Results: For Olt county, the simulation indicated that the existent human and material resources are sufficient, but some adjustments are needed.
Conclusions: Performing computer simulations may enable us to better plan and perform the medical interventions required in case of the occurrence of natural disasters such as earthquakes.
Keywords: algorithm; assets; computer simulation; disasters; medical forces; needs; resources
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Current Status of Disaster Response and Training among Emergency Medicine Residency Programs: Pre- and Post-September 11

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Introduction: Emergency physicians (EP) always have played a significant role in disaster preparedness. It is believed that EP should assume a major role in the medical aspects of disaster planning, management, and patient care. In this study, we evaluated: (1) Whether emergency medicine (EM) training programs have played a major role in past disaster responses; (2) The current training and education available in EM training programs; and (3) The need for further disaster management education (DME) to be incorporated in EM residency programs post 11 September 2001.
Methods: All accredited EM residency training programs in North America were evaluated. A 36-question survey measuring the attitudes toward disaster training, previous responses to disasters, previous DME in residency programs, and future plans for DME was sent to all EM residency directors (RD). Non-responders were contacted by repeat mailing, e-mail communication, fax, and direct conversation.
Results: Of the 168 mailed surveys, 67% (112/168) were returned. Of all respondents, 57% (64/112) have dealt with disaster or mass casualty incident in the past. Currently, 97% (109/122) include teaching on disaster medicine (DM), with 30% (37/112) having an established curriculum. Following 11 September 11, the mean DM training hours have increased from a mean of total 8.6 to 10.6, and majority (63%, 71/112) of RDs feel that this is amount of DM training is apprppriate.
Conclusions: This study suggests that post-September 11, the amount of DM training in EM residency programs has increased slightly, and most RDs feel this is sufficient training for EM physicians.
Keywords: 11 September; curriculum; disaster; disaster medicine; emergency medicine; residency; roles; training
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Description and Evaluation of a Crash Program to Prepare Healthcare Professionals to Manage Casualties and to Instruct Their Colleagues Concerning Non-Conventional Warfare

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The possibility of a non-conventional attack on the State of Israel during 2003 encouraged the Emergency Services Department of the Ministry of Health to rapidly develop and implement an educational intervention to prepare healthcare professionals to deal with such an attack. This presentation will provide a description and evaluation of 19 two-day meetings attended by approximately 2,800 professionals from both hospitals and the community medical system. The educational program provided: (1) Essential knowledge and skills necessary to deal clinically with a non-conventional warfare attack; and (2) The ability to organize an educational intervention in their respective settings to prepare relevant staff to manage Mass Casualty Events stemming from either a chemical or biological attack. The time frame for developing and implementing the education was approximately five months. Evaluation data will be presented from an analysis of pre- and post-session questionnaires completed by the participants. The pre-session questionnaire was a self-assessment of the participants' level of knowledge required to clinically diagnose and treat victims, and their perceived ability or readiness to organize an educational intervention for healthcare workers in their respective work settings. The post-session questionnaire evaluated the contribution of the two-day meeting to their ability to effectively manage a chemical or biological attack, diagnose and treat the victims, and implement the educational intervention.
Keywords: assessments; attack, biological or chemical; community; education; evaluation; hospitals; intervention; Israel; knowledge; mass casualty event
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Terrorism 101: Introduction to Terrorism and Its Medical Implications

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For many medical personnel around the world, especially those without a military affiliation, terrorism is something that happens somewhere else, to someone else. However, recent events have highlighted how vulnerable our communities are to terrorist activities.

By understanding some of the tactics and techniques used by terrorist organisations, prehospital and hospital personnel can be better prepared to deal with this type of event.

From a medical perspective, the weapons of the terrorist can be categorised according to the B-NICE acronym (Biological, Nuclear, Incendiary, Chemical and Explosive). The methods of delivery of these weapons and their effects on the body will be described, along with the implications

for the medical management of victims.

