

The services provided by first responders could be enhanced greatly by training and close supervision through integrated mass-casualty management plans in developing countries.

Keywords: Asia; dead bodies; disaster; disaster management; first responders

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Disaster Needs Assessment Teams: Recent Experiences in Australia

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Introduction: Historically, Australia has relied on the Australian Defence Force to provide overseas medical assistance, including early disaster needs assessment. The need for small, rapidly deployable disaster needs assessment teams has been highlighted from experience gained from deploying civilian medical teams to Maldives and Banda Aceh after the 2004 tsunami; Yogyakarta after the 2006 earthquake, and aircraft crash in 2007; and to Mumbai after the bombings in 2008.

Methods: In previous disaster responses, the selection and preparation of these teams have been *ad hoc*, depending on the availability of suitable people to deploy. The Western Australian Department of Health, as part of its piloting of Australian Medical Assessment Teams (AUSMATs) development, has identified the need, composition, preparation, and training required for these small teams on a national basis.

Results: This presentation will examine the need, requirements, and development of these assessment teams; their communication role in the early stages of a disaster response and their role in facilitating the deployment of appropriately tasked, equipped, and trained Australian medical teams to assist in the disaster response. Recent deployments to Yogyakarta and Mumbai have illustrated the issues encountered if these teams are utilized.

Conclusions: The further development of these teams nationally is an ongoing focus. It is anticipated that a number of these teams will be prepared and ready to respond by the end of 2009.

Keywords: Australia; disaster health management; disaster needs assessment teams

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Creating an Advanced Medical Assistance Station for the Emergency Medical Assistance Service in French Guiana

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Introduction: French Guiana is a sparsely populated French department in South America. Ninety percent of its territory is covered with dense, equatorial rainforests. Medical teams constantly are confronted with difficulties concerning access for emergency services and telecommunications.

Methods: The Emergency Medical Assistance Service of French Guiana (SAMU973) is working with the French

National Spatial Agency and Thales-Alenia-Space Company to develop a high-tech, autonomous tool for tropical environments that can be deployed easily in disaster areas or isolated regions.

This unit, known as the Advanced Medical Assistance Station (PSMA) comes in a form of a freight container that can be transported by land, sea, or air, and contains communications equipment (tactical radio communications network, satellite dish, and computerized videoconference equipment) and peripheral applications that can be installed easily by a small, autonomous team.

Results: After being tested using three simulations in an isolated area, the PSMA demonstrated its efficiency for reconnaissance missions. It also can be used to coordinate the emergency medical chain and support medical teams operating field hospitals during longer missions. This is done using its communications networks, portable telemedicine unit for triaging and monitoring victims, and system for identifying and monitoring large numbers of patients (using barcodes).

Conclusions: The final results will provide French Guiana and the SAMU973 with an efficient disaster management facility able to withstand tropical conditions that is easy to deploy when aiding disaster victims.

Keywords: disaster management; French Guiana; isolated areas; medical care; transmission; triage

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Replication of a Study on Disaster Myths among Students in a Graduate Course on an Introduction to Emergency Preparedness and Disaster Health

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Introduction: Recently, de Goyet, Alexander, and Auf der Heide each have written on “disaster myths”. Alexander presents disaster myths as “propositions” and used them in a study to ascertain an understanding of these myths by students in Europe. Auf der Heide used an evidence-based approach to develop a similar list of myths. The purpose of this study was to explore the understanding of myths by two groups of Australian graduate health professionals.

Methods: Alexander's 19 propositions on disaster myths were replicated in a similar questionnaire. A further seven propositions from Auf der Heide were added. The questionnaire was distributed on two occasions to two groups of graduate health professionals undertaking the introductory unit in a Graduate Certificate in Emergency Preparedness and Disaster Health. The first occasion was during the first session in the course. The second was during the last session of the course, without any specific feedback on the outcomes of the first attempt.

Results: The means for all propositions for both groups of students in the initial attempt were in the “neutral” or “agree” range, while they should have been in the “strongly disagree” or “disagree” range. This profile was similar to the results found by Alexander. The means for all propositions for both groups of students in the second attempt also were in the “neutral” or “agree” range, although more were in the “neutral” range. Only a few students recognized the impli-

cations of the structure of the questionnaire on their second attempt, indicating that most students had not read the related articles provided as handouts during the first session.

