'Flagship Area 1, Hospital Safety '

15 December 2011

Update on the 'Hospital Safety' component of the Flagship I of the Nepal Disaster Risk Reduction Consortium (NRRC)

Presentation *by MOHP*

Nepal

A study (UNDP/BCPR, 2004) ranked Nepal as the 11th most at risk country to earthquakes and the 30th with respect to floods.

Another report (World Bank, 2005) classifies Nepal as one of the global 'hot-spots' for natural disasters.

Recently it is also believed that Nepal is at 6th position among the most at risk countries due to climate change.

Casualty

KVERMP, 1998 (Population-1.5M):

- Death: 40,000
- Injury: 95,000

2010 Estimate with Population: 3.0M

- Death: 100,000
- Serious Injury: 100,000
- Moderate Injury: 200,000

Health care service
public

- Central Hospitals - 8
- Regional/Sub-regional Hospitals - 5
- Zonal Hospital - 10
- District Hospital -65
- Primary Health Care Center - 208
- Health Post - 675
- Sub-Health Post - 3,127
- Teaching Hospital - 5

Total beds - 8671

Health facilities under private and NGO sector

Medical colleges	16	Total beds
Private hospitals	157	
Private total	171	
Mission hospitals	8	
Total beds	All	17833

A safe hospital …

will not collapse in disasters, killing patients and staff;

… can continue to function and provide its services as a critical community facility when it is most needed; and

… is organized, with contingency plans in place and health workforce trained to keep the network operational.

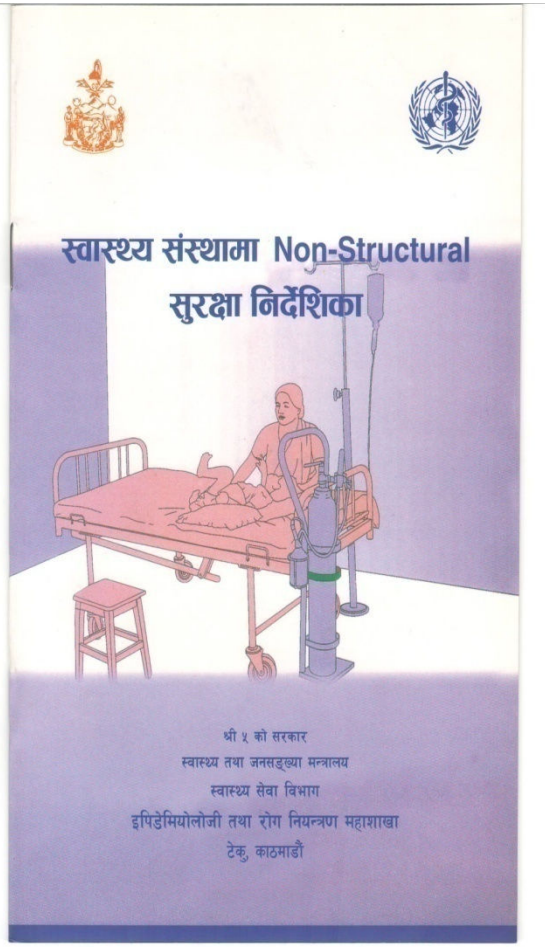
The Health case

- When hospitals are unable to fulfill their emergency function at the time when most needed, critical care is compromised and lives are lost needlessly.
- ongoing health surveillance to prevent outbreaks.
- public health and sanitation campaigns, particularly preventive medicine.
- attracting health research and hosting reference laboratories, driving innovation.
- acting as focal points for community organization.

