

Abstracts and Reports

FUNCTIONING OF THE INTERNATIONAL HEALTH REGULATIONS, 1983

The following report on the working of the international health regulations, reprinted from the World Health Organization's Weekly Epidemiological Record, was prepared in accordance with the International Health Regulations and in compliance with Resolution 19 of the Thirtieth World Health Assembly. The text of the report is based upon the information submitted by national health administrations concerning diseases subject to the International Health Regulations and other diseases subject to international surveillance.¹

Introduction

At the Alma-Ata Conference in 1978, the Member States of WHO decided to treat primary health care as an essential approach offering a real chance of achieving health improvement in all countries. They consequently undertook to implement the strategy of "health for all by the year 2000" through appropriate management methods, more especially the monitoring and evaluation of the actions undertaken and the results obtained in this sphere.

This involves the continuous development and strengthening of national epidemiologic services capable of deciding what information they require and working in close collaboration with the statistical services to produce information that will be significant and operational.

What is needed at the local and national levels is also needed at the global level, especially as regards the most important communicable

diseases. All countries need to know if unusual events have occurred in other countries and if special risks merit increased attention. This information must, of course, be as complete as possible so that the actual situation may be evaluated in a reasonable manner in the light of epidemiologic criteria.

It is also of the greatest importance that this information be transmitted without delay, since that is a necessary condition for taking appropriate and timely measures. These measures must, of course, be adapted to the situation and should not consist of the introduction of restrictive provisions without any epidemiologic justification and without any real effect as regards the spreading of diseases from country to country. The matter is more one of improving surveillance activities in relation to specific problems—such as analyzing food products by sampling methods, verifying and strengthening the vaccine coverage of population groups at risk, etc.

Reporting Practices

It should be noted that a number of countries do not invariably send periodic reports on

¹ See resolutions 47 and 48 of the Twenty-Second World Health Assembly (WHA 22.47 and 22.48) in World Health Organization, *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board, Volume 1, 1948–72*, Geneva, 1973.

the epidemiologic situation in their territories. For the period 1 January to 31 December 1983, 78 Member States provided such reports, compared with 82 in 1982 and 94 in 1981.²

On the other hand, it should be noted that the reports that are sent are better and better documented and increasingly contain descriptive interpretations of the numerical data. This is certainly evidence of progress in the development of national epidemiologic services and in understanding the value of promoting the exchange of information.

Unfortunately, the same progress is not to be noted regarding the notification of diseases subject to the International Health Regulations. In many cases Member States remain reluctant to make known without delay events that they have been able to record, or they report them so belatedly that the information has lost its main epidemiologic value from the point of view of the risk of transmission of disease to another country.

The main point of circulating information on abnormal situations is to warn the responsible epidemiologic authorities. In the light of the available information the responsible bodies decide what action to take to deal with the problem raised, whether it be, for example, a communicable disease or a contaminated foodstuff. In many cases countries adopt measures that are not epidemiologically justified because they have not developed a surveillance system capable of interpreting the information and correctly monitoring the situation.

Not being in a position to take selective and really effective measures, they believe that they are protecting themselves by enacting general requirements, the principal effect of which is to create a false feeling of security.

This could often be avoided were the countries to attempt to obtain fuller and more reliable information for a proper appreciation of the actual situation before taking hasty and inappropriate decisions.

The fear of excessive reactions partly ex-

plains the reluctance of some countries to give immediate and full notification. It is, in fact, they who are adversely affected by such an attitude. It is quite difficult nowadays to avoid statements by travellers or rumors put out by the various media, but such rumors coming from inadequately and incorrectly informed individuals or bodies have neither the status nor the value of verified and epidemiologically based data and are in general a considerable exaggeration of the real situation.

In such circumstances WHO is not in a good position to carry out its role of informing countries and collaborating with them for a realistic appreciation of the situation. Unless it receives sufficiently full and epidemiologically sound information from the countries affected, WHO is unable to give a proper reply to those who seek information and to reduce to its proper proportion the anxiety spread by unqualified sources. This often has the result of adversely affecting, for example, the movement of goods or tourism, an effect which the countries concerned were hoping to avoid.

The Automatic Telex Reply Service (ATRS)

This service is operational 24 hours a day for the immediate dissemination of epidemiologic information that has to be brought to the attention of health officials in the various countries without delay. The content of the messages is changed as often as required, and a weekly summary is available at the end of the week from Thursday night until Monday morning (Geneva time).

The number of calls has continued to decline. There were, on the average, only 379 calls a month in 1983 as against 404 in 1982 and 451 in 1981. These figures are definitely lower than they should be in the light of the number of potential users.

