item, Web-based questionnaire on their response experiences. Responder characteristics, competencies performed, and issues involved in the transition to the disaster provider role were analyzed.

Results: Of 196 respondents, 78% deployed with an organized group, and 73% reported prior training in disaster response. Despite this preparation, most reported difficulty in transitioning from their usual provider role to the role of a disaster responder. Only 43% knew what role they would perform, what professional items to take (38%), or how to protect themselves (27%). Neither membership in a disaster organization, prior training, nor disaster response experience contributed significantly to positive transition outcomes. Provision of appropriate information most strongly influenced a positive and/or satisfying response experience. Conclusions: Although well-trained and confident in clinical skills, responders often made the transition to the disaster role without adequate support or direction. The transition outcomes identified by Meleis can be influenced positively by providing timely information. Current disaster training focuses on teaching skills, rather than how to function in a disaster setting. Further study is needed on how to more effectively prepare individuals for a disaster response.

Keywords: competency; disaster; emergency preparedness; hurricane; preparedness; transition *Prebosp Disast Med* 2009;24(2):598-599

## Mobile Virtual Disaster Beds Supporting Hospital Surge Capacity

## Charles Little;<sup>1</sup> Jacqueline Ward-Gaines;<sup>1</sup> Michael Yaron;<sup>1</sup> Homer Castro<sup>2</sup>

- 1. Department of Emergency Medicine, University of Colorado Denver, Aurora, Colorado USA
- 2. University of Colorado Hospital, Aurora, Colorado USA

Introduction: Hospitals make extensive use of computer information technology (IT) systems to monitor patients, document care, process orders and display results of diagnostic testing. The use of cots, gurneys, or other improvised beds to accommodate large numbers of patients is common in hospital disaster planning. If not connected to the normal IT system, these surge beds may be limited in the ability to care for patients. In a recent emergency it required four hours to fully configure five new beds in one IT system, which is too slow for use during disasters.

Methods: As part of a comprehensive hospital disaster evaluation, methods of IT support for improvised beds were developed.

Results: One hundred virtual disaster beds in functional 25-bed, virtual nursing stations were configured in the main IT system. As the possible needed locations of the disaster beds are unclear in advance, a flexible, portable system was developed. A laptop computer configured with both inpatient and outpatient software was connected to a wireless hub, allowing it to drive a laboratory label printer and a standard printer. All hardware was placed on a mobile cart. This created a mobile, virtual patient care station. In testing the system, staff were able rapidly access patient beds, document and monitor care, order medica-

tions, therapeutic interventions and diagnostic studies, and retrieve results from any point within the hospital complex. **Conclusions:** The use of pre-configured portable wireless computers supporting virtual surge beds allows flexibility in meeting potential disaster requirements.

Keywords: information technology systems; hospitals; patients; preparedness; surge capacity Prebop Disast Med 2009;24(2):s99

Humanitarian Medical Aid to Developing Nations: A Recipient Country's Perspective

Ravindra Jammihal;<sup>1,2</sup> Harry Ralte;<sup>1,3</sup> Nobhojit Roy<sup>3</sup>

1. Center for Studies in Ethics and Rights (CSER), Mumbai, India

2. Trombay Industrial Dispensary, Mumbai, India

3. BARC Hospital, Mumbai, India

Introduction: Much of the published disaster literature documents the donor viewpoint of humanitarian aid rendered to developing world disasters. This paper presents the recipient country's perspective on disaster aid interventions. Methods: A systematic review of published papers (n = 25,416) on disasters over the last 20 years, revealed 272 papers that addressed humanitarian aid to developing countries. Accountability, cost:benefit analysis in terms of burden of disease, evidence-based humanitarian medicine, and the Sphere Handbook's minimum standards of humanitarian aid.

**Results:** Of the 25,416 disaster papers, 1.08% described developing world disasters, and these primarily focused on rescue missions and foreign field hospitals. Within this subgroup, only 15.3% papers, were written by local, developing world authors. Inadequate infrastructure, personnel problems, lack of coordination between agencies, corruption, social issues, and language difficulties were reported in these papers. The majority of the papers were researched during the acute phase, a few during rehabilitation, and fewer were follow-up studies. The assessment of humanitarian intervention in terms of money spent and health outcomes were measured, with due consideration to ethical ideals of disaster aid. Disasters caused by natural hazards were more attractive for relief and rescue, than complex emergencies dealing with conflict and riot situations.

**Conclusions:** Donor country reporting of developing world disasters represents a publication bias in disaster literature. It seems to imply that the global disaster disease burden is being met by international aid workers. It is acknowledged that local agencies meet the acute healthcare needs of the disaster-affected population. It would be prudent to harness incoming international aid in identified areas of need, like disaster research, follow-up studies and capacity building; rather than field hospitals, inappropriate technological aid, and rescue missions. Systematic research and documentation, disaster protocols, forging South-South collaborations, instituting the "all-hazards" model and help with long term rehabilitation are possible priorities for the developing world disaster agenda.

Keywords: capacity; developing country; humanitarian aid; international; medical; perspective Prebosp Disast Med 2009;24(2):s99