Hospital Emergency Preparedness: Philippines

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Outline of Presentation

I Introduction

II Philippine’s Initiative – 10 P’s
I. INTRODUCTION

- Philippines is an archipelago of 7,107 islands
- Lies along the path of turbulent typhoons
- Within the Circum Pacific Ring of Fire
- 300 volcanoes, 22 are active
- On top of two tectonic plates (Eurasian and Pacific)
- Country with the most number of natural disasters in the last decade (1990–1999) CRED
- Human generated disasters increasing
1972 – **Presidential Decree 1566** – organizational structure for disaster management from national to local

In 1992 the Local Government Code was passed

In 1994 - program **STOP DEATH** and **DMU**

In 2000 – institutionalization – **HEMS**

**Health Emergency Management Staff** – 15 staff

Main function is to coordinate health sector’s response to emergencies and disasters; covers preparedness, response and rehabilitation
Philippine Hazards and Vulnerabilities

Volcanic Eruption

- 300 volcanoes, 22 of which are active
- Philippines within the Pacific Ring of Fire

Typhoon

- Philippines is located along typhoon belt
- Light structured houses in the provinces
- Average of 22 typhoons occur in a year

Earthquake

- Located along the earthquake belt
- Active faults and trenches
- Most houses are not seismically prepared
### SITUATIONER – PHILIPPINE HOSPITALS

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<td></td>
<td>LGU Owned</td>
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<td>Level 3</td>
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<td>Level 2</td>
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<td>Level 1</td>
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<td><strong>TOTAL</strong></td>
<td><strong>1,725</strong></td>
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<td>Beds</td>
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<tr>
<td>Government</td>
<td>695</td>
<td>43,670</td>
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<tr>
<td>Private</td>
<td>1,030</td>
<td>42,860</td>
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(24,362) BEDS - DOH
### HEMS - OPERATION CENTER MONITORING REPORT

**CY 2005 (Jan-Dec) to 2006 (Jan.- Dec.)**

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<thead>
<tr>
<th></th>
<th># of Events Monitored</th>
<th># of Minor Emergencies</th>
<th># of Major Emergencies</th>
<th># of Disasters</th>
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<td><strong>CY2005 (Jan-Dec)</strong></td>
<td>379</td>
<td>236</td>
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<td><strong>CY 2006 (Jan-Dec.)</strong></td>
<td>462</td>
<td>257</td>
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II - Hospital Emergency Preparedness
Initiatives of DOH

10 P’s

1. Policies
2. Plans
3. Protocols, Guidelines and Procedures
4. People
5. Promotion and Advocacy
6. Partnership Building
7. Physical (Facility Enhancement)
8. Program Development
9. Practices
10. Peso and Logistics
1. Policies:

- AO168 - “National Policy on Emergencies and Disasters”
- AO 155 – “Implementing Guidelines for Managing MCI during Emergencies and Disasters”
- AO 182 – “Code Alert System for DOH Hospitals during Emergencies and Disasters”
Organizational Policies

- Institutionalized Hospital HEMS unit directly under the hospital director
- Designated Hospital HEMS coordinators and response teams
- Organizational shift during emergencies
- HEICS practiced in all hospitals
2. PLANS

- Hospital Emergency Preparedness, Response and Rehabilitation Plan (HEPRRP) a requirement in licensing of all hospitals (Multi hazard)

- Developed “Easy Guide for HEPRRP Development”

- Included in all strategic planning
3. Procedures, Protocols, Guidelines

- Manual of Operation for Hospitals (2\textsuperscript{nd} edition) includes: dispatching, alerting, reporting, communication, MCI etc.
- Pocket Emergency Tool (2\textsuperscript{nd} edition)
- Manual of Treatment Protocols for common diseases during emergencies and disasters
4. People

- Health Sector training agenda to include management and skills
- Training
  1. BLS, ACLS, EMT, MCI-ICS
  2. National PHEMAP
  3. National HOPE
  4. EMERGENCY ESSENTIAL SURGICAL SKILLS FOR DISTRICT LEVEL
  5. HOSPITAL BASED WMD
  6. POWER AND RISK COMMUNICATION
5. Promotion and Advocacy

- July – National Disaster Consciousness Month
- December- Health Emergency Week
- Compendium of Health Messages
- Health Sector Drills and Exercises
- Skills Benchmarking
- Recognition Awards
6. Partnership Building

- Organization of the Health Sector - 2001
- Establishment of the Health Cluster - 2006
- Establishment of Hospital Network to include referral systems
- TWG composition from members of the Health Sector (policy, training & advocacy)
- Networking activities especially during special national events (APEC, ASEAN)
7. Physical Facilities Enhancement

