

authors have suggested that instructing physicians in “cognitive forcing strategies” or “metacognition” will help reduce the amount of cognitive error in medical practice. It has been said “[There is an] ethical obligation to make all efforts to expose health professionals to clinical challenges that can be reasonably well simulated prior to allowing them to encounter and be responsible for similar real-life challenges.”

TYPES OF SIMULATION • Verbal • Tactile • Visual • Situational • Environmental

TYPES OF SIMULATION TRAINING • Standardized patients (role play) • Basic models (partial task trainers) • Simple level • Higher level • Mannequins • Low fidelity • High fidelity • Virtual patients • Screen-based; computer-based

COMBINATIONS • Augmented encounters with technology • Crises management

HUMAN PATIENT SIMULATION • Realistic • Suitable for all levels • Safe • Wide variety of training programs • Expensive

ADVANTAGES OF SIMULATION • Patients are never at risk • Serious but infrequent events, in predictable times and places • Errors can be allowed to occur, and play-out • Rehearsal, repetition, mastery • Crisis management simulation, planning • Reduces institutional liability • Increases operational confidence • Produces rapid results • Allows team training • Increases institutional prestige

The use of high fidelity simulations to train multidisciplinary teams in critical environments is well established. **References:** 1. Croskerry P, Wears RL, Binder LS. Setting the educational agenda and curriculum for error prevention in emergency medicine. *Acad Emerg Med.* 2000;7:1194–200. 2. Croskerry P. The cognitive imperative: thinking about how we think. *Acad Emerg Med.* 2000;7:1223–31. 3. Croskerry P. The feedback sanction. *Acad Emerg Med.* 2000;7:1232–8. 4. Handler JA, Gillam M, Sanders AB, Klasco R. Defining, identifying, and measuring error in emergency medicine. *Acad Emerg Med.* 2000;7:1183–8. 5. Schenkel S. Promoting patient safety and preventing medical error in emergency departments. *Acad Emerg Med.* 2000;7:1204–22. 6. Croskerry P. The importance of cognitive errors in diagnosis and strategies to minimize them. *Acad Med.* 2003;78:775–80.

Prehosp Disaster Med 2011;26(Suppl. 1):s28–s29
doi:10.1017/S1049023X11001063

(A105) A Core Curriculum for Nurses in Disaster Preparedness and Response

L. Chang,¹ S.M. Briggs²

1. Patient Care Services, Department of Nursing, Boston, United States of America
2. Boston, United States of America

Background: Nurses play an essential role in disaster response. All health care responders, including nurses, must have knowledge of the key principles of disaster medicine. The International Trauma and Disaster Institute (ITDI) at Massachusetts General Hospital has developed a core curriculum for Mass Casualty Incident (MCI) management. The curriculum provides all members of the multidisciplinary disaster team with the fundamentals of the MCI response. The proposed concurrent session will report on understanding of the fundamental knowledge in disaster medicine and preparedness for nurses in local and international disaster responses.

Discussion and Observations: Disasters follow no rules. Traditionally, medical providers have held the erroneous belief

that all disasters are different, especially those involving terrorism. In reality, all disasters, regardless of etiology, have similar medical and public health consequences. A consistent medical approach to disasters, based on an understanding of their common features and the response they require, is becoming the accepted practice throughout the world. This strategy, called the MCI response, has the primary objective of reducing the mortality/morbidity caused by the disaster. The Advanced Disaster Medical Response (ADMR) Course, available in eight languages, including Chinese, is designed to train nurses in the ABC's of basic medical and public health disaster care. The delivery of optimal care in a disaster relies on a common understanding of each health professional's role and common mastery of defined essentials of disaster response such as the Incident Command System, field triage, decontamination, care of specific injuries, environmental considerations, psychological response to disasters, and care of the dead and their families. Understanding key principles and training in medical disaster response will guide nurses in disaster preparedness and response to future disasters.

Prehosp Disaster Med 2011;26(Suppl. 1):s29
doi:10.1017/S1049023X11001075

(A106) Nursing Simulation in Disaster Management

D. Moore,¹ K. Atchison,² J. Boone³

1. Nursing, Costa Mesa, United States of America
2. Nursing, Anaheim, United States of America
3. Director of Global Studies, Ontario, United States of America

In the United States in 2010, there were 81 federal disasters, for this reason and at the request of our clinical partners, when West Coast University (WCU) started its Baccalaureate of Science in Nursing (BSN) program in 2008, it recognized the need to have a course in disaster management. The Disaster Management course was developed in concert with other parts of the curriculum such as Leadership, Physical Assessment, Critical Care courses to help students focus their assessment and intervention skills to prepare them to be future responders. As a component of the skill development, simulation exercises were developed in the simulation center within the college of nursing. To prepare students to respond to disasters, a variety of scenarios were developed to meet national patient safety goals and various types of disaster and emergency situations. In the scenarios students learn how to work as a team, follow the chain of command, assess and rapidly intervene to such medical crisis such as hemorrhaging, trauma, burns, cardiac arrest and respiratory arrest. They also learn how to delegate to the appropriate personnel as well as leadership skills. Students find this educational and reassuring to be able to practice these very high level sentinel events in a secure environment where they will get immediate feedback not only from instructors but from their peers. Preliminary research have identified students having significant improvement in their clinical skills from the first to the third exercise in regards to assessment, intervention, communication, and delegation. We have received feedback from our clinical partners that our students are better prepared than their current emergency staff in regards to disaster management and to that end we plan to work with our clinical partners to

translate our class into an online course so their staff can be trained on disaster management.

