(M12) Disaster Training via Annual Workshops in India

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Introduction: Disaster preparedness as a formal sub-specialty is relatively new to many hospitals and agencies in India. Many hospitals still do not have all-hazard plans, safety committees, and do not perform drills routinely. In the face of increased mass-casualty incidents (MCIs) in the past few years and high population densities, it is imperative that hospitals develop a more formalized approach to disaster preparedness.
Methods: An annual emergency medicine conference is held in various cities in India, which includes a disaster workshop. Since many attendees are from areas that frequently experience MCIs, they were asked informally how much the disaster workshop helped and what advances they have made at their hospitals.
Results: It is more difficult for smaller facilities to initiate all hazard plans and committees. As a result, representatives from hospitals reported that they are more readily able to garner the support of the administration in developing a disaster plan and drilling it, and more frequent drills have occurred. However, a lack of departamental participation in the disaster committee still is a problem.
Conclusions: Disaster preparedness is a formal area of training in India. By increasing awareness of its need and importance through workshops, providers have been able to bring this information to their hospitals. Support from the administration is vital to implement the changes required to develop disaster preparedness committees and plans.
Keywords: disaster; India; preparedness; training; workshop
Prehosp Disast Med 2009;24(2):s125

(M13) Leading Simulation as a Tool for Internal Cardiopulmonary Resuscitation Guidelines

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The Center for Resuscitation and Emergency Medicine Education (CREME) at Tel Aviv Sourasky Medical Center (TASMC) was established by a certified emergency nurse, to assist nurses, physicians, and paramedics with their education in emergency and disaster medicine.

Following the 2005 publication of the American Heart Association's *Guidelines for Cardiopulmonary-Resuscitation* (CPR), CREME took it upon itself to internalizing CPR guidelines and improving performance of CPR.

After training the physicians and nurses in the new CPR and Advanced Cardiac Life Support (ACLS) guidelines, CREME conducted surprise resuscitations drills at the medical center.

Most of the hospital departments participated in the drill, but, the emergency department, one of the largest departments, required a higher number of simulations in order to cover all of the staff who worked there.

This paper presents the outcome of the simulation in for the entire hospital department while comparing the performance of the department teams to the emergency department team's performances during a period of ten months. It also is focused on establishing new training standards.
Keywords: cardiopulmonary resuscitation; competencies, education; nurses; simulation; training
Prehosp Disast Med 2009;24(2):s125

(M14) Selection and Preparedness of Staff

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Introduction: The selection and training of medical specialists for field activities in emergencies requires a set of methods for providing professional capacities. The complex psycho-physiological approach allows a new system for the selection and preparedness on the psychological and professional level to be applied.
Objective: The objective of this study was to mobilize psycho-physiological instruments for the staff selection procedure, and to follow an approach of psycho-physologically based methods for staff mental preparedness.
Methods: The battery of quantitative evaluation methods for study and practice for use in laboratory and field conditions is proposed. The methods are underlined by complicated, bilateral, sensorial reactions in modeled conditions of ipsi- and contra-lateral visual deprivation and conditioned environments on the computer screen. In processing experimental conditions, the mechanisms of integrative factors regulating the characteristics of hemisphere asymmetry have been evaluated and managed as a result of the influence of specific procedures. The conditions of selection and ultimate correction, if necessary, are determined as a result of preliminary professional preparedness and initial mental status. The methods are completely objective based on the quantitative criteria. The selection procedure does not include any subjective evaluation.
Conclusions: The method battery is registered in the national registry of patents and inventions. The results and conclusions could be included in the training of search-and-rescue teams, medical emergency teams, and other hazard staff.
Keywords: competency; education; preparedness; staff selection; training
Prehosp Disast Med 2009;24(2):s125

(M16) Trauma and Emergency Ultrasound Training Program for Latin American Countries

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Objective: The Pan-American Trauma Society (PTS) developed a Trauma and Emergency Ultrasound Course (USET) in response to the requirement for trauma ultrasound training for low- and middle-income countries. The objective of this study was to evaluate the efficiency of this course.
Methods: Pre- and post-course tests were used. An interval estimation of proportions was calculated at 95% CI.

Theoretical and practical pre- and post-course knowledge were assessed with the Wilcoxon Signed Rank test at a 0.05 level of statistical significance.

