agencies to disasters.

Data from the Ministries and Departments of Union and State Governments, non-governmental organizations (NGOs), CBOs, and the reports and recommendations of the Committees and Commissions were collected and analysed. Reports and data pertaining to responses to major disasters that took place in India, for example, the Gujarat earthquake, and web based information from other countries were reviewed.

The government responses to natural disasters has improved progressively, due chiefly to administrative function; the presence of relief manuals at district levels; predetermined allocation of duties; and recently emerged public-private partnerships. However, there is no coordinated or integrated approach to an effective response. An integrated policy at the national level will address the vital aspects of disaster management in India. The presence of such a policy will help to define the government's approach on a continuous basis, and will aid in streamlining the coordination and functioning of various agencies.

Lack of command, coordination, civil administration involvement, civil resources, and apathy are illustrated repeatedly whenever and wherever disaster strikes in India. This remains true despite the fact that 24 states have been identified as being vulnerable to natural disasters. A simple identification of disaster-prone areas followed by designation of essential and specialist assets and contingency planning are required, all of which should come into motion automatically at the time of a crisis.

**Keywords**: disaster response; disaster risk analysis; India *Prehosp Disast Med* 2002;17(s2):s29-30.

### Planning for Passenger Ship Emergencies in Isolated Areas

Graeme McColl

Disaster Response Planning Coordinator, St John Ambulance Service, Christchurch, New Zealand

**Objective**: The aim of the process was to produce a coordinated plan involving all agencies likely to respond to a passenger ship in difficulties in Fiordland.

Background: Fiordland is situated at the South Western corner of New Zealand's South Island. It is a rugged isolated area with very few facilities or resources. A worldwide growth in ship cruising and Eco-tourism has seen cruises to this area increase dramatically both in frequency and size of the ships. All organisations involved (ship owners, national search and rescue, emergency services, and environmental authorities) had individual plans or ideas for responding to potential problems.

Methods: A meeting was called and presentations on each organization's preparation and planning were given. Presenters included: ship owners, pilots, national and local rescue organisations, emergency services, Fiordland business interests, and central and local government organisations serving the area. A small sub-group was formed to prepare plans for approval.

Results: A plan for the management of incidents on passenger ships was prepared and approved within five months of the first meeting. This plan coordinates the response required, the location, and the links to the resources of all

agencies likely to be involved.

Conclusions: While individual organisations may have existing plans (and ideas) regarding emergency response, these may not correspond with those of other agencies or with reality. A coordinated plan requires input from all agencies likely to be involved.

Keywords: agencies; coordination; cruising; emergency services; links; management; New Zealand; plans; search and rescue; ships; tourism
Prehosp Disast Med 2002;17(s2):s30.

### Task Force Session: Response to Psychosocial Aspects of Disasters

Chair: Professor Derrick Silove
Professor of Psychiatry, University of New South Wales, New
South Wales, Autralia; Director, Psychosocial Recovery and
Development, East Timor; Co-Chair, WADEM Task Force on
Psychosocial Aspects of Disasters

# A Psychosocial View of Marmara Earthquake in Turkey

Nese Kocabasoglu, MD;<sup>1</sup> Nurdan Apaydin, MD;<sup>2</sup> Ibrahim Balcioglu, MD<sup>1</sup>

- Professor, Istanbul University Cerrahpa\_a Medical Faculty, Department of Psychiatry Istanbul, Turkey
- Bogazici University, Kandilli Observatory and Earthquake Research Institute, Department of Earthquake Engineering, Cengelkoy, Istanbul, Turkey

On 17 August 1999, a devastating earthquake of magnitude 7.4 on the Richter scale, struck the Marmara Region in the northwest of Turkey, which is the most intensely populated and industrially developed part of the country. The impact on human psychology of social and economic losses caused by the quake was immeasurable, since the region's national income per person was twice the national income per person on the overall. This study examines the presence of an anxiety disorder observed after an earthquake in the people who live in the Marmara region of Turkey.

The study was implemented two and one-half months after the earthquake. At that time, it is expected that the symptoms of acute stress disorder that typically occur during the first four weeks after the quake, should have disappeared. Disorder and over-alertness often have been encountered by the people in the quake area who have applied to be evaluated in the Anxiety Disorders Polyclinic of the Department of Psychiatry at Cerrahpa\_a Medical Faculty, Istanbul University. This research was carried out in collaboration with the Department of Earthquake Engineering, the Kandilli Observatory, and Earthquake Research Institute, Bogazici University. Diagnoses were determined according to the DSM-4 diagnostic criteria as a result of psychiatric examinations by the same psychiatrist. After this initial step, the same psychologist preformed some psychological tests on each patient, and the scores obtained were analyzed. After scoring was completed, psychiatric treatments were established for the patients.

