

from their description of disaster, which included the cause, category, characteristic, impact and type of disaster. 36.4% of students were certain that disaster would happen again in China. A further 50.9% felt disaster was likely. Flood and earthquake were considered the most likely future disasters. 71% of nursing students strongly agreed that being prepared for disaster was important. The main reasons were better preparedness could decrease the damage to property and the incidence of death and injury. However, the level of understanding of the effects of disaster and the exposure of students to education about disaster health response was limited.

Conclusion: Knowledge and skills for disaster preparedness of nursing students should be strengthened in the medical university.

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(P1-35) Adapting a Humanitarian Organization for Disaster Response, Operation Smile in Haiti, 2010

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Background: Operation Smile International (OSI) is a Non-Government Organization (NGO) with experience providing surgical care throughout the world. OSI has vast logistical capacity, skilled and credential providers, and international relationships. Disaster response had been considered by OSI in the past, but never initiated. However, the magnitude of the Haiti disaster, coupled with request from Haitian OS Partners led to the initial disaster response of the OSI organization.

Discussion and Observations: This presentation will: (1) Describe the considerations and rationale that led OSI to this intervention. (2) Discuss the process of developing a disaster response within a relatively short period of time. (3) The response itself, and (4) Present how the lessons learned will be adapted to future OSI capacity and planning.

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(P1-36) Mass Casualty Incident Awareness of Remote Location Staff in Western Australia

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Introduction: The state of Western Australia has a remote population spread throughout an immense area. Remote health and retrieval is strained on a day-to-day basis, let alone in mass casualty incidents (MCIs). Anecdotally, remote medical staff has minimal training in MCI response. There is no research into how aware these staff is on principles of MCI response.

Methodology: An online survey was devised to ascertain the awareness and knowledge of medical staff most likely to be involved in a disaster. Demographic as well as questions in scenario format were disseminated to rural general practitioners (GPs), nurses and paramedics. Data was collected over a 4-month period.

Results: 117 surveys were completed online. Analysis revealed an astute awareness of resources and environment in a potential

MCI but triaging was poor and complex decision-making results were equivocal. Trained respondents handled scenarios better than experienced (MCI involvement or planning) respondents.

Conclusions: In general, remote medical staff is aware of only certain MCI principles. Further training is warranted. Voluntary feedback from these staff also strongly corroborated this view.

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(P1-37) Over and Undertriage in Simulation Exercises

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Over and undertriage in simulation exercises Introduction The first healthcare personnel arriving at the scene of an accident or major incident is often an ambulance crew. It is therefore of importance that they are familiar with, and can practice triage during situations where there is a lack of resources. Overtriage, when a casualty is given a priority higher than motivated, may lead to inadequate use of resources, while undertriage can be seen as a risk for medical errors. There is a consensus that up to 50% overtriage is accepted in order to have an undertriage, which is less than 5%. The aim of this study was to increase knowledge regarding prehospital personnel's triage during standardized simulation exercises.

Material and Method: 76 standardized simulation exercises where the triage of casualties was evaluated. The exercises were part of a training program for medical command and control at scene. The students trained were all professional ambulance crew. The scenario was a fire at a football stand with 50 casualties. All in all 3800 (76 x 50) triages were performed. The simulation system used was Emergo Train System. Prior to the exercises an expert group had triaged the casualties according to the MIMMS system (sieve). Of the 50 patients 15 were triaged as T1 by the expert group and the rest were not.

Results: Of the 3800 triages 37% ($n = 410$) were classified as undertriage and 13% ($n = 134$) as overtriage. The most frequently undertriage casualties had an airway and/or breathing problem that were not observed. The most frequently overtriage casualties had a burn injury involving 30% of body surface area or unconscious casualties.

Conclusions: Triage in this simulation setting did not meet acceptable standards. More triage training for ambulance crew may improve outcome. More studies are needed regarding simulation exercises as a tool for evaluating results of triage.

