

Oral Presentations—Preparation and Planning

Medical Plan and Activity for 2008 G8 Hokkaido-Lake Toya Summit

Yasufumi Asai;¹ Katsutoshi Tanno;¹ Kazubisa Mori;¹ Satoshi Nara;¹ Yasuhiro Yamamoto²

1. Sapporo Medical University, Sapporo, Japan
2. Nippon Medical College, Tokyo, Japan

Introduction: After the Genoa Summit of 2001 in Italy, when one protestor was killed while demonstrating, “retreat method” summits became predominant. The Windsor Hotel, located on a mountain next to Lake Toya in Hokkaido, Japan was selected to host the G8 summit in 2008.

Methods: The G8 Hokkaido-Lake Toya Summit was held 07–09 July 2008. Emergency medical services and systems were constructed. The Japanese Ministry of Health, Labour and Welfare developed a plan for emergency medical services and preparedness in response to potential nuclear, biological, or chemical terrorist attacks.

Results: The Windsor Hotel is located 75 kilometers from Sapporo, where there are four Level-1 treatment areas in four hospitals. In the Windsor Hotel, O-type (Rh -) blood was prepared for foreign guests. Four helicopters were on standby near the Windsor Hotel for emergency transportation. One Mobile Intensive Care Unit car was located near the foothill for the provision of emergency treatment. The expert medical team of the Windsor Hotel was present in the hotel’s medical office. More than 200 doctors with disaster and emergency expertise were commissioned to the summit. During the summit, 68 patients were treated, including one patient who was transferred to Sapporo by helicopter.

Conclusions: An emergency medical system was established for the G8 Hokkaido-Lake Toya Summit with the collaboration of many organizations.

Keywords: G8 Summit; helicopter; mobile intensive care unit; nuclear, biological, or chemical; terrorism

Prehosp Disast Med 2009;24(2):s90

Indian Perspective of Medical Preparedness and Capacity Building in Disaster Management

Vivek Chhabra;^{1,2,3} Janak R. Bhardwaj¹

1. National Disaster Management Authority, Government of India, New Delhi, India
2. Doctors For You, Mumbai, India
3. emsuniversal.com, Greater Noida (National Capital Territory), India

Introduction: Following the 2005 Disaster Management Act of India, there has been a paradigm shift from the old 3R (Rescue, Relief, and Recovery) approach to new 3PM (Planning, Prevention, Preparedness, and Mitigation) approach.

The National Disaster Management Authority (NDMA), India’s institutional mechanism for effective disaster management, was constituted in 2005. It approves policies, plans, and guidelines for disaster management prepared by various departments of the government to ensure timely and effective response to disaster. The NDMA is

supported by: the National Executive Committee, State Disaster Management Authority, the State Executive Committee, District Disaster Management Authority, the Central Government, International Agencies, and the National Institute of Disaster Management.

Methods: The strategy was to evaluate existing plans and methodologies. Multiple deliberations of various stakeholders including various nodal and line Ministries of Government were initiated by NDMA from 2005 onward. This was followed by core and steering group meetings/conferences, studies of international best practices leading to the evolution of a draft document for bridging identified gaps and ultimately, the development and implementation of National Disaster Management Guidelines—Medical Preparedness and Mass Casualty Management.

Results: An all-hazards, medical preparedness plan was developed for all phases of the disaster cycle. Salient gaps that need bridging were identified. Incident command systems were created along with comprehensive guidelines. These included legislative and regulatory framework, preventive measures, preparedness, capacity development. Hospital preparedness, specialized healthcare and laboratory facilities, alternative systems of medicine, preservation and identification of the dead, psychosocial care and mental health services and research and development for medical preparedness and mass-casualty management also was included. Guidelines related to responses, rehabilitation, and recovery, private-public partnership, post-disaster documentation, media management, and important medical management aspects also were created, along with specific chemical, biological, radiological, or nuclear emergency-related guideline. An approach for the implementation of the guidelines also was formulated.

Conclusions: The formulation and partial implementation of guidelines are displaying positive results and expected to strengthen our preparation for future disaster scenarios.

Keywords: capacity building; disaster management; India; planning; preparedness

Prehosp Disast Med 2009;24(2):s90

Global Partnership in Prehospital Care: A Case Study with Richmond Ambulance Authority and Save Accident Victims of Nigeria

Edeaghe E. Ehikhamenor; Jerry Overton

World Association Disaster Emergency Medicine, Benin City, Nigeria

Prehospital care involves innovations and the commitment of time and enormous resources that can overwhelm a solitary approach, especially in developing countries. The need for partnership between transitional countries and developed countries is imperative to overcome challenges in areas of high-tech resuscitation, trained personnel, ambulance and equipment procurement, and the development of academic curricula on paramedics and prehospital care. Cases of fraud and the notorious acronym “419” have made it more difficult for poor nations to initiate and build any durable relationship with counterparts in developed countries.

