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HEALTH, EMERGENCY PREPAREDNESS AND RESPONSE

REPORT
OF THE
INTERREGIONAL MEETING

Geneva, 13-16 April 1987



WORLD HEALTH ORGANIZATION



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 EMERGENCY PREPAREDNESS AND RESPONSE

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REPORT OF THE INTERREGIONAL MEETING ON HEALTH,
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1. EXECUTIVE SUMMARY

The meeting served the purposes of clarifying the Organization's role within the international community in emergency preparedness and response and reinforcing coordination within WHO. Present problems were surveyed, remedies proposed and paths of future cooperation were indicated.

The meeting emphasized the managerial and organizational aspects of preparedness and response to emergencies, whether acute or chronic, natural or man-made, involving epidemics or of a technological character. WHO and other organizations should, as an outcome, improve or build up institutional measures for emergency preparedness.

Particular attention was given to the necessity of improving the quality of information and its communication within WHO, among the organizations and agencies concerned, and between them and national authorities, as a means of more effectively preparing for, or mitigating disasters, as well as in responding to emergencies. The need for training in all aspects of emergency preparedness and response and for the participation of local authorities and communities was emphasized.

The discussions went beyond the consideration of disaster preparedness and response, because all phases of international action - the emergency rehabilitation and long-term development - are linked. Well-prepared long-term solutions would strengthen the capacity of countries to take development into their own hands and to cope with emergencies and disasters should they occur.

There was a consensus that emergency preparedness and measures taken by the health sector in response to emergencies should be an integral and indispensable component of the development process.

Each session of the meeting led to the formulation of recommendations designed to guide and develop the Organization's work in this field in the coming years.

2. INTRODUCTION

The Interregional Meeting on Health, Emergency Preparedness and Response was held at WHO headquarters from 13-16 April 1987

The participants in the meeting were focal points and officers in charge of WHO's regional emergency preparedness and response activities, their counterparts in the technical divisions and programmes at WHO headquarters and representatives of the United Nations and nongovernmental organizations which are the main partners of WHO in this field. The participants made brief statements describing their involvement and experience in emergency preparedness and response where appropriate and the extent of their collaboration with WHO.

Professor L. Kaprio, Special Adviser to the Director-General and Professor M. Lechat, Dean of the Faculty of Public Health, University of Louvain, Brussels, served, respectively, as chairman and vice-chairman. Mr A. Curnow was appointed as rapporteur. A list of participants is annexed to this report.

In welcoming the participants on behalf of the Director-General, Mrs I. Brüggemann, Director, Programme for External Coordination, emphasized the shift in WHO's activities in recent years from ad hoc responses to emergencies to the promotion of preparedness at the country, regional and global levels. WHO aims at a practical transfer of past experience into present action, as a means of

strengthening the capacity of the Member States to integrate emergency preparedness and response in their overall development. WHO identifies information support and the training of key national and international staff in emergency preparedness and relief operations as its major contributory role, with information as the most important link between the event and the action.

In his opening address Professor Kaprio emphasized that against the background of the Africa crisis and the increasing frequency of technological disasters, WHO has to increase its efforts for the promotion of the health management of disasters, integrating preparedness and response to emergencies in the primary health care system, and coordinating its activities with other agencies in the matter of resources and expertise.

Local communities carry the first responsibility for dealing with an emergency, they must be armed with appropriate information to mitigate the impact when disaster strikes and there should be mechanisms to reduce their vulnerability. Primary health care structures and the district health system are the appropriate means for an integrated and coherent response in disasters. It is, however, also necessary to look more closely at the administrative structures on which depend the organization of emergency preparedness and response.

3. RECOMMENDATIONS OF THE INTERREGIONAL MEETING ON HEALTH, EMERGENCY PREPAREDNESS AND RESPONSE

The meeting recommended that WHO should:

1. Cooperate with the Member States to create or strengthen their mechanisms for emergency preparedness and response so that the governments are in a position to consolidate national efforts with bilateral and multilateral offers of assistance as well as with assistance from nongovernmental organizations, and to direct the whole as a concerted and effective programme.
2. Encourage and assist Member States to integrate emergency preparedness and response in district health services, with a strong community involvement through primary health care.
3. Continue to encourage disaster-stricken countries to critically assess and specify the material and other support they require in a given emergency, and to coordinate with donor countries and organizations to adapt their programmes of assistance to meet these requirements.
4. Advise governments on the identification of health hazards, including high-risk technological activities, on the establishment of community profiles and on practical preventive measures to avoid or reduce the hazards.
5. Develop the Organization's capacity to provide management and technical guidance on health aspects of emergency preparedness and response to Member States, to United Nations and to other organizations and improve external and internal communication systems.
6. Reinforce its emergency preparedness programme by promoting and facilitating the direct transfer of experience between regions and Member States; increasing collaboration with nongovernmental organizations; enlarging the network of collaborating centres, particularly in the developing regions; and establishing a pool of expertise available on demand;
7. Streamline and strengthen its emergency preparedness and response programme at the global, regional and country levels; by establishing and clarifying the functions of the regional offices and of the WHO Representatives in guiding, advising

and supporting the activities and by making a concerted approach to prospective donors for extrabudgetary support.

8. Seek the support and views of the Organization's governing bodies and of the Member States, report on activities carried out under the programme and establish guiding mechanisms for the programme including an expert advisory panel for emergency preparedness and response.

9. Strengthen the Organization's internal coordination machinery by joint planning and implementation to associate such emergency preparedness and response activities that deal with technological disasters, epidemics and slowly developing disasters such as famine and refugee situations, with the activities of the technical programmes.

10. Encourage, through case studies and research, the analysis of past emergencies and the action that was taken, in order to learn from experience and to create an "institutional memory" as a basis for responding to or averting future disasters.

11. Coordinate with governments, United Nations and other organizations in the collection of information on emergencies and improve epidemiological surveillance and early warning systems, including early detection of epidemics.

