JDR Medical Team's Relief Activities following the Earthquake Disaster in Taiwan

Yuichi Koido;1 Hisayoshi Kondo;¹ Akemi Tada;² Tomoko Miyazaki;³ Eiko Shimada;⁴ Yoshie Kezuka;⁵ Tutomu Yamazaki;⁶ Keiji Nakata;⁶ Kimio Miura;⁷ Katsutoshi Fushimi;⁷ Kouji Fujiya⁷

1) Nippon Medical School; 2) Toyonaka Watanabe Hospital; 3) JMTDR Registered Nurse; 4) Kitazato University; 5) Saiseikai Utsunomiya Hospital; 6) JMTDR Registered Coordinator; 7) Japan International Cooperation Agency, JAPAN

On 21 September 1999, a great earthquake occurred in Taiwan. A Japan Disaster Relief Team (JDR) was dispatched to Taiwan and treated casualties. It arrived at the scene on 22 September, 48 hours after the quake. The JDR convened at the Disaster Countermeasure Headquarters of Nantou Prefecture, received disaster information, and arranged our activities with them. The JDR was capable of starting its activities on the first day, but it took 3 days until final site for its activities was selected. During these 3 days, the site was moved 3 times in order to get the best site.

At this time, the general condition of almost all of the casualties was rather stable. There were no patients who needed an urgent transfer. The JDR treated a total of 1,041 patients during its 11 days of operation. During the first half of the operation, the main treatments were surgical; during the second half, the main treatments were for medical conditions like respiratory infection, chronic diseases, and mental disease.

Recently, while JDR has been dispatched to disaster affected countries soon after the event has occurred, the number of times in which the activity site was not decided during the first day is increasing. Considering that selection of site for operations has a great influence on success of the relief activities, this presentation will propose some guidelines on selection of the site.

Keywords: coordination; disaster; earthquake; guidelines; Japan Disaster Relief Team (JDR); medical; operations; relief; site

selection

Assessment of Emergency Medical Relief Services following the Taiwan Earthquake

Matthew Huei-Ming Ma, MD, PhD; Edbert Hsu, MD; Michael K.F. Choo; Fuh-Yuan Shih, MD; Fang-Yue Lin, MD, PhD

Department of Emergency Medicine, National Taiwan University Hospital, Taipei, Taiwan, ROC

Introduction: The Taiwan earthquake on 21 September 1999 measured 7.3 on the Richter scale and resulted in 2,405 deaths and 11,306 persons injured.

Objectives: To determine whether emergency medical assistance teams (EMATs) were key to assisting critically injured patients through assessment of the number and level of hospitals responding, timeliness of response, and acuity of patients.

Methods: A structured questionnaire was sent to the hospitals that dispatched EMATs in the first 72 hours following the quake. In-depth interviews were conducted with team leaders.

Results: 30 team leaders were interviewed. 10% of the EMATs began providing care within 6 hours (hrs) of the earthquake, 24% within 12 hrs, 38% within 18 hrs, 48% within 24 hrs; 52% responded within 24 hrs. The majority of the patient encounters were level III and level IV, with fewer than 20% of teams seeing >10 level-I patients and fewer than 40% seeing >10 level-II patients.

Conclusions: The degree of emergency medical assistance was impressive, but largely uncoordinated. Most EMATs arrived at the disaster >6 hours after the quake, and did not take care of critically injured patients. A central mechanism that better integrates medical assistance is needed to ensure future disaster EMATs will be deployed in a timely and organized fashion.

Keywords: assistance; deployment; earthquake; emergency medical assistance team (EMATs); hospitals; responses; survey; Taiwan

E-mail: mattma@ha.mc.ntu.edu.tw