This is largely due to increasing lack of interest on the part of callers who too often receive a message to the effect that there is no new information. Unfortunately, for reasons already stated, the ATRS is unable to give new

² For the specific countries reporting, see World Health Organization, *Weekly Epidemiological Record* 59(51/52):394, 1984.

information at the same time as the media report the occurrence of situations that are the source of apparently serious concern. WHO cannot consider anything except information directly supplied by national health authorities, whereas the media can draw upon a great many different sources that are, however, not of equal value.

In such circumstances it should not be concluded that WHO has no information but more often that the information received is not of a sufficiently official nature to be relayed without the agreement of the country concerned. In other cases the information, although official, has been obtained with such delay that its dissemination by telex is not justified, publication in the *Weekly Epidemiological Record* being adequate. Lastly, in other cases it seems preferable for the ATRS not to refer to certain information because it is known from experience that unless such information is properly explained, some countries will react excessively to it, to the prejudice of the country from which the information originates, as has already been reported.³

This previous report referred to the projected modernization of the equipment so that longer messages giving a truer picture of the epidemiologic situation could be transmitted. This has not yet been possible, but we may well ask whether there is any point in pursuing this course if the obstacles encountered due to the late arrival or absence of officially approved communications are to continue, or if there is a danger that the information will arouse excessive alarm leading to unjustified or harmful decisions.

The *Weekly Epidemiological Record*

The *Weekly Epidemiological Record* (WER) has several purposes. First, it enables WHO to meet its formal obligations in accordance with a number of articles of the International Health Regulations and various related

recommendations of the World Health Assembly. The WER disseminates, as received, information officially transmitted to it by Member States concerning diseases subject to the International Health Regulations and other diseases under surveillance. As mentioned above, and for the reasons stated, this information is often incomplete in comparison with the actual situation, or relatively belated. The information would also be more valuable were it accompanied by epidemiologic details that would assist in its interpretation and avoid unwarranted reactions. The value of the WER as a tool would be greatly increased thereby.

Among the various items of official information published by the WER, special mention should be made of updatings concerning *Yellow Fever Vaccination Centres*, *Ports Designated in Application of the IHR*, and *Vaccination Certificate Requirements for International Travel*.

The WER is also a channel for the dissemination of progress reports on programs that play an essential role in the objective of "health for all by the year 2000", e.g., the Diarrheal Diseases Control Program, the Expanded Program on Immunization, the Malaria Action Program, etc.

Finally, reports on epidemiologic incidents of general interest or on national experiences are also an important part of the WER.

Because the contents of the WER are greatly influenced by the information received from national health authorities, it is essential that these authorities send reports to the editor without delay, describing not only their successes but also their difficulties, so that the international medical community may benefit.⁴

Vaccination Certificate Requirements and Health Advice for International Travel

Very few complaints have been recorded concerning vaccination certificates, and most

³ World Health Organization, *Weekly Epidemiological Record* 58(49):379, 1983.

⁴ A list of national epidemiological reports received regularly by the WER is contained in *Weekly Epidemiological Record* 59(51/52):394-395, 1984.

of them have had to do with the application of obsolete instructions or the use of forms that were out of date at the time of delivery of the visas or at the time of arrival at a seaport or an airport. These difficulties are essentially matters within the competence of the Member States, since they are generally due to lack of communication between national services with different responsibilities. Whenever it has been informed of such a matter WHO has intervened, and when the matter was only one of divergence between the measures of which WHO had been informed and requirements actually applied to travellers, the problems have been settled easily with great understanding on the part of the countries concerned. Matters are more delicate to deal with when the requirements concerned go appreciably beyond those laid down by the International Health Regulations.

There is little to report concerning smallpox vaccination certificates except that vaccinations have been carried out in a very small number of cases on the initiative of doctors, and that the necessary remarks have been made to the national health authorities concerned when the cases became known.

The booklet intended to assist those who have to advise travellers on the risks that they run in visiting other countries has been slightly changed and will henceforward be entitled *Vaccination Certificate Requirements and Health Advice for International Travel*. As has been the case every year, the text has been revised in relation to certain points so as to assist national health administrations in playing their part in collaboration with the medical profession, tourist agencies, airlines, shipping companies, the media, and other bodies concerned (see Books, p. 112).