12. Expand public education and information exchange, disseminating clear and unambiguous messages which are based on the resolutions and recommendations of meetings organized by WHO or by other organizations concerning emergency preparedness and response. Keep the media informed by participating in seminars and workshops and by means of briefings during emergencies.

13. Support and coordinate training programmes in health emergency preparedness and response, inter alia through preparation of training modules and materials as well as standard messages and guidelines; encourage the development of training programmes for health personnel in disasters, including graduate and postgraduate courses.

14. Cooperate with other agencies of the United Nations system, bilateral donors and nongovernmental organizations, in the coordination of international emergency relief in support to governments; and give leadership to the international health sector and harmonize its contributions.

15. Maintain and reinforce its cooperation with its major partners in refugee matters in development of health programmes for refugees and other displaced populations and in surveillance of their health status and help to integrate services to refugees in the health programmes of their host countries.

4. EMERGENCIES, HEALTH AND DEVELOPMENT

4.1 United Nations approaches

United Nations system views of emergency preparedness and response in relation to long-term development, with particular reference to the health aspects, were presented by representatives of the Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF), and the United Nations Development Programme (UNDP).

WHO and UNHCR work together in the field of emergency preparedness and response. Recent examples include the formulation of a health programme for Afghan refugees in Iran, the drawing up of operational guidelines for health and nutrition programmes for refugees, and the development of emergency health and immunization kits. There is room for further cooperation as, for example, in the early detection of epidemics, in providing information to UNHCR on the physical vulnerability of large migrating groups of people and in improving the health climate for refugees returning to their

countries of origin. UNHCR would welcome help from WHO in establishing standards of assistance and in integrating health care programmes for refugees in the national health services of host countries.

WHO and UNHCR should make additional efforts to recognize their areas of interdependence and provide mutual reinforcement to one another to avoid duplication of effort, as recommended by the Group of 18.

UNICEF and WHO complement one another and assume separate responsibilities in working towards the common goal of improved health for children and their mothers. UNICEF believes that the mobilization of all existing resources to bring basic protection to the lives and development of children using the low cost strategies now available is a practical and affordable way of meeting many short-term emergency needs and at the same time of building towards longer-term development.

Governments of developing countries are submitting an increasing number of proposals to UNDP for projects in the fields of disaster relief, emergency preparedness and prevention. UNDP stresses the importance of developing the infrastructure of countries for disaster preparedness, including the training of staff responsible for management. UNDP foresees a reassessment of its programme to focus on the source and effects of disasters, and on the development of better complementary links between its programme and those of other multilateral organizations as well as bilateral efforts. In the UNDP view, the United Nations system needs a coherent strategy to meet the emergencies created by endemic disasters such as recurring drought. A focal point within each agency of the system would reinforce collaboration in programmes for emergencies. In the field, the UNDP Resident Representatives represent the Office of the United Nations Disaster Relief Coordinator (UNDRO) vis-à-vis host governments. As Resident Coordinators of the UN system for development activities, the Resident Representatives can assist governments in emergency situations by ensuring coherent and coordinated action on the part of the international community.

It was proposed that one way to avoid duplication of effort between organizations would be for the governing bodies of the UN agencies working in the field of emergencies to be informed how the existing informal coordination functions. It was noted that formal agreements between WHO and UNHCR and between WHO and UNDRO are at present being prepared.

4.2 Strategies and role of WHO in emergency preparedness and response

WHO has a mandate for emergency preparedness and response in its Constitution. The World Health Assembly in 1981 and 1985 adopted resolutions which emphasize the fundamental importance of preventive measures and preparedness, the integration of emergency response with regular WHO programmes, and the linkage with development. The two main objectives are to promote emergency preparedness and response in the Member States within the Health for All strategies and to provide timely and appropriate response to emergencies in collaboration with the Member States and other organizations.

In the discussion it was pointed out that the emphasis on emergency preparedness in WHO activities serves as a reminder that the Health for All strategies and primary health care embrace much more than the provision of health services; a breadth of scope which will be reflected in community and country health activities.

The stress in emergency preparedness should be on community participation, local planning and the development of self-reliance. The identification of hazards, the assessment of risks, the organization and management of action in emergencies and the monitoring and evaluation of the impact of such action are in the first instance a community responsibility. Governments should give priority to training and the

development of management skills at that level in order to strengthen the capacity of communities to prepare for and to cope with disaster situations, and if possible to mitigate them.

WHO is trying to enhance its technical cooperation and improve coordination of its response to emergencies and it will integrate emergency preparedness and response in its health development programmes. As a consequence, the emphasis has shifted from the mounting of health relief operations to promotional and developmental activities, from vertical action in emergencies to an integrated and coordinated managerial approach.

In putting the emphasis on disaster preparedness, WHO shares the widely-felt concern for the cost-effectiveness of the funds put at the disposal of international organizations. The integration of action relating to emergencies with the development process, while logical, nevertheless creates a problem for potential donors. Is disaster preparedness relief, because it is linked to emergencies or development-oriented, because it involves training? The problem has to be addressed if adequate funding is to be found. WHO must argue effectively that emergency preparedness and response are indispensable to long-term economic and social development and that at headquarters and in the regions the Organization has the necessary will and capacity to implement the programme.

Chronic emergencies, such as famine, as well as other natural disasters, are matched by acute financial shortages which make it impossible for the countries concerned to maintain and rehabilitate their health infrastructures. The rehabilitation of run-down health services, which are usually fragile and inadequate before emergencies occur, has to be treated by WHO as a priority task, which can only be achieved by giving emergency preparedness a development setting.

The importance of district health systems to disaster preparedness lies in the monitoring of health status and key risk factors, the identifying and monitoring of vulnerable groups, better organization and management of interventions, and the monitoring and evaluation of their impact. In promoting district health systems, WHO is concerned mainly with training and the development of management skills.

The evaluation of WHO policies and strategies for emergency and development support should take account of their impact in terms of social relevance, equity and quality, as well as their statistical effectiveness. The poor of the poorest countries, it was pointed out, suffer more from disasters than others. Relief assistance does not necessarily reach the most vulnerable groups. The least privileged are also those most affected by the long-term consequences of disasters and by the repercussions when relief assistance has unintended negative effects.

