

**(B13) Rapid Health and Needs Assessments after Disasters**

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**Background:** Healthcare providers, stakeholders, and policy makers request a rapid insight into health status and needs of the affected population after disasters. No standardized rapid assessment tool is available for the Netherlands and other European countries. The aim of this article is to describe existing methods used worldwide and analyze them for the development of a workable rapid assessment tool.

**Methods:** A systematic review was executed, including original studies concerning a rapid health and/or needs assessment. The studies used were published between 1988 and 2008. The electronic databases of Medline, Embase, SciSearch, and Psycinfo were used.

**Results:** Twenty-five studies were included for this review. Most of the studies were of US origin and were related to disasters caused by natural hazards, especially the weather. In 14 studies, an assessment was executed using a questionnaire, seven studies used electronic records, and four used both methods. Questionnaires were used primarily to assess the health needs, while data records were used to assess the health status of disaster victims. The commonly used data collection methods were face-to-face interviews and hospital registration systems.

**Conclusions:** Ideally, a rapid assessment tool that does not add to the burden of disaster victims is needed. In this perspective, the use of existing medical records or the use of routinely collected data during disasters is the most promising. Since there is an increasing need for such a tool, this approach needs further examination.

**Keywords:** disasters; health status; needs; rapid assessment; tool

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**(B14) Coping with Sudden-Onset Emergencies in Emergency Departments**

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Emergency departments in general hospitals play an important role during disasters. Emergency department staff must be able to cope with a sudden-onset incident while being sensitive to the spread of infectious diseases. Emergency departments must formulate a disaster plan that includes how to: (1) report the event; (2) organize medical care; (3) triage the wounded; and (4) maintain order. Emergency departments should cooperate with other departments and when shorthanded, divert some patients to reduce pressure. Staff should know the preliminary plan and be trained for using the emergency plan. During an earthquake or war, the hospital itself may be damaged. Therefore, the hospital should have two rescue plans and rescue teams, maintain contact with local rescue organizations, and request help when needed.

**Keywords:** acute-onset emergencies; disaster health; disaster management; disaster plan; disease prevention; preparedness; rescue

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**(B15) Hurricane Ike: Lessons Learned from a Surgical Relief Mission**

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**Introduction:** Hurricane Ike hit the Turks and Caicos Islands in September 2008. Grand Turk Hospital suffered significant structural damage with limited function. The experience of a surgical team deployed to Turks and Caicos in the aftermath of the hurricane was evaluated.

**Methods:** Three phases of the mission: (1) pre-departure; (2) location work; and (3) post-mission debriefing were evaluated retrospectively. Lessons learned were reviewed.

**Results:** Two surgeons and one anesthetist from a Level-1 Trauma Center were deployed to Turks and Caicos after the hurricane conditions subsided. Based on a needs assessment, basic medical and surgical supplies were provided. The response team worked with local health officials to staff local hospitals. During the mission, 40 patients were treated with trauma, general surgical, orthopedic, and obstetric diagnoses. Definitive care was provided to 37 of the 40 patients evaluated. There were two major surgical cases, three major traumas, and five minor surgical procedures. Most cases were the result of routine surgical problems or post-hurricane recovery efforts. Three patients were transferred to higher-level care facilities. Lessons learned identified at the post-mission debriefing included: (1) early deployment and report of needs assessment by pioneer team; (2) availability of orthopedic care; and (3) a requirement for satellite communication.

**Conclusions:** The rapid deployment of surgical teams to disaster areas with existing human and material resources is feasible. Although the number of disaster-related injuries was low, relief to local healthcare practitioners was critical to provide continuing medical and surgical care in the post-hurricane environment. Lessons learned will be applied to future missions.

**Keywords:** disaster; disaster management; Hurricane Ike; lessons learned; surgery

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**(B16) Systematic Review by Meta-Narrative Mapping of Acute Kidney Injury in Disasters**

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**Background:** Some major disasters produce a substantial number of patients with crush syndrome and acute renal