Examples of terrorist events from around the world will be used to highlight the different methods of "attack", so that prehospital and hospital staff can best protect themselves and their hospitals, while delivering optimal medical management to affected patients.

Keywords: B-NICE (biological; nuclear, incendiary, chemical, explosive); hospitals; management; prehospital; protection; tactics; techniques; terrorism; terrorist; vulnerability

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"Diseases of Bioterrorism" Training Program for Emergency Medical Services Personnel

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The pre-hospital sector represents a segment of the healthcare workforce that has received little attention with regard to the public health management of diseases of bioterrorism. Emergency medical services (EMS) can play a key role in the early detection and prevention of the spread of diseases of bioterrorism. EMS staff may be the first to encounter a patient with a class A illness, and potentially could transport unknowingly infected patients throughout the healthcare system. Therefore, EMS workers must understand key aspects of these diseases, including recognition of potential cases, appropriate personal protective strategies and required reporting mechanisms.

To that effect, the Columbia University Center for Public Health Preparedness at the Mailman School of Public Health worked with EMS leaders in New York City and New York State to develop a training program entitled: Diseases of Bioterrorism — Detection, Protection and Reporting for EMS. Evaluation results indicated that the program was effective and well received. This presentation will provide an overview of this course, as well as the findings (pre- and post-program) from the measurement of changes in knowledge, beliefs and attitudes for diseases of bioterrorism among EMS personnel.

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Keywords: attitudes; beliefs; bioterrorism; detection; diseases; emergency medical services (EMS); evaluation; knowledge; prevention; protection; public health; roles; training

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Emergency Medicine Train-the-Trainers Program

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Emergency Medicine (EM) development internationally has been a popular area of interest among many physicians in the United States. Although, there have been a variety of targeted programs to develop EM internationally, few have developed Train-the-Trainers (ToT) for EM development. We describe the development and delivery of a ToT program for future EM development is described.

The targeted audience for the ToT is West Bank/Gaza health care workers including physicians and nurses who will be training future students in EM. The primary portions of the ToT focuses on five steps: (1) General adult education methods; (2) Building individual and team capacity; (3) Understanding of techniques to teach EM, teaching EM skills, and EM case management; (4) Self and peer assessment of the incorporation of these teaching techniques; and (5) Evaluation of presentation skills.

The first ToT was delivered in January 2003 to 12 participants. In the suceeding months, the ToT will be delivered to an additional 40 participants. Preliminary results show that >65% of materials presented were new to participants. All participants were extremely satisfied (4.5/5) with information gained from the ToT. Overall knowledge gained from the ToT was (4.2/5). Future training of students will be carried out based on this ToT session.

Train-the-trainers programs in EM are important for the development of EM internationally. This program is one possible way to deliver a ToT.

Keywords: assessment; education; emergency medicine; evaluation; international; medical; skills; teaching; train-the-trainer

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Global Learning, Sharing and Advancing: A Knowledge-Based Approach

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Intuitive Medical Technology

The Life Science industry is global, highly competitive, and resource intense. Rapid advancements have been achieved through collaborative efforts between public and private institutions. These advancements afford an improved level of healthcare delivery to the wider community. Private institutions, such as medical or pharmaceutical companies, must offset the cost of research and development to justify the initial outlay. There often is a potential conflict of interest between the public agendas regarding dissemination of information, and the private research approach to contain and value add to information before public release. Is it possible to protect the rights of public and private institutions, while maintaining the rights and meeting the expectation of the wider community?

This paper will discuss current best practice and lessons learned in the area of global learning, sharing, and advancing. This paper also will explore how this practice may be employed using a dual target, shareholder/stakeholder analogy in the Disaster and Emergency Medicine fields, to provide a mutually beneficial and economically advantageous relationships for all parties.

Keywords: conflict; costs; development; dissemination; global learning; information; life science; private sector; sharing; relationships; research

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