La 2ème étude regroupant 9 547 cas a confirmé ces données: taux de F.V. de 17,66% avec 30,54% de victimes hospitalisés avec activité cardiaque spontanée. La fréquence des fibrillations ventriculaires des moins de 20 ans a été confirmée: 13,41%.

Une dernière étude sur 22 373 dossiers d'arrêts cardiaques extra hospitaliers a confirmé ces chiffres: taux de F.V.: 19,2%, taux de ressuscitation 29,1% en cas de F.V. choquée. 513 arrêts cardiaques ont moins de 20 ans, un taux de F.V. de 14,85% (13,65% pour ceux de moins de 15 ans).

Ces premiers résultats plaident pour la poursuite du recueil des données, en incluant notamment le devenir post-hospitalier des victimes ainsi secourues.

Summary in English: The French Civil Protection made a national study over the using of AED by the fire fighters; the results of this study including 22,373 cases in two and one half years.

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Oral Presentations—Exercises and Drills

Innovative Approaches to Emergency Management Drills in South Asia

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Introduction: South Asian nations regularly experience natural and humanmade disasters that disproportionately affect vulnerable populations in large cities. Humanitarian agencies and educational institutions are shifting their focus from emergency response to emergency preparedness. A modular course approach culminating in a full-scale disaster drill is an innovative and timely strategy for building capacity in emergency management in these settings. Objective: The objective of this study was to create a training program that builds resilience in communities by facilitating collaborations between local stakeholders and experts. This will improve coordination and the timely and efficient utilization of resources during disasters and identify system and resource gaps to help prioritize emergency management activities.

Methods: Disaster drills were conducted in four cities in South Asia over a two-year period. Each drill was preceded by three days of modular didactics and a tabletop drill. Modules included tracks for trauma care, hospital emergency management, prehospital care, and public health. Tabletop drills also involved police and fire departments, municipal disaster management, non-governmental organizations, and the military. Full-scale disaster drills with mock victims engaged all parties in a coordinated response, and were followed by a comprehensive hot wash and afteraction report. A standardized evaluation tool and video were used to assess capacity and response during the drills. Results: Qualitative feedback from the modular courses and disaster drills, as well as real post-training events (terrorist attacks in Ahmedabad and Mumbai), indicated that participants felt the exercises were beneficial and provided the opportunity for collaboration and systems improvement in the areas of communication, command and control, patient care, resources, and security.

Conclusions: A modular course and disaster drill approach is an innovative and an effective strategy for building capacity in emergency preparedness in South Asia.

Keywords: disaster management; drill; emergency management; South Asia; tabletop

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Experience with the Agency for Healthcare Research and Quality Evaluation Tool in a Developing Nation John E. Arbo; Mamata Kene, Satchit Balsari;

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Introduction: Low- and middle-income nations are disproportionately affected by a growing number of disasters caused by natural and human-made hazards. Similarly, the human and economic costs associated with these events are exaggerated when compared with developing nations. Augmentation of disaster preparedness and response in these nations remains a focus of humanitarian agencies. A standardized evaluation tool to assess response capacity and track system improvements in such settings is lacking. We relate our experience using the Agency for Healthcare Research and Quality (AHRQ) disaster drill assessment tool to evaluate a simulated blast event in Colombo, Sri Lanka. Methods: A prospective observational study was completed during a full-scale disaster drill. Simulated victims were triaged, transported by ambulance, evaluated by hospital staff, and given operative, intensive care unit, floor, or discharge dispositions. Forty drill evaluators sent from regional disaster management offices completed a two-day course in disaster management, drill design, and the AHRQ tool. Results: A post-drill debrief was conducted. The evaluation emphasis of the AHRQ tool adequately addressed training concerns of the participating agencies. The applicability of the tool, however, was limited. Individuals available to serve as evaluators were few in number and diverse in their education and experience. The small sample size and difference in observer skill sets limited the consistency and broader applicability of findings. The approach of the external evaluator also limited participatory feedback, which might have enabled more comprehensive and timely reporting of data. Lastly, the tool proved complex in its language and design, impeding accurate and reliable execution in this setting.