Relief agencies are increasingly aware of the need to balance urgent measures and long-term assistance in order to reduce the vulnerability of populations to natural hazards. They have also learned that the local community and local authorities are the first to respond to an emergency and that in the area of disaster prevention, experience has shown how important it is for the people most likely to be affected to act in their own defence. Foreign assistance arrives later.

If emergency aid to disaster areas is substituted for the capacities of existing local organizations, existing development financing schemes and community participation, the danger of economic dependence of the whole society and not just the affected groups is increased, and its development potential weakened.

Relief operations are often hindered by poor communications. Communications can be improved at a small fraction of the total amount spent on emergency aid. A positive cost-benefit ratio may be expected because available resources would be

better used. Greater access to satellite communications may be a component of an improved approach both by making it possible to share facilities used by the media, and by employing small portable stations. A proposal to test this approach has been prepared by WHO.

The emphasis on disaster preparedness has consequences in the field of public information and education for health. Where information messages concerning emergency preparedness are to be communicated to target groups, WHO notes that communicators need to use political finesse; it is often a sensitive matter to draw attention to the risks of disaster. Those who are entrusted with communication on the issue of preparedness should have experience of acute situations. When emergencies arise and response is to be made, a public information service has to establish its credibility in the early stages, and to be prepared to cope with the problems of false and withheld information.

5. PREPAREDNESS IN MEMBER STATES AND IN WHO

5.1 National Disaster Preparedness

The Ministry of Health and Family Welfare of India organized a workshop on disaster management with the cooperation of WHO at Nagpur in October 1986. The workshop, which brought together representatives of many sectors in the central and state governments, serves on the regional level as a model for other meetings which are to be held in Bangkok and Jakarta. India is subject to floods, drought, cyclones, landslides, tidal waves, and severe heat and cold, and has also experienced major industrial catastrophes. All disaster situations present vast problems in the magnitude of their potential human impact. The structures developed by the Government of India to deal with natural calamities as well as man-made disasters were described to the meeting, with particular reference to the emergency medical services and relief provided by the Ministry of Health and Family Welfare.

Tunisia has instituted a national disaster management programme. An Emergency Coordination Committee has been created with the Minister of Health as chairman. The civil protection organization serves as inter-sectoral coordinator. Similar committees have been established at the provincial level. A master plan to cover action in connection with disasters, including forecasting and prevention, has been drawn up, and the organizational capacity for disaster management is being strengthened. Tunisia has signed conventions with Algeria, France and Italy covering mutual assistance in the event of catastrophes.

The early warning and planning service of the Relief and Rehabilitation Commission (RRC) of Ethiopia correctly predicted the famine of 1984-86 but official appeals for assistance met with a slow response. Only when the images of disaster had been projected on television screens did aid begin to flow from the international community. A succession of emergencies has given the RRC the experience necessary to sharpen its response in relief operations, rehabilitation and the coordination of aid. Health has a subsidiary role in RRC activities and all UN agencies and nongovernmental organizations participating in disaster relief and rehabilitation deal directly with the RRC. The Ministry of Health assesses the credentials of all nongovernmental organizations and gives them clearance to work in the health field, issues drugs in collaboration with the RRC, prepares drug and medical supply requests, participates in tripartite agreements with NGOs and the RRC for the rehabilitation or establishment of health centres and establishes guidelines. The Ministry had insufficient trained staff and funds to run health services in the large number of relief shelters and settlement areas established during the famine.

A WHO team visiting Ethiopia at the height of the famine noted the lack of a standardized approach in health reporting and monitoring, and the difficulty of identifying who was responsible in the emergency health field, and stressed the need

for a health coordinator. WHO appointed a health coordinator who played an important role in coordinating and streamlining health activities in the shelter areas.

The United Nations Emergency Prevention and Preparedness Group, established on 1 January 1987 will strengthen and support the capacity of the RRC and other Ethiopian Government agencies as well as international and bilateral institutions in emergency relief, preparedness and prevention.

Points made in the discussion included the need for a focal point in disaster preparedness and response in WHO regional offices, as well as the need for support from WHO in training and research and in the collection and dissemination of data to be used in emergency preparedness and response. It was suggested that countries which are formulating national emergency preparedness plans may usefully study the planning procedures adopted by other countries with well-established programmes.

5.2 WHO activities and programmes in emergencies and disasters

The WHO global action programme in emergency preparedness and response provides for the establishment of guidelines for information and communication within WHO and between WHO and other organizations, and the establishment of early warning systems. The Organization's capacity for epidemiological assessment is being improved. Training programmes and materials are being prepared. Closer coordination has been established with other organizations in the field of emergency health relief. Studies and research on previous disasters are being undertaken or encouraged, and the findings will serve as the basis for improvements in the programme.

The unit responsible for disaster preparedness and management at WHO headquarters is in the mainstream of coordination. The unit supports the initiatives of the WHO regional offices, coordinates their activities, collects and processes information, provides communication with other organizations and is responsible for the overall development of the programme.

There is a need to identify and clarify the role of regional offices and WHO country representatives in guiding, advising and supporting donor countries and organizations interested in participating in the health aspects of emergency preparedness and response.

5.2.1 Regional Office for the Americas (AMRO)

The Americas regional programme is well established. It aims to improve the preparedness of health institutions through contingency planning, training, public education and coordination with other sectors. Services to Member States include the provision of technical manuals, guidelines and training materials, the organization of international workshops and courses, a newsletter, simulation exercises, the short-term services of experts in disasters and disaster research and evaluation. In response to disasters, AMRO assesses health needs and supplies necessary information to potential donors, coordinates international health assistance, formulates and carries out rehabilitation projects, and provides expertise in the management of temporary settlements, sanitary engineering, water supply, disease surveillance and control, as well as other public health concerns. Voluntary contributions provide 90 per cent of the funding for the AMRO emergency preparedness programme.