Structural/Non-Structural Assessments

Year	Events (structural/non-structural assessments)
2002	Structural assessment of 14 hospitals (9 hospitals in Kathmandu Valley + 5 hospitals outside valey)
2003	Non-structural seismic assessment of 10 hospitals (5 in Kathmandu valley + 5 hospitals outside valley)
2006	Earthquake Vulnerability Assessment of Epidemiology and Disease Control Division Building at Teku, Kathmandu
	Earthquake Vulnerability Assessment of National Public Health Laboratory Building at Teku, Kathmandu
2007	Earthquake Vulnerability Assessment of Blood Bank Buildings at Districts Centers Nepal
2009	Re-habilitation of Patan Hospital Emergency Wing
	Kathmandu declaration on protecting health facilities from disasters “Twenty-seventh Meeting of Ministers of Health Kathmandu 7-8 September 2009”
2011	Rapid Structural Assessment of Bir Hospital
2011	Detailed Structural Assessment of Patan Hospital

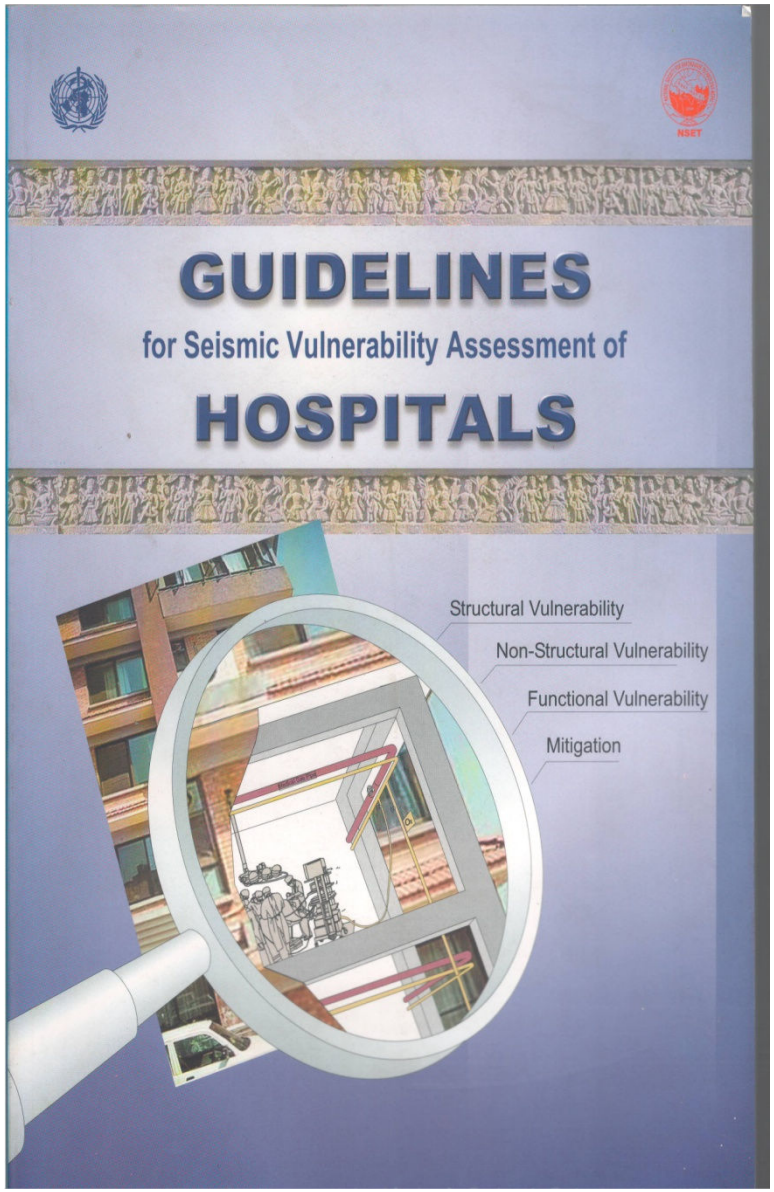
Non-Structural Safety in Health Institutions



Objectives;

- Provide information about Structural and Non-Structural Component.
- Causes of Non-Structural Damages.
- Non-Structural Vulnerability Mitigation Measures.

