

equipped medical teams activated during the first 48 hours after the onset of a disaster. Training courses also exist for overseas medical staff, including a disaster medical management course for Andean countries (Bolivia, Columbia, Ecuador, Peru, Venezuela), a training course in the reinforcement of mitigation and preparedness in disaster medicine (the Philippines), and the Hyogo overseas technical trainees program (Indonesia, Nepal).

Secondly, the HEMC regularly holds a meeting with the core hospitals and government organizations, such as the firefighters, the police, and the Self-Defense Force, to prepare for a disaster.

There also is an alliance called the DRA (Disaster Reduction Alliance), which is composed of the 15 organizations (WHO, JICA, ORCHA, UNCRD, etc.) in Kobe that share information in order to reduce the risk of the disasters.

Finally, relief workers are sent to the scene of disasters as a part of the government organizations, where they cooperate with the non-governmental organizations.

Relief workers have been dispatched to domestic and foreign disasters, such as Typhoon Tokage, the Niigata Chuetsu Earthquake, the train derailment in Amagasaki, the Bam Earthquake, the Sumatra Earthquake and Tsunami, the earthquake in Pakistan, and the Java Earthquake.

Keywords: disaster; disaster management assistance team; government organizations; Hyogo; Japan

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(64) Utilization of a Nurse-Operated Call Center in Clalit HMO in Israel during the Israel-Lebanon War, July–August 2006

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Introduction: Clalit Health Services (CHS) is one of the world's largest Health Maintenance Organizations (HMOs). Clalit runs a nurse-based Call Center (NCC) that provides medical consulting on various medical issues. All calls are documented.

During the Israel–Lebanon war in 2006, the northern part of Israel experienced heavy bombardments. The supply of health services was limited. The NCC continued to be active during the conflict.

Methods: An analysis of NCC data comparing utilization by CHS members in the north during war and pre-war periods was conducted. The NCC utilization ratio during four time periods (pre-war, war 1, war 2 and post-war) was then compared, in the affected areas and in the rest of the country. Data were analyzed considering the main causes for the calls.

Results: The average of daily calls in affected areas during wartime was 186 compared to 126 during the previous six months. Significant differences were noted in abdominal pain (4.66 vs 3.35, $p = 0.02$), issues of pregnancy (13.8 vs 7.07, $p < 0.001$), and instructions for the use of medications (9.60 vs 7.46, $p = 0.004$). Call rates in affected districts were 142, 239, 256, and 148 calls per 100,000 in pre-war, war 1, war 2, and post-war time periods respectively. These results

compared to 278, 250, 264, and 271 per 100,000 in the non-affected districts.

Conclusions: A significant increase in the number of calls processed in war-affected areas. Calls returned to baseline numbers immediately after war. There was a decline in the number of calls from people in other parts of the country. The NCC was an important source of medical information during the war, partly filling the lack of regular health services during this period of crisis.

Keywords: health services; Israel; medical consultation; nurse-operated call center; war-affected areas

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(65) Too Late and Too Long for Babies! The Role of Emergency Transportation and Trained Paramedics in Preventing Infant Mortality in Rural North India

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Objective: To study the role of emergency transportation and the lack of timely paramedic resuscitation on fetal outcome in labor patients in rural Uttar Pradesh.

Methods: A retrospective analysis of 1,480 babies born to 1,422 pregnant mothers from May 2003 to April 2006 in a secondary-level center in rural India was done. There was one triplet and 56 twin pregnancies. The distance traveled and the time from the onset of labor was analyzed in relation to fetal outcomes.

Results: There were 105 fetal deaths (7%) out of 1,480 deliveries. It was found that the risk of fetal death is 2.89 times greater when the mother in labor was brought from a distance of >10 km (CI = 1.89–4.44 km). It also was found that mothers who delayed arrival to the hospital for >6 hours after the onset of labor were 2.75 times (CI = 1.56–4.92) more likely to have fetal death occur.

Conclusions: With an infant mortality rate (IMR) of 83/1,000 live births, the state of Uttar Pradesh has one of the highest infant mortality rates in the world. Uttar Pradesh alone contributes 25% of all infant mortalities in India. The provision of emergency transportation systems and trained paramedics will help India to achieve the Millennium Development Goal of IMR <27 per 1,000 by 2015. This will be the contribution of emergency medicine in preventing the fetal death, which often is a tragic consequence of a normal physiological occurrence.