Results: Between 2005 and 2007, 114 students, including general surgeons, emergency medicine physicians, anesthesiologists, critical care physicians, and residents of these specialties, were trained in seven countries (Uruguay, Peru, Mexico, Venezuela, Aruba, Colombia, and Ecuador). The difference on complete knowledge ranked scores before and after the course was statistically significant (p <0.001). After the course, almost all participants (97.4%) demonstrated complete knowledge in final evaluation.

Conclusions: The USET course is an effective approach for trauma ultrasound training. Specific training programs for trauma care providers that work in low- and middle-income countries are necessary and could be performed with low-cost training programs.

Keywords: competency; education; emergency; Latin America; training; trauma; ultrasound
Prehosp Disast Med 2009;24(2):s125–s126

(M17) "Promoting Cooperation"—A Swedish e-Learning Project Concerning Inter-Professional Cooperation during Chemical, Biological, Radiological, or Nuclear Disasters

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Introduction: The aim of this project was to develop a Web-based, inter-professional education program on chemical, biological, radiological, or nuclear (CBRN) disasters, focusing on making cooperative, on-site efforts during the initial 15 minutes after the event more effective. The program should secure that intervening personnel from the police, health, medical, and rescue services have knowledge and understanding of the initial tasks and strategies of each respective organization in case of CBRN disasters.

Methods: Using tabletop seminars based on five scenarios, the strengths and weaknesses regarding accomplishing tasks in case of the CBRN disaster were identified for each organization. Putting further strain on each scenario, the critical levels for satisfactory accomplishment were crystallized. Based on this vital information, all cooperating authorities have, in consensus, decided on the on-site organization.

Results: The project has promoted the development of a profound national cooperation between the police, rescue, medical, and health services. The Web-based program has made the on-site efforts more efficient, focusing on personal and third-party security, on-site organization, zoning, levels of protection, and life-saving decontamination.

Conclusions: This program provides an increased interprofessional understanding of the responsibilities, authority, and capacities of different sectors. This pedagogical program is cost-efficient, applicable at all levels within organizations, secures that everyone receives the same information, available whenever and wherever it is needed, and adjustable. When a participant passes a level, they attain a certificate, thus providing a secure evaluation system where the employer can appreciate the employee's competence.

Keywords: chemical, biological, radiological, or nuclear; competency; cooperation; cost-efficient; e-learning; education program; interprofessional; secure; training; Web-based
Prehosp Disast Med 2009;24(2):s126

(M18) Need for Standardized Training for Doctors and Nurses in Trauma Care—A Perspective from a Developing Nation

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Trauma and injury are major health problems worldwide especially in developing countries. In the future, road traffic injuries will be among the top three leading causes of the global burden of disease. Developing countries will experience 90% of these deaths, especially in the younger population. It is imperative to organize comprehensive trauma care services at the grassroots level that will be affordable and available in developing countries. Hence, there is a need for adequate, protocol-based training with minimal available resources. Institutes in these nations can provide this cost-effective training module for the training of trainers. One such successful model of training was developed at the Apex Trauma Centre at the All India Institute of Medical Sciences (AIIMS), which trained the trainers at a leading trauma care hospital in Israel as a part of an international exchange program. A similar model with proper outcome indicators can be replicated in low-income countries coping with trauma care.

Keywords: competency; developing country; education; standardization; training; trauma care
Prehosp Disast Med 2009;24(2):s126

(M19) Undergraduate Paramedic Nurses, MicroSim, and Patient Assessment in Australian Emergency Health

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Introduction: This paper reports on an Australian experience with the MicroSim software used for the preparation of undergraduate, inter-professional paramedic nurses. The paramedic nurse course focuses on preparing graduates for practice in rural communities where there are opportunities to enhance the productivity and skill retention of the local emergency health workforce.

Methods: The students were introduced to the software during their second year of a four-year, double-degree programs to enhance their ability to conduct primary and secondary surveys and respond in a timely and clinically appropriate manner. Their responses were required to be relevant to the nursing, paramedic, and inter-professional preparation for nursing as reviewed by the course thus far. The students were assessed as individuals and teams and were invited to describe observations of their own responses and those of the broader inter-professional team.

Results: Aggregate results will be reported. The students were highly enthusiastic about their participation and assessment, and the method continued its third year in