- Establishment and upgrading of especial service units (Trauma ward, Burn Unit, etc.)
- Upgrading of blood banks and laboratories
- Provision of decontamination areas for the BCRN hospitals including necessary PPE’s
- Provision of negative pressure rooms for selected hospitals
7. Physical - Facilities Enhancement

- Creation of Hospital Operation Center (OPCEN) with communication system in certain regions
- Upgrading of ER, OR
- Upgrading of Ambulance Service
- Provision of triage areas
- Identifying and upgrading alternate areas in case of surge of victims during emergency
8. Program Development

- Strengthen Toxicology Centers
- Strengthen response to environmental emergencies especially chemical events
- WPRO Book on Assessment of Health Facilities – role of DOH - HEMS
- Embarking on a **nationwide assessment** of capability of hospitals on their structural, non-structural and functional capacity
- Proactive in using **licensing** as a strategy for hospital compliance
9. Practices

- 10 P’s as evaluation tools for all hospitals
- Postmortem evaluation of major events and disasters
- Documentation of good practices compiled into a book
- Documentation of all health sector proceedings
- Clustering approach in disaster management
- Providing leadership in all emergencies
9. Practices

MCM Survey of WPRO 2005 (VTN, PHIL, SING and FIJI)

- Framework of MCM covering the pre-hospital and hospital role in MCI
- Influenced our training agenda
- Need to have a coordinated training with all members of the Health Sector (Police, military, fire and LGU)
WHO Project 2006 – evaluation for the physical recovery and rehab of typhoon-damaged essential health facilities: 18 facilities

- Focused on architectural and engineering evaluation, building safety assessment – hazards (geotechnical, flood, structural, architectural, electrical)
- Policy manual on the Design and Construction of Health Facilities in Typhoon-Prone Areas
- Retrofitting of Existing Health Facilities to mitigate hazards of earthquake, fire, flooding and typhoons in compliant of existing Codes
10. Peso and Logistics

- Allocation of funding for Health Emergency activities is gradually increasing.
- The National Disaster Coordinating Council is recommending 5% of budget of facilities be for preparedness activities.
- Availability of Quick Release Funds (QRF) during emergencies.
- “Opportunities in times of Adversities”
CITY OF METRO MANILA
Metro Manila

- 17 cities where all government activities are
- Economic center of the Philippines and where all embassies are located.
- Saturated with 21 big DOH hospitals and other private and military hospitals; all connected through a good communication system
- Hospital zoning – “receiving hospital and satellite hospital” concept
- Strong networking camaraderie among hospitals with protocols depending on type of emergency
LRT BOMBING
Dec. 31, 2000
22 deaths
115 injured
Ultra Stampede Incident
(Pasig City) February 4, 2006

1,059 Injured Victims
and
71 Deaths
Bicol is located along typhoon belt. Most houses built of light materials are commonly/yearly visited by typhoon.

Typhoons: “Miolenyo, Paeng, Reming, Senyang”

Mayon Volcano is an active volcano that erupts yearly. Earthquake is very often to occur as it precedes volcanic eruption.

Hardest hit DOH Hospital:
- Bicol Regional and Training Hospital in Albay
Impact in the Community

- RHUs, BHS, hospitals were damaged
- Houses and other infrastructures uprooted
- Lifelines were broken down
- Basic health services disrupted
- Significant number of families were displaced into the evacuation centers or temporary shelters
| FACILITY    | NO. OF HEALTH FACILITY | NO. OF TYPHOON-DAMAGED | |
|------------|------------------------|------------------------|
| HOSPITAL   | 52                     | 33                     |
| RHU/CHO    | 133                    | 58                     |
| BHS        | 1026                   | 314                    |
Bicol Regional Training and Teaching Hospital

- Blown-off roofs
- Dilapidated building
- Damaged roof framing
- Damaged roof and ceiling
- Damaged ceiling framing, eaves, fascia; broken window glazing
- Damaged electrical wires & wiring devices
Impact in the Hospital

- Blown off roof making the 2nd floor non-functional
- Hospital personnel were victims (40%)
- Hospital water, communication, and electrical supply were down
- Hospital equipment damaged
- Some hospital areas non functional
- Surge of victims (1008 patients with 450 admissions)
- 14 died mostly due to communicable; 2 trauma
Resiliency of the Hospital is not just the structure but the system developed, the policies, guidelines, procedures and the people that makes the difference. Furthermore, if a hospital ceases to function, the ability of the network to cover the gap is the most important contingency plan.