Regular participation at international conferences can be the catalyst or starting point to network and stimulate a mutual collaboration and overcome such as the lack of trust.

Save Accident Victims of Nigeria (SAVAN) and the Richmond Ambulance Service (RAA) started a collaborative partnership in 2005 after meetings during the World Association for Disaster and Emergency Medicine (WADEM) Congresses in Australia in 2003 and in Edinburgh in 2005. With sustained verbal and e-communications during this period, their partnership has moved SAVAN from just an in-hospital non-governmental organization (NGO) in Nigeria, to a prehospital NGO with ambulances, donated by the RAA, manuals, and e-library materials for a paramedic training institution. More than 2,000 accident victims in Nigeria have benefited from SAVAN, while professionals such as doctors, nurses, and other volunteers have benefited from training. The partnership has evolved to such a level that spare parts for the ambulances and other consumables are being provided to avoid a scenario of grab and go.

United States citizens should be assured that their efforts and materials are saving the lives of fellow citizens in a developing nation like Nigeria, even though they may not know it. This fulfills the biblical injunction of being a “Good Samaritan”.

Keywords: global; non-government organization; partnership
Prehosp Disast Med 2009;24(2):s90–s91

Colombian Nationwide Emergency Medical Services Legislation Project

Andres M. Rubiano; Juan C. Puyana

University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania
USA

Colombia has a high burden of injury due to road traffic injuries, social violence, and natural disasters. Despite these problems, the infrastructure of prehospital systems in Colombia was very precarious until 2000. During this year, an inter-institutional project was put in place in order to create an organized emergency system and basic infrastructure for prehospital care in Colombia. The objective of this report is to describe the preliminary experience in developing this project and to share this methodology with all the international emergency medical services (EMS) community as an example of capacity building.

Representatives from several EMS groups organized a consensus meeting, and invited representatives from all possible stakeholders, including rescue volunteers, physicians, government representatives, and general actors from the EMS community and beyond. Working groups were created to develop guidelines consistent of and documents to support the governmental organization process for a national EMS system.

Since 2002, national prehospital guidelines, legislation (including EMS training and resources requirements), and prehospital care quality improvement tools have been released. These include three national ministry of health decrees and resolutions and 44 basic prehospital guidelines.

Inter-institutional projects, including governmental and academic medical societies are excellent ways to organize tools for capacity building in countries with high burden of injuries.

Keywords: capacity building; Columbia; legislation; injury; emergency medical services; prehospital; preparedness

Prehosp Disast Med 2009;24(2):s91

Capacity Planning of Ambulance Services in the Netherlands

Geert Jan Kommer; Laurens Zwakkals

Dutch National Institute of Public Health and the Environment,
Bilthoven, Netherlands

Introduction: The geographical distribution and capacity of ambulance services for 25 regions in the Netherlands is described by the use of a two-step model. In 2008, the model was actualized and a number of pre-limiting conditions were ascertained. Among these is the condition that 97% of the Dutch population should be reached within 12 minutes.

Methods: The two-step model first optimizes the geographical distribution of ambulance stations based on population coverage, using a drive-time model based on real-time ambulance velocities that predicts the average drive time for each possible trajectory. In the second step, the capacity per station is determined. In the capacity model, a Poisson distribution is fitted of two hour-block. The number of ambulances is calculated in order to meet <5% service failure. An uncertainty analysis is performed to investigate the sensitive parameters of the model.

Results: To meet the assumption of 97% coverage for each region, a total of 206 stations is needed. During working hours, 494 ambulances are needed to meet the demand of 930,000 ambulance calls per year. The capacity model is sensitive for the components for geographical preparedness and the amount of planned services.

Conclusions: The new macro-planning of the ambulance services is based on uniform assumptions for each region in the Netherlands and should provide an improved service level of EMS. The two-step model is a useful tool for capacity planning at the macro-level.

Keywords: ambulance; capacity building; emergency medical services; Netherlands; planning

Prehosp Disast Med 2009;24(2):s91

Workshop Utilizing Action Cards to Improve Disaster Preparedness in the University Hospital

Taichi Takeda; Tsuyoshi Hatada; Ken Ishikura; Yukinari Omori

Mie University Hospital, Tsu-city, Japan

Background: Major earthquakes with a magnitude of 7–8 are 60% likely to occur in the next 30 years on the southern coast of Japan's main islands. Severe damage is predicted, and Mie University Hospital is expected to play a major role in the medical response for the disaster. Since ordinary Japanese hospital personnel do not have military backgrounds, and the hospital has not been prepared, developing disaster preparedness is extremely challenging. Providing a disaster manual is not sufficient.

Objective: In order to build a disaster preparedness system, workshops for hospital executives were convened.

Methods: According to a scenario (e.g., train crash, earthquake) given by a facilitator, as a team, the participants were encouraged to discuss and to fill in their responses on a template of the action card.

Results: The survey after the workshop indicated that each participant could identify his/her own roles as well as the