

Results: The EMS center of Tehran dispatched 213 ambulances every day in 1999–2000 compared with 1,200 in 2009–2010. During the 2009–2010 period, the mean response time for city locations was 14.18(+ /-4) minutes, compared with 1999–2000 the mean response time for city location was 16(+ /- 8). The mean response time from the time period of 1999–2000 also was longer than for 2009–2010 (14.18 vs. 16.58 minutes).

Conclusions: Despite the prominent increase in the number of ambulance dispatching everyday, the mean response time in Tehran decreased during last decade. This improvement can be due to the improvement of the prehospital system in Tehran, including the number of: ambulances, trained staff, EMS stations, etc. However, it still is far from a national standard (eight minutes for city).

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(A316) Pre-Hospital Emergency Care in Sudan - Current Practices in Disaster Management (DM)

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Introduction: The problems of pre-hospital care and training in the developing world are very similar – resource limitations and training deficiencies. Humanitarian conditions in the Sudan have been among the worst in the world including both man-made and natural disasters. Effectively responding to emergencies is of paramount importance.

Methods: The information was collected by a group of Sudanese physicians working in the emergency department at a large urban public hospital in Khartoum, Sudan and in the U.S. for the purpose of establishing structured training programs for pre-hospital responders.

Results: There are currently 37 registered state operated mini-ambulances serving ~8 million people in the capital city of Khartoum. There is 1 central dispatching command center operated by the state Ministry of Health (MOH) that serves 29 hospitals. Services are available by calling a central “999” emergency response number. There are no private ambulances in Khartoum; however, most patients are transported by private or public transportation. Ambulance transport teams consist of ~2 ambulance emergency assistants with limited medical training. Ambulance transport costs are covered either by insurance for the insured; however, the majority of patients are self paid. Emergencies are also managed by the Department of Civil Defense, which is a branch of the Sudanese MOH that responds to natural and man-made disasters. There are 2 layers of this team; 420 physician with masters degrees in DM and emergency rescue workers. These emergency rescue workers do not have formalized training. Other important findings are: lack of training centers for first emergency responders, no standardized practice guide lines among pre-hospital care personnel.

Conclusion: Emergency response in the Sudan is a relatively new practice but has shown a promising trend for the continued

development of a highly advanced and functional pre-hospital/emergency response system. More structured training through collaborative efforts and substantial resources are needed.

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(A317) Evaluation Outcomes - Capacity Building for Emergency Medical Services along National Highway No. 5 in Hai Duong Province, Vietnam – October 2009

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Background: This project was designed to reduce secondary injury of road traffic accidents (RTA) victims in Hai Duong (HDRC) province in Vietnam in collaboration with the Red Cross with funding from Medical Teams International (MTI). The approximate number of beneficiaries was 601,820, including the 1,820 direct beneficiaries who received first responder training and emergency treatment. The 600,000 indirect beneficiaries is the population along a 45km corridor of National Highway #5 crossing Hai Duong province.

Methods: In late October 2009 an evaluation team from MTI reviewed the training of Vietnam Red Cross volunteers in Hai Duong province. The pre-evaluation activities (review of patient contact log books and patient interviews) were conducted by the MTI-Vietnam staff. 58 trained lead volunteers and 20 community members participated in this evaluation. Additionally 92 patients who had been treated by the volunteers were also interviewed.

Results: Findings included: a) the volunteers who received training stated an increase in their confidence to respond to emergencies, b) a 65% increase of Red Cross volunteers, c) a increased awareness of EMS within the province, d) greater community engagement at emergency scenes, and e) broad respect from the community towards the HDRC volunteers.

Discussion: Considerations for the future include: a) development of a continuing education program, b) increase of supplies to volunteers, c) more training involving multi casualty incidents, d) development of a communications protocol between volunteers and other healthcare providers and e) limit CPR training to drowning related events.

Conclusion: The outcomes exceeded the planned goals: knowledge and retention of course materials and skills is good, confidence levels of volunteers increased and those that are involved in emergency events in Hai Duong province are safer. The profile of EMS and first responders as a critical component of community health has been measurably raised among key stakeholders and the community.

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(A319) Using a Computer Simulation (CS) to Improve Training and Event Management of Paramedics for Mass Casualty Incidents (MCI)

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Using a Computer Simulation (CS) to improve training and event management of paramedics for Mass Casualty Incidents