

# International health assistance in relief operations: preparing local health personnel to meet the challenge

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## Introduction

Disasters are not merely very large accidents. They imply complex public health problems that must be resolved under difficult circumstances: society's normal coping mechanisms are disrupted; the high visibility and critical coverage provided by the mass media make the situation politically sensitive; logistic nightmares abound; the multi-agency response from outside the affected area is often poorly coordinated. In short, decision-making in a climate of uncertainty is the norm. *Information* management, not the *medical* management of patients, is often the main challenge facing health managers and volunteers in the initial or relief stage of a disaster.

The concept of disaster management has evolved considerably in the last two decades. In the early 1970s, the international community was barely recovering from the highly-publicized relief efforts to aid the victims of the Biafra-Nigeria civil war, when it was shocked by the news of an unprecedented cyclone and tidal wave in Bangladesh. The death toll reached 250,000, and relief operations faced insurmountable logistic and administrative problems.

## International relief and response

As a result of this chain of events, innovative measures were taken to ensure a better international response: the United Nations Disaster Relief Office was created in Geneva, a Research Center on Disaster Epidemiology was established, and the Red Cross and Red Crescent Societies strengthened their international response mechanisms.

At the time, the situation appeared simple: what was needed was *better* emergency relief. If relief agencies such as the League of Red Cross and Red Crescent Societies and other NGOs were more effective, then international agencies and health ministries of the various countries could concentrate on “serious” issues such as long-term development of health services or extending primary health care coverage.

Simple, it was not! In spite of an explosion of new non-governmental agencies in the field of medical and health emergency relief, the disaster death toll kept climbing. International chaos and overlapping assistance did not appear to decrease. Besides, uncontrolled “technological progress” was creating new threats, such as the chemical accident in Bhopal, India, and the Chernobyl nuclear accident, which was a minor incident in terms of *immediate* health effects, but an ominous warning for the future. Perennial threats — earthquakes, hurricanes, cyclones, floods, drought, locusts — did not fade away. On the contrary, rising population, poverty and numerous conflicts dramatically aggravated the consequences of natural disasters.

From the far corners of the world, the mass media’s instant coverage exposes even the most remote disaster, highlighting not only the suffering of the affected population but also the shortcomings of the national authorities. This, in turn, triggers an influx of international aid into the country. Too often, it is the wrong thing, at the wrong place or at the wrong time.

However altruistic it is meant to be, this generous aid does not achieve its anticipated results if decision-makers base appeals on non-humanitarian criteria or if the type of aid reflects preconceived ideas, traditionally held by the public in donor countries, such as these:

## Myths and Realities of Natural Disasters

**MYTH:** Foreign medical volunteers with any kind of medical background are needed.

**REALITY:** The local population almost always provides immediate first aid. Only medical personnel with skills that are not available in the affected country may be needed.

**MYTH:** Any kind of international assistance is needed, and it's needed now!

**REALITY:** A hasty response that is not based on an impartial evaluation only contributes to the chaos. It is better to wait until genuine needs have been assessed.

**MYTH:** Epidemics and plagues are inevitable after every disaster.

**REALITY:** Epidemics do not occur spontaneously after a disaster and dead bodies will not necessarily cause catastrophic outbreaks of disease. The key to preventing disease is to improve sanitary conditions and educate the public.

**MYTH:** Disasters bring out the worst in human behaviour.

**REALITY:** Although isolated cases of anti-social behaviour exist, the majority of people respond spontaneously and generously.

**MYTH:** The affected population is too shocked and helpless to take responsibility for its own survival.

**REALITY:** On the contrary, many find new strength during an emergency, as evidenced by the thousands of volunteers who spontaneously united to sift through the rubble in search of victims after the 1985 Mexico City earthquake.

**MYTH:** Disasters are random killers.

**REALITY:** Disasters strike hardest at the most vulnerable group, the poor — especially women, children and the elderly.

**MYTH:** Housing disaster victims in temporary settlements is the best alternative.

**REALITY:** It should be the last alternative. Many agencies use funds normally spent for tents to purchase building materials, tools, and other supplies in the affected country.

**MYTH:** Things are back to normal within a few weeks.

**REALITY:** The effects of a disaster last a long time. Disaster-affected countries deplete much of their financial and material resources in the immediate post-impact phase. Successful relief programmes make provision for the fact that international interest wanes as needs and shortages become more pressing.

