



EXECUTIVE BOARD

INDEXED

Sixty-fifth Session

Provisional agenda item 4



EXPERT COMMITTEE MEETINGS

Report by the Director-General

During the sixty-fourth session of the Executive Board in May 1979, the members of the Board, in view of the pressure of time during the short two-day session, decided to postpone the discussion of agenda item 7 (Report on expert committee meetings) to its next session.¹

In order to provide Board members at an early date with some of the relevant documentation, the Director-General herewith re-submits the document prepared for the sixty-fourth session (document EB64/4) in which the reports of six meetings of expert committees were presented (see Annex).

An addendum to this document will be submitted when further reports of expert committee meetings become available.

¹ See document EB64/1979/REC/1, p. 84.



Sixty-fourth Session

Provisional agenda item 7

EXPERT COMMITTEE MEETINGS

Report by the Director-General

In compliance with Regulation 10.6 of the Regulations for Expert Advisory Panels and Committees,¹ the Director-General submits this report on six meetings of expert committees whose reports² have been prepared in English and French since the sixty-third session of the Executive Board.

With regard to the report of the Expert Committee on Cancer Statistics dealt with in section 4, the Board's attention is drawn to the Expert Committee's proposal to establish four subcommittees (see paragraph 4.3.2 below). In reviewing this proposal, the Board may wish to consider the suggestion made in paragraph 4.5.

The six meetings of expert committees and their reports are reviewed hereunder, in the following order:

1. AFRICAN TRYPANOSOMIASSES
Report of a Joint WHO Expert Committee and FAO Expert Consultation
2. TRAINING AND UTILIZATION OF AUXILIARY PERSONNEL FOR RURAL HEALTH TEAMS IN DEVELOPING COUNTRIES
Report of a WHO Expert Committee
3. EVALUATION OF CERTAIN FOOD ADDITIVES AND CONTAMINANTS
Twenty-second report of the Joint FAO/WHO Expert Committee on Food Additives
4. CANCER STATISTICS
Report of a WHO/IARC Expert Committee
5. SAFE USE OF PESTICIDES
Third report of the WHO Expert Committee on Vector Biology and Control
6. CONTROLLING THE SMOKING EPIDEMIC
Report of the WHO Expert Committee on Smoking Control

¹ WHO Basic Documents, 29th ed., 1979, p. 93.

² For easy reference, copies of these reports are annexed to this document (for members of the Executive Board only).

1. AFRICAN TRYPANOSOMIASES

Report of a Joint WHO Expert Committee and FAO Expert Consultation Rome, 8-12 November 1976¹

1.1 Background information

The WHO Expert Committee on Trypanosomiasis met jointly with FAO experts, its previous meeting having been in 1968.² An expert review was particularly needed for WHO in view of the increased emphasis laid on research in the trypanosomiasis mainly as a result of the development of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.

1.2 The report

The report gives an up-to-date analysis of the geographical distribution and prevalence of the human and animal diseases and the distribution of tsetse flies in the 35 African countries that are infested. The latest information on parasitology, epidemiology and pathology is presented concisely yet comprehensively.

The report emphasizes the practical aspects of detection, treatment and control of the human disease, such as clinical symptoms, medical surveillance, and appropriate use of chemotherapeutics.

With regard to vector control, great emphasis is laid on the environmental impact of control operations. Biological control methods are at present considered impracticable. The key to making a lasting impact on the vector situation is proper land use management and maintenance.

Since a radical solution of the trypanosomiasis problem is not feasible yet, either through a medical approach or through vector control, the strategy should be based on continuous surveillance and control by the public health and veterinary services.

Simplification of techniques and expanded training are the prerequisites to the improvement of well-functioning national services. Research and training needs are covered in detail according to subject, and detailed costings of control operations are included.

1.3 The recommendations

The recommendations concentrate on needs in research and training, which are listed in order of priority as follows:

Training. The first priority for FAO and WHO should be to promote the establishment of a national core of experts in trypanosomiasis control and of research specialists.

Drug development. For both human and animal trypanosomiasis, the second priority should be the development of trypanocides. Studies on fundamental biochemistry and modes of action and the empirical screening of compounds are considered to be of equal importance.

Epidemiology and current control methods. For the human disease, emphasis should be laid on developing: methods of identification of pathogenic Trypanosoma, which are also crucial for animal reservoir studies; easily applicable tools for detecting infection in man; and simple means for reducing man-fly contact at the community level.

