How Did the Hyogo Prefecture Renovate its Disaster Medical Services System based on the Lessons from Great Hanshin-Awaji Earthquake?

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The purpose of this study was to examine how Hyogo Prefecture renovated its disaster medical services system based on the lessons of the Great Hanshin-Awaji Earthquake. Countermeasures taken after the earthquake were the:

1. Establishment of a disaster-related medical information network that was introduced to various institutions to collect and disseminate medical information in case of a disaster;
2. Designation of 15 core hospitals as Disaster Medical Centers which were expected to play a leading role in disaster management and to receive many patients during a disaster; and
3. Construction of the Hyogo Emergency Medical Center that was designated as a main Disaster Medical Center to train medical staff and operate the Emergency Medical Information Control Center.

There are several training courses for medical staff. The most important training course is the Disaster Medical Assistance Team (DMAT) training course. The DMAT trainings are held at the two main Disaster Medical Centers, the east National Disaster Medical Center, and the west Hyogo Emergency Medical Center. More than 200 teams have been cultivated.

A train accident occurred in Amagasaki in Hyogo on 25 April 2005. The Hyogo Emergency Medical Center served as the emergency information control center, dispatched ambulances, performed on-site triage and first aid, dispatched a second team by helicopter, received four severe cases by helicopters, dispatched a third team in the evening, provided confined-space medicine, and took initiative of a surveillance study of the casualties.

The disaster medical services system in Hyogo was improved based on the lessons from the Great Hanshin-Awaji Earthquake. Therefore, they functioned at the time of the train accident in Amagasaki.

Keywords: disaster health; disaster management; Georgia; Tschinvali; Kazakhstan; disaster management and to receive many patients during a disaster; and

Introduction: No formal prehospital emergency system exists in Kampala, Uganda. The aim of this study was to describe the current injury patterns seen by lay people in this setting and determine if laypersons can be trained to deliver basic prehospital trauma care effectively.

Methods: A modified basic first-aid course was conducted for police officers, taxi drivers, and local officials. Prior to the training, a cross-sectional survey was conducted to determine: the injury epidemiology and current skills, knowledge, and access to equipment. Tests were conducted before and after the training.

Results: During a six-month period, a total of 307 people participated and witnessed 19 traumatic emergencies per person (mean, 95% CI = 16-21). Thirty-one percent (n = 93) had witnessed a death (95% CI = 22-42%), with 1-5 deaths each (mean). The most common mechanisms were: road crashes (89%); assault (66%); and burns (44%). Fifty-two percent had some prior first-aid training (95% CI = 47-58) and 43% had some access to equipment (95% CI = 37-49). The most common aid given was lifting (82%, 95% CI = 77-87%) or transport (76%, 95% CI = 71-80%). Lack of knowledge (37%, 95% CI = 18-57%) or equipment (44%, 95% CI = 24-65) were major concerns when aid was not given. Initially, knowledge was low in: moving (29%); transport (32%); and bleeding control (38%). After training, the overall scores increased from 45% correct to 86% correct (p <0.0001).

Conclusions: Laypersons witness a large number of emergencies and deaths in Kampala, Uganda. A context-appropriate, modified basic first-aid course for laypersons can improve knowledge and may be a step toward formal prehospital care.

Keywords: emergency medical services; first aid; lay people; prehospital; training; trauma