5.2.2 Regional Office for Europe (EURO)

The Regional Office for Europe has strengthened its accident prevention programme to cover disaster preparedness. The main activities relate to management, with technical aspects of disaster preparedness developed within related regional programmes: environmental health, mental health, nursing and primary health care. The aim of the programme is to enhance national preparedness in coping with health aspects of disasters and major accidents in the framework of community participation

and primary health care. Guidelines on protecting the health of the community in disasters are being drawn up. Regional and national courses on disaster preparedness are being held. Country profiles and indicators for the rapid assessment of health risks and needs before and following a disaster are being prepared. Six countries are being helped to create national plans for disaster preparedness. The services of a task force of assessors are available to assist Member States at all stages, from preparedness to rehabilitation after a disaster. A manual of guidelines on action to be taken by the regional office at the time of a disaster is being prepared, and an in-house task force has been created which has already worked successfully in major disasters, including the nuclear accident at Chernobyl.

5.2.3 Regional Office for Africa (AFRO)

Workshops were organized in 1985-86 to train health professionals from Member States and to brief WHO staff, including WHO representatives, on the contents of the emergency preparedness programme and on their responsibilities in responding promptly in emergency situations. Technical officers and associate professional officers are to be appointed in Africa for the programme. A regional centre for emergency preparedness and management is to be established in Addis Ababa. A regional action plan, first drafted in 1985, is in the process of being revised and further developed.

5.2.4 Regional Office for the Eastern Mediterranean (EMRO)

A plan of action for emergency preparedness and response has been drawn up for the Eastern Mediterranean region. The objectives are to assist countries in the region to achieve self-reliance in emergency preparedness and management at all organizational levels, and to provide timely and appropriate response in emergency situations. WHO will support Member States in formulating their plans for the health aspects of emergency preparedness and management, and will assist in the training of nationals in emergency management. WHO will collect information for country profiles as a basis for monitoring, evaluation and prompt response to emergencies. Links between refugee health and general health programmes will be strengthened through collaboration between governments, UNHCR and WHO. WHO will support governments in the rehabilitation of health services after emergencies. An emergency relief committee has been established in the regional office.

5.2.5 Regional Office for South-East Asia (SEARO)

Disasters in many parts of the South-East Asia region are of an endemic nature. Some countries have taken the initiative to develop their own national preparedness and response programmes. Information systems for emergencies and the flow and exchange of information between the country, regional and global levels need improvement. Attention should be given to the training of national and WHO staff. Funding is being sought for a regional emergency preparedness and response programme which will identify and promote preventive measures so as to minimize the health hazards and risks to the populations directly or indirectly affected, and to collaborate with the Member States and the international community in developing and refining the health aspects of emergency relief work.

5.2.6 Regional Office for the Western Pacific (WPRO)

Activities of WHO for emergency preparedness in the Western Pacific region have been sporadic. A regional emergency preparedness and management programme and plan of action will be based on a review of national programmes in the region, on the identification of the need for WHO support and the resources required, and on the compilation of country health information profiles. In the small island countries of the region emergencies usually involve not more than a few thousand people. Assistance is, for this reason, on a small scale.

5.2.7 Collaborating centres

The collaborating centres provide support to WHO in its emergency preparedness and response programme. At present there are two collaborating centres in this area: the Centre for Research in the Epidemiology of Disasters, University of Louvain, Brussels; and the Centre for Refugee Health and other Displaced Communities at the London School of Hygiene and Tropical Medicine. More collaborating centres will be added to create a network covering all regions. Universities and other institutions are encouraged to include the subject of health in emergencies and disasters in their training curricula, and individual experts are invited to participate in the assessment of needs, the coordination of field activities and training. WHO is already working closely with the Asian Disaster Preparedness Centre at the Asian Institute of Technology in Bangkok.

6. SPECIAL ISSUES IN DISASTERS

6.1 Food shortages and famine: Planning and surveillance

Food aid constitutes the bulk of international assistance in chronic emergencies, including famine, with the need to maintain nutritional levels as the main criterion. However, it is not always easy to determine the cut-off point of an emergency - for which the food aid is intended - and the start of the post-emergency rehabilitation period. The danger is that if the distribution of food continues, an attitude of dependence is created, and the affected population expects its government and external agencies to go on supplying its essential needs.

Famine strikes essentially the rural poor and is linked to long-term poverty, neglect in development, inefficient use of land, the prevalence of debilitating diseases and malnutrition. Food aid can be used as one means of breaking the cycle of under-development. It can be targetted as a development resource to those in greatest need and be used to assist clearly defined projects with specific objectives. It may, for example, be used after the acute stage of an emergency as an incentive to community action, as a support to primary health care. By relating food aid to preventive health action, the health sector is able to make a greater contribution to development and help to avoid the negative effects of ill-planned food distribution.

Malnutrition is not linked solely to the amount of food available; it is related to specific health problems which must be identified. The significance of malnutrition levels varies according to the overall situation, and the macro-picture is often more significant than a narrow interpretation of food needs.

Nutritional monitoring is the only way to determine the regions and target populations for food distribution, and the types and quantities of food to provide. Yet, in many disaster-affected countries, nutritional surveillance does not play a significant role in the assessment and implementation of response to emergencies. In most African countries, the national health structure is incapable of responding to this requirement, which has to be supplied by external means. The problem is to have the desired impact with the limited resources available, but in the absence of nutritional surveillance, external agencies are under great pressure to make general distributions of food, which are ineffective.

The World Food Programme has close ties with WHO. Further cooperation might take the form of helping governments to set up national surveillance systems with plans to identify the areas where there are extreme food shortages and, in those areas, which people are in need of emergency food distribution.

A conference on nutrition in times of disaster will be held in Rome in January 1988. Private voluntary organizations, United Nations agencies, bilateral aid agencies and individuals and organizations in developing countries working on

disaster problems will be invited to discuss the identification of target groups in nutritional need, the determination of foods and the quantities to be distributed, and the monitoring and evaluation of effectiveness of nutrition programmes. Training, and the handling of all nutritional issues as they relate to sudden catastrophes will also be discussed.

