Transport = 0, Health equipment = 0, Hospital beds = 0, Organization = 2, Total = 4.
Total = 57; Average = 13.

Conclusions: A standardized scoring system must be available for evaluative research. This trial revealed following problems: 1) the scoring depends on the view of the referee; 2) the referee must be trained to use the scoring system; and 3) more trials will validate the confidence in the use of the scales for the severity of disasters.

Keywords: earthquake; Guidelines; severity score; Tottori-Ken Seibu earthquake, 2000; Utstein Templates; WADEM

Evaluation of the Geiyo Earthquake
Katsubiko Ibara MD; Takahiro Hotta, MD;
Hajime Ogawa, MD; Tatsumi Matsuoka, MD;
Katsushige Goami Me
Critical Care Medical Center of National Kure Medical Center, Japan

Introduction: The magnitude of the Geiyo earthquake was 6.7 on the Richter scale, and the maximum amplitude of the earthquake was 6 degrees.

Objectives: To evaluate the Geiyo earthquake,
Methods: The disaster evaluation-research template was applied.
Results: One-hundred ninety-five persons were injured including one death, and 352,292 houses were damaged. The roads were blocked at 704 points, and 49 routes were closed. Just after the earthquake, many components of the public transportation system such as the railways and omnibus, stopped temporarily, but they were returned into service several hours later. Lifelines also were blocked temporarily. At the one time, the water supply was blocked in 47,767 houses, the leakage of fuel from gas line was identified at 449 points, and the supply of electricity was interrupted in 35,108 houses. Sixty-one hospitals were stricken, but any decrease in the clinical activities was not apparent.

Conclusion: The evaluation for Geiyo earthquake using the disaster evaluation-research template, indicated that the Geiyo earthquake did not produce much damage. The training for the management of the disaster was useful.

Keywords: damage; earthquake; Geiyo earthquake; hospitals; lifelines; training; transportation

Mortality from the Chi-Chi Earthquake In Taiwan
Chiung-Yuan Hsu, MD; Fuh-Yuan Shih, MD; Wan-Ching Lien, MD; Matthew Huei Ming, MD, PhD; Wen-Jone Chen, MD, PhD
Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan

Objective: The Chi-Chi earthquake on 21 September 1999 was the most serious disaster in the last century of Taiwan. The purpose of this study was to analyze the pattern and risk factors for mortality.

Methods: It was retrospective designed. Records collected from the DOH were reviewed. Most of the victims received forensic examination. The causes of death were coded by ICD-9. Comparison with the experience of Hanshin earthquake and Loma Prieta earthquake was made.

Results: Most of the death happened at the first 24 hours (92%). More than 90% were dead at scene. Another 6.62% still passed away in the hospitals even under aggressive treatment. Intracranial injury results in most cases of victims, followed by complications of trauma, crushing injury and torso blunt injury. Skull fracture had highest mortality among all types of injury. In every age group, intracranial injury was the leading cause of death.

Conclusion: Head injury was the most cause of death in this earthquake and education for prevention should be emphasized. Compared with the Hanshin and Loma Prieta earthquake, death caused by burn or crushing syndrome was significant lower. It was probably due to different architecture materials and the timing of disaster attacked.

Keywords: earthquake, mortality, disaster

Problems in Disaster Rescue Work in Taiwan
Kuang-Jui Chang, MD; Fuh-Yuan Shih, MD; Ting-I Lai, MD; Matthew H-M Ma, MD, PhD; Wen-Jone Chen, MD, PhD
Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan

Introduction: During disasters, it is common for response teams from long distance to help. They sustained emotional stress in unfamiliar situation. The purpose of this study was to survey the feelings and observations of the rescue workers.

Methods: A questionnaire was distributed to participants before a training program for community disaster responders. It included a series of questions that sought the subjective feeling of their experiences and observations about their work.

Results: A total of 430 questionnaires were distributed, and 384 questionnaires were valid for analysis (89.3%). While asking for deployment to some disaster impact area, their family was the first concern (33.8%). Social support from friends contributed most for relieving their stress (37.2%). Only 32.3% of them thought that traditional taboos hampered rescue work. Most (65.6%) perceived that there was a significant increase in rumors and crimes. While asking what was the major problem in rescue work, a vague command structure was perceived as the most important problem (58.3%).

Conclusion: An efficient command structure and control of rumors are important in disaster response tasks. Social support could be beneficial to relieve tension. Taking care of their families can facilitate their willingness to join distant rescue efforts.

Keywords: command structure; disaster; emotional stress; rescue workers

January – March 2002 http://pdm.medicine.wisc.edu Prehospital and Disaster Medicine