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(P1-38) Emergency Department Preparedness for Training Management Plan towards Mass Casualty Incidents

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It is important to equip emergency department (ED) staff with skills to manage mass casualty incidents (MCI) as disasters

strike without warning. Our hospital, Tan Tock Seng Hospital, has been the national screening centre for severe acute respiratory distress syndrome (SARS) and H1N1 outbreaks in 2003 and 2009. Furthermore, our ED has managed casualties from mass food poisoning in the community. We would like to share our experiences in training our staff for MCI. For the ED to operate smoothly in a MCI, comprehensive training of staff during “peace” time is essential. We have a selected team of doctors and nurses as the department disaster workgroup. This team, together with the hospital emergency planning department, prepare the disaster protocols using an “all hazard approach concept” and aim to minimise variations between different protocols (Conventional, Infectious disease, Hazmat, Radioactive MCI). These protocols are updated regularly, with new information disseminated to all staff. Next, all staff must be well-versed in the protocols. New staffs undergo orientation programmes to familiarize them with the work processes. Regular audits are conducted to ensure that the quality is well-maintained. Additionally, training also occurs at the inter-departmental and national levels. There are regular activation exercises to test inter-departmental response to MCI and collaborations with Ministry of Health to conduct disaster exercises e.g. the biennial Kingfisher Exercise in preparation for radiation-related MCI. Such exercises improve communication and working relationships within the ED and with other departments. The camaraderie developed can act as a pillar of support during stressful times of MCI. Lastly, the ED staffs attend local and international courses and conferences to update ourselves on the latest training and knowledge in the handling of MCI. This allows us to share our ideas and to learn from our local and international counterparts, and helps better prepare ourselves.

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(P1-39) Support for Functionally Insufficient Key Disaster Hospitals by Dmat for Large-Scale Disaster in Japan

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Background: Japanese Disaster Medical Assistance Team (DMAT) has important duties to support and reinforce functionally insufficient key disaster hospitals in the large-scale disasters. However, it is difficult for Japanese DMAT to fulfill these duties in the current circumstances, because the DMAT consists of individual institutions and Teams have less experience to work in the other institutions. To resolve the issues, disaster drills for some DMATs which consist of several institutions have been held since 2008. We evaluated the effectiveness of the drills and educational system.

Methods: Investigation was performed by surveillance questionnaires to 129 participants in the drill (staffs from DMATs, Red Cross and local government, and sham patients). The questionnaires are: A. Was the cooperative medical practice performed smoothly? B. Was the support for hospitals conducted effectively?, C. Was the medical record for wide-area transportation

completed? (for our staffs only), D. Was our activity enough? (for participants excluding us), and E. Was the drill beneficial?

Results: 85 participants including 30 staffs in our institution answered the questionnaires (65.9%). The number of participants who answered ‘Yes’ was as follows: A. 48 (56.5%), B. 64 (75.3%), C. 8 (26.7%), D. 44 (83.0%) and E. 81 (95.3%).

Discussion: Although the cooperative medical practice was not so smooth, it was recognized that members in DMATs got mutual trust by their high knowledge and skills. And it was suggested that DMAT could not command and control the hospital staffs without their understanding the equipments and documentations used by DMAT. And it is ideal to change the mind-set of hospital top managements towards the disaster medicine through the repeated drills.

Conclusion: The repeated disaster drills at the local area is essential to make DMAT function sufficiently.

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(P1-40) Development of Hospital Triage Training at the Chris Hani Baragwanath Hospital

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Development of Hospital Triage Training at the Chris Hani Baragwanath Hospital F. Plani¹, E Degiannis, P Lingham
No disaster training had ever been carried out at the CHBH, the biggest hospital in the world with over 2900 beds and over 5000 staff members. The 2010 Disaster Plan required that all clinical staff undergo the appropriate training. Basic Interprofessional Training for Trauma Disasters 411 staff members attended a half day course during May/June 2010, presented and sponsored by CHBH Trauma Directorate consultants. The aims of the course were to disseminate the trauma disaster plan in interdisciplinary and interprofessional fashion, clarify hospital triage, familiarize staff with Trauma Unit equipment, and practice resuscitations in mass casualty incidents. The course started with presentations on CHBH Disaster Plans and Protocols and Principles of Triage and Standard of Care in Disasters. This was followed by 3 multiple patient scenarios with rotating groups, over a whole hospital floor with: 1) 50 mixed patients outside the hospital; 2) 10 serious patients in the ER; 3) 10 patients deteriorating later in a ward or ICU. Next were individual patient resuscitations, Primary, Secondary, Tertiary Survey and “hand-over”, patient resuscitations in a disaster, using the contents from “Disaster Bags” and questionnaires to assess confidence and suitable treatment areas (Red, Yellow, Green, OT) for allocation in a disaster. The course was wrapped up by a familiarization visit to ED and the colour coded areas.

Results: Final questionnaires demonstrated that all participants were a lot more confident in the triage of patients and the initial resuscitation using the implements found in the resuscitation room and the “Disaster Bags”. The course has been adopted as part of staff orientation at all professional levels from 2011 onwards, and is in the process to be extended to secondary level hospitals in Gauteng, RSA.

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