

has been tested and delivered in South East Asian countries. It addresses the structural, non-structural, on-site and inpatient management of disasters, including hospital evacuation.

The three priorities of HOPE are to: (1) produce local instructors; (2) institutionalize the course; and (3) to prepare the hospitals for disasters.

Twenty-nine instructors have been developed from this course. In the process of institutionalization, many sensitization programs have been conducted for high officials within the government. The result is that the Nepalese government has allocated a budget for HOPE. The sensitization also showed extra benefits; it helped us select proper, various organizations financed HOPE and also the course got known to other hospitals and they have requested for more courses.

The most important objective of HOPE is to help hospitals in Nepal prepare for emergencies. Previously, only some hospitals had non-implemented disaster plans and only one hospital held regular dispatch drills. Now, with 95 HOPE graduates from 10 hospitals, four hospitals have developed disaster plans and have performed disaster drills. Seven hospitals, including one private hospital, are preparing their disaster plans including one private hospital, after which they are planning to do a disaster drill.

Our future goal is to provide training to all the large hospitals in Nepal and to help them develop their disaster plan and drills so that when disaster occurs, hospitals will effectively be prepared because of HOPE.

Keywords: education; finance; hospitals; Nepal; preparedness; training
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Hospital Preparedness for a Mass-Casualty Incident: A National Pilot Drill

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Terrorists strike all over the world without prior notice. Unfortunately, it is not a question of “will it happen”, but rather “when will it happen”, and if so, “are we ready?” The health system in Israel is on constant alert for mass-casualty incidents (MCI) and disasters.

In April 2006, the Tel Aviv Sourasky Medical Center, a Level-1 Trauma Center, practiced a national pilot drill, the Rapid Response System for Mega Mass Casualty Incidents, for the first time. The drill was carried out in cooperation with the Israeli Defense Force (IDF) Home Front Command (HFC), Magen David Adom (the National Israeli Emergency Medical Service), the Israeli Police Force, and the National Railway System.

The drill was performed without interrupting the regular work of the hospital. Due to the continuation of the regular work, not all of the designated personnel took part in the drill. The drill was evaluated by colleagues from other hospitals, HFC, and the Ministry of Health.

Two hundred “casualties” were brought to the hospital within three hours. There were 120 minimally injured, 30 moderately injured, and 30 critically injured casualties.

The drill was performed in order to evaluate the hospital and the national response system to a major (“Mega”)

MCI. It also evaluated the cooperation and collaboration among all agencies related to the MCI response.

This paper will present the outcome of the drill as well as the recommendations to health authorities that followed the drill.

Keywords: drills; hospitals; mass-casualty incidents; preparedness; terrorist attacks

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The Impact of Three Super Typhoons in the Philippines within One Year: Climate Change

Experience

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Introduction: Several typhoons from the Pacific Ocean impact the Philippine archipelago each year. Category 4 typhoons strike this region every five to seven years. In 2006, three super typhoons devastated the Philippines. The experiences of dealing with the effects of these three successive typhoons damaging communities including the capital, Manila, are presented.

Methods: A review was conducted of the experiences in the Philippine regions affected by Typhoons Milenyo, Reming, and Seniang.

Results: Typhoon Milenyo directly impacted metropolitan Manila. Power lines were downed by the >180 kph winds and the damage to several billboards resulted in deaths. Typhoon Reming caused the flow of lava from the Mayon Volcano burying several towns despite excellent early warning systems. Typhoon Seniang caused the devastation of several islands as the country still was in the recovery process from the impact of the two previous typhoons.

Conclusions: As global changes in weather continue to occur, valuable lessons can be learned from the resilience demonstrated by the Filipino community in dealing with climate change.

Keywords: community; Philippines; recovery; typhoons; weather change

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National Centres of Research and Development in Medical Emergency Preparedness in Sweden

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In 1999, Swedish National Board of Health and Welfare established National Centres of Research and Development in medical emergency preparedness. The centers have been linked to already existing, university institutions and other corresponding bodies. Today, five centers have been established, with an annual budget of US\$3.3 million.