Diseases Subject to the International Health Regulations

Plague

In 1983, 715 cases of human plague, including 40 deaths, were recorded in 11 countries

and reported to WHO. These figures can be compared with those for 1982, when there were 713 cases, including 36 deaths, in 12 countries. These figures were, respectively, 785 (34) in 1978, 661 (33) in 1979, 506 (56) in 1980, and 194 (25) in 1981. It might therefore be generally concluded that the decline in the number of cases observed in the preceding years has come to a halt. A more detailed analysis of the figures,⁵ however, shows that the variations result from situations which are confined to a small number of countries and which must be interpreted with caution.

Distribution by continent was as follows: Africa, 251 cases including 10 deaths in three countries (Madagascar, United Republic of Tanzania, and Zimbabwe); the Americas, 225 cases including 12 deaths in five countries (Bolivia, Brazil, Ecuador, Peru, and the United States of America); Asia, 239 cases including 18 deaths in three countries (Burma, China, and Viet Nam).

In the above-mentioned countries, the increase in morbidity may be connected either with the approach of a renewed cycle of disease activity or with a relaxation of effective epidemiologic surveillance in former known foci. Also, attention has already been drawn to the possibility that the increase in morbidity from plague may sometimes be a result of the development of tourist or sociocultural activities involving a higher risk of contact with infected animals in areas where plague is enzootic. It must be stressed, however, that in 1983 plague continued to pose no problem for international travel.

Cholera

A total of 64,061 cases of cholera were reported to WHO for the year 1983 by 33 countries. The comments made in previous reports⁶ remain applicable. That is, although the num-

⁵ World Health Organization, *Weekly Epidemiological Record* 59(38):289-290, 1984.

⁶ World Health Organization, *Weekly Epidemiological Record* 58(27):205 and 210, 1983; and 59(19):141-142, 1984.

ber of countries reporting cases is decreasing (42 in 1981, 37 in 1982), the number of reported cases is greater (36,840 in 1981, 54,856 in 1982), but there are such variations one way or the other from country to country that it is impossible to draw any conclusions.

There is no doubt that the fear of seeing some health authorities take excessive and epidemiologically unwarranted measures against them has led some countries to hesitate to declare cases that have occurred in their territory. However, as these situations ended up by becoming known, the health authorities of the other countries had some grounds for deciding on unsuitable and excessive measures in the absence of objective information. It is to be hoped that the gradual general spread of awareness concerning really effective methods for the control of cholera (more especially the improvement of hygienic conditions, sanitation, and detection and surveillance systems) will make it possible to escape rapidly from this vicious circle.

Yellow Fever

The 778 cases of yellow fever reported to WHO in 1983 was the highest number in the last decade. The majority of cases (728) occurred during an epidemic in Burkina Faso and Ghana in Africa. The remaining 50 cases, notified by five countries in South America (Bolivia, Brazil, Colombia, Ecuador, and Peru), indicate a continuation of the decreasing trend noted there in 1982 (from 237 cases in 1981 to 140 in 1982).

In Ghana, two infants with hepatitis died in a village in West Gonja in the western part of the Northern Region on 20 August 1983. Retrospective investigations showed that 37 similar fatal cases had occurred in the same area since the end of July. Histopathologic investigation of postmortem liver specimens indicated yellow fever. In mid-October, a village in the northeastern part of the Northern Region reported cases. The first cases in this area could also be traced back to the end of July.

Thereafter, the outbreak spread to the eastern part of the Upper East Region. The epidemic peaked in the two foci from the last week of September to the end of October. The last cases were reported in the first week of November. In all, 372 cases were notified. Of these, 201 were fatal (the mean case-fatality rate being 54% and the range being from 28% to 100%). Most cases occurred in children under 14 years of age.

In Burkina Faso, the first cases appeared in early October 1983 in a region just north of the epidemic area in the northeastern part of Ghana, and the epidemic rapidly extended to the southeastern part of the country. The affected population was comprised mainly of children of a seminomadic tribe living in camps near gallery forests. The epidemic peaked between 10 and 15 October, and the last cases were reported on 20 December. A total of 356 cases were notified, of which 286 (80%) were fatal.

In both countries, extensive control campaigns were rapidly carried out. Over a million doses of yellow fever vaccine were administered in Burkina Faso during October. In Ghana, a mosquito control program was organized and 300,000 yellow fever vaccinations were administered in a few weeks. In addition to the emergency program, a larger vaccination campaign in areas at risk was undertaken in both countries with the assistance of WHO and various donor agencies.

