utmost efficiency. Different activities then will be compared as to which is more effective in solving a problem. However, we still will need to define a different set of values if we want to verify if an activity really has benefited the victims. This demands a comprehensive understanding of the use of Indicators of Effectiveness, since one commodity (or action) may serve both as a variable and a parameter. (Water may serve as a parameter with regard to logistics, but would be a variable with regard to Crude Mortality Rate in a refugee camp). To some extent, the indicators will be quantitative, to some extent qualitative.

The TFQCDM has developed the indicators needed for the computations of a Disaster Severity Score and a Health Disaster Severity Score. Also, the concept of a Vulnerability-Preparedness Index will be subjected to already identified indicators. However, a complete list of Indicators of Effectiveness must be developed as the Guidelines become used more widely. All in all, the proper use of the Disaster Research Template should provide all of the elements needed to finally start to analyse disasters, their potential for reduction, and their management in an institutionalised way.

References

- TFQCDM: Disaster medical response research: A template in the Utstein style. Prebosp Disast Med 1996:11;16-24.
- Sundnes KO: Evaluation of health disaster management. Prehosp Disast Med 1998:13;S9. Abstract
- TFQCDM, Chair: Sundnes KO: Health disaster management: Guidelines for evaluation and research in the Utstein style: Executive summary. Prehosp Disast Med 1999:14:43-52.

Keywords: basic elements; BOWA; damage probability; disaster medicine; evaluation; qualitative methods; quantitative methods; research; severity scores; template; vulnerability-preparedness index

Theme 5. Application of International Standards to Disasters

Chairs: Dr. Frederick Burkle & Dr. Judy Isaac-Renton

Standards of Care in a Crisis Environment: Lessons Learned from Complex Emergencies

Frederick M. Burkle, Jr., MD, MPH University of Hawaii John A. Burns School of Medicine, Honolulu, Hawaii, USA

Nation-state internal conflicts, caused primarily by political factors, have resulted in high levels of violence primarily in vulnerable population groups of children, females, and the elderly, and in the loss of sustainable livelihood. A major characteristic of these complex emergencies is that they represent catastrophic public health emergencies.

The international humanitarian community entered the decade of the 1990s with little expertise and no standards of care. Parameters for water, nutrition, sanitation, communicable diseases, shelter, essential drugs, and health and nutrition assessments were developed with both painstaking trial and error and focused field and outcome research. By the end of the decade, the International Federation of Red Cross and Red Crescent (LFRC) had developed the Sphere Project to standardize care and codes of conduct, the UN Agencies had developed training manuals and guidelines, and University-NGO partnerships offered education, training, and research opportunities to further professionalize the disaster and humanitarian response.

Similar efforts are required to develop operational standards of care for reproductive health and women's issues and mental health interventions. Organizational management standards are lacking in the areas of information technologies and sharing, security, coordinated logistics, measures of effectiveness, and civil-military collaboration.

Keywords: complex emergencies; disasters; education; humanitarian; management; research; responses; standards; training