

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

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(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 inter-professional 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

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(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

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(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

2009. Examples of student responses to cardiac and trauma clinical scenarios will be demonstrated as two of the most frequent presentation types to the emergency department calls to the ambulance service.

Conclusions: The combination of the use of interactive software and teamwork in simulations that paramedic nurses may experience in rural Victoria was highly successful in promoting confidence, competence, communication, critique, and team-building in this already high achieving group of students.

Keywords: assessment; competencies; education; emergency health; inter-professional; MicroSim; paramedic nurse; simulation; training

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(M20) Training Course in Emergency Medical Assistance in a Tropical Environment

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Introduction: French Guiana is an overseas department of France in South America, where the practice of emergency medicine is limited due to geographical isolation and tropical diseases.

Methods: The aim of this project is to devise an original training course for medical teams in charge of casualties in an equatorial, isolated area and to prepare participants of the medical teams to engage in humanitarian missions without being a burden for the other rescuers.

Results: The course lasted 10 full days, and consisted of 50 hours of lectures and four days of practical training in the field. The topics covered were the tropical environment, specific pathologies, and techniques. Fifty-five professionals worked on developing the course. The simulated exercise involved real conditions and necessary skills training including: workshops with trekking, localization, means of radio communications, medevac, using a stretcher, helicopters, three nights in the forest (bivouac), and survival basic life support. The evaluation of the course included both theoretical and practical critique.

During the first three sessions (2007, 2008, 2009), 85 students participated: 48% were physicians; 29% were pre-graduate students; and 23% were nurses, who were working in hospital, clinics, or in the army, and were from French Guiana, French West Indies, or Europe.

Conclusions: This original university course is useful, even essential, for emergency specialists working in tropical environments.

Keywords: emergency medical assistance; French Guiana; isolated area; training; tropical environment; tropical medicine

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(M21) Certified Hospital Emergency Coordinator Training Program

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Introduction: In an effort to create uniformity in job-critical knowledge and skill sets among hospital emergency coordinators throughout Georgia, yielding improved emergency preparedness and interagency cooperation, the Georgia Department of Human Resources Division of Public Health and the Medical College of Georgia's Center of Operational Medicine created the Certified Hospital Emergency Coordinator (CHEC) Program.

Methods: A focus group of emergency management, public health, and emergency medicine experts was convened. Twenty-seven critical and important tasks, skills, and areas of knowledge imperative to professionals were identified. Based on these, two novel courses were developed. The completion of these and other established courses available through the US government and the National Disaster Life Support Foundation, in addition to job experience, form the basis of the newly created three-level certification program.

Results: Approximately 125 hospital emergency managers from all regions of Georgia have been trained thus far, and another four courses are scheduled for 2009 with an average of 30 students per course expected. Attendance at both the Basic and Level II courses has created valuable interpersonal relationships, professional familiarity, and a common educational baseline amongst the state's hospital emergency coordinators.

Conclusions: Georgia's CHEC program represents a novel approach to training and preparedness at the hospital level. Coordination between public health and academia has allowed for the sharing of knowledge and resources in an unprecedented way. This has created enhanced preparedness throughout the state and has emboldened interpersonal and interagency cooperation within the realm of emergency management.

Keywords: emergency management; emergency medicine; emergency preparedness; public health; training

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(M22) Significance of Education and Training for Confined-Space Medicine for Medical Teams and Search-and-Rescue Professionals—Lessons Learned from the JR Train Crash in Japan, 2005

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Introduction: In 2005, a seven-car commuter express train collided with an apartment building in Japan. The crash left 107 passengers dead and 549 injured. This paper highlights confined space medicine that was provided for three survivors and introduces the current approach for training Japan Disaster Medical Teams (JDMATs) and/or rescue professionals.

Methods: A retrospective analysis of confined space medicine provided after the train crash and a study of training of JDMATs and/or rescue teams.