

1. Time/number of emergency department nurses per patient;
2. Number of emergency department nurses outside the emergency department at any given time; and
3. Coordination of patient flow

In addition, the exercise tested how the various units functioned as a result of the nurse mobilization.

Conclusions: The implementation of this new model ensures a professional and skillful transfer of casualties and efficient reinforcement of the personnel at various hospital units.

Keywords: emergency department; hospital; mass-casualty incident; mobilization; nursing; transfer

Prehosp Disaster Med

The Second Lebanon War—Preparedness, Functioning, and Analyzing Data of Injuries Presenting to the Trauma Unit at the Rambam Health Care Campus

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Introduction: In 2006, the Rambam Health Care Campus, a Level-I Trauma Center, treated those injured during the 2nd Lebanon War and the rocket attacks on Haifa.

Methods: During the war, the hospital received 849 injured patients, of which, 281 were hospitalized: 66 civilians, 213 soldiers, and two UN Soldiers.

The hospital was prepared for casualties based on knowledge and previous experience. At the end of the war, information about the injuries was collected from different sources. The characteristics of the injuries were analyzed. A statistical analysis of the data was performed.

Results: Most of the injured had multiple traumatic injuries from penetrating trauma with a low percentage of burns. The Injury Severity Score (ISS) distribution: ISS 1–8 = 65% of the injured, ISS 9–14 = 20%, ISS 16–24 = 9%, ISS ≥25 = 6%.

Conclusions: Continued learning from special events could contribute to developing a body of knowledge that may assist to prepare the teams to deliver optimal care to this specific injured population.

Keywords: preparedness; Second Lebanon War

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Unique Role of Emergency Medical Services after an Earthquake—A Community-Based Approach

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Introduction: Emergency medical services (EMS) are a dedicated to providing prehospital, acute medical care, and/or transport to definitive care, to patients with illnesses and injuries which the patient and constitutes a medical emergency.

The goals of most EMS is to treat those in need of urgent medical care, or arranging for timely transport of the patient to the next point of definitive care.

Earthquakes are among the most dangerous and destructive types of events caused by natural hazards, strik-

ing suddenly with no accurate method of prediction or warning, thereby taking a heavy toll on life, and causing injury and loss of property. The damage affects all aspects of the community—transportation, telecommunication, and infrastructure, and easily can overwhelm local health services, damage clinics, hospitals and render them useless.

Methods: The objective of this presentation is to review the pertinent literature and analyze the information in order to set practical guidelines for EMS following earthquakes using a community-based approach.

Results: Survival of casualties extricated from under the rubble depends on early medical interventions by emergency teams, thus, providing EMS with special challenges concerning early arrival, early qualified treatment, early transport, and definitive care.

Conclusions: Earthquakes differ from other disasters. During other disasters, the EMS system often remains intact. During disasters caused by earthquakes, the vast number of patients, together with problems concerning availability of medical personnel, accessibility to victims, means of transportation and communication, and no immediate definitive care set a new stage for EMS upon which to work. A routine, national, community-based approach will strengthen the ability to provide early response during daily and disastrous events, improving morbidity and mortality rates.

Keywords: community-based; disaster; earthquake; emergency medical services; preparedness

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Efficiency of Emergency Evacuation in Multi-Storied Hospital Buildings

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Introduction: Hospitals play an important role during external disasters, providing essential care to the affected. Relatively less attention is paid toward internal disasters that necessitate immediate evacuation of patients and staff. Special attention should be paid to this aspect since the potential for survival and safe evacuation is less for patients in most hospital buildings than in the unhospitalized population.

Objectives: The objectives of this study were to assess: (1) the knowledge of the patients and staff members residing in the SMB building regarding the existing emergency exits; and (2) the safety and the physical status of evacuation pathway.

Methods: A cross-sectional study was performed at the SMB building which is the newest and tallest building of the Teaching Hospital Anuradhapura. An internal emergency was hypothesized at 21:00 hours on 24 October 2007. All of the staff members and 80 patients were interviewed and the emergency exit path was inspected.