Slowly, the international pendulum has swung toward disaster preparedness, focusing attention and modest resources on the urgent task of improving the disaster preparedness of the health sector, National Red Cross/Red Crescent Society and local communities in a vulnerable country.

## **Local preparedness**

Preparedness implies recognizing the possibility of a disaster and its expected impact on public health. It includes measures to improve the *readiness* of the health sector by defining the respective roles of the various institutions, strengthening their capacity to deal with disasters, and engaging in contingency planning, drills and simulation exercises, and disaster-management training. The expected outcome: a prompt and efficient response in case of disaster.

### ***Risk mapping***

The first step is for countries, cities and communities to identify the risks to which they are exposed. Are earthquakes a threat, volcanic eruptions, floods, drought or perhaps snowstorms? What type of hazardous substances are transported or manufactured in the area? Neither Red Cross/Red Crescent Societies nor health ministries alone have this specialized information to plot on maps. Risk mapping is a multidisciplinary *task that requires the input of geologists, meteorologists, hydrologists and other experts. A technical inventory of all potential hazards that threaten a community is essential. Indeed, the value of preparing oneself against unknown risks is questionable!*

### ***Vulnerability analysis***

A community's vulnerability is made up of social factors that predispose it to suffer the health consequences of the hazard. Everyone, rich or poor, living around the Pacific Rim of Fire is *exposed* to the same risk or probability of experiencing an earthquake of magnitude 7 on the Richter scale. However, not everyone will be *affected* equally. Those who live in poor or neglected areas, in unsafe, substandard constructions, are the most likely to suffer health consequences.

A vulnerability analysis will come up with possible or probable public health scenarios for different types or magnitudes of hazards. Speculative by nature, scenarios open the door to a wide range of interpretation and abuse. Some are extremely unlikely, cataclysmic or worst-case scenarios, designed to capture the attention of the mass media and the public and the support of those who control the purse strings in more developed countries. Others, the so-called denial scenarios, lead to inaction on the part of officials in charge and lull the public into a false sense of security. Caribbean islands that overlook their earthquake vulnerability by narrowly focusing on hurricanes are an example. Another, even more symptomatic example is persistent official denial of impending famine in the light of a major crop failure and food shortages. Obviously, the motivation and rationale in these two examples may be quite different.

### ***Formulating a plan***

A disaster plan consists of two parts:

- *the main body* which assigns specific responsibilities, defines lines of authority and sets out administrative procedures for each probable or potential disaster scenario; and
- *the operational annexes* which list the resources available, the addresses of key personnel or suppliers and technical guidelines.

The first part of the plan will state who is responsible for water supply and quality control in temporary camps while the second part will list the addresses of chlorine manufacturers or experts and provide technical specifications for chlorination of water containers.

According to the resources available and the country's level of development, the plan can be limited to the most probable disaster situations or extended to cover less likely possibilities.

The process of formulating a disaster plan is perhaps more important than the final product itself — the written document. Finding advance solutions to the most common problems can be more beneficial than building extensive stockpiles of equipment. Potential problems can be organizational: for instance, who will coordinate medical triage and care at the disaster site — the hospital physician, the Red Cross, the fire department, the army medical officer, or can anyone and everyone fight for a piece of the action? Problems can also be institutional in nature. Disaster relief is not immune to interagency turf fighting and manoeuvring for visibility. Therefore, disaster plan-

ning becomes indispensable to resolve in advance as many potential conflicts as possible, thus minimizing the confusion that results from crisis situations.

Recruiting an “expert” to draw up a scientifically sound disaster plan or assigning the task to a deskbound planner is just not effective. Stories abound in the disaster relief community of sophisticated plans that merely gather dust on a shelf or are never consulted in times of emergency. The process of openly discussing an agency’s self-perceived role in an emergency, and its constraints and limitations is, in itself, a way to ensure better coordination among agencies. Latin America has used the process (or excuse?) of formulating a disaster plan to promote ongoing, productive discussion between ministries of health and social security, the armed forces health services and the Red Cross.

