

aster management to the need for continuous, long-term, and intergeneration monitoring and follow up.

Sen pushed traditional boundaries and provided interesting results from an empirically based study on the phenomenon of family witnessed resuscitation and holistic medicine. Madrid's dynamic presentation, on behalf of R. Grant, addressed the aftermath of disasters such as the Gulf-coast hurricanes (e.g., Katrina in the US), and the fact that psychological recovery may take many years. It was apparent from the engaged discussion and audience questions that the disaster management research field must address the psychosocial needs, perceptions, and fears of women and girls, including their reproductive concerns, as illustrated in the Chernobyl evacuation case study. Zinchuk's fascinating presentation on Chernobyl provided an excellent closing moment and demonstrated how disaster survivors can experience haunting feelings of exposure and concern for many years, not only for themselves, but also for their unborn children.

The speakers discussed the merit of emotional first aid in an all-hazards approach. The concept of stress "inoculation"—to prepare the public as well as first responders also was raised. Care of first responders was highlighted throughout the presentations. It is fundamental that training and preparedness help first responders to take care of themselves. The session concluded with an appreciation that planners must take into consideration the needs of special populations, such as women and children, as well as caregivers, healthcare providers, those with special needs as well as journalists—in other words, those who witness human tragedy. The audience was appreciative of the five speakers, particularly as an attempt had been made to demonstrate the best practice, interventions, and policy for different populations, from diverse nations, along the disaster event to recovery time [longitudinal] continuum. The quality, rigor, and import of these presentations indicates a growing appreciation and recognition of psychosocial factors in prehospital and disaster health. Participants and speakers alike are looking forward to the next WADEM conference in Victoria, Canada in 2009.

Presentations

1. Vymetal S: Psychosocial assistance in emergencies: Current situation in Czech Republic. (Czech Republic).
2. Deignan P: Psychological first aid. (USA)
3. Sen A: Beliefs and attitudes to family witnessed resuscitation amongst doctors, nurses and paramedics, in emergency departments—A UK perspective. (UK).
4. Grant R (presented by P. Madrid): Effective disaster mental health policy is integral to preparedness. (USA).
5. Zinchuk A: Impact of the Chernobyl disaster perceptions on the reproductive health of Ukrainian women. (USA).

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Humanitarian Crises

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This session focused on models for improving international responses to major disasters. The application of these models to humanitarian crises in conflict zones also was

addressed. Four different papers were presented and discussed with thoughtful participation from the audience.

The session opened with observations from the chairs of the session that all international engagement in humanitarian crises must be undertaken in conformance with the Geneva Conventions, according to which, medical personnel must abide by rules of neutrality, independence, and impartiality. It was noted that security for humanitarian personnel, including health personnel, has become increasingly problematic in conflict zones. Hence, the focus of most of the papers in this session was on providing care in disaster areas, and they provided important observations on and testing of methods and models that often were difficult to assess in highly insecure situations. The question was posed to the presenters and the audience as to the applicability of the research findings to war areas.

The first two papers^{1,2} described the design and use of a rapid medical assessment unit established by the Swedish government to determine whether it is necessary to send in a team to support the medical needs of Swedish citizens in crisis situations overseas. The key component of the design of this unit involves the Rapid Medical Assessment (RMA), which consists of nested steps for gathering increasingly more detailed information about the situation on the ground. These steps consist first of an office-based inquiry in Sweden, relying on fax, telephone, and internet investigation; extend next to the dispatch of an assessment team that travels to the affected area for a period of one to three days; and then, if the situation is determined to require a fully staffed team, the deployment of a medical and surgical team of up to 10 members, along with necessary equipment and supplies.

The unit has been activated three times and was deployed once in response to the war in Lebanon in July 2006. The decision in two situations, that there was no need for Swedish assistance was as valuable in establishing the importance of this unit as the third experience of deployment, in that the RMA was shown to be very effective in remotely gathering sufficient information to support good decision-making.

The deployment to Lebanon was the subject of the second paper. Difficulties in logistics and information flow were described, but by 15 July 2006, the medical-surgical team from Sweden arrived in Lebanon and proceeded to support the evacuation of >5,000 people with connections to Sweden. The team was prepared to respond to a wide range of medical and surgical problems, but, in fact, the greatest need of the evacuee population was for reassurance and basic support for psychosomatic issues resulting from high stress levels. Lack of sleep aggravated many of the reported symptoms and observed presentations, including anxiety, crying, aggression, and digestive and cardiovascular complaints. A few chronic medical problems of the elderly were treated, and there was one cardiac death in this population. The presence of the team conveyed reassurance, and the team members spent much of their time engaged in triage of the evacuees, determining priorities for buses, and timing of evacuation, as well as comforting and advising those with significant psychosomatic distress. The find-

ings emphasized the need to consider early deployment of trained psychological personnel, along with medical and surgical team members. The experience also reinforced the recognition that team members need to take care of themselves and monitor each other for signs of stress and exhaustion.

