

significant mortality and morbidity. Disasters may be caused by natural or man-made events. With either type, the forces of the event overwhelm the first responders and health organizations in the stricken community and outside assistance is required. Developing countries have the highest burden with limited available resources. Today's complex disasters have increased the need for mobile medical/surgical response teams to provide disaster care. The United States (US) Government created the International Medical Surgical Response Teams (IMSuRT), which, on short notice, deploy a multidisciplinary team of doctors, nurses, and other health professionals to disasters around the world. IMSuRT has a rapidly deployable, fully equipped field hospital. Historically, Massachusetts General Hospital (MGH) in Boston, Massachusetts, US, has played a significant role in responding to humanitarian efforts both within the US and internationally. The MGH nurses play key roles in several response teams, including IMSuRT. Disaster nursing has many unique challenges. Nurses practice daily under controlled situations and become expert in one specialty; however, in the disaster setting this is not possible. Disaster nursing requires a fundamental change in the care of patients. During disasters, nurses work in areas that are not their primary specialty. Disaster nurses must be prepared in the essentials of disaster response—this requires planning, preparation, and training with multiple simulation drills focusing on patient scenarios, equipment utilization, teamwork, triage, decontamination, and scene safety. We must be creative, adaptable, and flexible to the needs of the disaster. Most importantly, cultural sensitivity, and communication are important factors in the delivery of disaster care.

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#### (P2-56) Nurses' Knowledge, Skills and Perception Towards Disaster Response and Emergency Preparedness F.C. Wee

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**Background:** Disaster response and emergency preparedness has taken a bigger role in our daily operations since the advent of events of September 11 2001. It is essential that nurses be prepared and trained to respond to disaster incidents. Nonetheless, we are largely unaware of how our nurses feel about their readiness to respond to these disaster incidents. This study aims to understand our nurses' knowledge, skills and perception towards disaster response and emergency preparedness.

**Method:** A self administered structured questionnaire survey was conducted for the nurses in our hospital. Using a 5 point Likert scale, the questionnaire covered knowledge, skills and perception of institutional and individual preparedness towards a disaster incident. The data was analyzed using SPSS 17.

**Results:** A convenient sample of 1143 nurses (response rate 95.5%) was studied over a 2-month period from 1st August to 30th September 2010. 55.7% of the surveyed nurses have not attended any training in disaster response. Despite that, more than 50% of them scored correctly in term of their knowledge in different types of disaster incidents. 75.3% of them have not been trained to don the HAZMET suite within the last 2 years. 72.9% do not know where to get the HAZMET suit in the event of a chemical incident. While 80.2% felt that the institution is

able to respond to any disaster incident, only 41.3% felt that they were ready. In addition, 83.6% were willing to participate in future disaster incident response training. 77.1% agreed that being able to respond to a disaster incident should be part of their professional competency.

**Conclusions:** There is a need for the hospital to incorporate disaster preparedness into nursing education curriculum as a clinical core skill to ensure that nurses are ready to respond to disaster incidents.

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#### (P2-57) When a Glue Sniffer Turns Weak

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**Introduction and Discussion:** Inhalant abuse has become less common in Singapore. Awareness of glue sniffing and its complications has decreased among local physicians. Prolonged toluene exposure can result in renal tubular acidosis, with electrolyte and acid-base derangements, and should be considered in the differential diagnosis of any young patient with unexplained hypokalaemic periodic paralysis and normal anion gap metabolic acidosis. We present a typical case to illustrate the abnormalities and to heighten awareness among emergency physicians who may not have laboratory results on hand when evaluating causes of limb weakness.

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#### (P2-58) A Multicasualty Event of Multiple Burn Victims Caused by Spout of Heated Hydrochloric Acid in a Chemical Plant

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**Background:** A sudden break-down of a heat-exchanger in vinyl chloride plant resulted in that 141 °C, 23% concentration of hydrochloric acid spouted out over the workers around it. Eight workers suffered and Ichihara City Fire Department was deployed in response to the call 3 minutes after the onset of the incident, 17 vehicles including 5 fire engines, 6 ambulances, and two helicopters. Finally three severely (> 80% of TBSA) burned, two moderately (20–80%) burned, and three slightly (< 20%) burned victims were identified and triaged. One severely burned was transferred at first to the closest tertiary care hospital (TUCMC) which existed within 2.5 km distance by an ambulance and other two and one moderately burned were transferred by helicopters to the neighboring tertiary care hospitals. Another moderately burned one was sent to TUCMC by an ambulance about 30 minutes later than the first one. Three slightly burned victims were sent to a local hospital and treated as an outpatient. This casualty mission was ended by 120 minutes after the call. Two among the three severely burned patients lost their lives but another severe one and two moderately burned were survived. **Conclusions:** With these considerations, the management of this multiple burn casualty was successful, partly because of small