchange of information and ideas between technicians in the field of vital and health statistics for adaptation and modification of national systems; and

(f) establishment of professional contacts among statisticians of the different countries of a region and with those of the international agencies.

The duration of training, and the number of participants at each training centre or seminar, are shown in table I.

TABLE I. NUMBER OF PARTICIPANTS AT WHO-ORGANIZED TRAINING CENTRES OR SEMINARS

Training centre or seminar	Place and country	Year	Duration	Number of participants
Inter-American Seminar for Biostatistics	Santiago, Chile	1950	12 weeks	49
International Training Centre on Vital Statistics and Health Statistics for South-East Asia	Nuwara Eliya, Ceylon	1951	12 weeks	32
Training Centre on Vital Statistics and Health Statistics for Eastern Mediterranean	Cairo, Egypt	1951	8 weeks	37
Western Pacific Regional Seminar on Vital Statistics and Health Statistics	Tokyo, Japan	1952	7 weeks	33
* Total				151

Altogether, 151 responsible officers engaged in the development of national statistical services in four of the WHO regions have so far received some guidance and training, including, in some cases, practical suggestions for the improvement of statistical work in the countries of their region. These groups were considerably heterogeneous, comprising both medical and non-medical personnel, of whom some had previously received highly specialized basic training in statistical theory, whereas some others had practically no knowledge of fundamental statistical methods but had been engaged for a number of years in the collection and publication of statistics and had acquired some practical experience. Both the participants and members of the teaching staff also represented a variety of statistical interests, agency affiliations, official statuses, and statistical backgrounds.

The meeting of such heterogeneous groups at the different training centres, although presenting obvious difficulties and consequently some disadvantages, was nevertheless an asset, as it enlightened the discussions by providing a broader view of statistical activities and helped in developing ideas for co-ordinating these activities. The varied knowledge and experience thus gained added something of great practical importance to what could be obtained from textbooks or from the statistical literature currently published.

The method of training consisted for the most part of group discussions,

which took place after each lecture. A special feature of these centres was the emphasis laid on practical work.

A good deal of teaching material was prepared and distributed in the form of lecture notes, reprints of important recent articles from professional journals, pamphlets, textbooks, vital and health statistics reports, and yearbooks of both national and international agencies. Each participant was thus able to build for himself a useful reference library on vital and health statistics to which further additions could be made. This literature was provided in the hope that some of the participants in responsible government positions would be able to translate the material into national or local languages for the training of statistical personnel in their own countries. In fact, the discussions at these centres brought out the need for holding similar in-service training programmes at the national level in local languages.

A significant advance was made for the Spanish-speaking countries in the Americas by the establishment in 1952 of a permanent Inter-American Center of Biostatistics in Santiago, Chile. It has been jointly sponsored by the Government of Chile, the United Nations, and the World Health Organization for the purpose of contributing to the improvement of the vital and health statistics in Central and South America by training technical personnel. Courses of longer duration and covering a variety of special fields in vital and health statistics are offered, and practical in-service training is arranged. In November 1953 the first class completed a nine-months course, of which six months were devoted to academic studies and three months to practical training in various field programmes. It was attended by 31 students from 15 different countries.

Further, WHO and the United Nations are planning to collaborate with the Government of Afghanistan in establishing a centre, with courses in the Farsi language, to train basic statistical personnel in that country in elementary health statistics.

A training course for coders was held by WHO in June 1951 in Geneva in connexion with the application of the International Statistical Classification of Diseases, Injuries, and Causes of Death, 1948 Revision. It was attended by 20 participants drawn from 16 different countries of the European region.

It is expected that the teaching material supplied and the knowledge and experience gained by the participants in all these teaching programmes will help them in providing training for a wider circle of national statistical workers, with the assistance, if possible, of international agencies.

The various courses given at these centres have covered such subjects as methods employed in the collection and analysis of vital and health statistics, application of the International Statistical Classification of Diseases, Injuries, and Causes of Death, and refresher courses on statistical methods and mathematics.

Because of the recognition afforded to these activities at the highest official level by host governments and other countries of the region, and the publicity given to them, an increased awareness was created in the regions of the valuable role that improved statistical services can play in national development.

During these training programmes the useful work which national committees on vital and health statistics have already performed in several countries was discussed, and the participants were made aware of the need to have similar committees established in their countries or to stimulate their work where they already existed. The association of this type of trained personnel with the work of the national committees on vital and health statistics will, it is hoped, go a long way not only to develop national training facilities for statistical personnel to suit national and local needs of various kinds, but also to improve generally the efficiency of statistical work.

Future programme

Looking ahead, it would seem that the activities of WHO in this field, at least in the near future, will be largely connected with :

- (1) awarding fellowships in health statistics to promising people already employed in responsible posts in their own countries ;
- (2) assisting regions and individual countries to conduct seminars or short-term in-service training programmes ; and
- (3) rendering assistance to national teaching institutions in enlarging and strengthening their teaching programmes.

The emphasis, therefore, is laid by WHO on the applied side of statistics. It is prompted by the desire to improve the quality and coverage of national statistics by a more efficient use of the staff and resources already existing within each region and country. The work of WHO does not duplicate the training afforded in academic institutions, where of course the first and the most necessary foundations in a statistician's training are and should be laid.

TRAINING OF DISEASE CODERS IN ENGLAND AND WALES *

In England and Wales a number of sources of health data have recently been exploited, and the General Register Office has had some experience in training the personnel involved. In 1943, a sampling survey of sickness

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