Seismic Vulnerability of Hospitals



Objectives;

- Introduction of Seismic Vulnerability assessment.
- Approaches for Data Collection for Vulnerability assessment.
- Structural assessment Vulnerability factor identification.
- Non-Structural vulnerability assessment. ments.
- Identifying Critical systems and facilities.
- Assessment of individual Components.
- Assessment of Architectural Nonstructural Components.
- Assessment of System's Vulnerability.
- Hospital performance evaluation and Recommendations

Capacity Building

❖ Various trainings and development skills are provided to the medical personnel and other staffs.

HOPE Course – 11 batches, 225 grads., 47 HOPE TFI

MCM Training-

MUSTER Training

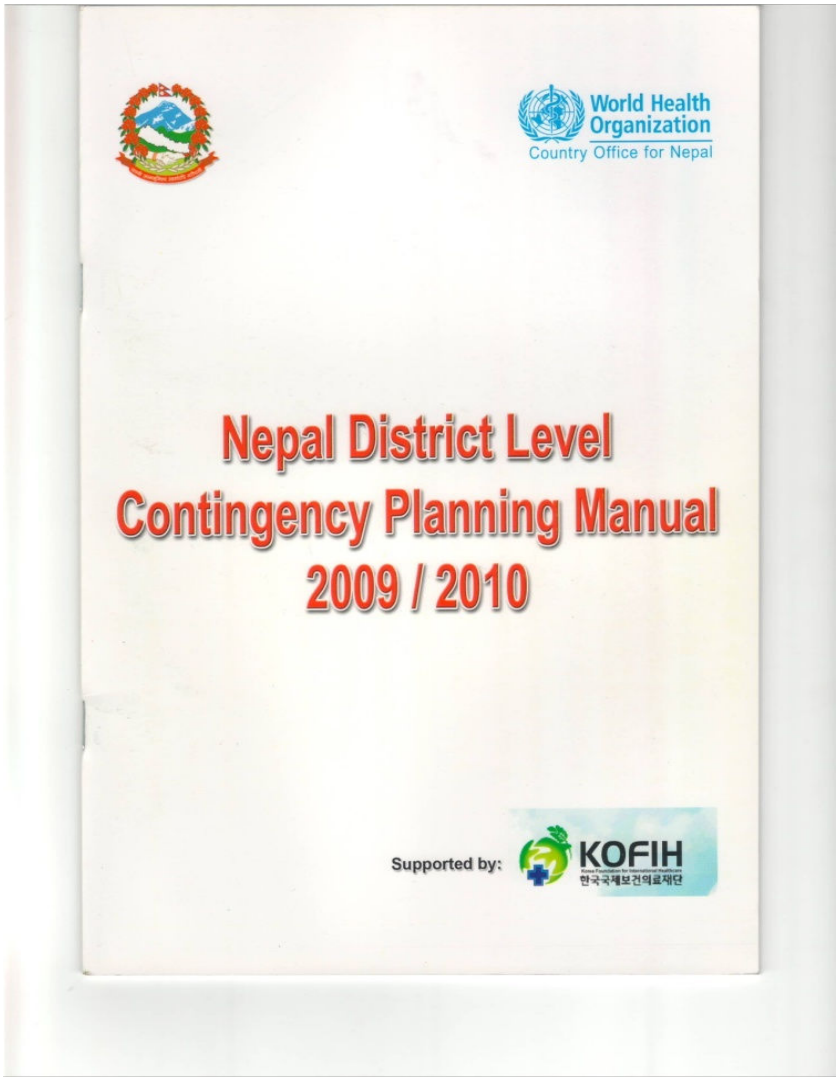
Primary Trauma Care Training - 96 health worker

Ambulance Driver's Training - 102 drivers

Since May 2009

- In September 2009: Nepal was instrumental in Kathmandu declaration on protecting health facilities from disasters at the “Twenty-seventh Meeting of Ministers of Health”.

District Contingency Plan



<u>Expected outcomes;</u>

- Enhanced awareness on contingency planning for public health emergencies..
- Clear roles and responsibilities identified for all actors.
- Communicaltion strategy elaborated.

