Supplemental Abstracts for the Scientific and Invited Papers

(Where abstracts are not included, please see Vol. 20, No. 2 (Supplement 1))

14th World Congress for Disaster and Emergency Medicine

16-20 May 2005 Edinburgh, Scotland

Saturday 14th-Sunday 15th May 2005

Disaster Research Methodology Using the Guidelines for Evaluation and Research in the Utstein Style

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Objectives:

By the conclusion of this workshop, the participants will:

- 1. Develop an understanding of the need for a structured approach to disaster research and evaluations;
- 2. Become familiar with and have a working knowledge of the concepts contained in the Guidelines;
- 3. Develop an understanding of the terms and principles embedded in the Conceptual and Operational Frameworks for disasters;
- 4. Be able to apply these principles into the working matrix of the Guidelines and Templates for the purpose of designing and conducting evaluation and research into the pathophysiology of disasters and of interventions directed at the pre-event, intra-event, and/or post-event phases of a disaster or disasters;
- Recognize the requirements and mechanisms for the development of appropriate indicators of functional states, adequacies of supplies of goods and services, and of the effectiveness and benefits associated with the implementation of interventions;
- 6. Develop an understanding of the utility of severity scores in disaster research;
- 7. Be able to critically evaluate published studies using the Operational Framework (Templates for Disaster Research and Evaluation);
- 8. Understand some of the ethical issues associated with the conduct of disaster research and evaluations; and
- Become familiar with the use of quantitative and qualitative data collection methods and interpretation.

Keywords: concept; disaster; ethics; evaluation; framework; Guidelines; operation; pathophysiology; research; severity score; Templates

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Wednesday 18th May 2005

Special Seminar: The Tsunami of Southeast Asia

Chair: David Bradt, MD, Victoria, Australia

Overview of the Disaster

David Bradt, MD Victoria, Australia

The Geophysics of a Tsunami—Strategies for Early Warning

S. Boxall

Southampton Oceanography Center, United Kingdom

International Coordination—The Role of the World Health Organization (WHO)

R. Waldman United Kingdom

"Operation Tsunami Assist"—Australian Civilian Medical Team Deployment

D.M. Cooper

New South Wales (NSW) Health, Australia

Following the Tsunami Disaster on 26 December 2004, the Australian Government received requests for medical assistance from the governments of Indonesia, Sri Lanka, and the Maldives.

The Australian Government, through Emergency Management Australia (EMA) and AusAID, in consultation with the Department of Health and Aging, tasked the NSW Health and Ambulance Service Counter Disaster Unit (CDU) with the establishment, configuration, and deployment of four disaster medical teams. This was following the full activation of AUSASSISTPLAN, the national disaster plan for overseas assistance.

The request from the Australian Government was made at 17:00 hours on 28 December 2004. The team delivered the first two task forces (Alpha and Bravo, 14 persons each) at RAAF Richmond by 10:00 hours the next day, operational in just 17 hours after the request. These teams were deployed to Banda Aceh via Jakarta, and soon were in place providing medical and surgical care. The configuration of the teams included surgical (orthopedics/general surgery), emergency medicine, nursing, paramedic, public health/infectious diseases, and logistics elements through the NSW Fire Brigades. The deployment included personnel

from four states: (1) New South Wales; (2) Victoria; (3) Western Australia; and (4) Queensland.

Of particular importance was the need for self-sustainability in such an austere environment, and the NSW Fire Brigades were vital in providing essential logistics through their urban search and rescue capability. The task force deployment included 17 tons of medical and logistics equipment on 16 pallets, including pharmaceuticals, generators, lighting, tentage, water and ration packs, completely filling an RAAF 707.

The team performed over 90 surgical operations in total and up to 300 consultations and interventions per day with over 70 in-patients managed at all times. This treatment was undertaken in very difficult conditions with no running water, sterilization, laboratory infrastructure, and only intermittent power through our generator capability deployed with the teams.

The other task force (Charlie Team sent to the Maldives) and public health team (Delta Team sent to Sri Lanka) also were configured in Sydney and were deployed by the CDU on 30 December from the Sydney airport. These teams provided vital public health and primary care support.

In all, 50 personnel were deployed from these four teams (28 from NSW), three additional staff from Canberra Hospital were deployed to Phuket as an assessment team, and two mental health workers were deployed to Jakarta to assist United Nations staff. Many other forensic experts are embedded with the Australian Federal Police in Thailand.

The arrangements and actions will be described.

Keywords: Banda Aceh; conditions; Indonesia; limitations; medical care; planning; preparedness; staff; surgery; task forces; teams; tsunami

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What Types of Patients Were Seen after the Tsunami in Banda Aceh in an International Committee Red Cross (ICRC) Field Hospital Outpatient/Emergency Department?

L. Redwood-Campbell
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Southeast Asian Tsunami—Australian ECHO Team Response

H. Grantham

South Australian Ambulance Service, Australia

The tsunami that occurred following an earthquake in the closing days of 2004 proved to be a disaster on a large scale. The initial information came from the less dramatically damaged areas, while the information from population centers nearest the epicenter was suspiciously absent. As the picture cleared, it became apparent that the northern part of Indonesia had been severely devastated with massive losses of life and injury.

Australia, along with many other nations, sent relief teams to the area. The ECHO Team was the second relief team from Australia and consisted of a plastic surgical reconstructive capability and an infectious diseases capability. The 26-member team contributed to the international relief effort in Banda Aceh working with teams from all around the world. A number of useful lessons learned from this experience should be shared with a wider audience.

The scale of the international relief effort presented very significant challenges to prior conceptions of disaster relief based on single nation responses. Logistical and communication issues predictably caused some difficulty. Maintaining effective team welfare and dynamics in an environment that was both physically and psychologically challenging required a considerable conscious effort in terms of leadership.

The clinical challenges included re-establishing routine clinical care, dealing with aspiration pneumonia, providing plastic reconstructive surgery in challenging conditions, and coping with a tetanus outbreak. The logistical issues and the pre-existing medical conditions of the patients hampered all clinical work. The most important lesson demonstrated in the ECHO Team response was the value of accepting cultural differences and managing the situation through the local providers, rather than imposing preconceived solutions on an already traumatized community.

A total of 130 reconstructive operations were performed at two sites, approximately 50 medical cases were managed, and a functional hospital, including laboratory and X-ray support was re-established.

One of the most challenging features was ensuring smooth, effective collaboration between local Indonesian personnel and the multitude of International aid providers from around the world.

Keywords: aid; Australia; challenges; collaboration; culture; ECHO Team; Indonesia; international; relief; support; tsunami
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Culturally Sensitive Care in Disaster Areas

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The medical team provided services to a rural camp of survivors in Aceh, Indonesia after the tsunami. What differentiated the care provided was that the beliefs of the locals were integrated in order to provide culturally sensitive care.

This contrasted starkly with the approach used by many of the other aid groups encountered. This resulted in a more warm reception by locals, who had developed a sense of distrust for other aid groups and their motives. This model of providing care during a disaster, by people respectful of local traditions, is a strategy that should be replicated consistently in the future.

Keywords: acceptance; beliefs; culture; Indonesia; team; traditions; trust

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The Asian Tsunami: Experience on the Indian Coast Nobs Roy

BARC Hospital, India

Introduction: An earthquake with a magnitude of 8.5 on the Richter scale occurred near Sumatra, 10 kilometers below sea level, triggered a tsunami wave, which traveled at