# Ecumenicalism and Cultural Diversity: A US Christian Physician Joins a Muslim and Hindu Medical Team in a Buddhist Country

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The 2004 Southeast Asia tsunami disaster produced an enormous response from hundreds of different countries and NGOs—each with its own objectives. The sudden onset, catastrophic nature and size of the disaster forced many agencies to build their teams in piecemeal fashion with any available candidates. Several groups discovered rich cultural diversity within their own members. On very short notice, the author (a US physician and Christian) was invited to join a medical team from the United Kingdom (comprised of Asian and Middle Easterners of Muslim and Hindu faith) and work in refugee camps along the eastern coast of Sri Lanka, one of the most devastated areas following the tsunami. An expected cultural difference was found in the fact that the majority of Sri Lankans are Buddhist (70%), with Hindus (15%), Christian (8%), and Muslims (7%) comprising the remaining 30%. Other challenges to working in this country included language barriers and the civil unrest between the Sinhalese majority and Tamil minority, which was complicated even more by their own cultural and religious differences. The author analyzes and critiques his mission team's successes and failures in its humanitarian efforts, in addition to discussing some of the biased religious viewpoints among different relief workers.

Moreover, insight is given as to how other non-US and non-Christian relief workers view the policies of the US. A personal account shows how the group bonded and used open discussions to overcome some of the difficulties in fulfilling its fundamental commitment.

Keywords: barriers; civil unrest; faith; medical team; mission; nongovernmental organization; relief; religion; tsunami Prebosp Disast Med 2005;20(3):s121

### Free Papers—Theme 13: Disaster Planning-1

### The Myth of Crisis Management versus Consequence Management

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Introduction: Those involved in disaster management are drawn from all levels of government, and specialist agencies in law enforcement and security, firefighting and rescue, prehospital care, and health. This inevitably draws together professional disciplines who have different priorities, knowledge, skills, and worldviews. This is most clearly seen in the division between those in the uniformed or disciplined services and those in the health system. This interagency and inter-disciplinary research will directly address the need to develop more flexible and integrated services to

improve the safety and security of all Australians based on research evidence.

Objectives: To: (1) Identify the differences that have developed in the organizational structures, processes, and the culture between emergency health services and the uniformed emergency services that impact their interaction with each other in the event of major disasters; (2) Develop innovative models which will enhance effective teamwork and cooperation between agencies at both strategic and operational levels; (3) Use small and major disaster exercises to test new inter-agency approaches to major disaster management; and (4) Recommend more effective multiagency approaches to major disasters that strike an informed balance between the objectives and needs of the health and emergency systems.

Methods: The research project will be submitted to the Australian Research Council and be undertaken in partnership with the emergency management agencies with responsibility for disaster management in New South Wales in the fields of police and fire services, emergency management, emergency medicine, and prehospital care.

Soft systems methodology will be used to develop alternative models to increase teamwork and cooperation between agencies. Data will be drawn from: (1) official reports; (2) interviews with participants; (3) piloting during "small" incidents; and (4) application as part of disaster exercises.

Discussion: The output and outcomes of this research will have significant social, economic, cultural, and intellectual benefits across Australia, and in the Asia-Pacific region. At a local level, the work will have economic and social impacts by contributing to the better management of public service organizations, and improved local and national services.

Conclusion: Interdisciplinary sharing and multidisciplinary efforts are essential for advancing knowledge in disaster management. This research collaboration will make recommendations that bring together perspectives from a wide range of academic disciplines and emergency management agencies.

Keywords: collaboration; consequence; crisis management; disaster; health systems; management; models; myths; process; soft systems; structures

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## Applying Management Science to Emergency Medical Planning for Mass-Casualty Incidents in the City of Munich

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Introduction: In Germany, civil protection and multiple casualty management was based largely on the Cold War scenario. After the fall of the Berlin Wall, the existing civil protection program was decentralized and responsibilities were assigned to regional authorities. The increasing threat of terrorism and high kinetic energy incidents, combined with a lack of funding and organization, has led to a deficit

in emergency planning for large numbers of civilian casualties. Recent experiences have emphasized the need for interdisciplinary planning and synchronized management strategies and protocols. Germany will host the World Soccer Cup in 2006, and Munich will be hosting several games for this event. Therefore, it is necessary to reevaluate the current system for dealing with mass casualties.