The third presentation³ described the efforts of Dutch surgical teams dispatched for short periods of time to treat the injured from the Yogyakarta earthquake in Indonesia, (27 May 2006). The hospital where these teams deployed, Bethesda Hospital, received >3,000 injured people and was overwhelmed. The Dutch teams encountered major difficulties with assessment and triage, in that patient lists were not available, yet managed to surmount problems with equipment and supplies. Local physicians and nurses provided invaluable support as well as translation capacities. With very long days on the part of all health personnel, by the end of 14 days, the majority of the acute injuries had been treated. The presentation concluded with the observation that the direct connection between physicians in Amsterdam and in the Bethesda hospital in Indonesia resulted in an important contribution to the immediate care of casualties resulting from this disaster.

The fourth presentation⁴ reported on a computer-based, analytical program for identifying and managing hospital beds throughout Europe. A key problem in many countries in responding to a potential mass-casualty incident (MCI) was the absence of a system to deal with the problem of hospital crowding. This problem was approached by developing a baseline data system to record and update real-time information on what hospital beds were available in all hospitals throughout Germany, Switzerland, and Strasbourg, France. The system, which now is operational, allows for updated tracking of hospital beds, by category of acuity and staffing, on an hourly basis. An on-line computer chat room, supported by automatic translation, allows physicians and nurses from across the system to talk with each other when necessary, in order to convey information that can amplify the data transmissions. The paper concluded by noting that, among the many systems needed to support successful responses to a mass-casualty incident, this hospital bed database, which now is scalable to all of Europe, will facilitate rapid triage and patient evacuation to appropriate inpatient settings.

The discussion with the audience explored details of these various models (the rapid medical assessment tool linked to a proceed-out team to care for nationals of one country trapped in war or disaster overseas; the insertion of international surgical teams in time of disasters due to natural hazards; and the development of a transparent transnational hospital bed database in anticipation of a MCI that would overwhelm one country's medical response assets). Acknowledgment was made of the ethical difficulties of taking care of the nationals of one country rather than the entire affected population. Emphasis was placed on the psychological needs of people trapped in unexpected and alien circumstances. Problems of triage, absence of advanced equipment, and long-term follow-up care were noted in the Indonesian experience. The sophistication of the computer model was appreciated, but it was noted that

the information pertained to hospital beds, not to individual patients or to patient condition. It was agreed that obtaining and managing that level of information involved great complexities in terms of patient confidentiality, accuracy of patient data, and patient safety.

The discussion ended by returning to the opening points: (1) neutrality and competence of medical teams in disaster and war are major priorities; (2) safety of medical personnel must be assessed and assured on a daily basis; (3) disaster and war settings are austere environments, in terms of technology; and (4) improvements in information flow in disaster and war settings are essential, but require close attention as well to issues of patient privacy, confidentiality, and safety.

Presentations

1. Riddez JL, von Schreeb J, Holst J: Experiences in establishing a national unit for rapid medical needs assessments of disasters involving Swedes abroad. *Prehospital Disast Med* 2007;22(1):s58.
2. Riddez JL, von Schreeb J, Wahl M, Michel PO: The psychosomatic and medical problems observed during the evacuation of Swedish citizens from Lebanon, July 2006. *Prehospital Disast Med* 2007;22(1):s58.
3. Hoogerwerf N, Goslings JC, Pudji SR: Dutch surgical team sent to the Yogyakarta earthquake disaster. *Prehospital Disast Med* 2007;22(1):s59.
4. Hadeif HH, Bartier JCB, Dupeyron DJP: Using baseline data to address the lack of hospital beds during mass-casualty incidents. *Prehospital Disast Med* 2007;22(1):s59.

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Preparedness

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The session opened with a discussion of the perennial problem of defining a disaster. Although many organizations have come up with differing definitions, it was concluded that disasters can be comprehensively described as an event or events that terminate human lives or cause disabilities within a situation of “inadequacy”. However, when we examine situations using both of these criteria, there are instances in which the community is able to mount a response in the face of mass fatalities or casualties. Perhaps it is more appropriate if these are termed as “Extraordinary Situations” (EOS), due to their rarity.

The presentation on the National Centres for Research and Development in Medical Emergency Preparedness, located in Sweden, highlighted the important role that national entities play in the development of disaster medicine and preparedness. In the current competitive global environment, our governments have many priorities to consider. It is not uncommon that investment in research and development activities for disaster preparedness and mitigation is not a national priority. The Swedish National Board of Health and Welfare's support for research and development of activities in disaster medicine should serve as a good model for other national bodies responsible for disaster preparedness and response.

Community preparedness programs must be tailored to the community and may not work when replicated in other communities. A qualitative study conducted in Istanbul on factors that affect preparedness activities and their acceptance by the community uncovered the importance of reli-