### ***Testing and updating the plan***

Simulations and mock disaster drills are needed to test the plan, not to show the mass media and the public how well prepared we claim to be. Testing will identify unforeseen flaws and weaknesses in the system. Any plan that claims to be 100% successful is a fake. On the contrary, the more problems that are detected (and corrected later), the better. Often, foreign experts are invited to participate in simulation exercises involving hospitals, the armed forces, municipalities and other institutions. Officially, their role is to assist in the “critical evaluation” of the exercise and the plan. But they quickly realize that constructive criticism is not welcome; the public relations display has little to do with improving the state of preparedness.

A final word: Do not forget that mock disasters are only a pale imitation of reality. Never be too complacent. A successful simulation is not a foolproof guarantee that the response to a disaster will be smooth.

### ***Training and public information***

As alluded to before, the response to a disaster rarely follows the neat contingency plan drawn up in the quiet environment of an office. The quality of the response will depend first on the readiness and qualifications of the first responders, local leaders and the primary health services in the affected communities and, second, on the ability

of the country's central authorities to support and coordinate the response from abroad. The better prepared the local health services and communities are, the better the overall national response will be. Developing human resources through training those who train should be an essential component of disaster preparedness.

The entire health services (primary, secondary and tertiary health care providers) respond to the health challenges of a disaster, and so do the Red Cross or the Red Crescent and the affected community itself. Consequently, everyone, from the man in the street to the general director of health services and higher, should benefit from disaster management training. It is a never-ending task.

Remember: Disasters are managed by people. Competent, well-informed volunteers or professionals are the key to a successful response, not money, supplies or equipment (though they admittedly help).

Experience in past disasters has confirmed that normal medical care, disease control, or environmental health measures are still the most appropriate in disaster situations. However, they must be implemented more rapidly, effectively and widely, with less resources, and under more difficult circumstances. It is not surprising, therefore, that improving health care in disasters is often contingent upon improving the quality and efficiency of health care in normal times. Training activities aimed at one will benefit the other.

It is at the *family and community level* that the most decisive and immediate post-disaster health actions take place. In sudden-impact disasters, search-and-rescue operations are carried out and initial care provided by relatives and neighbours rather than by organized health services or fire departments. At the family level, the most useful contribution may be the Red Cross/Red Crescent Society's efforts to promote basic first-aid training. Closer cooperation is required between WHO, the National Red Cross/Red Crescent Society and the Ministry of Public Health to ensure that first-aid training is given the necessary priority and support it requires. To be effective, local organizations and community leaders must be involved in disaster preparedness activities.

Despite their usefulness, *ad hoc* courses and workshops are not sufficient. In order to "institutionalize" emergency preparedness in the health sector, the educational curricula of academic or technical institutions that train the country's health personnel must progressively include the basic principles of emergency preparedness and disaster management. The systematic exposure of new generations of health professionals such as doctors, nurses or sanitary engineers to the basics

of emergency preparedness is vital to the stability and the continuity of the programme at the national level. Considerable success has been achieved in Latin America and Europe. In 1990, a survey among faculties of public health in Latin American universities revealed that more than 55% included disaster preparedness in the curriculum; of these, 64% had “formalized” the subject. In the long run, formal education should progressively replace basic disaster management workshops and training sessions.

## **Disaster prevention and mitigation**

Progressively throughout the 1980s, preparedness has improved significantly in many countries. In Latin America, for instance, thousands of professionals have been trained and the countries have designated full-time health coordinators to prepare and mobilize the health sector for disasters. In the Caribbean, the League of Red Cross and Red Crescent Societies worked jointly with UNDRO and PAHO/WHO in a decade-long disaster preparedness project. They have raised awareness and encouraged timely action in these island nations, thus ensuring that preparedness reaches a peak at the start of the annual hurricane season.

But disaster-related casualties are still high and the numbers are rising. Losses are not decreasing. Disasters and accidents remain a major obstacle to development and health. One more step must be taken to deal with the cause of the problem: prevention and mitigation.

A disaster need not have serious social or health-related consequences. The probability of a disaster occurring can be reduced by careful land use, by selecting proper sites for public works and by including or considering these factors in development planning.

Prevention and mitigation actually have the greatest potential for saving lives and reducing losses. But the scope of these measures goes far beyond the public sector, the medical community, or the Red Cross/Red Crescent system.

Certain prevention activities are directly relevant to the health sector. These include:

- early warning systems for drought and famine;
- location and design of health facilities;
- public education on house-building techniques.

