

Evaluation of a Disaster Simulation Method for a Disaster Medical Assistance Team

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Introduction: Disaster drills are a fundamental tool for the improvement and evaluation of local disaster response capacity. No generally accepted disaster simulation methods exist for improving the medical response of a disaster medical assistance team (DMAT).

Objective: This study evaluates the feasibility and effectiveness of a disaster simulation method for a DMAT.

Methods: Five emergency physicians devised a disaster simulation method based on clinical scenarios involving 12 victims, and identified requisite critical actions for each victim. The study group consisted of 29 DMAT members from a large university hospital in Seoul, South Korea, who were assigned to individual roles corresponding to rescue, triage, treatment, support, transport, or communication in each drill. Six disaster drills were conducted and repeated under the same conditions. Time results were defined as the duration of triage and treatment, respectively. Performance results were defined as the ratio of performed critical actions to requisite critical actions. Time results and performance results were measured for each victim and summed for each drill. Improvement of overall DMAT medical response was evaluated by comparing the overall time results and performance results from each drill with its repeat drill using paired *t*-tests.

Results: Triage time ($p = 0.034$) and treatment time ($p = 0.016$) improved significantly. No improvement in performance results was observed. In total, 322 of 413 (78%) critical actions were performed during the 12 drills.

Conclusion: This disaster simulation improved DMAT time results. Additional training methods may be required to improve performance results.

Keywords: disaster medical assistance teams (DMAT); disaster; drills; performance; simulations; times; triage

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Experience of a Korean Disaster Medical Assistance Team in Sri Lanka after the Tsunami in South Asia

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Introduction: On 26 December 2004, a large tsunami struck the coasts of several South Asian countries, including Sri Lanka, which experienced 29,729 deaths and 16,665 persons with injuries. Following the tsunami, a Korean Disaster Medical Assistance Team (DMAT) was deployed to south Sri Lanka.

Objective: This study describes the operation of a Korean DMAT during its deployment in Sri Lanka.

Methods: Descriptive information about the DMAT operation was based on personal observations during the deployment from 2–8 January 2005. In addition, the authors collected and interpreted data regarding the numbers of patients seen during the deployment and their associated medical conditions from medical records maintained by the DMAT during its deployment.

Results: The DMAT brought two air tents, two electric generators, medical equipment, supplies, and pharmaceuticals to Sri Lanka. It also brought enough food and water to remain self-sufficient during the deployment. Fourteen volunteers from the Korean International Cooperation Agency provided translation services during the deployment. Patients with mild conditions were triaged directly to the observation unit or pharmacy. Patients who required more specialized care were triaged to the medical or surgical units. During the deployment, the DMAT performed 3,231 clinical evaluations of patients with 3,186 chief complaints, made 3,263 diagnoses, and treated 2,807 patients. The majority of patients had medical problems (82.2%) rather than injuries (17.6%). Respiratory disease was the most common diagnostic category (32.0%). Most medical conditions (92.2%) were mild enough for the patients to be discharged after simple medical management.

Conclusion: Beginning seven days after the tsunami, many persons sought medical care at the DMAT for relatively minor medical problems. Helpful aspects of this DMAT deployment included: (1) logistical and operational self-sufficiency; (2) collaboration with volunteer translators; and (3) a triage system that was customized to match available resources.

Keywords: 26 December 2004; demography; disaster medical assistance team; medical care; Sri Lanka; translations; triage; tsunami

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Curriculum Integration Project: Utility of the Human Patient Simulator and Trauma/Disaster Care Kit in a Disaster Management Course

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Introduction: Once seen as specialty training for health professionals in the military and emergency medicine, disaster management is now considered as a basic competency for all undergraduate nursing students since the terrorist attacks of 2001. In response to the need to educate nurses with skills and expertise in disaster management, Prairie View A&M University College of Nursing initiated a disaster content integration project for undergraduate nursing students.

Objective: This presentation describes the use of simulation exercises to enhance learning and competency related to disaster management among undergraduate students.

Methods: A descriptive, comparative study design was used to assess knowledge and skills in disaster manage-