

identify vulnerable patient groups and risk factors for wound infection.

Prehosp Disaster Med 2017;32(Suppl. 1):s11–s12

doi:10.1017/S1049023X17000553

Military and Civilian Collaboration within Medical First Responders - the Israeli Experience

Eyal Furman¹, Gil Moshkowitz²

1. Medical Department, Israel Defense Forces Home Front Command, Kfar Monash/Israel
2. Deputy Director General, Head Of Operations, Magen David Adom (Israeli EMS), Tel Aviv/Israel

Study/Objective: The two major medical first responding organizations in Israel are the Medical Corps, Israel Defence Forces (IDF) Home Front Command (HFC), and the National Israeli EMS provider, Magen David Adom (MDA). We will describe some of the main, unique, and specific areas of cooperation between MDA and the IDF.

Background: The Magen David Adom (MDA) Law, an Israeli Parliament Law from 1950, defines MDA as an operative assistance organization to the IDF Home Front Command (HFC) in case of emergencies and during war time. Cooperation, by law, in preparedness, training, and emergency cases has led to collaboration in day-to-day activity and routine emergencies.

Methods: 1. Human Resources - support between IDF and MDA medical teams in various medical events. IDF funding of MDA volunteer course. MDA operates the National Blood Bank, the IDF as the main blood donor. Military blood services unit to assist MDA. IDF recruits the MDA medical personnel. IDF supplies medical personnel to MDA ambulances. Cooperation of medical teams in humanitarian missions. 2. Training - combined training and exercises between IDF and MDA. Interagency cooperation in training (IDF, MDA, MOH, hospitals), mass toxicological events, CBRN drills. Military paramedic course conducted by MDA experts. MDA management goes through senior IDF courses. 3. Command control and coordination - independent organizations are routine, there is information replaced in any event. MDA works under IDF HFC coordination during emergency events. 4. Doctrine and regulation sharing and supervising. 5. Equipment - both logistic departments work together. Mutual influence leading to advanced, up-to-date medical equipment. 6. Scene response - organizations, medical teams can be activated by both. Coordination between IDF Air Force and MDA and IDF HFC.

Results: There is a better medical response for civilian and military personnel with collaboration and creating synergism

Conclusion: The major keys for success will be described.

Prehosp Disaster Med 2017;32(Suppl. 1):s12

doi:10.1017/S1049023X17000565

Military and Civilian Experience in Providing Medical Care to Pediatric Patients in Disasters and Mass Casualty Incidents - What Can We Learn from Each Other?

Katarzyna Dlugosz

The Department Of Disaster Medicine And Emergency Care, Jagiellonian University Medical College, Kraków/Poland

Study/Objective: The main purpose of this work is to find common areas of combat medicine and civilian medical rescue in mass casualty incidents and disasters where children are the victims. The results of this study provide the basis for the creation of common solutions that will improve the chance for survival of children in disasters and mass casualty incidents.

Background: Mass casualty incidents and disasters involving children are difficult situations for medical emergency responders. Rescuing of patients and providing medical emergency care in these types of events is similar to combat medicine. Exchange of experiences, dilemmas and issues in military medical services is the way to improve operation during mass casualty incidents and disasters that involve pediatric patients.

Methods: In this research we invited Polish soldiers who are paramedics, and when they were on a military mission, they provided emergency medical care to pediatric victims. A second research group are former civilian medical rescuers, who have provided medical care to pediatric patients of disasters or mass events. Participants were asked questions about difficulties, dilemmas, ways of providing medical care for children, evacuation and transport of pediatric patients from the scene to the hospital.

Results: Dilemmas and difficulties in providing medical emergency care to pediatric victims in mass casualty incidents and disasters, are similar to those in combat medicine when the military paramedics save children's lives. The common areas include ethical dilemmas, regarding providing emergency medical care, opportunities and access to resources, rescuers, medical equipment and pediatric patient transport. The biggest challenge in both groups were stress and emotional reactions of children and rescuers.

Conclusion: All common areas should be well developed, discussed and have joint trainings. This cooperation could give an opportunity to develop the best solutions to save children in mass casualty incidents and disasters.

Prehosp Disaster Med 2017;32(Suppl. 1):s12

doi:10.1017/S1049023X17000577

Development of New Triage and Scene Management Techniques to Provide a More Effective Response to Active Shooter Situations

Brad Keating

Medical Division, Colorado Springs Fire Department, Colorado Springs/CO/United States of America

Study/Objective: This paper will discuss the needs for response in an active shooter incident, including the use of a cold, warm, and hot zones by all responding agencies. Additionally, building upon techniques learned while training in Israel, numerous tactical medical operations, and responding to incidents abroad, a new triage technique will be proposed that evaluates a casualty based only on their ability to follow commands and assessment of a radial pulse. The new method also eliminates the yellow category and labels patients only as

urgent, delayed, or expectant/deceased. The combination of these two methods will reduce the time spent with each casualty and make the entire triage process much more rapid.