Conclusions: The AHRQ tool proved challenging to deploy in a resource-constrained setting. Evaluation tools intended for use in such settings should use simple and consistent language, be brief, easily translated, and participatory in their design and feedback mechanisms. Such a

design optimizes sample size, applicability of findings, and timeliness of data reporting.

Keywords: Agency for Healthcare Research and Quality; developing nations; disaster health management; drill; evaluation

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Emergency Information Management and the Onset of Disasters: An Exercise-Based Study

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Introduction: The primary objective of an emergency information system is to improve the capacity of decision-makers to take needed actions. Use of an effective information management system is a key, although difficult aspect of emergency management. *Emergency information management* is defined as the collection, consolidation, analysis, and dissemination of information. It must be planned, organized, and controlled to ensure that information is given to the right decision-maker at the right time.

Objective: The goal of this study was to analyze the importance of information management for increasing the efficiency of post-disaster activities.

Methods: A total of 22 tabletop exercises were performed in 22 hospitals in Iran from December 2006 to 2008. A team of experts was responsible for running and evaluating these exercises. Standard data sheets and checklists were used for evaluation.

Results: Defects included factors such as a lack of: (1) staff to operate the information system; (2) supervision and feedback; (3) lack of guidelines, laws, and/or standards; (4) coordination and partnership with key internal and external stakeholders; (5) communicative systems; (6) skill; and (7) availability of transportation.

Discussion: The hospital disaster plan was not performed completely and accurately. Although some activities were performed on the basis of the Hospital Incident Command System, but the system was not efficient and processes should be redefined.

Keywords: decision making; disaster health; disaster management; exercise; information management

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Simulations, Critical Thinking, and Clinical Judgment: Lessons Learned

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Introduction: Simulations often are used to develop skills. However, through well-designed simulations in which the educator has planned beyond skills development, the students can develop good judgment. Methods to ensure that staff are ready for the tasks-at-hand and are able to make good decisions on the in the heat-of-the-moment, particularly where the health and lives of people are at stake must be developed.

Methods: This was a qualitative study investigating across traditional professional barriers and covered nursing, medicine, ambulance, and firefighters. Data were collected through interviews and observations.

Results: Simulations can help students to develop practical wisdom. However, this is determined by the educator and how the simulation was developed. Furthermore, students must engage in the development process and expend some emotional currency to learn and utilize reflection.

Conclusions: Simulation is a powerful learning and teaching instrument. It can be used to develop simple psychomotor skills. However, if the design of the simulation is planned and run appropriately, it can develop good decision-making skills.

Keywords: clinical judgment; critical thinking; education; emotional currency; phronesis; practical wisdom; training Prebosp Disast Med 2009;24(2):s114

Using Disaster Simulations to Identify Surge Capacity Strategies that May Reduce Emergency Department Overcrowding

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Introduction: An interprofessional team conducted >20 major mass-casualty exercises in Southern Ontario including building collapses, heat waves, blackouts, chemical tanker explosions, terrorism, and pandemics. The number of participants involved ranged from 250–700 and included healthcare professionals and students, administrators, first responders, telecommunications, media, and government.

Objectives: The objectives of this study were to identify surge capacity strategies that can reduce emergency department overcrowding.

Methods: A simulated hospital consisting of an emergency department, intensive care unit, family practice, family information center, pharmacy, and command center is run by actual hospital staff. A typical bed census is used to determine available beds, which was invariably none. The hospital must manage the situation by creating patient care capacity.

Staff members are allowed to create surge capacity strategies before and/or during the exercise. Expert evaluators (physicians, nurse and risk managers) observe. Immediately post-exercise, participants and experts were asked for their opinion as to what worked to reduce the impact.

Results: Four major strategies were identified as useful:

- 1. Treatment and release directives for paramedics and nurses:
- Diversion of "walking wounded" to a community or family health centers;
- 3. Well person or minor illness centers (including flu and immunization clinics) staffed with students, supervised by nurses and on-line control provided by physicians; and
- Sequential organ failure assessment score for determining who should receive critical care.

Conclusions: These surge strategies may reduce hospital overcrowding.

Keywords: disaster; drill; exercise; overcrowding; simulation; surge capacity

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