Results and Conclusions: None of the patients and the majority of the staff members were aware of the availability of an emergency exit. The emergency exit path was not properly maintained in a way to facilitate safe, efficient evacuation. Thus, a mechanism to educate patients and staff on emergency exit usage must be formulated.

Maintaining the effective width of the evacuation pathways is of prime importance. Emphasis should be given to designing the emergency evacuation infrastructure and strategies during hospital building planning.

Keywords: disaster; emergency; evacuation; hospital; hospital evacuation

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Model of Independent Nursing Practice in Chemical Warfare

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Biochemical warfare is a threat in today's political arena. The potential and projected numbers of victims of such events have created a medical challenge that may be met by the expanded role of the nurse acting as an essential and independent caregiver.

Current legislation has empowered the Israeli nurse to perform those necessary acts during times of war.

The transformation of the nurse in peacetime involves active programs that anticipate emergencies. The Disaster Nurse Coordinator assesses and interprets military field evaluations and provides care efficiently at the hospital and community levels.

Keywords: caregiving; Disaster Nurse Coordinator; Israel; nursing; war

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Emerging Infectious Diseases: Department Design Makes a Difference

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The physical design and infrastructure of a hospital or institution is an essential component of its infection control measure. Thus, it must be a prerequisite to take these issues into consideration in the initial conception and planning stages of the building. The balance between designing a hospital to be an open, accessible, and public place and the reduction of the spread of infectious diseases is a necessity. At Singapore General Hospital, many lessons were learned during the severe acute respiratory syndrome (SARS) outbreak pertaining to this issue. During and subsequent to the SARS outbreak, many changes at the hospital enabled staff to handle and face any emerging infectious situation with calm, confidence, and the knowledge that staff and patients would be in good stead.

Keywords: department design; hospitals; infectious diseases; severe acute respiratory syndrome; Singapore

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Radiological Decontamination, Assessment, and Treatment Center

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One of the main outcomes of a Radiological Dispersal Device (RDD) terrorist event will be the probable exposure of the population in the vicinity of the radioactive materi-

als. The central objective of a Radiological Decontamination, Assessment and Treatment Center (RDATC) is to divert a mass of uninvolved population (worried-well), as well as those who were mildly exposed to radiation, from flooding the hospitals. The extent of decontamination capabilities will be influenced by public instructions and recommendations concerning the need to perform a self-decontamination at home before reaching the RDATC. The assessment of a mass population for external contamination can be conducted manually by professional radiation inspectors, but this would take a lot of time. Radiation ports should be used, which are more suitable for detection of gamma radiation. Assessment of internal contamination and exposure are based on estimation of the proximity to the scene, the exposure time to radioactive materials, as well as clinical symptoms and in vitro bioassays (urine samples). Most of the population will need guidance and cognitive support, but some will need decorporation therapy with chelating agents and evacuation to hospitals. Because of its unique role in treating a mass population in such a distinctive event, the RDATC must open soon after the event. Early attempts to inform the public and worried well also should be made.

Keywords: cognitive support decontamination; radioactive materials; radiological dispersal device; worried well

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Challenges and Opportunities in the 2009 Pandemic Influenza Vaccination Program: The Global and Israeli View

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Introduction: Vaccines are a cornerstone in any pandemic influenza preparedness plan. Principles and challenges of the vaccination program are similar but its implementation should be tailored for each country, based on its unique culture, health system, and resources, as well as current epidemiological condition and experience with mass vaccination.

Methods: Challenges and opportunities for the Global and Israeli 2009 pandemic influenza vaccination program were systematically identified and analyzed based on Israel's and other countries' experience with pandemic preparedness and response, as well as mass vaccination program planning. Israel took an active role in the World Health Organization's Workshop on this subject, and common lessons from the workshop were adapted. The analysis considered all the relevant steps for successful vaccination, such as procurement, regulation, prioritization, management, communication, resources, deployment, vaccination, surveillance, and summary.

Results: Global and Israeli challenges and opportunities were identified and addressed. Major challenges were found to be common to all countries, such as uncertainty regarding the severity of disease, availability and timing of vaccine