Background: With an increase in mass shootings in recent years, providers may find themselves responding to an active shooter scenario incident. Lessons learned from the incidents in the Paris theater shooting, Columbine school shooting, and Orlando nightclub shooting demonstrate the lapses in active shooter and triage protocols.

Methods: In those with an inability to follow basic commands, in addition to a weak or absent radial pulse, the mortality rate approaches 92%. In a mass shooting event, a novel “two step” triage technique is proposed, in which EMS determines if the casualty can follow a basic command, such as “squeeze my fingers,” combined with the assessment of a radial pulse to establish a triage category.

Results: The benefit of this simplified process is speed and ease of use. When there are dozens of patients, spending 60 seconds with each patient is not only unfeasible; it may cost the lives of those awaiting triage.

Conclusion: The current method of responding to active shooter incidents is ineffective at best, and current triage methods are overly complicated and difficult to implement. By moving toward new triage and scene management techniques, the potential to save numerous lives is possible.

Prehosp Disaster Med 2017;32(Suppl. 1):s12–s13
doi:10.1017/S1049023X17000589

Evacuating a Geriatric Medical Facility during Emergencies - Exercising a Complex Challenge

R. Ringel¹, A. Ohana¹, E. Furman², B. Adini³

1. Ministry of Health, Jerusalem/Israel
2. Medical Department, Israel Defense Forces Home Front Command, Kfar Monash/Israel
3. Disaster Management & Injury Prevention, Tel Aviv University, Tel Aviv/Israel

Study/Objective: To examine lessons learned from exercises simulating evacuation of geriatric hospitals to improve emergency preparedness.

Background: Emergency events may necessitate full or partial evacuation of geriatric hospitals, posing a complex challenge. The evacuation process entails close medical supervision of chronic/ventilated patients and provision of oxygen-support means in tandem with evacuation of visitors and hospital staff. In order to generate an effective automatic response to such situations, the Ministry of Health (MOH) developed a national evacuation doctrine of geriatric facilities and evaluates it through routine exercises.

Methods: The geriatric evacuation exercises encompass four main processes: decision-making, planning, implementing the evacuation, and return to normalcy. Following each exercise, an After Action Review is conducted, to identify elements that should be sustained or improved.

Results: Strategic, operational and infrastructural lessons were learnt, including: 1) evacuate patients based on internally available personnel and equipment rather than reinforcements; 2) accompany each evacuating vehicle with hospital's team

member to ensure patients' safe arrival to a receiving facility including sharing information; 3) plan and utilize designated forms, to facilitate control and monitoring of the evacuation; 4) equip each evacuation vehicle with a list of the patients including contact details of evacuating and receiving facilities; 5) operate an “evacuation operation center;” 6) prepare a mechanism to assess patients that may potentially be released home; 7) plan evacuation of patients through stairs, due to potential dysfunctional elevators; 8) plan positioning of rescue forces in a way that will prevent blockage of evacuation routes; 9) exercise joint communication means to ensure flow of information between all responders.

Conclusion: Evacuation exercises significantly promote emergency preparedness of geriatric hospitals and strengthen their collaboration with first responders. Readiness of geriatric hospitals for an emergency evacuation necessitates preparedness of resources, life-saving equipment, and personnel to facilitate a rapid response during such a complex emergency.

Prehosp Disaster Med 2017;32(Suppl. 1):s13
doi:10.1017/S1049023X17000590

Conflict and Disaster Medicine: The State of Military Medicine in Ukraine

John M. Quinn V¹, Vladimir Bencko², Patrick Chellerw³, Olia Romaniuk⁴

1. Expert Consultant, Reforms Office (ro) At The Ministry Of Defense (mod) In Ukraine, PhD Candidate and Researcher, Prague Center for Global Health, Institute of Hygiene and Epidemiology, First Faculty of Medicine, Charles University, Praha/Czech Republic
2. Prague Center for Global Health, Institute of Hygiene and Epidemiology, First Faculty of Medicine, Charles University in Prague, Praha/Czech Republic
3. Program Lead, Medical ATO Report Series, Kyiv/Ukraine
4. Program Researcher, Medical ATO Report Series, Kyiv/Ukraine

Study/Objective: Assess battlefield morbidity and mortality, from point of injury to tertiary care, across the spectrum of the evacuation chain. This is to include phases of TCCC and Prolonged Field Care (PFC) for war-fighting and ancillary activities in Eastern Ukraine and peri-conflict regions.

Background: The former Ukrainian president Yanakovich's refusal to sign an agreement, bringing Ukraine economically closer to the EU in November 2013, ignited a political and social revolution. The reforms' process for the Ministry of Defense (MoD) is a long struggle, and as NATO alignment in all processes remains the goal, multiple actors must continue support it in order to save life, enable the soldier to have access to best practices in battlefield medicine, maintain state sovereignty, promote democracy, and uphold the Ukrainian constitutional values.

Methods: Qualitative and quantitative morbidity and mortality data from war-fighting activity; research spanning 2014–2016. Field data in the form of structured interviews and surveys, core methods under the Working Group model, in collaboration with all departments and institutes at the military medical academy.

Results: We conclude that the evacuation chain has improved markedly from the onset of the war, but that hybrid warfare by