The planning of response to emergencies should be started as part of the process of surveillance, and in planning it is necessary first to set clear objectives which will determine the approaches to be adopted. Consideration must be given to putting in place at an early stage the defence mechanisms of the population, and to defining what is expected of systems to prepare for emergencies.

6.2 Health care and displaced populations: organization of services

Mass movements of population and concentrations of refugees increase enormously the risk of epidemics of communicable disease. The outbreaks of cholera, meningitis and measles in Sudan in 1985 provide recent examples. The spread of deficiency diseases, such as scurvy, is also a feature of refugee situations, and has been noted in Sudan, Somalia and among Cambodian refugees. The risks of disease outbreaks are often predictable.

International agencies should make greater efforts to combine in the assessment of refugee needs. If this can be done, it may be possible for the agencies to harmonize their efforts more effectively at the planning and action stages. A formal means of consultation among the agencies concerned with refugee problems would lead to better coordination, including agreement on the form of risk assessment and on working together in the field at the time of an emergency.

Among the specific objectives of consultation should be standardized policies and protocols on information collection, training and forms of treatment, the designation of lead agencies, the establishment of channels of communication, and the decentralization of the health programmes. WHO should have a major role in the coordination of health assistance to refugees.

At the present time, the quality and variability of assessments provided by persons with differing professional backgrounds and levels and degrees of experience create problems. There are also difficulties in finding agreement on priorities for action as, for example, between nutrition and sanitation.

The temptation must be avoided in dealing with refugee situations of creating parallel health services furnished by external agencies in cases where the national health systems are weak. Priority should be given to strengthening the national health service capacity, so that it can effectively meet the requirements of the national community as well as those of the displaced groups. The training of nationals, in particular those who are expected to coordinate and manage health programmes at the field level, is an important task for the international community.

6.3 Public health and disasters

Contingency planning and the setting up of an early warning system are essential if health service is to cope rapidly with an outbreak of disease. Contingency planning for emergencies should fit into the normal administrative structure as an element of the government's day-to-day dealings with the health services. The national health authorities for their part should consider communicable disease control as an integral part of health service, bearing in mind that success in dealing with epidemics depends largely on the state of preparedness achieved in advance of the need to take action. Priority in planning should be given to preparedness for diseases which have already caused epidemics in the region concerned.

WHO provides technical support to Member States at short notice to combat outbreaks of disease and aims to strengthen the self-reliance of countries in disease control, as well as to develop international cooperation in the control of epidemics. Among other actions, WHO identifies experts available immediately to serve in epidemic situations and has some 200 collaborating centres on hand to provide advice and services covering a wide range of infectious diseases.

Support to the national health authorities in dealing with an epidemic is the starting point for national and preparedness against future outbreaks, based on epidemiological surveillance and laboratory services. However, there is rarely financial and political commitment, either from national authorities or from external sources to take the necessary steps once an epidemic is over. Studies show that the cost of controlling epidemics is several times higher than the cost of preventing them.

Environmental health is an essential component of primary health care, and as it covers the questions of shelter, water supply, sanitation, drainage, rubbish disposal, vector control and food safety, is intimately bound up with emergency preparedness and response. The main environmental health concern in emergency situations is to prevent the spread of disease leading to epidemics, to maintain the health status of the population, and to ensure that essential services are restored or improved. Action in the interest of preserving environmental health in an emergency calls for planning in advance, and for education and training extending down to the basic community level.

Veterinary public health is a fundamental consideration in both natural and man-made emergencies. Many of the veterinary problems which arise in emergencies are covered in the report of the European Workshop on Veterinary Public Health in Disaster Situations (Rome, 1984). The Centre for Research and Training in Veterinary Public Health (WHO Collaborating Centre) at the Istituto Superiore di Sanita in Rome compiles information on veterinary action in disasters which is available on request.

The meeting discussed the problems inherent in dealing with cholera: overcrowding, poor sanitation and water supply, difficult communications - and surveillance which is lacking everywhere. All these factors are characteristic of emergency situations. If a country establishes a national programme for the control of diarrheal diseases, health workers are able to treat cholera with the others and limit its spread. When mass movements of refugees occur, sanitation control is the most effective way of preventing cholera outbreaks.

6.4 Health aspects of technological disasters

The health aspects of technological disasters are a matter of concern to many developing countries with industrial complexes. Developing countries are at more of a loss in dealing with such disasters.

In the International Programme on Chemical Safety, a joint programme of WHO, the ILO and the United Nations Environment Programme (UNEP), WHO is preparing guidelines for the prevention of chemical accidents, and health safety guides for chemicals, as well as international chemical safety cards for the use of people handling chemicals on a day-to-day basis. Courses for the training of workers and middle management in the prevention of chemical accidents are being organized.

A meeting on chemical accidents was held in India early in 1987, and a World Conference on Chemical Accidents will be jointly organized by the Istituto Superiore di Sanita in Rome and the WHO Regional Office for Europe in July 1987 in response to growing concern about major accidents involving chemicals.

WHO is helping Member States to deal with chemical poisoning through the preparation of guidelines with information on diagnosis and treatment, monographs on antidotes, and a handbook on treatment, and is preparing a roster of experts on call when chemical disasters occur. WHO emphasizes the need to identify technological activities with a high risk of accidents and to translate such health hazards into practical preventive measures. The training of workers and management in the safe operation and maintenance of industrial plant, and the safe use of chemicals in industry, commerce and agriculture is essential. The efficiency of the international response to disasters depends on the appropriate agencies having information on national emergency systems and contingency plans. A prearranged mechanism is required for governments to call on the services of international agencies and for the latter to take immediate action.

The emphasis given by the International Labour Organisation (ILO) to the control of hazards in industry is illustrated by the fact that 40 per cent of ILO conventions deal with problems in the field of occupational safety and health. The ILO Governing Body has adopted a code of practice on safety, health and working conditions in the transfer of technology to developing countries and a manual on major hazard control is in preparation. Some 70 000 chemicals are in use in industry and the number is steadily increasing. An operational major hazard control system, as outlined by the ILO, would aim to identify activities which may give rise to a potentially disastrous situation; locate the possible sources of disasters; assess the ways and conditions under which disasters may occur; analyse industrial plans for potential weaknesses in the process and safety systems, and take steps to eliminate them; maintain an emergency programme to minimize the consequences of a disaster; and prepare an emergency plan for action by services outside the plant and within the local community.