Keywords: emergency transportation; India; infant mortality rate; mothers in labor; paramedics

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(66) Role of Emergency Medical Services Agencies during Hospital Evacuation or Need for Mass-Patient Transfer

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Introduction: Many studies detail the lack of surge capacity among hospitals during a disaster or public health

emergency. The idea of using emergency medical services (EMS) agencies to rapidly transfer patients from one facility to another in order to increase a hospital's ability to care for a large influx of patients has been postulated. Additionally, questions concerning how to evacuate a hospital and send patients in rapid fashion to nearby medical centers during an emergency have been raised.

Methods: A compilation of all licensed ambulance providers in the seven counties of the greater New York City Metropolitan-Hudson Valley region was gathered. A simple, random sample of the transporting EMS providers from each county was obtained, and these agencies were contacted to complete the survey tool.

Results: Of those responding, 15.1% stated they would not be able to provide staffed ambulances to area hospitals or medical centers to assist in transferring patients to other facilities or rapidly discharging patients to make room for disaster victims. Of respondents, 12.1% stated that they had formal agreements with acute or non-acute care hospitals to provide dedicated ambulances in the setting of a natural or man-made disaster, terrorist event, mass-casualty incident, or public health emergency. All of the agencies that had agreements were private, for-profit ambulance services.

Conclusion: Hospitals must begin to draft agreements with private ambulance companies to provide dedicated, staffed ambulances for the purpose of hospital evacuation or mass-patient transfer. Hospitals should not rely upon municipal "9-1-1" emergency telephone system activated EMS systems to contribute ambulances for these purposes.

Keywords: ambulance services; emergency medical services; evacuation; hospitals; mass-patient transfers

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(67) Altered Standards of Care for Emergency Medical Services Personnel during Public Health Emergency

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The emergency medical services (EMS) system is one of the key components in disaster, terrorism, and public health emergency preparedness and response. During the past 30 years, the EMS system has developed into an effective means of delivering prehospital medical care. Public health agencies typically provide regulatory oversight of EMS. Recent studies have demonstrated the value of an EMS/public health partnership in increasing a community's preparedness for disasters and other public health emergencies.

In this session, participants will be presented with the potential roles of prehospital medical providers (emergency medical technicians (EMTs) and paramedics) in augmenting the traditional public health and medical response to disasters and public health emergencies. Current and pro-

posed expanded scope of practice models will be presented along with suggested educational modules for altered standards of care. Additionally, model protocols for utilizing EMTs and paramedics for skills, including, but not limited to, vaccine administration, antibiotic/antiviral dispensing, case and contact tracing, surveillance, and healthcare facility evacuation and mass-patient transportation, will be presented.

Keywords: emergency medical services (EMS); emergency medical technicians (EMTs); paramedics; public health emergencies; standards of care

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(68) Preliminary Report of Chest Pain Triage System with an Electrocardiogram Time of 10 Minutes

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Introduction: The Emergency Department (ED) of Hospital Quinta D' Or has experienced an increase in patient visits during the past decade. Many of these cases have involved chest pain. The correct identification of patients with acute cardiac ischemia remains challenging. Diagnostic strategies for the evaluation of the patient with chest pain have basically two aims: (1) the prompt identification of an acute myocardial injury (AMI) eligible for reperfusion; and (2) the exclusion of an acute coronary syndrome in an accurate and timely manner to allow the patients to be discharged appropriately.

Objective: To present a preliminary report on the implementation of a chest pain triage system that includes a quick clinical examination complemented by an electrocardiogram (ECG) in all patients presenting to the ED with chest pain.

Methods: From 17 October to 30 November 2006, all patients with chest pain were evaluated using a standard ECG. The target was a maximum 10-minute interval between the admission to the ED and completion of the ECG (ECG time).

Results: During this period, 92 patients with chest pain were registered. The mean values for the ECG time and the length of stay in the ED were 26.05 and 185 minutes respectively. Before the new triage system was implemented, the mean value for the ECG time and the length of stay in the ED were 31 and 225 minutes respectively.

Conclusion: After the implementation of a chest pain triage system, the time for the reperfusion treatment of patients with AMI with ST elevation can be reduced, and the patient flow through the ED setting can be optimized.

Keywords: Brazil; chest pain triage system; emergency department; electrocardiogram; time to ECG

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