Pathogenesis. For WHO, the next priority should be research on the pathogenesis of the disease, with particular reference to adverse side-effects during treatment and to the immunopathological aspects. The main approaches required are experimental pathology and biopsy/autopsy studies in man.

¹ WHO Technical Report Series, No. 635, 1979.

² WHO Technical Report Series, No. 434, 1969.

These are the major areas relevant to the WHO Special Programme for Research and Training in Tropical Diseases. The six other areas considered of particular importance are:

Vector control by chemical methods. It is recommended that FAO carry out studies to improve methods for large-scale operations by aerial application, particularly in the dry savanna zone. In the human trypanosomiasis field, WHO should promote studies to improve techniques of aerial application of insecticides in the moist savanna as well as investigations on simple vector control systems suitable for self-help schemes by rural populations.

Antigenic variation and immune protection. An understanding of the mechanism of antigenic variation may lead to new insights into the immune pathology and create new possibilities for chemotherapy. This seems an essential step in the search for a vaccine, which would be very helpful in the control of trypanosomiasis in domestic animals.

Trypanotolerance. A study of the mechanisms responsible for this phenomenon found in cattle trypanosomiasis could help clarify the phenomenon of symptomless carriers in man.

Vector control by biological methods. For both animal and human trypanosomiasis, biological control of tsetse needs much investigation. It could open up entirely new aspects in the control strategy.

Land use. Criteria for comprehensive planning in land use should be defined and their application encouraged not only by FAO but also by WHO.

1.4 Implications for the Organization's programme

With regard to control, the detailed practical guidelines on control methods and principles in the report are of immediate relevance to national programmes. The proposals for the development of research under the Special Programme for Research and Training in Tropical Diseases were opportune and of crucial importance for the initial planning of this programme.

1.5 Comments

The meeting attached great importance to the inclusion in its report of accurate figures for the detailed costing of vector control operations and medical surveillance. The delay in finalizing the report was due to unforeseen difficulties in obtaining this information subsequent to the meeting.

The recommendations of the meeting, largely inspired by the public health needs, provided the basis on which the scientific working groups of the Special Programme for Research and Training in Tropical Diseases have since selected the priorities in research. For FAO, which has been in the process of preparing a 40-year programme for the control of animal trypanosomiasis, the meeting was of equally great importance.

2. TRAINING AND UTILIZATION OF AUXILIARY PERSONNEL FOR RURAL HEALTH TEAMS IN DEVELOPING COUNTRIES

Report of a WHO Expert Committee
Geneva, 12-16 December 1977¹

2.1 Background information

This Expert Committee meeting was jointly planned by the Divisions of Health Manpower Development and Strengthening of Health Services, with the participation of the Divisions of Family Health and Environmental Health. It was part of the efforts which contributed to the preparations for the International Conference on Primary Health Care held in Alma-Ata, USSR, in September 1978. Its purpose was to review the existing situation of delivery of health

¹ WHO Technical Report Series, No. 633, 1979.

care in rural areas, to clarify the main issues, and to give new stimulus to the use of health auxiliaries in the development of primary health care.

2.2 The report

In its report, the Expert Committee deals with training and utilization of auxiliary personnel for rural health teams in developing countries, in accordance with the interpretation given to rural development by the World Bank in its policy paper on this subject, namely as "a strategy designed to improve the economic and social life of a specific group of people - the rural poor".¹

The report considers the means of expanding the coverage of primary health services to the total population and gives an illustration of the classical pyramid of health services. It expresses support for the combined approach to health services and manpower development, defined as the functional integration of various elements of the health services and health manpower development systems for the improvement of the health status and quality of life of the population.

Most of the report is devoted to the development of rural health teams, their composition, training and management, and means of improving their efficiency. A strategy for developing rural health teams at national level is outlined and specific recommendations are made.

2.3 The recommendations

Ten recommendations are made by the Expert Committee, with the aim of helping national authorities to formulate plans of action to develop and improve their primary health care services in rural areas through training and utilization of front-line and intermediate workers for health teams. The recommendations stress the importance of political commitment at national level for a successful primary health care policy; the need for the full involvement and participation of the community, together with appropriate information support, for the success of any primary health care programme; and the need for the development of approaches likely to reinforce the health workers' status or "image". The report also recommends that the existing definitions of the word "auxiliary" be revised.

