

GENERAL SECTION

DISASTER PLAN FOR MASS CASUALTY

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A disaster has been defined (Retherford) as an accident with so many Casualties as to require extra-ordinary mobilization of emergency services. For a Hospital of DHQ size and resources more than five serious cases and five minorly injured patients will require mobilization of emergency services. Disasters can be divided into:

- 1) Minor — involving at least 15 patients.
- 2) Moderate disaster — involving at least 50 patients.
- 3) Major disaster — more than 100 patients.

A Hospital cannot possible organize itself to receive the victims of Major Accidents without detailed planning beforehand. This planning is incorporated into what is usually weighty document known as major accident plan. This contains details of all actions that anyone associated with the accident will have to take from Consultant to catering staff. NO plan is perfect and all potential participants need to be tested by some form of practice. This also serves the valuable purpose of staff to be familiar with the entire plan. This article will act as a guideline for the performance.

1) Types of Major Accidents

- a. Large fire.
- b. Explosions, Chemical Gas, Bombs.
- c. Public Transport Disaster
Air, Rail, Road, Sea
Earthquake
Nuclear disaster
Riots
- d. Epidemic

ORGANIZATION AT HOSPITAL LEVEL

The basic organizational problem in a Hospital is to mobilize the right number and the rights kind of staff for a particular disaster.

It is important to call sufficient people in but not too many. Some disasters will pro-

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duce patient with burns, other with fractures and a third one with firearm and stab injuries. The number of patients and those requiring admission differs. Therefore, it is not possible to detail in advance the number of doctors of specialists, surgeons of a particular branch nor the number to be required.

What is necessary is a command structure of people with sufficient experience who will be called up to organize the staff and resources.

2) Factors in Major Accidents

- Staff Resources
- Medical
- Nursing
- Administrative

(COMMAND STRUCTURE)
ACCIDENT AND EMERGENCY DEPARTMENT

Usually patients arrive in taxis and private cars without any warning. If it can be coordinated with the Police Department to issue instructions to local police stations that in event where many people are injured due to any reason, they should ring the accident and emergency department of DHQ and if possible to tell an appropriate number of people involved and to give rough ideas of stage a doctor and nurse of sufficient experience and authority must be summoned to take charge. The bigger disaster the better to call in more senior consultants and sisters. Their jobs will be to treat patient but also to organize the department. At this juncture sufficient doctors of Registrar level and below and other nurses from the wards would be summoned up. As soon as the emergencies start to arrive they should be sorted out into:-

- 1) Seriously injured — Resuscitation room.
- 2) Next worst — Cubicles.
- 3) Minorly injured — waiting areas.

3. HOSPITAL RESOURCES

- Space in accident and emergency department.
- Number of Beds in Intensive Care Unit.
- Number of Theatres and Equipment.

DOCUMENTATION

That is the names and address of patient with their medical notes. It was observed last time when a school wagon collided with a truck that no proper documentation was done when the relations started to arrive and asked about the names and where-about of the injured children. There was great difficulty in informing them who the child is and where he is admitted or has he been discharged or has not arrived at all in this Hospital.

THE HOSPITAL

Four functions to be fulfilled:

(1) MEDICAL RESOURCES :

Doctor administrator will best cover this aspect i.e. Medical Superintendent or Medical Officer-1. After getting information from the Casualty Medical Officer or Consultant incharge of the Accident and Emergency Department about the number of patients he should make necessary beds available. Similarly he should make theatres available for emergency surgery In other words he will direct and co-ordinate the whole hospital.

(2) NURSING NEEDS :

The Matron should direct as many nurses as needed and deploy them where they are needed most. Ideally the nurse who works in Casualty or theatres routinely should work there.

(3) THE LAY ADMINISTRATOR:

His responsibility is to direct all the other resources of the Hospital. Sufficient orderlies, chowkidars and sweepers to take patient to the wards or operation theatres and to maintain law and order outside the A/E Department.

(4) A SENIOR SURGEON :

His main responsibilities are in deciding operative priorities for allocating operation team to theatres and patients to these teams.

CALL UP MECHANISM:

There must be an efficient system to call up the five to six senior officers in the command structure very rapidly after the news of the disasters.

