Abstracts – IPRED 2010 s73

of trainees who came for this reason was low in both populations. The training course significantly contributed to a feeling of safety. Correlation was found between coming due to anxiety and the need to know how to help loved ones. The training course contributed to a knowledge of what to do after a rocket attack and role acquisition. The quality of training, which was tested using the measures of professionalism, interest, and instructors' answers to questions, was found to contribute to reducing anxiety with the knowledge variable as a mediator.

Conclusions: People under attack who learned first aid while in shelters perceived themselves as caregivers and not as potential targets of attack themselves. Learning first aid is seen as a need to help loved ones, but not as a way of reducing anxiety among trainees. The professional level of training significantly influenced the level of knowledge, and thus, decreased anxiety. The results of this study emphasize the importance of assigning appropriate instructors in such situations.

Keywords: anxiety; civilian; education; first aid; stress; training; war Prebosp Disaster Med

Scaling of Earthquakes Facilitates Efficacy and Defines New Roles of Emergency Medical Services

Eli Jaffe, PhD; Mr. Alon Basker; Ms. Sharon Ben-Zvi Magen David Adom International Institute, Israel

Introduction: Timely actions can facilitate the efficacy of emergency medical services (EMS) during disasters by understanding the scale of the event and shifting of traditional tasks.

A simple scaling ABC system of earthquakes/disasters is:

- 1. Level A—One or more multi-casualty incident(s) in a defined geographical area that can be treated easily by local EMS;
- 2. Level B—An earthquake/disaster in which the EMS and medical community can complete their task within 48 hours, by reinforcement of regional and national aid coordinated by automatic autonomic response. (e.g., earthquakes in Taiwan, 1999; Niigata, Japan, 2004); and
- 3. Level C—An earthquake/disaster that the EMS cannot mitigate within 48 hours, even on the national level (e.g., earthquakes in Turkey 1999; Sumatra, Indonesia, 2004).

Methods: Information from international medical systems during earthquakes in the past 20 years was gathered and analyzed to help develop strategies that use the strengths and opportunities of a national EMS system to minimize the weaknesses and threats while achieving the objectives of EMS by adapting to shifting conditions.

Results: All multi-casualty incidents share the same problem—available resources in the system or area are overwhelmed, placing great demand on the need for equipment, rescuers, and facilities. Combined with the unpredictability of earthquakes, the magnitude of the event, and its unique aspects, earthquakes demand EMS to consider new roles and functions while keeping the objective of doing the greatest good and concentrating on those who can be saved.

The goal of EMS is to provide treatment to those in need of urgent medical care and arrange for the timely removal of the patient to definitive care. Emergency medical personnel are not qualified or equipped to treat victims in the field for hours or days. However, many earthquake victims do not require definitive treatment or have an immediate life-threatening injury. Therefore, EMS will need to take on a new role in a triage system, incorporating a treatment area for delaying evacuation. This entails prioritizing, sorting, and sending patients who require immediate attention to definitive care while considering the availability of destination facilities and transportation resources. Patients who do not require immediate attention or cannot be saved shall await evacuation.

Conclusions: By scaling the event by the ABC, a timely, coordinated, autonomic, regional/national response can begin immediately. An area defined as Level A will automatically back-up a Level B/C area during an event that causes the collapse of the standard communication and activation systems. Moreover, a clear shift in EMS roles will occur during a Level B or C event.

Keywords: disaster; earthquake; efficacy; emergency medical services; roles

Prehosp Disaster Med

Factors Influencing the Willingness to Return to Volunteer among Magen David Adom Volunteers during Times of War

Eli Jaffe;^{1,2} Einat Aviel;³ Moti Nave;² Limor Aharonson-Daniel;⁴ Haim Knobler^{4,5}

- 1. International Institute of Magen David Adom in Israel
- 2. Magen David Adom of Israel
- 3. Bar Ilan University, Ramat Gan, Israel
- 4. Ben Gurion University of the Negev, Beer-Sheva, Israel
- 5. Hebrew University, Jerusalem, Israel

Introduction: Volunteers who reinforce emergency medical services during times of war are essential for the organizations that must work under stress and rocket attacks while also serving the civilian population during routine events. Magen David Adom (MDA), Israel's national rescue organization, used hundreds of volunteers from northern Israel to reinforce emergency medical teams in the South during Operation "Oferet Yezuka", which affected only the southern part of the country.

To ascertain the return of professional volunteers to additional reinforcement shifts during a time of war, the organization must maintain satisfactory conditions. The goal of this study was to evaluate the factors influencing the willingness of reinforcing volunteers to return to another shift during a time of war.

Methods: A telephone survey of 99 out of 561 volunteers who came to reinforce MDA's forces in the settlements under attack in January 2009 was conducted. The volunteers were asked about the factors that influenced their willingness to return for another shift. The factors analyzed were job characteristics, physical conditions, feeling of personal safety, and the correspondence between the volunteers' expectations and their job assignment.

Results: Physical conditions, reception, and job assignment, as well as the number of events treated significantly influenced willingness to return for another shift. The number of