These centers have been established in the following areas: Microbiological Preparedness, Radiation Medicine in Disasters, Disaster Toxicology, Disaster Medicine and Disaster Psychiatry. The centers have different tasks within their respective area of expertise—from research in psychosocial support and traumatic stress, classical disaster

medicine, development of tools for education and training, and management of accidents involving heavy vehicles (buses and high speed trains) to the different chemical, biological, and radiation/nuclear areas.

The centers have served as important expert bodies for the National Board of Health and Welfare and have produced scientific reports on items within their respective area of expertise, such as depleted uranium, evacuation of victims in bus accidents, quality assurance in command and control, and follow-up studies on psychosocial support.

The Swedish National Board of Health and Welfare has, in this way, promoted research in the area of emergency medicine that would not otherwise have been performed due to lack of foundation and support from traditional Swedish funds for research.

Keywords: disaster medicine; preparedness; research; Sweden; training
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Analyzing Factors Affecting Mitigation and Preparedness for an Earthquake at the Individual Level in Istanbul

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This study is aimed at investigating the process of taking action regarding earthquake preparedness and the mitigation of the effects of earthquakes at the individual level, and identifying factors that influence this process. This paper is based on the first part of an ongoing project. It was conducted in Istanbul using Focus Group Discussions (FGDs) and in-depth interviews. To maintain comparability, the FGDs were conducted in two areas of Istanbul that have different levels of earthquake risk. Within these areas, three socioeconomic levels were considered. A total of 13 FGDs were conducted. Eleven in-depth interviews with key informants also were conducted. A Maxqda software program was used to assist in data analysis. The discussions and interviews indicate that the 1999 Marmara earthquake, which resulted in the deaths of >30,000 people, has affected people in both positive and negative ways regarding preparation and mitigation activities. The analysis confirmed that better socioeconomic status and a higher level of education are important factors for undertaking mitigation and preparedness activities; however, these factors do not automatically guarantee better preparedness or mitigation at the individual level. Other factors such as: (1) direct experience with the consequences of the 1999 earthquake; (2) social interaction; (3) social acceptance of preparation measures; (4) risk perception for the individual; (5) outcome expectancy; (6) cultural issues; (7) normalisation bias; (8) onset time; and (9) others may have substantial influ-

ence on individuals. Also, fatalism and some religious beliefs do not advocate for the importance of disaster preparedness. The results of this study will provide key points for better preparedness programs.

Keywords: determining factors; earthquake; individuals; Marmara earthquake (1999); preparedness; Turkey
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Introduction of a Model for a Village Disaster Task Force in Iran, Based on a Community Intervention Trial on a Flood Early Warning System

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Introduction: This study has proposed a Village Disaster Task Force (VDT) as complementary part of Iran's national law for disaster management. The effectiveness of the VDT was evaluated using a flash flood Early Warning System in Golestan Province.

Methods: A community interventional trial was implemented during the summer 2006. Using a systematic random sampling selection process, 4,732 subjects were studied in both of the areas. The composition of the VDTs included representatives of the community, government, Ministry of Health, Iranian Red Crescent Society (IRCS), and Basij (a community-based military organization). The VDTs trained the population on flash flood preparedness, established a local communication system, and conducted the safe-zone drill. The statistical software used was STATA 8.0 and the interaction of the study area and assessment time in logistic or linear regression models was used to evaluate the effectiveness of the intervention.

Results: Pre- and post-assessments estimated that 20.4% and 80.6% of people had prepared an emergency kit in intervention area, respectively, and it was estimated that 11.6% and 19.3% had an emergency kit in the control area (Adjusted $\beta = 3.27$, confidence interval (CI) 95%: 3.24–3.50, $p < 0.001$). The result were same for the flood hazard map, participation in the safe-zone drill, and other outcome measures ($P < 0.001$). A case study on the communication system of VDTs during a flood threat on 13 September due to a heavy rain demonstrated the system's effectiveness.

Conclusions: The VDT task force is an effective integrated model that is based on community capacity and government legislation, and can be a basis for extending to other rural parts of the country and other hazards.

Keywords: disaster risk management; early warning system; emergency preparedness kit; floods; Iran; people-centered disaster management
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