Prehosp Disaster Med 2011;26(Suppl. 1):s29–s30
doi:10.1017/S1049023X11001087

(A107) Victimbase: Disaster Victim Descriptions for Simulation, Training and Research

M. Debacker,¹ M. Boosman,² W.J. Van Norel,²
J.L. Tryan³

1. Research Group on Emergency and Disaster Medicine, Brussels, Belgium
2. Delft, Netherlands
3. Ottawa, Canada

Introduction: A 2006 survey showed that 27% of training institutions used computer-based training in disaster medicine and an additional 23% indicated that they will use it in the near future(1). Victim descriptions are an important element of simulation exercises. Currently, the victim data utilized in computerized simulation exercises cannot be used in an interchangeable way.

Methods: The European Master in Disaster Medicine (EMDM) Academy, recognizing the need for access to reliable disaster victim data, initiated the Victim Base project in order to improve the availability and quality of disaster victim profiles for use in simulation, training and research. A standardized victim template was developed through a review of primary and secondary survey requirements with consultation from an international consortium of training experts in disaster medical management during two workshops.

Results: The victim template is composed of a description of the victim profile, a set of clinical conditions and triggers (time and interventions) to move from one clinical state to another. The parameters of a casualty condition are organized in sub-templates and arranged in the way the victim would most likely be assessed. Victim profiles can be delivered in different output formats on request of the users.

Conclusion: In order to evaluate the effectiveness or outcome of disaster response exercises or test operational plans, victim data must be robust, reliable and of high quality. Moreover, the data must be interchangeable in order to make comparisons between different response systems, regions or countries. VictimBase as an online library of disaster victims will contribute to achieve these objectives. 1. Delooz H, Debacker M, Moens G, Johannik K. and the ISEE Partnership. European survey on training objectives in disaster medicine. *Eur J Emerg Med* 2007;14:25-31.

Prehosp Disaster Med 2011;26(Suppl. 1):s30
doi:10.1017/S1049023X11001099

(A108) Hospital Disaster Planning: The Structured Approach

G.E.A. Khalifa

Emergency Medicine, Abu Dhabi, United Arab Emirates

Background: Disasters and incidents with hundreds, thousands, or tens of thousands of casualties are not generally addressed in hospital disaster plans. Nevertheless, they may occur, and recent disasters around the globe suggest that it would be prudent for hospitals to improve their preparedness for a mass casualty incident. Disaster, large or small, natural or man-made can strike in many ways and can put the hospital services in danger. Hospitals, because of their emergency services and 24 hour a day operation,

will be seen by the public as a vital resource for diagnosis, treatment, and follow up for both physical and psychological care.

Objectives: Develop a hospital-based disaster and emergency preparedness plan. Consider how a disaster may pose various challenges to hospital disaster response. Formulate a disaster plan for different medical facility response. Assess the need for further changes in existing plans.

Methods: The author uses literature review and his own experience to develop step-by-step logistic approach to hospital disaster planning. The author presents a model for hospital disaster preparedness that produces a living document that contains guidelines for review, testing, education, training and update. The model provides the method to develop the base plan, functional annexes and hazard specific annexes.

References: 1. JCAHO standards as a starting point to prepare for an emergency 2. Australian Emergency Manual. Community Emergency Planning Guide, Second Edition. www.csu.edu.au/faculty/health/aemf/EMPlanning/PLANNING.doc 3. Developing practical emergency management education programs Joint Commission Perspectives, December 2001, Volume 21, Number 12 4. Guide for All-Hazard Emergency Operations Planning (FEMA). www.fema.gov/pte/slg101.pdf 5. EMERGENCY MANAGEMENT PLAN The University of Mississippi Medical Center The University Hospitals and Clinics Jackson, Mississippi August, 2002 6. Hospital Disaster Preparedness: Meeting a Requirement or Preparing for the Worst? By Paul V. Richter Risk Management Coordinator for Support Services South Carolina Hospital Association

Prehosp Disaster Med 2011;26(Suppl. 1):s30
doi:10.1017/S1049023X11001105

(A109) Health Workforce and Disaster Preparedness of Rural Hospitals

L. Sieglhoff, L. Cusack, P. Arbon, A. Hutton, L. Mayner

Flinders University Research Centre for Disaster Resilience and Health, Adelaide, Australia

Following the devastating March 2009 Victorian bushfire disaster in rural areas of Australia, authorities reviewed strategies designed to protect communities during periods of extreme fire risk. New policy and regulation were introduced and designed to ensure that small rural communities were protected and prepared to confront a wildfire emergency during days of extreme heat or bushfire risk weather. As a result on days of declared 'catastrophic' bushfire weather conditions government agencies in South Australia have implemented a policy for schools (including pre-schools) to be temporarily closed. On these days community members are advised to evacuate early to safe regional centres, and to limit travel on country roads. The WADDEM Guidelines for Disaster Evaluation and Research demonstrate that Basic Societal Functions (BSFs), such as education, health, transport and others, are interconnected and interdependent. For example in small rural communities in South Australia people may have a number of important roles including being parents, volunteers of emergency services while also being employed as staff of local hospitals. This project reviewed the impact of school closures and other protective measures on the availability of the rural nursing workforce and on rural hospitals. Rural hospitals in Australia are staffed, on average, by 2–8 nurses, service