REVIEW PROF-623

DISASTER MANAGEMENT

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Our planet is a beautiful gift of God almighty, full of natural bounties and highly technological advancements discovered by human beings.

It is a great place to live in and enjoy life. It is the rapidly changing world we enjoy. Occasionally these changes are more than what we can endure. The unfavorable and unfortunate situations beyond our control bring us to face the disasters.

The disaster is defined by different people differently but it conveys almost similar massage. Some understand it as;

- Sudden and great misfortune
- A ruinous occurrence
- A severe mishap
- A stroke of bad-luck
- A catastrophe
- A calamity which causes public suffering
- Something which puts a sudden end to things

- A catastrophic event which relative to the available resources and manpower, overwhelms a health care facility and usually occurs in a short period of time.

- A sudden and unexpected natural or human related calamity of proportionately larger magnitude in relation to available human or other resources
- People understand is the way they like but it is a condition which one feels incapable of handling but it has to be handled and handled successfully"

The disasters can be;

Natural
Earthquake, Volcanoes, Hurricanes, Tornados, Floods, Hailstorm (rain storms), Famines, Droughts, Avalanche, Ice Storms & Bush fires.

Unnatural/Human or Terrorist activated
Air crashes, Tower block crashes, Fires, Wars, Terrorist activities, Suicide bombers, Severe accidents, Ship wrecks, Explosions and blasts, Land mines, Chemical, biological disasters and Emerging infections

The common wishful thinking that "Disaster will never happen to us" is not always true.

In fact Misfortune never strikes alone and it is always sudden and at a time when least expected. It is usually a new disaster , requires different approach and different physical needs every time.

The poor, old, women, children and new residents to the area are most vulnerable victims.

The calamity changes into a tragedy because there is sudden excessive human & property loss. There is shortage of trained personal and resources and short period to respond. There is lack of co-ordination & co-operation between various departments.
The tragedy is made worse by economical difficulties and lack of preparedness.

Disaster cannot be managed by just good will or good intention. The disaster team should be ready to manage the disaster before it occurs. The objectives are;

1. Pre planning
2. Pre training
3. Readiness

It requires both;

1. Multi-department and multi-hospital collaboration and participation.
2. Structured plan of management.
3. Allocation of various responsibilities and authorities.
4. Preparation of check lists is done in advance.

Even after all the planning, it is also unreasonable to expect everything during disaster to be Orderly, sane and appropriate

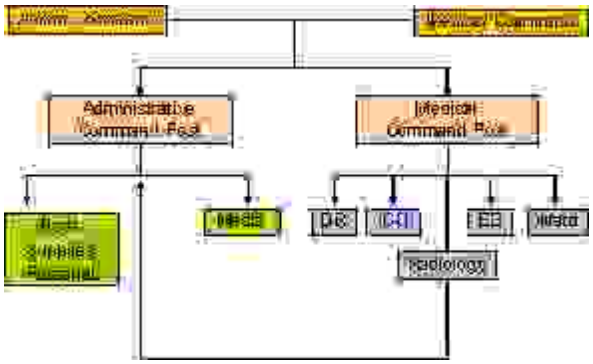
The best one can hope is
"controlled chaos"

PLANING TO MANAGE THE DISASTER

The task forces should be established to deal with the evolving disasters. Administration command team is set up as ;

Administration Command Set up

1- Emergency preparedness office (central control office)
2- Declaration of disaster
3- Communication through the control office.
4- Organizes Field triage team and
5- Set up information center



1. Disaster Management Plan

The incharge should pro-actively work to advocate and facilitate the multi-disciplinary and multi organizational requirements for disaster management. A resource list of inter-disciplinary institutions, activities should be developed. The disaster management plan should issue clear instructions to anticipate, plan, prepare and respond effectively.

The disaster management teams should engage in joint preparation, response & training. They should focus at prevention of the damage from events. The teams should have excellent media relations and create an information and data clearing house on disaster management. Preferably web sites should be established.

DISASTER DECLARATION

As soon as the disaster occurs, the plan is immediately activated by the chief of management from disaster control office.

The disaster team immediately performs assessment of disaster and responds in a quick & organized manner to minimize the damage to life and property.

There is strong possibility of breakdown of normal communication channels during disaster leading to problems such as;

1. Field triage units are unable to communicate with the command post effectively.
2. The command post is unable to communicate

with other hospitals.

3. The lines of communication with family members are unavailable.
4. The lines of communication with the media are less than satisfactory.

New communication set up is to be designed as per available facilities. Some times personal managers are the only way to communicate. Even if the communication system is set up, it is very important to decide what is to be communicated and when.

An organized approach for information release should be adopted. At the times of disaster everybody wants to do everything but is unable to do anything. It results into too many people, too much confusion and too little action at the disaster site. Authorized and responsible personal for a specific duty should be decided and clearly notified before the disaster.

The chaos is avoided by clear instructions as these achieve clear results. It includes securing the treatment areas. Security control of the media, family members and minimally injured victim.

Medical Command Set Up

Goal of hospital emergency plan is to provide severely injured patients with a level of care that approximates the care given to similar patients under normal conditions. The concept of minimal acceptable care is the key to staged management approach in mass causality incident.

Emergency arrangements at the hospitals are immediately done.

The patients who can be looked after at home are discharged early and beds are vacated for disaster victims. The operation theaters are made available by cancelling the elective lists and all staff is made ready to receive disaster casualties ICU beds, personnel, equipment and supplies such as medicine, food are collected as quickly as possible for disaster victims.

