

Organising Ophthalmological Aid in Disasters and Emergencies

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- 1) Lost of vision in emergencies is a severe mental injury;
- 2) Provide first aid. Eye specialists should be included in the general medical team;
- 3) A special kit containing medicines, bandages and instruments has been developed to provide ophthalmological first aid;
- 4) A colour marker card system to identify eye injuries has been developed; and
- 5) A list of recommendations for first aid to patients with eye injuries, including disinfectant drop instillation, application of sterile bandages and hospitalisation in a specialised eye centre, is presented.

Keywords: aid; disaster; eye; ophthalmology

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Management of the Mass Casualties of Traffic Accidents in the City

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The number of Chinese drivers comprise 2.2% of the total in the world. But the automobile accidents in China comprise 9%. Currently, the number of people dying from traffic accidents is about 86,000/year. Shanghai is one of the biggest cities in the world. It contains a population of 13,000,000. The average density of population is >1,000 persons/km² and >10,000 persons/km² in the downtown. The daily commuting population in Shanghai is >2,000,000. Statistics of the past five years show that the traffic accidents exceed the past records by 60,000 cases with 2 persons killed every day (in China, one person is killed by accidents every 6 minutes).

Table 1—Numbers of traffic accidents, injured, and deaths in Shanghai 1987–1991

Year	Accidents	Wounded	Dead
1987	18,475	10,059	1,514
1988	20,074	9,500	1,164
1989	8,736	8,991	947
1990	7,621	4,699	607
1991	7,524	4,450	594
Total	62,430	37,699	4,826

Table 2—The number of traffic accidents, wounded, and dead in China 1987–1991

Year	Accidents	Wounded	Dead
1987	298,147	187,399	53,439
1988	276,071	170,598	54,814
1989	258,030	159,002	50,441
1990	250,297	155,072	49,271
1991	264,817	162,019	53,292
Total	1,347,362	834,090	261,257

The data indicate: 1) 85% of all the persons killed in traffic accidents are >40 years old; 2) Prehospital mortality is 66% of the total; 3) 60% of traffic accidents are related to bicycle riders; 4) Owing to the improvement of prehospital first-aid and emergency facilities, the mortality rate and the number of wounded has decreased in recent years.

The Shanghai First-Aid Central Station (SFACS) owns 173 ambulances and employs 517 specialists. The new resuscitation ambulance, called "Movable ICU", is equipped with a cardiopulmonary monitor, ventilator, emergency drugs, and other resuscitative equipment. The ambulance also is equipped with an excellent communication system that can connect with any part of the communication network in Shanghai. A total of 110,889 persons who needed first-aid were transported by SPACS in 1991. The number of people wounded by traffic accidents and other events (such as burns, intoxication, drowning, etc.) was 26,681 with 318 persons found dead before hospitalization.

All severe trauma patients should be transported to the identified hospital in Shanghai. Every central hospital in Shanghai is setting up a Resuscitative Department to care for large numbers of critically wounded casualties. The function of Resuscitative Department is to sort out all of the critically wounded, resuscitate them, and render supportive treatment. Their functions include: 1) Cardiopulmonary resuscitation; 2) Immediate treatment of life-threatening respiratory failure, organ injuries, and the loss of blood; and 3) Initial management of fractures and injuries.

Keywords: accidents; ambulances; bicycles; cardiopulmonary resuscitation (CPR); China; deaths; equipment; hospitals; pre-hospital; resuscitation; Shanghai; traffic; trauma

Vulnerability and Disaster Management in India

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The Indian subcontinent has a highly diversified range of natural features. Its unique geo-climatic conditions make this region among the most vulnerable to natural disasters in the world. Disasters occur with amazing frequency and while the community at large has adapted itself to these regular occurrences, the economic and social costs continue to mount year after year. It is highly vulnerable to drought, floods, cyclones, earthquakes, landslides, volcanoes, etc. Almost all parts of India experience one or more of these events. This paper highlights the various disasters that are prevalent in India and their management.

With an increase in the perception towards spreading a culture of prevention in the disaster management scenario, considerable emphasis is being placed on research and development activities. In India, a number of Research Institutes are conducting active research in the field of disaster management. Valuable inputs in technical, social, economic as well as management areas of the field are being investigated. Research activities are being coordinated by different ministries depending on the type and level of research. An important role is played by the universities.

The National Centre for Disaster Management (NCDM) is the nodal agency for research, training, consultancy, and advocacy in the field of natural disasters in India. The NCDM has identified broad areas of research such as disaster preparedness, disaster mitigation, cost-benefit analysis of preparedness plans, environmental impact of floods, droughts, earthquakes, cyclones, and other disasters, and the behavioral aspects of disasters on the affected people. It is networking with various Central Government Ministries and concerned departments involved in disaster management as well as with various autonomous institutions. These activities are described in detail during this presentation.

Keywords: agencies; contingency; coordination; disasters; economics; India; mitigation; prevention; research; vulnerability

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