Other recommendations relate to: the composition of the health team; the educational programmes for front-line and intermediate-level health personnel; the training of their teachers; the management of rural health teams; and the establishment of national reference centres to undertake research, planning, training, implementation and evaluation, and the collection and dissemination of information relevant to primary health care and rural health personnel.

2.4 Implications for the Organization's programme

As an integral part of the medium-term programme for health manpower development, an interregional workshop has been planned to take place at the Western Pacific Regional Office in October/November 1979 to promote the implementation of the Expert Committee's recommendations. At the workshop, 20 participants from different developing countries will outline plans of action for the further development of rural health teams in their own countries. Subsequent seminars or workshops are envisaged at regional or national level to propagate the recommendations of the Expert Committee.

2.5 Comments

The recommendations of the Expert Committee have been reinforced by the recommendations of the International Conference on Primary Health Care and will serve as guidelines for the development of health services at peripheral level in developing countries. They will consequently be an important tool for reaching the goal of health for all by the year 2000.

¹ World Bank. Rural development, Washington, D.C., 1975 (Sector Policy Paper), p. 3.

3. EVALUATION OF CERTAIN FOOD ADDITIVES AND CONTAMINANTS

Twenty-second report of the Joint FAO/WHO Expert Committee on Food Additives
Rome, 3-12 April 1978¹

3.1 Background information

This meeting of the Joint FAO/WHO Expert Committee on Food Additives was the twenty-second in the series of meetings convened as a result of the recommendation of the Joint FAO/WHO Conference on Food Additives held in Geneva in 1955.

3.2 The report

The main groups of additives considered at this meeting were food colours, organic salts, microbial enzyme preparations, and sweetening agents such as sorbitol and xylitol, together with the food contaminants asbestos, lead, mercury, and tin compounds.

General topics discussed included requirements for toxicological testing, the problem of trace contaminants in food, animal feeding studies employing the progeny of exposed parents, and the need for international liaison among the several international groups involved in the toxicological evaluation of food additives and food contaminants.

3.3 The recommendations

The recommendations highlight the following actions:

(a) Food additives and food contaminants should be selected for accelerated systematic evaluation, in accordance with resolution WHA30.47 adopted by the Thirtieth World Health Assembly in 1977.

(b) FAO and WHO should convene an interdisciplinary group of experts to establish an inventory of compounds that have not yet been fully evaluated, or which need to be re-evaluated, and to classify them in terms of their potential hazard to health on the basis of toxicological knowledge and extent of use.

(c) WHO should take the initiative in establishing liaison with international groups concerned with the evaluation of food additives.

3.4 Implications for the Organization's programme

Systematic and accelerated toxicological evaluation of food additives and contaminants is foreseen within the framework of WHO's human health and environment programme (see resolution EB63.R19²).

3.5 Comments

For effective national food control programmes and the establishment of food standards within the Joint FAO/WHO Food Standards Programme, the toxicological evaluation of food additives and contaminants and the assessment of their potential risk to health is of great importance. The acceptable daily intake figures (ADI) are extensively used by national food regulatory departments of Member States.

¹ WHO Technical Report Series, No. 631, 1978.

² Executive Board, sixty-third session: Resolutions and decisions (document EB63/48), p. 22.

4. CANCER STATISTICS

Report of a WHO/IARC Expert Committee Madrid, 20-26 June 1978¹

4.1 Background

Since cancer statistics had not been discussed by a WHO expert committee for 20 years,² it was considered necessary to carry out a reappraisal of previous recommendations in the light of developments over the last two decades. Among these developments is the emergence of cancer as a major public health problem in many developing countries, a trend likely to gain further momentum with socioeconomic development.

4.2 The report

The report emphasizes the necessity to obtain a coherent and comprehensive picture of the cancer situation in a country. It identifies the various components of cancer statistics and underlines the importance of collating information derived from various sources, as well as continuously evaluating the reliability and significance of the collected statistics. It points out that many recommendations and guidelines formulated by previous expert committees have become outdated and must be replaced.