Methods: As the basis for the planning, a critical path model for the management of a multiple-casualty incident using evidence-based medicine was developed. The starting point is the first unit on-scene and the finishing point is the stabilization of all patients in a hospital facility or the discharge of those not requiring treatment. Triage Category 1 patients was defined as having a zero buffer time, and therefore determining the critical path in the chain. The critical path model has been transformed into a management algorithm and encompasses medical, as well as logistical procedures.

To test the viability of this model, exercises are being conducted and evaluated continuously. In parallel, hard data are being collected, giving values to amounts of resources and times of procedures needed in a computational model.

Results: The creation of an interdisciplinary algorithm has greatly enhanced the ability to work with other emergency management services and facilitators to achieve a synchronized emergency management matrix. All personnel involved in responding to such an incident have a clear understanding of their role, priorities, and dependencies.

Discussion: A more structured approach to planning and dealing with mass-casualty incidents has been the topic of many publications and conferences, and theoretical and empirical planning methods have proven ineffective. Integrating knowledge and practices from other management fields into emergency medical management will prove beneficial. The frequency of incidents involving multiple casualties is increasing and valid planning methods will become an integral part of risk management for governments and authorities.

Keywords: exercises; Germany; mass-casualty incidents; models; Munich; planning

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#### Tiered, Multi-Hospital Response and Joint Triage for Disaster: A Model for Resource Allocation and Surge Capacity

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Objectives: In city-wide disasters, multiple hospitals are stressed and inundated by patients, some of which have needs not routinely provided by an individual facility. Redistribution and triage of patients in a coordinated response to disasters can utilize the unique services of each hospital, while lessening the burden on any one facility. Having a city hospital, such as Kings County Hospital Center (KCHC) across the street from a state-run, tertiary care facility, such as the University Hospital of Brooklyn, is common in large urban centers. A rehabilitation nursing home and a state psychiatric facility also are located within

a radius of one kilometer. A disaster response to mass-casualty incidents was developed incorporating all of these facilities, demonstrating that it is possible to minimize duplication of services in order to provide efficient use of resources. In subsequent drills, it became apparent that a full response was neither efficient nor cost-effective for all scenarios. A graded response system was developed to prevent under- or over-utilization of resources. In this tiered system, with each level of escalation, additional surgical teams, directors, and hospital emergency incident command system (HEICS) personnel are activated.

Methods: An emergency preparedness liaison was appointed to each hospital to integrate these plans into a joint multi-hospital disaster response. The police and fire departments along with the Office of Emergency Management were integrated into this project. The following graded response plan was developed: Level I and Level II are limited responses for circumstances in which the number of casualties expected are no more than 10, or 10-30 critical victims presenting over a 1-2 hour period, respectively. As KCHC is the regional Level 1 trauma center, the first two levels of response are contained within the KCHC HEICS. A Level III center is utilized when the number of casualties are expected to exceed 30 critically injured, requiring hospital-wide disaster plans for all facilities. Integration of rehabilitation and nursing home facilities into the plan allows the trauma center (KCHC) to free up isolation beds in case of a biological disaster. Ventilated patients can be reassigned to the extended care facilities at the discretion of hospital medical officers as need arises. Families and associates are directed to the psychiatric facility where counselors are available for assistance.

Results: Disaster drills of this graded response system showed improvements in triage, tracking, treatment, and surge capacity. All city, state, and federal agencies reacted favorably to the joint hospital project, changing traffic patterns to facilitate a unified triage system between multiple hospitals.

Conclusion: It was found that interhospital and interdepartmental cooperation in disaster management is possible and beneficial to rapid, organized, and efficient resource allocation.

Keywords: cooperation; disaster management; graded response system; hospital; response; triage

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#### How Can Information and Communications Technology (ICT) Improve Coordination and Control in Disaster Response?

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Introduction: Successful coordination and control depends on all parties having access to up-to-date information. Current approaches are based mostly on verbal communication (by phone/radio), and by the exchange of written forms. Experience has shown that these methods often are inadequate. The use of information and communications technology (ICT) offers great potential in providing a common, up-to-date picture of the situation. But this