Yellow fever remains an enzootic disease transmitted permanently to monkeys by certain wild mosquito species in tropical forests and savannas of Africa and South America. It may cause sporadic cases or sudden epidemics in unvaccinated rural human populations, creating a risk of urban yellow fever in nearby towns infested by the domestic *Aedes aegypti*. Preventive vaccination programs for populations in areas at risk should be encouraged, and immigrant workers or visiting tourists in these areas should be vaccinated. Residents of large towns at some distance from savannas and forests are not considered exposed to the same levels of risk unless an *Aedes aegypti*-

transmitted epidemic occurs. In terms of herd immunity, it may be considered that a single injection of vaccine protects a person for life; children can be vaccinated as early as six to seven months of age.

Diseases under Surveillance

Smallpox

Following the recommendations of the Thirty-Third World Health Assembly, which declared the eradication of smallpox throughout the world, WHO continued smallpox post-eradication surveillance—as recommended by the Global Commission for the Certification of Smallpox Eradication and endorsed by the World Health Assembly.

Vaccination policy. All countries of the world except Albania have discontinued routine smallpox vaccination programs. As all reference to smallpox was deleted from the International Health Regulations in 1981, smallpox vaccination certificates are no longer required from international travellers. WHO continued to publicize this development and to assist in its implementation, in case international organizations or national health representatives or other agencies that issued visas or made travel arrangements still required the certificates through negligence or for other reasons.

Following several reports submitted to WHO on the spread of vaccinia infection among civilians who had been in contact with military recruits experiencing major reactions to vaccination, the Committee on Orthopoxvirus Infections has advised military personnel that recruits being vaccinated for the first time be confined to their bases and prevented from contacting unvaccinated persons for a period of two weeks following vaccination.

Investigation of suspected smallpox cases. Over 100 suspected smallpox cases have been reported to WHO Headquarters since the beginning of 1980, at a rate ranging from 10 to 30 reports a year. Investigations carried out by national and/or WHO teams and supported

when possible by the laboratory testing of suspected specimens have failed to confirm any of these reports; in most of them chickenpox, measles, or skin diseases were mistaken for smallpox. Details of several investigations were reported in the *Weekly Epidemiological Record*.⁷ WHO continues to encourage the submission of such reports in order to strengthen world confidence in the fact that smallpox has been eradicated.

Other Diseases

Influenza was on the whole mild in 1983, although in general more activity was noted than in 1982. For the fifth consecutive year, influenza A viruses of both H3N2 and H1N1 subtypes were reported as well as influenza B.

Influenza A(H3N2) predominated in the majority of countries reporting on influenza during the first months of the year. Influenza A(H1N1) already played a role in some countries at the beginning of the year and became increasingly important, especially during the second half of the year and in the southern hemisphere. Influenza B was rare on the whole, although cases were detected during or following the main influenza A wave in some areas.

Most isolates of influenza A(H3N2) virus characterized in the WHO Collaborating Centers for Reference and Research on Influenza were similar to A/Belgium/2/81(H3N2). However, later in the year, strains showing a slightly different reaction pattern, typified by A/Philippines/2/82(H3N2), became more common. Among the influenza A(H1N1) viruses characterized by the collaborating centers, strains like the A/England/333/80(H1N1) variant predominated. However, some strains isolated in Europe and most of those coming from Asia and Oceania during the second half of the year proved to be antigenically different in hemagglutination-inhi-

⁷ World Health Organization, *Weekly Epidemiological Record* 56(8):61-62, 1981; 56(26):207, 1981; 56(45):353-355, 1981; 58(29):226-227, 1983; and 58(48):374, 1983.

bition tests. Two strains, A/Hong Kong/2/82(H1N1) and A/Dunedin/27/83(H1N1) represented these new slightly drifted variants. The few influenza B virus isolates available for study in the collaborating centers continued to be similar to B/Singapore/222/79.

Malaria. Globally, the malaria situation did not change significantly, some countries reporting improvement and others deterioration of the situation.

Reliable information is still lacking from many countries, and reporting on malaria continues to be deficient and very uneven, both in terms of geographic coverage and periodicity of reporting.

Some 92 million clinical malaria cases are estimated to occur annually, three-quarters of them in tropical Africa alone. However, many more people are infected with the disease without necessarily showing clinical symptoms.

Whereas in South-East Asia the number of cases reported has declined to nearly the pre-surgence level and has decreased significantly in China, in the other Regions the reported overall incidence has shown a generally upward trend in recent years.⁸

Resistance of *Plasmodium falciparum* to chloroquine continued to be reported from countries and areas where it was not known to exist previously. During 1982, parts of India, Indonesia, Sudan, Zaire, and Zambia had to be added to the list of areas where chloroquine-resistant *P. falciparum* is known to occur.