4.3 The recommendations

4.3.1 The report highlights the following priorities for further development:

- (a) International coordination is needed to collect and analyse data on etiological factors in cancer incidence so as to find effective preventive measures. For this purpose, cancer statistics should be analysed in relation to ethnic, cultural and geographical factors and matched with environmental statistics. WHO should formulate guidelines for the matching of data sets and help governments to resolve the conflict between the wish for complete confidentiality of personal information and the need for identification of health hazards in the population.
- (b) It is necessary to obtain international agreement on the methodology for evaluating the effects of treatment, particularly on criteria for assessing the quality of life after treatment and on the methods of adjustment for such variables as age and stage of disease.
- (c) In general, international discussion and agreement can be of most immediate value for methods of classification, the definition of statistical indices, and the uniformity of data collection on cancer.
- (d) In any country, priority should be given to establishing cancer registries in strategically chosen situations. It is also urgent to develop guidelines for the collection of cancer statistics in developing countries.
- (e) In the whole health sector, not only statisticians and epidemiologists but all health professionals should be trained in the generation and utilization of statistics. Statistical developments should be stimulated in important areas of health policy formulation and evaluation such as the evaluation of the social and economic impact of illness and the projection of disease frequency and resource requirements.

4.3.2 On the basis of these considerations the Expert Committee formulated 16 recommendations. It proposed, inter alia, the creation of four subcommittees of the WHO Expert Committee on Health Statistics, to deal with the following:

¹ WHO Technical Report Series, No. 632, 1979.

² WHO Technical Report Series, No. 164, 1959.

- (i) Cancer statistics in developing countries;
- (ii) Cancer survival statistics and measurements of quality of life;
- (iii) Health trend projections; and
- (iv) Social and economic costs of disease.

The last two subjects should not be restricted to cancer but should cover all areas of health.

4.4 Implications for the Organization's programme

The report contains an up-to-date review of cancer statistics and is an important milestone in the development of a coherent cancer statistics programme relevant to cancer prevention and control. In particular, it breaks new ground in several areas of growing importance, including the statistical needs of developing countries.

4.5 Comments

In accordance with Regulation 9.3 of the Regulations for Expert Advisory Panels and Committees,¹ the Executive Board is invited to examine the above proposal for the establishment of four subcommittees of the Expert Committee on Health Statistics. In this connexion, the attention of the Executive Board is drawn to resolution EB61.R29, and in particular to operative paragraph 3(5), which approved a recommendation "that for global coordination of the total programme, in accordance with WHO's constitutional role as the coordinating authority on international health work, a Director-General's coordinating committee should be established on a permanent basis to deal with high-level programme policy issues covering the whole range of problems directly or indirectly connected with cancer prevention, control and research". The Board may wish to refer the recommendation of the Expert Committee to the Director-General's Coordinating Committee on Cancer before it takes a decision on the establishment of the four subcommittees proposed.

5. SAFE USE OF PESTICIDES

Third report of the WHO Expert Committee on Vector Biology and Control Geneva, 3-8 October 1978²

5.1 Background information

The third meeting of the Expert Committee on Vector Biology and Control was concerned exclusively with problems related to the safe use of pesticides in public health and agriculture.

5.2 The report

The report identifies the needs of developing countries to promote the safe use of pesticides, and provides recommendations on action required at national and international levels. In discussing the problems of toxic impurities, the report gives a warning that more products containing toxic impurities may reach the market in the future.

In evaluating the hazards of pesticides developed for public health use, the main emphasis is given to insecticides developed for residual indoor application and the relatively narrow safety margin of some alternative insecticides is pointed out. The conditions on which the level of exposure depend are listed, leading to guidance on the more effective use of precautionary measures and on methods for monitoring exposure. Several other aspects of the safe use of pesticides are discussed, including information and training.

¹ WHO Basic Documents, 29th ed., 1979, p. 92.

² WHO Technical Report Series, No. 634, 1979.

Annex 1 of the report sets out the chemical structure of some new pyrethroids; Annex 2 summarizes the treatment of insecticide poisoning; and Annex 3 provides guidance on sampling and despatching specimens in outbreaks of poisoning.

5.3 The recommendations

Recommendations for national authorities provide guidance on specific organizational, legislative and other preventive measures required for the control of pesticides.

The Expert Committee recommends inter alia that WHO should continue field trials of new insecticides and promote environmental and toxicological studies on candidate compounds; it should continue to issue the FAO/WHO data sheets and other information on pesticides and maintain the existing presentation of the WHO recommended classification of pesticides by hazard. It should also continue the development of the WHO modular course on the safe use of pesticides.

Subjects recommended for future research include the study of the potential hazard of the presence of toxic impurities in pesticides.