Most accidents involving chemicals occur not in their manufacture, but while they are being transported. UNEP published guidelines in 1982 on risk management and accident prevention in the chemical industry. UNEP recently proposed that governments should negotiate two international conventions which will provide, firstly, for notification of accidents in which chemicals are released that might have harmful transboundary effects, and secondly for the prompt offering of assistance to minimize damage and to protect life, property and the environment. UNEP is also proposing a programme to enable governments in cooperation with industry to work with local leaders to identify acutely toxic chemicals present in their communities and show them how to control, limit and deal with accidental releases.

The Chernobyl nuclear accident, because of its wide international implications, provided a test for the emergency preparedness and response mechanisms of the WHO European Regional Office, which was able to give valuable service to the Member States, particularly in the form of expert services, the exchange of technical information, and to provide information in a way that was understandable to the media and the general public. The accident revealed many shortcomings, including a lack of national contingency plans to deal with transboundary nuclear pollution, lack of coordination, and shortcomings in the exchange of information. Monitoring networks were inadequate and guidelines on the levels of radiation at which public health intervention is required were lacking (these are now being drawn up). There were discrepancies in radiation measurement procedures. WHO is now providing assistance to Member States in remedying these deficiencies through a special project on nuclear accidents and public health, and is increasing the number of collaborating centres in radiation medicine which will accept victims of nuclear accidents as patients.

7. MANAGEMENT OF RESPONSE TO DISASTERS

7.1 Interagency coordination and collaboration

Coordination in disaster preparedness and response at the international level should be a routine and regular occurrence so that the various organizations concerned learn to work together when not under the pressure of action to deal with emergencies, and to do so without competing for leadership and resources.

When Member States are concerned about health issues, they look to WHO for leadership which should be exercised firmly; the health input to coordinated action by the United Nations family at the country level must come from WHO. It is the task of WHO to marshal technical support in the health field, tapping where necessary the resources of the Member States and the expertise and experience of nongovernmental organizations.

WHO should continue to advise disaster-stricken countries to refuse unassessed emergency relief, and encourage donors to put their efforts into second-phase relief and rehabilitation. The decisions on the timing and contents of requests for assistance are for the affected countries to make, once they have determined how far they can go with their own resources. The meeting noted that the League of Red Cross and Red Crescent Societies has informed governments and its member societies that a decision to send unrequested drugs in an emergency is "a decision not to save lives".

In the African drought, different types of coordinating committees were established independently. The effective committees were those under the chairmanship of the government, with the participation of bilateral donors, multilateral agencies and nongovernmental organizations. Governments must have a central coordinating role in operational planning for disasters and their involvement in the contingency planning of the international agencies is also desirable because it ensures access to data which may not otherwise be made available.

There is difficulty in finding agreement among the agencies on the standards to be used in making assessments. Views diverge on the techniques to be adopted and there are no common parameters. It is vital that these assessments be coordinated, because they concern basic needs in the emergency situation. A greater effort should be made to establish common policies and guidelines.

At the field level, better communication and a freer exchange of information among agencies and between them and the communities receiving assistance would improve the impact of emergency programmes. The communities must be involved in planning and operations.

Agencies also need to find better ways of sharing information in the post-emergency phase to avoid repeating mistakes, and to ensure that the lessons learned lead to better performance. The development and application of an institutional memory is required.

The Office of the United Nations Disaster Relief Coordinator (UNDRO) collects and reconciles information from many sources on the targeting and types of assistance needed and communicates it to the donor community, international agencies and nongovernmental organizations. UNDRO expects the agencies to feed information into this system.

The meeting noted that technological disasters are increasing in frequency and that they are not covered by any specific mechanisms of international coordination in preparedness or response.

7.2 Immediate post-impact assistance: materials and supplies

WHO collaborates with UNHCR in listing the essential drugs which may be dispensed by health workers with very limited training in emergencies. The WHO Expanded Programme on Immunization has developed with OXFAM an emergency immunization kit. On vaccination techniques, WHO counsels the use of jet guns only if large numbers of people must be vaccinated quickly. Reusable syringes and needles are recommended - provided the capacity for sterilization is sufficient.

In its "pre-disaster" plans, UNICEF advises its field offices to identify the potential local suppliers of commonly needed relief items, the main means of transport and routes to disaster-prone areas, the potential transport contractors, and the means of delivering quickly goods procured abroad. Priority is given to local procurement as the most rapid and effective way of meeting the immediate needs of an affected population. The transport of vehicles and other bulk supplies from abroad may be costly and even if the prices for the same items within the country are high, it may be advantageous to buy them locally.

Care, however, must be taken not to upset the local market by depleting stocks, thus creating shortages and raising prices. UNIPAC handles overseas procurement for UNICEF and its services are available on a reimbursable basis to the United Nations agencies, governments and nongovernmental organizations. When a disaster strikes, a UNICEF country representative can draw immediately on a contingency fund and may if necessary divert supplies or funds within the country from regular programmes.

Increasingly, containers are bought rather than rented - at little extra cost - when importing supplies for assistance programmes in Africa. On arrival they are used as storage space.

The view was expressed that in emergency assistance there is a need for better coordination in the procurement and distribution of items other than food. Closer collaboration is needed among the external agencies to avoid duplication in internal transport and storage.

8. INFORMATION SUPPORT: APPLICATION AND USES FOR DISASTER MANAGEMENT

Country and community profiles are based on data collected in advance of emergencies. They should indicate preventive and mitigating measures for the control of hazards, for the education of the community in emergency preparedness and self-protection. Profiles serve to direct rescue and external aid and provide a baseline for the assessment of needs and for evaluation. They should include veterinary information. The development of a common model of a simplified country profile, useful as a tool in the field for all concerned with emergency services is a subject for discussion among agencies involved in disaster preparedness and response.

