Earthquake Disaster in India: Overview of the Israeli Defence Forces Field Hospital in Bhuj — January 2001

Yosefa Bar-Dayan, MD, MHA;[1] Yaron Bar Dayan, MD, MHA;[3] Giora Martonovits MD MPA MPSc ;[2] Nissim Ohana, MD, MPH;[2] Avishay Goldberg, PhD, MPH, MA;[3] Yehuda Baruch, MD, MHA[1]

1. IDF Medical Corps Mission Team Field Hospital in Bhuj
2. Surgeon General Office IDF Medical Corps
3. Department of Disaster Medicine, the Faculty of Medicine, Ben-Gurion University Israel

On 26 January 2001 at 08:45 hours, an earthquake of 7.9 magnitude (Richter scale) struck the Gujarat state in the northwest of India. India suffered many thousands of fatalities and more than 10,000 people were injured.

The earthquake significantly damaged the infrastructure of the cities including that of the healthcare system. Medical teams and rescue services from numerous countries were posted in the region and provided medical aid.

The Israeli Defence Forces (IDF) Field Hospital arrived at Bhuj, on Day 5 after the quake. The team consisted of 100 medical and 80 logistics personnel. The field hospital acted both as a primary-care clinic and as a secondary referral center for several worldwide, volunteering medical teams, and to the partially functioning hospitals of Bhuj. The hospital provided an operating theatre and hospitalization facilities in the damaged city, whereas the local hospitals could not provide these services during the first two weeks after the quake.

A total of 1,200 patients were treated in the field hospital between Day 5 and Day 19 following the earthquake. A total of 127 patients (10.6%) were hospitalized in the field hospital for a duration range of 24 hours to one week. During the two weeks of activity of the hospital, 54 patients were operated on and 13 new babies were born.

The unique culture of the Indian people led to the establishment of a special doctor-patient relationship. Indian time is endless, and it always is available. Its people are modest and have a magical ability to accept the suffering and loss. Their faith had given them the strength to accept the disaster and the ability to act and help each other in spite of their great sorrow. People were not passive, they did not complain, they continued in their routine without any aggression and with a mysterious harmony and self-containment.

As patients, the Indians do not tend to agree to be hospitalized even if they suffer from a major disease, and they urge the doctor to send them home even if they have an acute myocardial infarction, pulmonary edema, or a major wound infection. Diseases, such as tetanus, that only rarely are seen in the western world were seen in this hospital.

The Indian volunteers met in the hospital quickly became friends, and, together with the Indian nurses, physicians, and volunteers, we could encourage the sick and wounded and provide them with medical care. Although some of the volunteers had lost their families, they found the strength to help others go through great suffering.

Conclusions: We came to help in a state of disastrous distruction, and we have learned a new way of life. It was difficult not to fall in love with these people, and we felt that every one of us had been given a lot more than he gave.

Keywords: culture; earthquake; field hospital; India; mass casualties
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Email: bardayan@netvision.net.il

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Free Papers: Global Sharing: Education Programs for Health Professionals

Co-Chair: Knut Ole Sundnes, MD;[1] Dr. Judith M. Fisher, MD[2]

1. Head, Office for War Surgery and Emergency M<edicine, Norway; Chair, Task Force for Quality Control of Disaster Management; President, WADEM
2. Chief Medical Advisor, British Red Cross, United Kingdom; WADEM Chief Financial Officer

Disaster Management in the World

Wei Zhao
Department of Training, People's Liberation Army General Hospital, Beijing, PR. China

With the development of the world, more and more disasters are occurring caused either by manmade or natural events. There are urgent needs to access more information about disaster reduction, disaster prevention, and disaster medicine. In addition, disaster management training is very important, especially in China, a country with a very large population. Currently, there are increasing data relative to these subjects. This paper discusses disaster management and humanitarian assistance, describes the World Wide Web information on disaster management, and introduces some methods for obtaining and using these data, and training medical students on disaster management.