5.4 The implications for the Organization's programme

With regard to the Expert Committee's recommendations to national authorities, their substance has been the subject of technical cooperation with several developing countries in the past. It is proposed to intensify this cooperation as much as possible.

In evaluating the safety of pesticides for use in vector control programmes, every effort will be made to enhance technical cooperation with Member States to enable them to achieve self-reliance in the evaluation of hazards posed by pesticides used under particular circumstances.

It is proposed to expand collaborative studies on the toxicology of pesticides of particular interest to WHO and to include a greater number of institutes in developing countries. For this, in addition to technical services and advice, support for manpower development and for laboratory facilities will be essential.

5.5 Comments

The Expert Committee's recommendations have given guidance for the future programme on toxicology and epidemiology of pesticides, with particular emphasis on those activities which will assist developing countries in promoting safe use of pesticides.

The Expert Committee has endorsed the programme developed by the Organization to remedy the health problems posed by ever-increasing use of pesticides in many countries, and has recommended its further development.

6. CONTROLLING THE SMOKING EPIDEMIC

Report of the WHO Expert Committee on Smoking Control Geneva, 23-28 October 1978¹

6.1 Background information

The meeting was held in accordance with resolution WHA29.55 adopted by the Twenty-ninth World Health Assembly in 1976, in which the Director-General was requested to convene an expert committee to review and evaluate the world situation with regard to smoking control.

¹ WHO Technical Report Series, No. 636, 1979.

6.2 The report

The report reviews the harmful health consequences of smoking, with particular emphasis on evidence established since the meeting of the WHO Expert Committee on Smoking and its Effects on Health in 1974.¹ It discusses the socioeconomic implications of tobacco use, contrasting the revenues made by governments in tobacco production with the health costs that governments must bear as a consequence of premature deaths, extra morbidity, and extra absenteeism from work caused by smoking-related diseases. Strategies for smoking control and specific components of smoking control programmes are also discussed, with sections on the monitoring of national smoking problems, information and education of the public, legislation and restrictive measures to control smoking, and helping the individual to stop smoking.

6.3 The recommendations

The Expert Committee considered that the recommendations of the 1974 Expert Committee meeting on Smoking and its Effects on Health are still valid and decided to include those recommendations as Annex 1 to its own report. In addition, new recommendations were addressed to:

- (a) All countries in general, proposing that non-smoking should be regarded as the normal social behaviour; that all forms of tobacco promotion should be prohibited; that tobacco export should be discouraged; and that more attention be paid by governments to the serious dangers for smokers in certain industrial occupations;
- (b) Developed countries, particularly to the effect that the export of tobacco containing higher levels of tar and nicotine than products marketed under the same brand designation in the country of origin should cease immediately and that tobacco products that are exported should carry the health warning and emission levels required in the country of origin;
- (c) Developing countries, and in particular those where the smoking habit is not yet widespread and where the short-term financial gain resulting from involvement in the tobacco business would be offset by long-term health costs due to smoking-related diseases, to the effect that high priority should be given to policies directed at the prevention of smoking, using legislation, educational approaches, etc., and that tobacco growing or manufacture should be discouraged, priority being given to the development of substitute crops, with international cooperation;
- (d) The United Nations system, urging collaboration with FAO, ILO, UNCTAD, UNESCO and other relevant agencies to prevent the spread of tobacco smoking.

6.4 Implications for the Organization's programme

This report provides a basis for WHO's activities on smoking and health. It will also serve for WHO's participation in the Fourth World Conference on Smoking and Health. This conference, to be organized by the Swedish National Smoking and Health Association and co-sponsored by WHO, will be held in Stockholm from 18 to 21 June 1979. The report will be useful in the preparations for World Health Day in 1980, which is to be devoted to smoking and health under the slogan: "Smoking or health: the choice is yours".

6.5 Comments

After taking a clear stand on the harmful health effects of smoking as established by the WHO Expert Committee on Smoking and its Effects on Health in 1974, WHO should now move on to review the possibilities of controlling the spread of the smoking habit. This can be done through information and education of the public, legislation, voluntary restrictive measures,

¹ WHO Technical Report Series, No. 568, 1975.