The need to collect information required in handling emergencies effectively is an additional reason for the development of a comprehensive health information system at the country and district levels as part of primary health care. The basis of such a system is training in surveillance for frontline health workers, village officials and administrators, who are usually the first to note that a disturbing situation is developing and who need to be given clear criteria for reporting. This is one aspect of an early warning system; the other is to train managers to use the information they receive for the planning of emergency services. So many organisms are involved in emergencies that the issue is as much a lack of communication and use of information as a lack of reliable data.

In refugee and famine situations, the interest is more in the quality of information than in the rapidity with which it is gathered. It is not necessary to spend time identifying the major health problems, which are known, but it is important to synthesize the information provided by past experience in similar

circumstances. At the beginning of an emergency, there are many indicators other than those to be found in country profiles - often informal signs which, to be detected, call for imagination on the part of information collectors - to show that a crisis is developing. The challenge is to decide what information is necessary and how accurate it needs to be.

Nutrition data are important, as well as infant and child mortality data, which are needed to interpret information on nutritional status. Mortality data in terms of crude death rates are, however, not valid unless the underlying population profile is known.

At present, the data and information available on nutritional status are unreliable in many countries. Efforts are under way to develop or strengthen food and nutrition surveillance systems, especially in those countries frequently suffering from critical situations. WHO, UNICEF and FAO have recently organized a plan of action for this purpose.

Data on nutritional levels, it was suggested, should be compared with economic indicators on a regular basis in order to judge the impact of economic policies.

If the purpose of collecting data is to cope better with medium- to long-term emergencies, it is advisable to set up training programmes for data collectors, as well as collection systems.

The Consolidated Information System for Famine Management in Africa, a project of the Centre for Research in the Epidemiology of Disasters at the University of Louvain, is a tool for programme planning for relief, rehabilitation and health development which, in its first, pilot phase covers nine countries in the Sudano-Saharan belt of Africa. Drawing exclusively on existing United Nations and governmental sources, the project explores the viability of developing a standardized data base which would serve famine prevention rather than famine response programmes. It is intended as an information source for governments, international agencies implementing famine-related programmes, research institutes and professional associations.

The UNEP International Register of Potentially Toxic Chemicals (IRPTC) has four main purposes: to make data on chemicals available to those who need it; to locate and draw attention to the major gaps in available information and to encourage research to fill those gaps; to identify the potential hazards of manufacturing, handling and using chemicals and make people aware of them; and to assemble information on existing policies for the control and regulation of hazardous chemicals.

IRPTC operates a global network for information exchange on chemicals and has stored comprehensive data profiles on over 600 chemicals of international significance in its computerized data files. It issues regularly a bulletin and other technical publications and operates a query-response service for those who need efficient and quick access to data on hazardous chemicals including emergency situations.

9. TRAINING AND PUBLICATION EDUCATION IN DISASTER PREPAREDNESS

The identification of risks to human life and health, whether natural or technological, is politically and economically sensitive. A first requirement of preparedness is public awareness of the nature, location and potential consequences of hazards, leading to a second stage: popular pressure for political and administrative action. The technical basis for the information on risks must be very sound, both to convince the experts in industry and in governments, and to serve as a foundation for popular messages. When emergencies occur, clear, brief and unambiguous messages conveying not only what is established information, but also

admitting what is not yet known, assume great importance as a means of allaying anxiety. Plans for disaster preparedness and response should specify the authorized sources of information and the target groups.

In disaster preparedness, training materials should be directed to the needs of the community, propose simple measures which are oriented towards self reliance and which can be implemented locally. As part of its contribution, WHO should stimulate the standardization of training for medical staff in emergencies.

Training, with the active participation of the community, should be a permanent aspect of primary health care, and local teams should be in contact with specialized health centres for back-up services. Briefing of expatriate health workers being sent into the field and refresher courses for them should incorporate material on disaster preparedness with particular reference to the areas to which they are being assigned.

Risk maps, as part of community profiles, and prepared with the participation of the local community, are valuable in identifying and making generally known the potential hazards to life and health to which the local people are exposed. Such maps, however, only assume usefulness in association with the mapping of resources: water, food, rescue and relief materials.

In the Americas region, as a result of an AMRO initiative, issues such as preparedness, the mitigation of disasters and sanitation in emergencies are being incorporated in the curricula of university schools of public health. These schools frequently become centres of coordination in sudden disasters.

Disaster preparedness, it was suggested, should be introduced as a module into all training developed by the technical divisions and programmes of WHO.

INTERREGIONAL MEETING ON
HEALTH, EMERGENCY PREPAREDNESS AND RESPONSE

Geneva, 13-16 April 1987

ANNOTATED AGENDA

Agenda item 1: EMERGENCIES, HEALTH AND DEVELOPMENT

Session 1 discusses the indispensable link between emergency preparedness or response and health development, the framework for WHO's emergency activities, and presents the main UN system views.

In 1977, the Member States of WHO at the World Health Assembly decided that the main health target of governments and of WHO should be the attainment by all the people of the world by the year 2000 of a level of health that would permit them to lead a socially and economically productive life, popularly known as "Health for All by the Year 2000". The Global Strategy for Health for All, launched in 1979, requires the combined efforts of governments, people and WHO, nongovernmental organizations and other associations of people concerned. The Strategy calls for action that makes it possible for people to defend themselves against disease and to promote their health, strengthening of the health infrastructure of Member States is one of the key issues. It is within such a framework that the promotion of emergency preparedness and response should be viewed, as an integral part of the Strategy.

At the same time, the health sector is only one partner in the overall multisectoral development programme. It is realized that short-term solutions, such as direct emergency relief operations, would be short-lived, whereas long-term solutions are required to strengthen the capacity of countries themselves to forge their own development and sustain it.

Within the framework of its general policy and strategies WHO plays an active role in the efforts undertaken by the United Nations organizations and nongovernmental organizations in the area of the health emergency preparedness and response.

