

(C25) Experience from the Boumerdes Earthquake in Algeria

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Although it cannot be predicted when or where an earthquake will occur, lessons can be learned from the worldwide experiences of those involved in the fields of prevention, paraseismic construction, rescue planning, and medical treatment of wounded victims. Nowadays, many actions are taken to minimize the dramatic results of a major earthquake.

On 21 May 2003, an earthquake of 6.8 on the Richter scale put the population of Boumerdes, Algeria into great disorder. The authorities engaged the Algerian army for this large catastrophe. The military health services played a remarkable role in providing available human, material, and organizational resources to rescue victims trapped under rubble and provided assistance until they reached a hospital; and remained involved from the first alert until the recovery. Once the immediate phase of panic was over, and after a night aerial identification, the operations focused on medical rescue, evacuating victims and corpses, establishing shelters, providing psychological support (especially for children who lost their parents), hygienic and epidemic prevention, integrating national and international assistance, and media management. The entire response was conducted under high security since the region was a target for terrorist activity. The Algerian military of health services acquired a worthy experience in managing disasters due to natural hazards in this specific situation.

Keywords: Algeria; Boumerdes Earthquake; disaster; health services; management; military

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(C26) Health Consequences of Flooding in China and Australia

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Background: Floods are the most common type of disasters and cause more deaths and damage than other types of disasters. The health consequences of floods vary according to the nature of the flood, geographical and demographic characteristics, and policy arrangements for preparation and consequence management.

Methods: This study involves a comparative analysis of the response to selected floods in China and Australia as an example of diverse geographical, demographic, and policy environments. The study involved an examination of news and government reports, interviews with key players, site visits, and an analysis of the policy and governance arrangements. A framework for the health consequences of floods was developed and utilized to compare the consequences in each location.

Results: The health consequences varied considerably with the nature of the flood and the geographical and demographic environment. Flash flooding caused more immediate injuries and deaths, and less effective immediate management because of its rapid and unpredictable onset.

The variation in resources and preparation between the two countries resulted in a demonstrable difference in health consequence management. The long-term outcomes including mental health problems were difficult to identify. **Conclusions:** Effective flood management was shown to reduce the health consequences of floods. These consequences may be immediate, medium-, or long-term, and effective management strategies must address each of these elements.

Australia's highly sophisticated disaster management system minimized the health consequences of floods. Despite its considerable population and other challenges, China has a demonstrated capacity to reduce health impact through improved policy frameworks and resource management.

Keywords: Australia; China; disaster management; flood; flood management; health consequences

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(C27) Damages to Healthcare Facilities by the Earthquake in Pisco, Peru

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Introduction: On 15 August 2007, a 7.0 Richter earthquake struck the southern coast of Peru. The national government reported 519 people dead, >1,500 injured, and 192,492 homes affected (78% of all homes in the eight provinces in the regions of Huancavelica, Ica, and Lima). The province of Pisco in the region of Ica was the most affected.

Methods: The estimation of damages to healthcare facilities was based on a review of the assessment of the national and regional health authorities and recovery projects proposed by the South Reconstruction Fund.

Results: At least 60 primary healthcare facilities were affected (18% of the total in the affected area), as well as four Ministry of Health hospitals. Three Social Security hospitals had moderate and severe structural and non-structural damages. Sixty-two percent (515) of the total number of beds available (834) in three Ica provinces were lost in a few minutes after the earthquake.

Conclusions: The effect of the earthquake on hospital services was large. It included damages to the infrastructure and the loss of furniture and biomedical equipment. Foreign field hospitals and temporary strategies were adopted to assure the continuation of healthcare services and to reduce the risk of public health problems associated with the disaster.

Keywords: damage; disaster; earthquake; healthcare facilities; Peru; safe hospitals

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(C28) Estimation of the Socioeconomic Impact of the Earthquake in Pisco on the Peruvian Health Sector

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Introduction: On 15 August 2007, a 7.0 Richter magnitude earthquake struck the southern coast of Peru. Economic resources were invested to help the healthcare facilities affected by the earthquake recover, and to control public health problems in the regions of Huancavelica, Ica, and Lima.