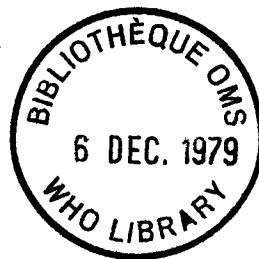
and help to the individual to stop smoking. Particular attention should be devoted to developing countries, which do not yet have as serious a smoking problem as the industrialized countries, but which will probably suffer increasingly from this problem as they develop economically unless steps are taken now to control the spread of the smoking habit. Great efforts should also be devoted to preventing youth from taking up the habit. The protection of the rights of non-smokers to breathe air unpolluted by tobacco smoke, particularly at the place of work, should be emphasized. Control of the smoking epidemic should form part of primary health care programmes.



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EXPERT COMMITTEE MEETINGS

Report by the Director-General

Addendum

In addition to the six reports of expert committee meetings presented in document EB63/3, two further reports have become available in English and French¹ and are reviewed in this addendum in the following order:

1. WHO EXPERT COMMITTEE ON BIOLOGICAL STANDARDIZATION

Thirtieth report

2. PARASITIC ZONOSSES

Report of a WHO Expert Committee with the participation of FAO

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1. WHO EXPERT COMMITTEE ON BIOLOGICAL STANDARDIZATION

Thirtieth report

Geneva, 7-13 November 1978²

1.1 Background information

At its thirtieth meeting, the WHO Expert Committee on Biological Standardization continued to broaden the horizons of the activities needed in the disciplines of medical biology with respect to the establishment of international standards and reference preparations. The developments that had taken place in the standardization of hormones since 1974, when the Expert Committee's entire meeting had been devoted to these substances, were reviewed and several standards for hormones established. The requirements for biological substances formulated more than 10 years earlier were brought up to date.

¹ For easy reference, copies of these reports are annexed to this document (for members of the Executive Board only).

² WHO Technical Report Series, No. 638, 1979.

1.2 The report

It was noted that international standards or reference preparations had been established for two antibiotics, one antibody, four antigens, one blood product, six endocrinological substances, 10 reagents and five miscellaneous substances. Studies were in progress for the establishment or replacement of five other reference materials.

A major part of the report is concerned with the reformulation of the WHO Requirements for Diphtheria, Toxoid Pertussis Vaccine, Tetanus Toxoid, Combined Vaccines (DPT and DT) and Dried BCG Vaccine. The Requirements for Influenza Vaccine (Inactivated) were also reformulated and Requirements for the production and control of Influenza Vaccine (Live) were formulated. These requirements have taken into consideration the developments that have taken place in the last decade. The reformulation of the Requirements for combined DPT vaccine called for a revision of the manuals for the production and control of the vaccines concerned in order to transfer the technology to the developing world. Appropriate amendments have been made and the revised manuals distributed.

It has been recognized for many years that the exhaustive drying applied to biological reference materials in conformity with international standards in order to attain satisfactory stability has produced a product that may take up water rapidly from the atmosphere when the ampoule is opened, unless the material is carefully protected from ambient humidity. It has been the practice to provide, where possible, guidance on the rate of water uptake by certain international standards and reference preparations. Such guidance, however, has been based on experimental results obtained with slow weighing procedures, and new techniques have revealed that moisture uptake of 100 g/kg may occur at 50% relative humidity within two or three minutes of opening the ampoule. In the case of the proposed reference preparation of bleomycin, moisture is taken up at a rate equal to that shown by phosphorus pentoxide, at least to a content of 70 g/kg, in one minute, at 20% relative humidity. By using special equipment, which is complicated and expensive, weighings of the bleomycin preparation may be effected at relative humidities low enough to prevent undesirable errors, but such equipment is not generally available - even to many national control laboratories.

The problem may be largely avoided by distributing an international standard in freeze-dried form and assigning a defined number of international units per ampoule, thus making it unnecessary to weigh quantities of the standard preparation. The total contents of the ampoule are removed with an appropriate solvent and the final volume is accurately adjusted. The Committee recommended that, whenever possible, future international standards and reference preparations should be prepared so as to allow the unit to be defined on the basis of the total contents of an ampoule. The Committee emphasized that, when such a procedure is used, satisfactory evidence is essential, in each case, to demonstrate that the amount of liquid filled into each ampoule does not vary by more than $\pm 1.0\%$.

In order to effect a gradual change to this new notation, the latest list of "Biological substances"¹ already shows the biological activity expressed as the number of international units contained in the ampoule and in addition, where appropriate, the international units contained in a calculated weight of the reference material.