Travel has continued to increase worldwide and continues to give rise to a serious threat that malaria will be reintroduced into countries or areas which have been freed from it. Local transmission originating from imported cases and infections acquired in the vicinity of airports (or aboard aircraft) illustrates the need to maintain effective vigilance in receptive areas and to urge countries to conform with the provisions of Articles 19 and 83 of the International Health Regulations (on disin-

secting aircraft and keeping airports free of potential breeding-places).

Deaths continued to be reported among imported malaria cases. In all likelihood they could have been prevented had the necessary prophylactic measures been taken and/or an early diagnosis made. Although a plethora of information on malaria risk for travellers and on how to prevent the disease exists, it is still difficult to get the correct information to those concerned. In this context, it has to be stressed again that giving advice to international travellers is a joint responsibility of the countries of origin and destination of the travellers. Inadequate and vague information on areas with malaria risk is likely to create unnecessary fear, particularly if the media give prominence to the situation. Clear and detailed information on these risk areas provided through official channels permits the travellers to limit their precautions to situations where they are really necessary.⁹

Poliomyelitis. In 1983, 24,556 cases of poliomyelitis were reported by 101 WHO Member States which contain about 80% of the total population of all Member States and Associate Members. Twenty-eight countries, containing about 3% of the total population of the WHO Member States, reported zero incidence. The number of cases reported in 1983 is considerably lower than the 37,253 cases reported by 134 Member States for 1982. A comparison of the number of cases in 94 Member States reporting in both years confirms the decrease—about 25%. The decrease was particularly noticeable in three of the four WHO Regions where most cases occur, i.e., in the African, Eastern Mediterranean, and Western Pacific Regions. In the Region of the Americas the number of cases remained at the low level seen in 1981 and 1982 following a marked decrease in 1979 and 1980. In some countries this decrease followed the trend observed over a number of years and could be ascribed to successful immunization programs. In other countries,

⁸ World Health Organization, *Weekly Epidemiological Record* 59(34):281-284, 1984, and *World Health Statistics Quarterly* 37:130-161, 1984.

⁹ See World Health Organization, *Weekly Epidemiological Record* 59(29-31), 1984.

where these programs have had less impact so far, the decrease was most likely part of the natural cyclic pattern of poliomyelitis.

Louse-borne typhus and louse-borne relapsing fever. These diseases have not been of any concern with respect to international travel for

many years. They are a problem in relatively confined areas in a very limited number of countries in Africa and South America.

Source: World Health Organization, *Weekly Epidemiological Record* 59(50):385-391, 1984.

HEALTH SERVICES RESEARCH IN THE AMERICAS

In 1983 the 22nd Meeting of PAHO's Advisory Committee on Medical Research recommended that available information on health services research (HSR) in the Americas be collected and presented in a concise but comprehensive document. In compliance with that recommendation, a regional study of the characteristics of national policies in health services research and of research studies in 15 countries of Latin America and the Caribbean¹ during the last 10 years was conducted.

This study, carried out during the period January-March 1984, was based on a working definition of HSR framed at the 18th Session of the Subcommittee of WHO on Health Services Research. That working definition termed HSR "the systematic study of the means by which basic medical and other useful knowledge is applied to the health of individuals and communities in a given set of existing conditions."

Information on national and institutional policies relating to HSR was collected and analyzed by investigators designated in each country, and in accordance with a common framework provided by PAHO. A survey on the characteristics of studies in HSR conducted in the participating countries was carried out by the designated investigators, following a protocol based on an ad-hoc system for classification of HSR. The survey data

were analyzed in a seminar-workshop with the participation of all the investigators in charge of the study in the countries and the team of consultants assigned by PAHO to collaborate in the design, administration, analysis, and publication of the study. And the information derived from all these activities was consolidated into a summary document entitled "Trends in Health Services Research: Study in some Latin American and Caribbean Countries 1974-1983."

Regarding consolidation of coherent health services research policies, this work showed that there is a great deal of variation from one country to the next, and also from one institution or government level to another within individual countries. In general, however, the number of health services research projects conducted within the countries studied rose fairly steadily from 1974 to 1983. That is, the 2,899 questionnaires completed for the study indicated that there were 188 HSR projects in 1974 as compared to more than double that number (443) in 1982. A major exception to this upward trend came in 1983, when the overall number of HSR projects declined to 392. It should also be noted that significant departures from the general trend appear when data for individual countries or specific areas of research are examined.

In 1982 the World Health Organization's Study Group on Health Research for the Reorientation of Health Systems proposed a classification for various types of health services research. This classification, which was adopted and modified for purposes of the

¹Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guyana, Jamaica, Mexico, Peru, Uruguay, and Venezuela.