

Basics in Paediatrics In Disasters

Conrad Wanyama

Emergency Incidents and Disaster Management Lead

International Centre for Humanitarian Affairs

Kenya Red Cross Society

Presentation during 16th KPA conference on 28th April 2016, Boma Inn, Eldoret

Outline

- Guiding principles in Disaster Management
- Common Terminologies
- Role of Red Cross & Role of Healthcare Sector
- Mock exercise 'Simulated Disaster Response, (Magen David Adom, MDA Israel)



Guiding Principles in Disaster Management



**Hyogo Framework
for Action 2005-2015:**
Building the Resilience of Nations
and Communities to Disasters



UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan



**Sendai Framework
for Disaster Risk Reduction
2015 - 2030**

Common terminologies

- Disaster
- Emergency
- Mass Casualty Incident (MCI)



Disaster

- A sudden event that causes serious disruption of the functioning of a community resulting to widespread human, material, economic or environmental loss that exceeds the ability of the affected community to cope using its own resources (WHO, IFRC, UNSDR)

- Disasters do not always generate Mass Casualties

Emergency Incident

- An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, **and which requires a significant and coordinated response.**
- **Disasters are considered emergency incidents**

Disasters: Understanding the problem

- 2009: Nearly one natural disaster/Day in the world, killing an estimated 10,655 persons and affecting 119 million others through loss of homes or livelihoods.
- 2014: A record number of level 3 humanitarian crises: Syria, Iraq, Central African Republic, resulting in requests to help over 76 million people in 31 countries
- The frequency and severity of these natural disasters seem to increase every year, most likely related to global warming.

Disasters: Understanding the problem

- LMICs often lack the public health facilities, staffing and infrastructure, emergency management preparedness, water and sanitation infrastructure, and food/nutrition capacity to respond to a major natural disaster or complex humanitarian emergency.
- Majority of clinical healthcare workers are not skilled and competent in responding to humanitarian and public health emergency incidents

Types of Disasters & Emergency Incidents

Slow Onset:

Flood

Drought

Famine

Chemical Spill

Disease Epidemics

- **Natural disasters**
- **Man-made disasters**

Sudden Onset:

Collapsing Buildings

Civil Clashes

Flash Flood

Road Traffic Accident

Severity of Disasters

- Magnitude of the event
- Vulnerability of the population
- Number of affected people
- Rates of associated diseases
- Crude mortality rate (CMR)



Population Vulnerability

Children

Increased numbers of deaths and injuries

Population displacements

Psychological and social behaviour disorders

Possible food shortages and nutritional deficiencies

Disease from environmental health hazards

Number of affected People: Mass Casualty Incident/Mass Casualty Event

- Any emergency incident resulting in a number of victims (casualties) large enough to disrupt the normal day-to-day operations of emergency and healthcare facility services (WHO)

Mass Casualty Incidents

- Intentional
 - Deliberate (terrorist) harm intended to harm a large number of people
 - Chemical, Biological, Nuclear, Radiological agents
 - Civil wars (PEV, Tribal clashes, Political strife)
- Accidental
 - Occurs as a result of human error (leading to large fatalities or injuries)
 - Fires, electrical, major car crashes
- Natural
 - Occurs due to natural hazards
 - Mudslides, floods, earthquakes, disease outbreaks

Impact of Disasters/Mass Casualty Incidents on Health care Systems

Strain on System Capacity

- Facility does not have enough physical resources to respond to the incident
- E. g number of doctors, nurses, beds, ambulances, space for treatment

Strain on System capability

- Normal procedures and treatment may not be feasible because of number of victims
- Will depend on what the facility can/can not do
- E. g surgeries, diagnostic tests, equipment, staff expertise

Hazard Specific Plan



- Is a community plan for relevant hazards, threats, or incidents to allow a community to consider how local factors contribute to potential threats
- **Will arise from findings on Hazard vulnerability analysis**
 - A systematic and formal approach to evaluating the probabilities and consequences of all hazards that might affect the facility or surrounding community

The role of Kenya Red Cross Society

- Established in 1965, ACT of parliament, CAP 256, for Humanitarian & Relief Response >>>> **Red Cross Action Teams (RCATS)**
- Local network of volunteers and staff (63 branches)
- Supporting **Pediatrics in Disaster** Training(course 1, Sep-Oct 2015)