Another most important innovation considered was the possibility of the provision of international working standards. This has particular relevance where the reference materials are in short supply and the provision of materials is unlikely to be available for the establishment of national standards. Furthermore, such international working standards would be of great assistance to those countries without national control laboratories.

¹ Biological substances: lists of International Standards, Reference Preparations, and Reference Reagents, 1979, Geneva, World Health Organization, 1979.

Finally, the part that the Expert Committee should play in the formulation of requirements for the quality control of kits and reagents used in diagnostic procedures was considered. This was a departure from previous activities but was considered to be of great importance in the improvement of medical care.

1.3 Implications for the Organization's programme

The Biologicals programme is continuing to fulfil the demands for the standardization of biological substances. The expression of activity in international units contained in each ampoule has recognized an important practical need in the use of the reference materials. Of particular importance is the reformulation of the requirements for the manufacture and control of several vaccines in order to take into account modern technology and improve the products used in childhood immunization programmes.

2. PARASITIC ZONOSSES

Report of a WHO Expert Committee with the participation of FAO
Geneva, 14-20 November 1978¹

2.1 Background information

This expert committee meeting was the first to discuss the subject of parasitic zoonoses in a comprehensive manner. However, special groups have been convened by WHO, alone or jointly with FAO, to consider research, practical control programmes, and other aspects of major parasitic zoonoses, such as echinococcosis (hydatidosis), taeniasis (cysticercosis) and parasitic zoonoses covered by the WHO Special Programme for Research and Training in Tropical Diseases (leishmaniasis, trypanosomiasis, schistosomiasis, and filariasis, as well as malaria). The FAO/WHO Expert Committee on Zoonoses² and the WHO Expert Committees on Fish and Shellfish Hygiene³ and on Microbiological Aspects of Food Hygiene,⁴ both convened with the participation of FAO, also dealt to some extent with parasitic zoonoses.

2.2 The report

The report examines socioeconomic and sociocultural aspects in detail, focusing on the factors influencing prevalence, which include the introduction of large-scale intensive animal production, effects of human settlement, fluctuations in animal populations, and the behavioural patterns prevalent among certain peoples that determine food habits and attitudes towards domestic animals.

A discussion follows which centres on the principles of surveillance, prevention, control, and elimination of parasitic zoonoses, considerable attention being devoted to immunological questions, including the choice of immunodiagnostic techniques for mass testing and recent developments in immunization.

The role of food in the transmission of parasitic zoonoses is also dealt with, and suggestions are made regarding the introduction of control procedures to deal with this hazard. Simple preventive measures are advocated for use among persons who, because of their occupation, are at high risk of contracting these infections.

¹ WHO Technical Report Series, No. 637, 1979.

² WHO Technical Report Series, No. 169, 1959, and No. 378, 1967.

³ WHO Technical Report Series, No. 550, 1974.

⁴ WHO Technical Report Series, No. 598, 1976.

The report then presents an extensive and informative review of the principal infections grouped according to various species of parasites and a summary of infections and infestations by other parasitic and allergenic arthropods. Each infection is described in detail - its manifestations in man, the animal vectors involved, modes of transmission, diagnosis, treatment, and prevention and control.

Annexed to the report are a proposed classification of zoonoses and a partial list of parasitic zoonoses, noting the causative organisms and the vertebrate animals principally involved. A further annex, dealing with the immunodiagnosis of parasitic zoonoses, lists the main infections and the immunological tests and antigens used in detection.

2.3 The recommendations

The Expert Committee made recommendations covering individual diseases and directed to field and laboratory workers, parasitologists, veterinary and public health agencies, governments, and international agencies (FAO and WHO). The following is a summary of the more important general recommendations.

(1) The simple definition of zoonoses contained in reports of the Joint FAO/WHO Expert Committee on Zoonoses¹ should be retained but kept under review by FAO and WHO in the light of practical and scientific developments.

(2) Socioeconomic evaluation should be an essential part of all programmes for the control of parasitic zoonoses, and more public health workers as well as veterinary personnel should be trained in the necessary epidemiological and economic methods. Moreover, FAO and WHO should encourage and assist Member States to carry out surveys on the health and other socioeconomic consequences of foodborne zoonoses.

(3) National and international surveillance of zoonoses in man and animals in general should be intensified.

(4) FAO and WHO should expand the programme for the preparation of international standards and reference reagents for the diagnosis of the major parasitic zoonoses.

(5) A comprehensive study of food production processes and certain dietary practices which contribute to the endemicity of some of the important food-transmitted parasitic zoonoses should be carried out.