Two workshops in 2010 and 2011

- *In December 2010:* ADB, WHO and the MOHP, organized a national workshop on "Implementing Earthquake Vulnerability Reduction Programme in Hospitals in Nepal";

- In addition, WHO in collaboration with the Management Division (MD) of the Department of Health Services (DOHS) of the MOHP conducted 'Health Facility Mapping Survey 2009/2010: An initiative to institutionalize Health-Geographic Information System (GIS)' in 27 Districts in Nepal, and a similar mapping is on-going in additional 30 districts;

- *In February 2011*: A workshop was organized on "Hospital Identification for Retrofitting" by the MOHP and WHO, and identified the priority hospitals.

ECHO funded project

- *In May 2011*: ECHO provided funds to WHO to implement a project on “Enhancing emergency health and rehabilitation response readiness capacity of health system in the event of high intensity earthquake in Katmandu Valley”;

- Three hospitals identified by the MOHP and one of the areas of activities is to conduct *structural and non-structural assessments of in three priority hospitals,* and two rehabilitation centers, and *retrofit the non-structural part in one hospital.*

WHO as lead

- Role much clarified as lead agency since May 2011.
- Organising meetings at different levels & is in continuous process of providing technical support, exploring potential partners, consolidating partnership and has identified priorities on hospital safety.

Priority hospitals

- *In July 2011*, the MOHP identified seven priority hospitals to be retrofitted and priority activities for hospital safety in emergencies to be in place.
  - *Tribhuvan University Teaching Hospital (TUTH),*
  - *Birendra Army Hospital,*
  - *Civil Services Hospital,*
  - *Patan Hospital,*
  - *Bir Hospital,*
  - *Kanti Children Hospital,* and
  - *Maternity Hospital*

In July 2011

WHO organized a high level meeting

NRRC members, senior officials from MOHP to

Share the DFID expert's draft recommendations & challenges in moving forward on the issue of hospital infrastructure.

In August 2011:

WHO developed a concept note (CN) on 'Plan for Preliminary Seismic Safety Assessment of Hospitals in the Kathmandu Valley with a View to Identifying Facilities for Seismic Retrofitting and Priority Activities' in consultation with the MOHP and the NRRC secretariat.

Oct. 2011

It was agreed that DFID and WHO would develop a revised Terms of Reference (TOR) to conduct “a seismic vulnerability survey of hospitals in Nepal and project management and structural surveying services to support hospital infrastructure improvements.” The funds would be provided by the DFID.

December 2011

WHO organized a meeting with the DFID, MOHP, DUDBC, and the NRRC secretariat to finalize the TOR.

Govt. allocates budget

- For the first time MOHP allocates NRs. 20 m. in capital cost for retrofitting.
- NRs. 1 million allocated for HOPE course.
- MOHP is in process of developing health sector emergency fund management guideline. NRs. 10 m has been allocated for the fund.

Mohp in dialogue

- A meeting in MoHP chaired by secretary of Health in October 2011, suggested to start dialogue with diplomatic mission like Indian, Chinese & Japanese Ambassadors to request them to consider retrofitting of hospitals, that they supported in the initial construction.

2012

- Conduct structural and non-structural assessments of three MOHP identified priority hospitals i.e. TUTH, Sri Birendra Hospital, and Civil Services Hospital and two rehabilitation centers.
- MCM plan and Hospital Emergency Preparedness Plan in TUTH, Army Hospital, and Civil Services Hospital

Low cost design safety &retrofitting

- Incorporating comprehensive disaster protection from earthquake and weather events into designs from the beginning will only add 4% to the cost.

- non-structural elements – the contents, rather than the building – represent most of the value of hospitals. Damage to non-structural elements is also what most often renders a hospital inoperable during a natural disaster. Retrofitting non-structural elements costs only about 1% while protecting up to 90% of the value of a hospital.

Key messages

- The most expensive hospital is the one that fails.
- Disasters are a health and a social issue: All disasters are a health issue, and damage to health systems affects every part of society and nations as a whole.
- Protecting critical health facilities from disasters is possible.
- The health workforce must be primary agents of disaster risk reduction

THANK YOU