Public Health Impact of Disasters in the EM Region

Regional Joint Conference on “Disaster: Relief and Management – International Cooperation & Role of ICT”

Alexandria, Egypt, 14 - 17 April 2007
### Session IX: Public Health Impact of Disasters

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<th>Presenter</th>
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<td>WHO Emergency Preparedness and Response; Regional Perspective</td>
<td>Mr. Altaf MUSANI, Regional Adviser, EHA, WHO/EMRO</td>
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<td>Somalia Case</td>
<td>Dr. Mohamed FUJE, Officer in Charge for WHO Office in Mogadishu</td>
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<td>Sudan Case</td>
<td>Dr. Saad El-Din H. HASSAN, Head of the EHA unit in MOH, Sudan</td>
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<td>Iran Case</td>
<td>Dr. Farzad PANAHIM, Chief of Emergency Management Center in Iran</td>
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<td>Management of Logistics in Emergency and Disaster Situations: Use of SUMA Software as an Example</td>
<td>Eng. Victor MARTINEZ,</td>
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Overview

- Impacts of disasters
- WHO’s support to EPR
- Way forward
2 billion people at risk of experiencing crises

50 countries experiencing "crises"

During the past 20 years:

• Natural disasters have killed at least 3 million people
• Adversely affecting 800 million
• With 96% of deaths occurring in developing countries
## Natural Disasters Impact

<table>
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<tr>
<th>Industrialized Countries</th>
<th>Developing Countries</th>
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<tr>
<td>Tend to suffer higher economic losses in strict dollars terms</td>
<td></td>
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<td>Have mechanisms in place to avoid loss of life, such as early warning systems</td>
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<td>Have immediate emergency and medical care</td>
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<td>Insurance of property losses</td>
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<td>Cause setbacks to economic and social development</td>
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<td>Lack resources for early warning systems</td>
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<td>Inflict massive casualties</td>
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<td>Divert funds from development programs to emergency relief and recovery</td>
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Sources: (World Bank News and Broadcast, Natural Disasters: Counting the Cost, 2004)
## Health Problems related to type of disaster

<table>
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<tr>
<th>Effect</th>
<th>Earthquake</th>
<th>High Winds (without floods)</th>
<th>Tidal waves flash floods</th>
<th>Slow-onset floods</th>
<th>Volcanoes</th>
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<tbody>
<tr>
<td><strong>Deaths</strong></td>
<td>Many</td>
<td>Few</td>
<td>Many</td>
<td>Few</td>
<td>Many</td>
</tr>
<tr>
<td><strong>Severe injuries</strong></td>
<td>Many</td>
<td>Moderate</td>
<td>Few</td>
<td>Few</td>
<td>Few</td>
</tr>
<tr>
<td><strong>Risk of communicable diseases</strong></td>
<td></td>
<td>Potential risk following al major disasters (probability rising with deterioring sanitation)</td>
<td></td>
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<tr>
<td><strong>Damages Health Facilities</strong></td>
<td></td>
<td>Severe (structure and equipment)</td>
<td>Severe but localized</td>
<td>Severe on equipment</td>
<td>Severe</td>
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<tr>
<td><strong>Food Shortage</strong></td>
<td></td>
<td>Rare due to economic or logistic</td>
<td>Common</td>
<td>Rare</td>
<td></td>
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<tr>
<td><strong>Population Movements</strong></td>
<td></td>
<td>Rare</td>
<td>Common generally limited</td>
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SAEQ: Health access in remote areas

• 30,000 km² area
• 2.5 million homeless
• Around 73,000 dead
• More than 150,000 injured
• 509 health facilities damaged/destroyed
• More than 20,000 air evacuations
Horn of Africa: drought + floods 2005-2006

Drought impact
- Over 18 million affected
  (homeless + injured + killed)

Flood impact
- Over 746,000 affected
- 4.4 million US$ estimated damage

Data Source: CRED

Horn of Africa (HOA) =
- Djibouti, Ethiopia, Eritrea, Somalia and Kenya
- Appr. 2 million km², 86.5 million people
Health impact Lebanon: Casualties

- **1187** dead due to war
- **4092** injured due to war
- **974 184** displaced before ceasefire
  and still **255 986** after ceasefire *(as of 3 September)*
Health impact Lebanon: Health infrastructure

Graph 1: Status of health facilities assessed in total numbers (total = 410)
(total number of health facilities per district is mentioned between brackets)

Graph 2: Status of all health facilities in percentage (n=410)

Source: MOH/WHO assessment
Humanitarian Crisis: Occupied Palestinian Territories

- US$ 48 million shortfall in 2005 due to cessation of support by donors and withholding of tax revenues by Israel
- Disruption of the Ministry of Health basic services (60% of all health services)
- Medical staff strike due to unpaid salaries

Major gaps in health care delivery due to interruption of public funding
Somalia Crises
drought/floods/conflict/RVF/AWD

- Over 2 million affected by the drought/floods
- Well 1000 killed and more than 100,000 displaced due to conflict
- Over 100 cases of RVF
- Over 300 cases of AWD (reported 34 deaths)

Source: WHO, 06
On site Public Health Management

Improvement of response needed in several gap areas e.g. mass casualty management, water and sanitation, nutrition, non-communicable diseases, maternal and newborn health, mental health etc.
“Urging all Member States to build up the national capacity for emergency preparedness and disaster reduction/mitigation and response, in order to reduce avoidable mortality and disability”
Resolution EM/RC49/R7
(adopted during 49th Session of the Regional Committee, October 2002)

“Enabling all societies to become resilient to the effects of natural hazards and related technological and environmental disasters, in order to reduce human, economic and social losses”

(UN International Strategy for Disaster Reduction)
WHO's objective for crises work

**Objective:**
To reduce avoidable mortality and morbidity in crises

**Mission:**
The design and implementation of programmes that prepare the health sector to deal with emergencies, and that help improve health during and after emergencies

- Covers preparedness, response, recovery and mitigation
- Has a health systems approach
Challenges in Disaster Management

- Missing linkages between Relief & Development
- Curative Vs Preventive analogy → Response Vs Preparedness
- Health humanitarian assistance compared to other sectors
- Limited capacities within health sector
- Community involvement in EPR
- Most of the research in the North and inapplicable to EMR settings
- Research dissemination mechanisms unsuitable for EMR/South
In Summary

- Integrate disaster risk reduction into policies, plans, and programs of sustainable development and poverty reduction.
- Recognize risk reduction as both humanitarian and development issue and ensure appropriate investments.
- Focus on national implementation (including the community) with bi-lateral, multilateral, regional, and international cooperation.
- Integration of applied field research to disaster preparedness, mitigation, response and early recovery programs.

*Pakistan earthquake, 2005*
Thank You

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World Health Organization

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