

Poster Session II

Wednesday, 12 May, 11:00–11:45 hours

P-5

Experience with an Indoor Telephone Exercise on Disaster Preparedness Training: A Preliminary Report*Chih-Hsien Chi, MD; Wen-Hsing Chao, RN; Ming-Che Tsai, MD*

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Objectives: The experience with an indoor telephone drill for disaster preparedness in Taiwan is limited. To assess and compare emergency medical technicians' (EMTs') attitudes toward an indoor telephone drill and field drill in order to determine the effects of these exercises on the disaster preparedness and management.

Method: A nine-item questionnaire modified from the disaster evaluation guide questions No. 2271–2282 published by American College Emergency Physicians (ACEP), then was completed by 29 EMTs before and after participating in a 6 hour, mass casualty incident training program (including a one hour telephone drill).

Results: The results of the survey indicated that a field operation exercise could not provide adequate experience to link results of disaster exercises to appropriate changes in terms of training, equipment, supplies, and plans. Field operation failed to demonstrate the ability to fill in the absence of key executives. A telephone drill provided better performance relative to these two issues (41.4% vs. 65.5% and 41.4% vs. 62.1% respectively, $p < 0.05$). Indoor telephone exercises also provide a better chance than do field exercises to evaluate the response without relying on use of telephone, which may be damaged or jammed in a real disaster (72.4% vs. 51.7%, $p < 0.05$).

Conclusions: For disaster exercises, limitations of field operation drills such as communication, coordination, assignment of responsibilities, post-event mitigation priorities were noted, and telephone drills provide additional benefits for these settings. Large-scale evaluations of different drills may be necessary to design future disaster preparedness programs.

Keywords: disaster; drills; emergency medical technicians; exercises; field exercises; mitigation; telephone exercises

P-6

The Role of the Internet in Earthquake Disaster*Yoshio Murayama, MD*

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The Internet is a highly disaster-resistant computer network that straddles the entire globe. It originated from the ARPANET developed in the 1960s. With the capacity to transmit information anywhere in the world, the Internet functions to disseminate information and forge partnerships and interactions between user and computer without regard to geographical location.

It also is an effective tool for disaster research and disaster preparedness. In disaster response, it is of the utmost importance to share all disaster information among the central and local governments, fire departments, polices, armed forces, hospitals, volunteers, and other organizations. However, it is difficult to dispatch information on casualties and damage from the stricken area in the earthquake disaster. In an area with heavy damage, the lifelines such as power and telephone lines are cut off, and there is insufficient manpower.

This presentation will discuss the role of the Internet in earthquakes and the effective transmission of information.

Keywords: disaster; disaster-resistance; earthquakes; information; Internet; research

P-7

"Solitary Deaths" in Temporary Housing Units in the Areas Affected by the Southern Hyogo Earthquake*Yasuhiro Ueno, MD; Migiwa Asano, MD; Hideyuki Nushida, MD; Junko Adachi, PhD; Yoshitsugu Tatsumo, MD*

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Introduction: The Southern Hyogo Earthquake (the Great Hanshin-Awaji Earthquake) of 1995, inflicted heavy damage on the southern part of Hyogo Prefecture. In total, 6,430 persons died and 43,773 were injured, and three persons still were missing as of 24 December 1997.

After the earthquake, the local governments set up 48,300 temporary housing units for the affected people who lost their houses. In the housings, unnoticed deaths due to illness and suicide of people living alone have become a social problem known as "solitary death".

Methods: We investigated the age, disease history, drinking habits, and causes of death of the victims of solitary death, based on autopsy records of Medical Examiners of Hyogo Prefecture and police reports.

Results and Discussion: As of 30 November, 1998, a total of 246 such solitary deaths had occurred in Hyogo Prefecture: 207 due to illness, 30 to suicide, and nine to accidents. Seventy percent of all victims (174 of 246) were male, and nearly half of the victims (111 of 246) were males between 50 and 69 years old.

The main cause of death for males was heart disease, which accounted for 38.6% of male deaths due to illness, followed by liver disease (31.7%). More than half of the cases with liver disease cases (28 of 46) had alcoholic cirrhosis of the liver, and five cases were assumed to be alcoholic liver disease other than alcoholic liver cirrhosis. Most of men who died of liver disease were alcoholics or habitually heavy drinkers, and/or had a history of disease related to alcohol. The rate of alcoholic liver disease causing the deaths of middle-aged males living alone in temporary housing was higher than that of those living alone except in the case of temporary housing in Kobe (20.6%).

On the other hand, 66.1% of female deaths were due