4. DUTIES OF SITE MEDICAL OFFICER

- d Laise with emergency services; Assess the scene; Report to base hospital number of Casualties; Notify hospital when last Casualty has left the scene. The site Medical Officer does not participate in treating the patients.

The only system available in this hospital is the telephone operator or during working hours one or two orderlies to inform the wanted people, then to call up those people to work in the A/E Department. A list of people wanted in such situations will be made available in A/E department and telephone exchange with the Telephone numbers and addresses and finally allotment of doctors, Nurses and paramedical in the wards to look

after these cases.

SORTING OUT OF TRIAGE

Patients are to be sorted out. Usually they are of three categories. This should be done preferably by the Casualty Surgeon or somebody senior.

- (1) Minor Casualty, where treatment can be delayed.
- (2) Major with good look out. These are given top priorities.
- (3) Very grave with poor prognosis. These are low priority cases.

Also patients are to be sorted out for admission and for discharge. The x-Ray department comes a bottleneck. All the X-Ray request should be seen by the senior consultant and marked as:

- (1) Very urgent
- (2) Urgent
- (3) For delay till tomorrow
- (4) Unnecessary

DOCUMENTATION

- (1) Direct all patients to A/E Department.
- (2) List should be made of all the arrivals.
- (3) Then whether discharged, admitted serious, critical or minorly injured, put in form of their names.

BEDS

If possible, these patients should be admitted in one ward and routine patients who can be discharged or transferred from that ward to other, may be helpful.

DOCUMENTATION

PATIENT RECEIVED FOR DISASTER

A/E No.	Unit	Name	Address	Nature of injury	Condition	Disposal Home Ward No.	Age	Sex
					critical			
					fair			
					serious			

(Forms to be made available in the A/E Department)

5.

TRIAGE CATEGORIES

- | | |
|---|--|
| <ul style="list-style-type: none"> 1. Immediate 2) Urgent 3. Minor C 4. Palliative 5. Dead | <ul style="list-style-type: none"> (1) Head injuries with unequal pupils and developing Neurological signs. Suspected ruptured spleen or pneumothorax. Cuts burns and minor fractures. 60 year old patient with 80% burns. |
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INVOLVEMENT OF OTHER SERVICES

- 1. Police should be invited to come and control the public not to hinder the care of the patient.
- 2. Police should be requested to inform relatives or answer people asking for information.
- 3. Police should be requested to keep the A/E and hospital entrance clear for the emergencies to come in without difficulty.
- 4. The ambulance services are next to nothing in this area, so they cannot be relied upon.

DISASTER CELL

	Police	C.M.O. Ambulance	Hospital Telephonist	Other Services
M.S. or M.O.I. To call	Matron	Doctor Incharge of A/E Deptt.	Incharge of Surgical Deptt.	Physician on Call
— Lay Staff	— Extra Nursing	— To Call in Extra		— To organize surgical teams.
— Clerks	— Inform Theatres Sister	— To ask for the required number of Nurses		— To make sure that theatres are equipped and available.
— Porters	— Inform Nurses in the wards.	— Extra Doctors or Surgical registrar Medical Registrar and House Officers.		— To co-ordinate A/E and theatres transfer.
— Medical Stores				— To assign priorities for operations.
— To inform the X-Ray Deptt.				

CASUALTY MEDICAL OFFICER — DISPATCH AMBULANCES TO THE SITE

TELEPHONIST

Medical Superintendent OR Medical Officer-1	Matron	Consultant Incharge of A/E Deptt.	Surgeon on Duty	Incharge of Surgical Department
Adminis- tration of Situation	To inform the necessary nursing staff.	To inform or call the required Doctors.		To organise surgical team and operative priorities.
Provision of Medicines, etc,				

(This form should be clearly typed with telephone numbers and address of the above persons).

The operator should be told to disconnect other calls and give top priority to these calls.

REFERENCES :

1. Stephen Miles ABC or Major Trauma B.M.J. Vol: 301 20the Oct. 1990 P.919.
2. Alastair Wilson Peter Disiscoll ABC or Major Trauma B.M.J. Vol. 501 29the September, 1990 P. 658.
3. American College of Surgeons Committee on Trauma. Early care of the injured person. 2nd Edition W.B. Sanders London. Disaster plan for mass casualty p.433.