Keywords: China; data; disasters; education; events; management; medical students; training; World Wide Web
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A Graduate-Level Certificate Program in Disaster Management

Øistein Knudsen Jr., CNSc, SdrPhilos; Arnfinn Tønnessen, PhD;[1] Donald MacMillan, PA, EMT-P; David C. Cone, MD
Oslo, Norway

Buskerud University College in cooperation with the Norwegian Directorate for Civil Defence and Emergency Planning, the Division of Disaster Psychiatry, the University of Oslo, and HQ Defence Command, Norway, offers a graduate-level certificate program in disaster management. The program (an obligatory part of the Masters in Disaster Management Program), is a one-year, part-time program that is designed to teach principles of multidisciplinary disaster-, crisis-, and war management to senior professionals from police and fire departments, emergency medical services, city managers, military and homeland defense personnel, local health officials, and disaster response personnel. The curriculum emphasizes three major topics: (1) society, culture and environment; (2)

human aspects; and (3) preparedness and management. Practical exercises ranging from tabletops to full-scale field deployment are an important part of the program. The Division of EMS, Section of Emergency Medicine, and the Division of Environmental Health Services, Section of Epidemiology and Public Health at the Yale University School of Medicine are working with representatives of the three Norwegian agencies to bring this program to the United States. Utilizing essentially the same curriculum, U.S. students will complete four one-week, on-campus sessions, several on-line and distance-learning projects, and a final, one-week field exercise. Public health personnel will study and work alongside more traditional field personnel and emergency managers in this program, helping to integrate public health into disaster response.

Keywords: crisis; curriculum; disasters; education; learning; management; masters degree; preparedness; public health
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Where's That Disaster Manual?! The Training of Clinicians on Hospital Disaster Plans

Christina L. Catlett, MD
Deputy Director, The Johns Hopkins Office of Critical Event Preparedness and Response, Department of Emergency Medicine, The Johns Hopkins University, Baltimore, Maryland USA

In the wake of recent terrorist events, hospitals around the United States are realizing that existing disaster plans are not well suited to mass casualty events, and are designing new disaster plans to improve readiness. However, a hospital's disaster plan cannot be effective if clinicians are not trained in the activation and implementation of the plan. For many years, clinicians have been trained in hospital disaster procedures through disaster drills. A comprehensive literature review indicates that there is a surprising paucity of scientific evidence supporting this educational technique, although most experts still recommend the drill as a vital training tool. Are there other educational approaches that would be useful for primary or adjunctive training of clinicians to use their disaster plans, such as tabletop exercises, "smart" simulated casualties, and computer simulations? What is the evidence supporting these approaches? A group at Johns Hopkins is taking an evidence-based medicine approach to hospital disaster plan preparedness.

Keywords: clinicians; disaster; drills; evidence-based medicine; exercises; hospital; Johns Hopkins; plans; tabletop; training
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E-mail: ccatlett@jhmi.edu

Disaster Medicine Training in the Philippines

Teodoro Javier Herbosa, MD, FACS
Philippines General Hospital, Manila, Philippines

Objective: This study aims to describe the courses dealing with disaster medicine in the Philippines over a 10-year period from 1992 to 2002. It also aims to identify the training needs and requirements in the field of disaster medicine in the country.

Methodology: This is a retrospective analysis of courses offered during the study period, including who were trained; the duration of the course; where the funding was obtained; the trainers; and the training facilities available.

Results: The field of disaster medicine was recognized in the Philippines during the study period. Several disasters led to this renewal of interest in the field of disaster medicine, including the 1990 earthquake in Bagiuo and central Luzon; the 1991 eruption of Mt. Pinatubo; the flash floods of Ormoc, Leyte; the Ozone disco fire; the Cherry Hills landslide; and the Payatas dumpsite, among others.

The leaders in disaster medicine training were the Department of Health's STOP DEATH (Stop Disasters, Epidemics, Accidents and Trauma for Health) Program and the University of the Philippines (UP), Manila. The UP Manila College of Public Health and the Philippine General Hospital Department of Emergency Medical Services were central to these modular training courses. The University had a collaborative symposium with Kobe University after the Kobe earthquake. The World Health Organization, Western Pacific Regional Office, conducted several regional disaster medicine courses. The Asia Pacific Center for Disaster Management (APCDM; later renamed the Institute for Disaster Risk Management, (IDRM) conducted courses as well, as did the Asian Disaster Preparedness Center (ADPC) based in Bangkok, Thailand. The Philippine National Red Cross also conducted disaster medicine seminars for their volunteers and the community. The National Disaster Coordinating Council has conducted courses through its teaching arm, the National Defense College of the Philippines.

Conclusions: Disaster medicine training in the Philippines remains fragmented and in its infancy. International training often is inappropriate to the available healthcare system and technology in the country. Since funding sources were not institutionalized, funding ended after a few courses; none of the courses were sustained. The academy and the health sector need to develop disaster medicine courses that are more permanent and sustainable and not dependent on foreign grants, money, or expertise. Local experts must develop the appropriate curriculum to affect a decrease in morbidity and mortality due to disasters. After 10 years, similar mistakes with little improvement seem to occur. There should be a government center dedicated to expertise, training, and research in the field of disaster medicine.

Keywords: disaster medicine; funding; Philippines; research; training
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