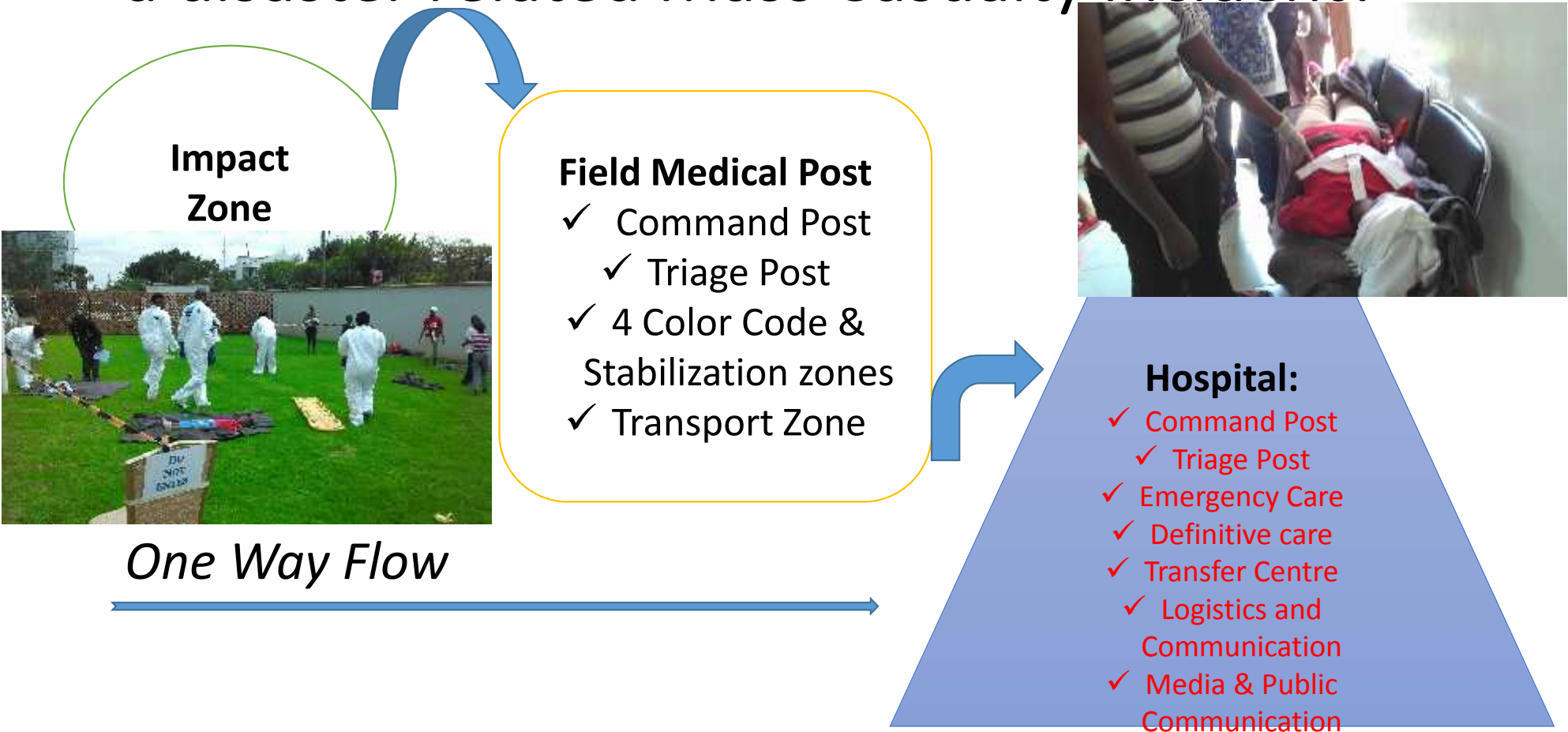


- Principles: **Humanity, Impartiality, Independence, Neutrality, Voluntary Service, Unity, Universality**

What is the role of healthcare sectors during a disaster related Mass Casualty Incident (MCI)

- Mass casualty management is the health sectors' immediate priority in any emergency incident
- Response should be through a standardized and well defined/rehearsed **Incident Management System** together with Standard Operating Procedures
- Health Care should **begin at the site of impact** (e.g. during search and rescue following a collapsed building)
- Care must be prioritized (based on MCI Triage)

How should healthcare sectors operate during a disaster related Mass Casualty Incident?



Proposed best practices for all health care sectors and institutions in Disaster Management?

- Conduct local Hazard & Vulnerability Assessment
- Develop **Disaster/Emergency Incident management Plans (spanning Pre-disaster, During and Post-Disaster phases)**
- Develop **Internal capacity** for managing internal disasters
- Develop **internal capacity** for responding to surge capacity
- Periodically review/**test existing disaster response plans**
- Lobby for and Implement a **local joint emergency response plan**

Mass Casualty Event Using ICS and Tested SOPs

Questions

Summary

- Children are vulnerable during disaster and emergency incidents
- Hospitals should have workable disaster plans that focus on the needs of children