Agenda item 2: PREPAREDNESS IN MEMBER STATES AND IN WHO

Session 2 discusses three examples of the health emergency programmes in Member States and provides the background for WHO's support to these programmes. The presentations illustrate a variety of approaches, problems and responses.

Country-specific experiences from India, Tunisia and Ethiopia serve as examples for the formulation of national emergency programmes: India's presentation concentrates on the health sector of preparedness and response; Tunisia's presentation concentrates on the health sector within the overall civil defence framework; and Ethiopia's presentation is on the coordination of massive emergency response involving a large number of external agencies and gradually leading to rehabilitation and development.

The World Health Assembly resolution WHA34.26 reaffirms that the Organization's commitment to emergency preparedness and to promotion of the development of approaches for the prevention of adverse health effects of emergencies. The Organization can provide technical advice in many areas, such as communicable diseases, environmental health, nutrition, essential drugs and related medical supplies. WHO Collaborating Centres are an important external resource which needs to be strengthened further.

WHO cooperates with the governments of the affected Member States in responding to the health consequences of the emergencies as an integral part of the regional and global strategies for health for all, particularly taking into account the need to intensify the Organization's technical cooperation at the country level to enable the Member States to enhance their emergency preparedness.

All regions of WHO have formulated their emergency preparedness and management programmes and the related plans of action which will be presented under this item.

Agenda item 3: ISSUES IN CHRONIC DISASTERS

Session 3 discusses the complex issues of famine, refugees and other large scale population movements, the ways and means to predict and prepare for such situations, as well as the modalities for response.

Large-scale population movements and famine, as a consequence of drought, wars or civil strife, are complex situations which require massive external resources. It is particularly in these types of disasters that the differentiation between emergency and long-term development becomes arbitrary. Many refugee situations have become semi-permanent and require the continuation of external assistance beyond the immediate emergency phase.

Food aid is the bulk of international assistance. The quantity and quality of food aid, its effects on local production, monitoring of needs and impact of food aid have been subject of extensive discussions, which will be summarized in this session. The health sector's role in the overall famine relief and preparedness are also to be discussed.

In the chronic refugee situations, after the immediate food aid and other acute relief efforts, other aspects of external and internal response gain importance, which have many similarities to regular development programmes. The formulation of refugee health programmes, external aid, community involvement, the balance of services for refugees the surrounding populations, the involvement and responsibilities of the host country's health authorities are among the issues to be discussed.

Agenda item 4: SPECIAL ISSUES IN ACUTE DISASTERS

Session 4 discusses the differences and similarities of approaches in response and preparedness for epidemics of communicable diseases and technological disasters; one type of disaster in which the health sector has long experience, and the other one becoming increasingly important and frequent.

Epidemics of communicable diseases are not a threat of yesterday for most of the world. The control of epidemics has a long history and may provide lessons for the efficient management of disasters of other types. The recent experiences in management of epidemics, chemical and nuclear disasters will be discussed, in order to compare the differences and similarities of approaches, the preparedness or prevention possibilities and methods as well as responses. The emergency preparedness and response approach which has this far concentrated largely on natural disasters, such as earthquakes, volcanoes, cyclones, floods, etc. will have to be reconsidered against the background of the changing nature of disasters.

Agenda item 5: MANAGEMENT OF DISASTER RESPONSE

Session 5 discusses the inter-agency coordination and collaboration in disaster response as well as the need to strengthen the coordination between the UN and other organizations, donors and recipients.

UNDRO has a mandate for the coordination of disaster response among UN agencies. It plays an important role between the Governments of the disaster-stricken countries and donors through its information and communication system. Other UN and nongovernmental organizations have more or less well-specified roles, some organizations concentrate on emergency action, some may draw on their regular programme resources and capacities established for other purposes in responding to emergencies. The standardization of the approaches may be difficult to achieve, but to a certain extent, guidelines etc. may help together with frequent communication in the rationalizing of responses and not wasting resources.

Agenda item 6: INFORMATION SYSTEMS: APPLICATIONS AND USES IN DISASTER SITUATIONS

Session 6 discusses information and communication as key issues in disaster preparedness and response. Some existing or experimental information systems and their applications are presented.

Appropriate emergency response depends on information. In addition to information describing the disaster situation, the assessment of needs, the background data on available resources and skills form the basis for action. Communication is even more crucial for obtaining the information together, to serve the decision making. Much of the information can be collated in advance. Communication channels can be established. Systems for early warning can be developed. New technologies provide means for collecting and combining information from a variety of sources. The session highlights developments and potentialities in this area.

Agenda item 7: TRAINING AND PUBLIC EDUCATION FOR DISASTER PREPAREDNESS

Session 7 discusses training materials and coordination of various training programmes, as well as community involvement and public education as means for emergency preparedness.

Orientation and training are amongst the most important components of emergency preparedness and management. Under- and post-graduate training as well as specialized training or orientation by various organizations will be discussed under this item. In WHO, there is need to clarify emergency response mechanisms at all organizational levels, to reorient WHO staff, particularly the WHO Representatives, to accelerate the implementation of training programmes and to place greater emphasis on practical training at the subregional and country levels for improving national capacities and capabilities for emergency preparedness and response.

In the immediate aftermath of disasters, the first response is mostly left to the community. The role of public education will be discussed.

Agenda item 8: WHO INTERNAL GUIDELINES IN DISASTERS

Session 8 discusses the framework for WHO's emergency management with reference to collaboration with and use of the other organizations' experiences in disaster management.

The capacity of WHO to provide sound technical advice on the management of emergencies within its field of competence need to be improved at all levels. The issues include assignment of responsibilities within the organization, improvement of information systems, communication, assessment of health needs, early warning systems as well as coordination and collaboration with other organizations.

Closing session:

The conclusions and recommendations of the meeting will be discussed for presentation to WHO and reporting to other organizations.

INTERREGIONAL MEETING ON
HEALTH, EMERGENCY PREPAREDNESS AND RESPONSEGeneva, 13-16 April 1987LIST OF PARTICIPANTSInternational Organizations

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