Field Interventions are crucial for effective management of disaster. Its Goals are;

1. Securing the area to prevent of further injury
2. Determining the need for emergency treatment
3. Initiating treatment as per protocols
4. Communications with medical control center
5. Rapid transport of patient to appropriate specialized centers

Identification of hospital and administration staff helps to avoid confusion and chaos.

Areas should be specified by sign posts for the patients, staff, relatives, media, religious services and ambulance services for organized and professional care.

Over 50% deaths occur within seconds or minutes of injury. No trauma care system, no matter how sophisticated can prevent these deaths. Other victims can be saved by appropriate medical care.

Triage

French word "Trier" (for sorting out various qualities of wool)

"To Sort Out"

It means prioritization of victims depending upon;

* Severity of injury
* Likelihood of survival
* Urgency of care

Following methods are used for sorting the patients in field;

* Scoring system
* Check lists
* Criteria

Triage team at site consists of ;

* Medical personal (Surgical team) and
* Administration personal

Each surgical team consists of;

Senior surgeon = 1
Residents = 2

Nurses = 3-4
Respiratory therapist if available = 1

Medical Care Team

* Each triage teams is pre-designated. There may be many triage teams to look after the disaster of greater magnitude .
* The authority of the triage team is established in the field and unnecessary interference is avoided.
* Head of the triage team is responsible for treatment and team organization.
* The members of the treatment teams know their roles as these are pre determined.

Standard documentation is carried out for identification of every patient and his / her problems.

Rapid and accurate field identification of high risk injured patients is done. Only 5-10% injured patients need treatment in trauma center. These are immediately shifted after resuscitation.

Quick assessment is required under adverse conditions and limited resources. The transportation of less severely injured patients are avoided to prevent unnecessary over burdening of trauma centers.

The major trauma victims (with an injury severity score of 16 or greater) are immediately transferred to specialized treatment center.

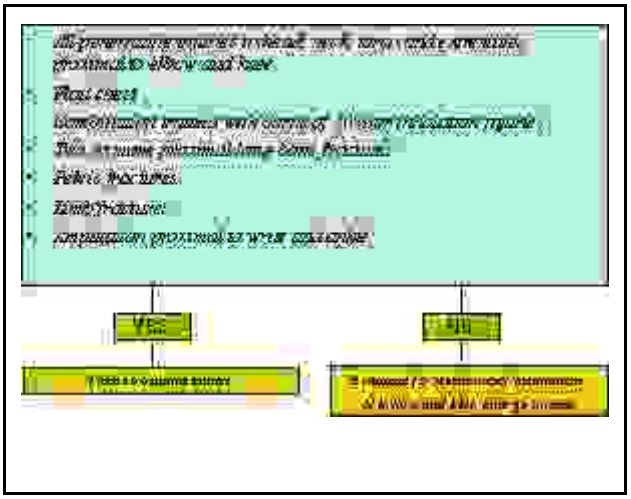
Appropriate measures for moral boosting and psychological support of public and workers are taken.

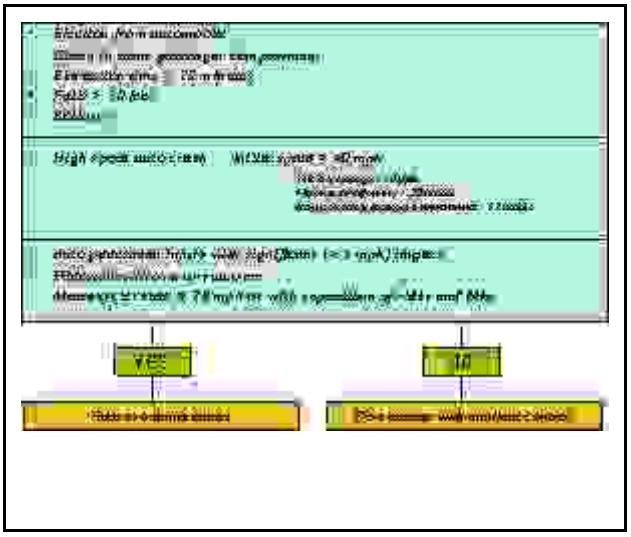
Rehabilitation is always actively arranged after the disaster has been managed.

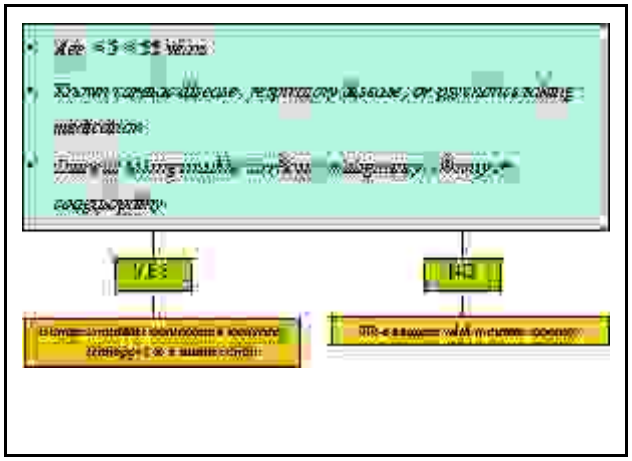
Audit and plans for future prevention/management are finalized and documented after the emergency is over.

Over triage decreases morbidity and mortality to some degree under triage is less desirable.

Over triage doesn't increase the burden on trauma centers significantly.







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