

Plenary Sessions

1. Plenary Session 1

Global Models of Emergency and Disaster Management Systems and Their Development for Asia

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A global model is created either by an official and world-wide process of endorsement or by dissemination based on recognised standards. Political tactics and strategies have proven to be as important as has been the professional content. Few, if any, models for Disaster Management have been endorsed globally.

In principle, there may be no differences between generic models applicable to Emergency Management Systems and Disaster Management Systems. The practical differences, however, are considerable and significant.

The term "emergency" defines a wide range of situations with immediate needs including Emergency Medical Systems (EMS) and disasters. The term "chain of survival" developed for cardiopulmonary arrest (the first Utstein Template), was expanded to Disaster Medicine at the 2nd Nordic Congress on Disaster Medicine. For Emergency Medicine, however, in addition to the "chain of survival", the concept of Advanced Trauma Life Support (ATLS) is widely recognised. Nevertheless, for EMS, only parts of it will be subject to global modeling, since EMS must be tailored to the region it serves, unless it also functions as a coordinating body for disaster response and assistance from outside.

In addition to providing structure and framework, global models must identify and allocate responsibilities and obligations. Often, hundreds of organisations are involved and, consequently, some must be subordinate to others. Without a strong command-and-control (C2) system that includes a strong national representative, this hardly ever is achieved. When international society assumes control alone, a conflict between the UN-Charter and the UN-Resolution, the "right to intervene", exists. Furthermore, disaster aid must be defined as a human right within a "global insurance system", disregarding a nation's ability to pay its "premium". Solidarity, both within and between nations, is a key virtue, but the widening gap between rich and poor, also within and between nations, is counterproductive in this respect. Thus, global models must include the United Nations system, the World Health Organization, and key humanitarian organisations (e.g., Red Cross systems), in addition to the countries ratifying or abiding by them.

A global model also must draw attention to pre-event activities such as prevention and mitigation, including technical and judicial topics. In addition, a national inventory of all infrastructure, hardware, and software, is mandatory. A global model must address technical and operational questions; team composition as well as provide command-and-control; judicial/legislative questions including obligations,

rights, and border control; prevention, mitigation and economics. Compatibility is essential, but the recipient country normally provides the yardstick simply because disaster-prone countries traditionally have the weakest economy. As a rule, high-tech solutions for global models will be unsustainable.

Asia comprises 31% of the total world area, but suffers 40–50% of all natural disasters. With 58% of the world's total population, it has accounted for 70% of all disaster-related deaths since 1950. During the last decade, 90% of all people reported affected by all types of disasters were Asian. Civil strife and war have been ongoing and numerous, as have other man-made, technical "accidents."

The types of disasters, ranging from heavy snowstorms to tropical cyclones, are as diverse as is Asia itself. The geography ranges from tropical to arctic. Asia has the highest mountains and the deepest ocean. Some countries are enormous archipelagos, while others are landlocked deserts or mostly mountainous. Disparate military alliances and political systems, in addition to the 2,165 registered languages using 13 different alphabets found in Asia hamper communication. However, these diversities and differences should be viewed not as incompatibilities or counterproductive obstacles; instead, they provide a unique source to increase knowledge and insight into disasters and their pathophysiology. In Asia, strengthened communication and collaboration between all institutes and organisations involved with disasters are mandatory. Much focus is given to operational Disaster Management.

A model is not global unless it works for Asia, whereas a model functioning for Asia has all of the qualities needed to be endorsed globally. The Utstein Template for Disaster Research is today, perhaps the only model that is on the verge of global endorsement. The model identifies fourteen basic societal functions. Properly implemented, its use should facilitate worldwide disaster research and help the identification of the generic elements needed to be included in any global model for operations.

Keywords: Asia; disaster; emergency; global; model; Utstein Template

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Plenary Session 2

Recent Advances in Blood Transfusion: Their Impact on Defence Medicine

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War is the greatest disaster known to man. In addition, as wars often erupt with little or no warning, they also can be classed as "emergencies". Because of the ever-changing nature and increasing sophistication of modern weaponry, it is vital that defence medical planning is aware of these changes and reacts accordingly. Modern warfare has moved away from the concept of large set piece battles involving large numbers of troops, to smaller conflicts, that erupt