In this study, major depression, obsessive-compulsive disorder, generalized anxiety disorder, panic attack, social

phobia, post-traumatic stress disorder, somatoform disorder, trichotillomania, tic disorder, schizophrenia, bipolar affective disorders were presednt in this population following the earthquake.

Keywords: depression; earthquake; panic attacks; phobia; post-traumatic stress disorder (PTSD); schizophrenia; bipolar; somatoform disorder; testing; ticdisorder; treatment; trichotillomania; Turkey

Prehosp Disast Med 2002;17(s2):s30-31.

E-mail: nesekocabasoglu@superonline.com or napaydin@boun.edu.tr, or nurdanapaydin@hotmail.com

#### SALVE: The System for Coordination of Management in Extreme Incidents in the Psychosocial Field

Claes Lind, Reg Psychologist, Annika Hedelin, RN Center for Prehospital and Disaster Medicine, Gothenburg, Sweden

SALVE was created in response to the experience of several major accidents and disasters, and was in accordance with a project in psychological quality-development supported by the National Board of Health and Welfare. The system is now a part of a development program in the western region of Sweden. Other parts of Sweden also have expressed their interest in the implementation of this computerized system. The system is suitable to be connected to the national system SWEDE, used by the somatic field and rescue service, and therefore, is available to other professionals outside the psychosocial field.

Psychosocial organization for disasters is based on answering the following questions: (1) What should be done? (2) How should it be done? (3) Who should do it? SALVE is meant to give support to maintain and develop this structure before, during, and after an incident through different types of technical support. The purpose of SALVE is to increase the efficiency, while simplifying, preparing, and developing the quality of operative management in the psychosocial field; and ultimately, creating a dynamic, task-orientated organization in the accident and disaster-field. The following functions in the program will be illustrated: "bank of knowledge", distribution of information, documentation, communication within leadership, staff-management, mission-report, planning of localities, identification-support, education, and training.

Keywords: education; field; information; management; organization; planning; psychosocial; quality; rescue; SALVE; SWEDE; training
Prehosp Disast Med 2002;17(s2):s31.

### Free Papers : Global Sharing: Education Programs for Health Professional

#### Training of National Disaster Medical System Responders Via the Internet

Richard Bissell, PhD; Bruce J. Walz, PhD; John Droneburg, MBA

Department of Emergency Health Services, University of Maryland, Baltimore County, Baltimore, Maryland USA

The United States Public Health Service (USPHS) main-

tains Disaster Medical Assistance Teams (DMATs) strategically located throughout the United States. Teams consist of volunteers from all aspects of health services including physicians, nurses, health workers, and EMTs. Some support personnel have no formal medical training, but possess expertise in specific logistical areas. Upon activation, team members become federalized with control and compensation by the government. To develop and maintain knowledge and skills, teams are encouraged to train and exercise regionally or on their own. Prior to implementation of an Internet training program, training was team-specific, non-centralized, and without a standard curriculum.

Recognizing the need to provide standardized training, the USPHS Office of Emergency Response contracted the University of Maryland, Baltimore County (UMBC) to develop on-line, Internet-based, didactic training. On-line training is used by UMBC to deliver emergency health services education.

The UMBC developed, delivers, and maintains student records for DMAT training covering a variety of topics related to team response and medical specialties. Utilizing a distance-learning platform, material is presented via audio lecture with visual slide presentations. Supplemental information is available on-line along with participant evaluation. Continuing Medical Education Credits (CMEUs) are available as an incentive for participation.

This presentation will describe aspects of the program and discuss lessons learned related to:

- Curriculum development process
- Curriculum packaging
- Curriculum delivery
- Participant evaluation
- Tracking of participant progress
- Revision and updating
- Alternative delivery methods (non-online)

The on-line training program consists of 32 modules and has reached 8,000 participants nationwide.

Keywords: curriculum; Disaster Medical Assistance Teams (DMATs); distance learning; education; emergency health services; evaluation; Internet; modular courses; on-line; tracking participation

Prehosp Disast Med 2002;17(s2):s31. E-mail: walz@umbc.edu

## Computer Simulated Earthquake Medical Intervention in Olt County, Romania

Col. (r) Steiner Nicolae MD, PhD;<sup>1</sup> Bg. Gen. Dragusin Ion, MD<sup>2</sup>

- 1. Director of National Training Center in Medical Management of Disasters, Romania
- Romanian Health and Family Ministry, Director of Special problems and NATO Integration Department, Romania

Introduction: Taking into account the 1977 March earthquake data, we continued the study of these natural disasters in an attempt to calculate the specific morbidity and mortality rates.

Methods: Using the Epi 6.04 and our own calculation algorithm, we obtained a matrix of calculation of needed medical forces and assets necessary to perform the medical interventions associated with earthquakes in the prehospital and hospital phases.