### ***Early warning systems for drought***

The most visible and important effect of drought is widespread protein-energy malnutrition, which is definitely a health issue. Climatic, agricultural and market data make early detection of impending drought and food shortages possible. But the current collection of data and their analysis tend to rely heavily on sophisticated satellite and computer technology; this, in turn, depends on the funding and personnel from developed countries. But the already existing networks of epidemiologic surveillance, community health workers and Red Cross/Red Crescent volunteers could provide excellent support for collecting data at grassroots level and the opportunity to monitor the incidence of nutritional change.

### ***Location and design of health facilities***

The health sector is directly responsible for ensuring that new health facilities are built in safe places and that they adopt reasonable building norms and safety practices in areas that are prone to earthquakes, cyclones or floods. The complete destruction of hospitals — in Mexico City, El Salvador and Armenia — must be prevented in the future.

### ***Public education in building techniques***

Following earthquakes, cyclones and other sudden-impact natural disasters, the majority of casualties results from the collapse of unsafe housing structures.

Red Cross/Red Crescent volunteers should cooperate very closely with the ministries responsible for housing and, together with health professionals, they should actively disseminate knowledge and information about low-cost techniques that improve the disaster resistance of local building materials.

Reducing the human toll of natural or technological disasters requires a change in attitudes, from the head of State to the head of family. We are already slowly adjusting the way we build cities or manage agricultural land in order to reduce the risk of global pollution. We should now promote the same type of thinking when it comes to making public constructions or housing more resistant to natural hazards. Are the local hospital, the Red Cross/Red Crescent

Society's headquarters and its warehouse reasonably protected from major disasters? This is not the exclusive domain of some higher authority, it is everyone's concern and responsibility.

At the community level, the Red Cross or the Red Crescent, UN agencies and governments have initiated several pilot projects. For instance, the Italian Cooperation has tested and applied a procedure whereby small, poor communities are encouraged to identify local risks, discuss local solutions and implement them. The message is that disaster prevention should not be limited to that one giant cyclone or the earthquake of the century. Small disasters that occur in modest communities probably kill more people than the highly-visible events that attract international attention. Those small landslides, fires and chemical accidents may represent a custom-made challenge for organizations such as the Red Cross/Red Crescent Societies with their strong roots at the community level.

Disaster reduction, from prevention to response, is the objective that the international community has selected for the 1990s. All Member States of the United Nations have formally adopted the International Decade for Natural Disaster Reduction (IDNDR). Countries are urged to establish a high-level national IDNDR committee, where public officials, the private sector, NGOs, scientists and other leaders will join forces to mobilize public opinion and the country's resources for a national programme.

With their considerable experience in the social field, health workers, including the Red Cross/Red Crescent Societies, are particularly well placed to play a key role in this undertaking.

## **Disaster Reduction and Relief**

Prevention and mitigation *will* reduce the impact of disasters on health, but this will take time. On the other hand, they *will not* make society invulnerable. Buildings will continue to collapse — both older, unsafe ones and newer ones that are subjected to forces above and beyond those they were designed to withstand. Nor will prevention and mitigation suppress the need for humanitarian assistance and international solidarity. The process of providing external assistance will, however, have to undergo changes in the coming years, especially in developing countries with sophisticated health systems. There is neither justification nor room for the international dumping of expired drugs, used clothing or perishable foods.

Well-intentioned foreign medical volunteer teams or mobile hospitals that arrive the second or third day do little to save lives after sudden-impact disasters. The task has been completed by the nationals long before!

Developing and promoting a well-advertised search-and-rescue capacity in *developed* countries should not sidetrack the international community from the more important need to develop this on-site capability in disaster-prone developing countries. Unfortunately, transfer of technology and training are definitely less attractive than a highly-publicized, post-impact international response.

Do present trends in international relief complement and support preparedness and response efforts or do they, on the contrary, compete with or even supplant them? There is no clear-cut answer. Definitely, international relief assistance needs to be better attuned to development and disaster-reduction activities. Too much international attention is given to immediate needs in the aftermath of a disaster, and too little to the secondary problems. The immediate needs—search and rescue, medical care, shelter and food—can be dealt with promptly and effectively only by well-prepared local health workers or volunteers.

Relief, preparedness and prevention/mitigation are closely interdependent. Health relief assistance in the 1990s will have to become an integral part of development if it is to play its role in meeting the goals of the International Decade for Natural Disaster Reduction.

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