(6) Special guidelines are urgently needed to provide advice on simple preventive measures to ensure the protection of farm workers and other personnel against the occupational hazards presented by zoonoses.

(7) The following aspects are considered important in the implementation of resolution WHA31.48, adopted by the Thirty-first World Health Assembly in 1978, on the prevention and control of zoonoses and foodborne diseases due to animal products:

(a) In the proposed zoonoses centres, parasitology, especially its epidemiological and immunological aspects, should receive adequate attention.

(b) The existing network of FAO/WHO collaborating centres for research and training should be extended by designating further centres for particular parasitic zoonoses - e.g., echinococcosis (hydatidosis) and taeniasis (cysticercosis) - which are at present covered only in a general way. Centres concerned with food hygiene should be encouraged to strengthen their activities relating to foodborne parasites, as should the centres dealing with laboratory animals.

¹ WHO Technical Report Series, No. 169, 1959, and No. 378, 1967.

(c) With respect to the international collection and dissemination of information, the WHO Weekly Epidemiological Record could be used more extensively for transmitting information to all governments on public health and economic problems related to parasitic zoonoses. For improving the communication of such information to WHO, national epidemiological bulletins should be utilized, as well as surveillance systems implemented by the FAO/WHO collaborating centres.

(d) In order to assist Member States in their programmes in this field, manuals and laboratory guides on methods of surveillance, prevention, and control should be produced. These should give particular attention to such parasitoses as toxoplasmosis, trichinellosis, toxocariasis, cestode infections, liver fluke infections (clonorchiasis and opisthorchiasis), and paragonimiasis. It is also important that general guides covering such subjects as problems of urban living, hazards related to environmental change, and foodborne diseases should deal adequately with parasitic diseases.

(e) In many veterinary, medical, and public health schools the teaching of parasitology needs to be strengthened and special attention paid to epidemiology, surveillance, and control. FAO and WHO should cooperate in this endeavour, particularly in developing countries. The interrelationship between the medical and veterinary professions concerning parasitic zoonoses requires that veterinary teaching staff should participate in the education of medical students. Moreover, specialized training in zoonoses should be made available to physicians and veterinarians.

(f) The training of auxiliary veterinary and medical personnel should be an integral and essential part of national programmes for the prevention and control of parasitic zoonoses.

(g) International and national seminars, workshops, training courses, etc., for personnel at various levels should be organized in different regions, with special emphasis on simple modern techniques, methods of surveillance, and field control.

(h) At the community level health education should be emphasized and the importance of community participation should be stressed.

(i) Collaborative research in parasitic zoonoses should be encouraged, with special emphasis on methods of surveillance and control.

(j) In developing the programme, use should be made of national institutions and appropriate nongovernmental organizations that are in official relationship with FAO and WHO in order to carry out specific tasks.

(k) In view of the changes in ecological conditions generated by large development projects, adequate international technical cooperation should be made available for the prevention, surveillance, and control of parasitic zoonoses which might emerge, or have emerged, in the areas concerned.

2.4 Implication for the Organization's programme

The Committee's report indicates particular areas in which WHO can cooperate with countries to improve their control programmes against parasitic zoonoses. These include: recognition of factors influencing prevalence; introduction of improved surveillance; prevention and control programmes; extension of the network of FAO/WHO collaborating centres by designating further centres for particular parasitic zoonoses - e.g. echinococcosis (hydatidosis) and taeniasis (cysticercosis) - which are at present covered only in a general way; expansion of the programme for the preparation of international standards and reference reagents for the diagnosis of the major parasitic zoonoses; extension of the number of WHO zoonoses centres, which would include epidemiological and parasitological aspects in their programme; improvement of international collection and dissemination of data on mortality and morbidity due to parasitic zoonoses; improvement of education and training in parasitology; elaboration of national, regional and global strategies and methods for surveillance, prevention and control of parasitic zoonoses; and strengthening of collaborative research.

Wherever zoonoses constitute a major public health problem their prevention and control should be integrated into primary health programmes. WHO should advise Member States on the most effective ways and means to achieve the best results in this area, which has so far been to some extent neglected.

2.5 Comments

This report meets a need for concise information in this field. The report not only provides practical advice to WHO Member States, identifies research needs, and recommends further work to be done by WHO, but can also be used for undergraduate and postgraduate education and training.

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