Conclusions: Australian health professionals have a similar lack of understanding of disaster myths as do their European contemporaries, and do not show evidence of learning during a five-day short course. This study has implications for the future education of health professionals in disaster health.

Keywords: Australia; disaster health; disaster myths; education; emergency preparedness; student

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Nursing and Midwifery Disaster Needs and Core Curricular Domains in the Western Pacific Region

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Introduction: The Asia-Pacific region is prone to serious disasters where nurses and midwives can play important roles in preparedness and response. Understanding important issues for disaster nursing and midwifery in this region is essential.

Methods: A survey of representatives from the Asia-Pacific was conducted at a meeting of nurses and midwives representing the Western Pacific and Southeast Asian regions of the World Health Organization. The aim was to identify key disaster-related issues; participation in and availability of training programs; quality assurance mechanisms; clinical-practice guidelines; and core education domains for pre-service, specialized, and continuing education levels for nurses and midwives.

Results: Responses were received from 16 representatives of the countries in attendance. The most significant challenge cited was the need for resources (funding and equipment) and training. The priority disaster curriculum domains varied by intended audience, however, the topic that was very important for all groups was emerging infectious diseases. Only eight (50%) reported active nurse and midwife leadership in disaster planning and response; 10 (63%) reported some form of disaster training program. However, three (19%) reported the existence of quality assurance, and three (19%) reported clinical practice guidelines.

Conclusions: Nurses and midwives are two key groups whose potential as a resource for disaster preparedness and response has not been recognized fully. Understanding the disaster preparedness capacity needs and current state of affairs for nurses and midwives can assist with future planning by nations in this vulnerable region.

Keywords: Asia-Pacific; curriculum; disaster health; midwifery; nursing; preparedness

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Dentists—The Forgotten Provider during Mass-Casualty Incidents

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Introduction: Dentists have been identified as potential providers of emergency care during mass-casualty incidents since the mid-1940s. However, the incorporation of dental

professionals into response planning still has not been widespread. The barriers that prevent the utilization of this potentially critical member of the healthcare team during these incidents are explored.

Methods: A Web-based search of PubMed was performed using the following keywords: dentists-disasters; dentists-emergency; dentists-mass casualty incidents. Subsequently, a convenience sample of articles was assembled and reviewed.

Results: Upon review of the articles, the utilization of dentists in the key roles of triage, initial trauma management, and surgical assistance often were identified. Barriers that prevented their full use fell into four categories: (1) visibility; (2) skill/education/training issues; (3) legal issues; and (4) attitudes of planners and dentists.

Conclusions: During a mass-casualty incident, there is a need to utilize all available assets. Dentists can be important assets if the barriers to their participation are addressed and corrected before the incident. Barriers that inhibit their use are being addressed by dental schools, organized dentistry, and some governmental organizations, but a concentrated effort must be made to correct this deficiency.

Keywords: barriers to utilization; dentistry; disaster planning; emergency; mass-casualty incident

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Physical Health and Psychosocial Issues for Older Persons in Disasters and Emergencies

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Introduction: Few healthcare workers have adequate training with respect to the elderly and emergency situations. The objectives of this presentation are: (1) to describe how the aging process makes older persons more vulnerable than younger persons; (2) discuss the implications of their vulnerabilities for the four phases of the disaster cycle; (3) draw attention to the fact that post-traumatic stress disorder (PTSD) can result from any disaster and affect any and all members of the exposed population; and (4) describe strategies and resources for capacity-building among health professionals.

Methods: An interdisciplinary working group with expertise in geriatrics and emergency response has been meeting for two years under the aegis of the Public Health Agency of Canada's Division of Aging and Seniors and the Centre for Emergency Preparedness and Response. Activities have included identifying and reviewing education and training programs and materials targeted at health professionals.

Results: While many gaps were identified with respect to meeting the physical and mental health needs of older persons during disasters, some evidence-based training materials and best practices were identified.

Conclusions: Healthcare professionals and other emergency responders need all-hazards training in geriatrics. This training must include attention to pre-existing physical health conditions (i.e., chronic disease management)