

COMMON DISASTER : ERADICATION AND CONTROL

In the last chapter, you were apprised of those disasters which were caused due to human error in the course of modern technologies. In this chapter we will acquaint you with those disasters which are also caused because of the human error or due to insufficient knowledge. The sources of these disasters are not ominous situation arising due to technological development but are those facts which are associated with daily activities, food habits, transportation and social settings. These disasters create that type of mental torture, the management of which require greater human understanding and foresightedness than material and money.

Common disasters can be categorised in to two following categories:

(A) Small scale disasters

(B) Large scale disasters

(A) Small Scale disasters:

Small scale disasters are caused because of the unhealthy food habits and life style. It evolves at individual and family level but sometimes due to lack of social awareness and that of proper management of health services it becomes an epidemic. These disasters bring death warrant for the poor families. In this disaster, infectious and epidemic causing diseases like malnutrition, vomiting, Cholera, plague, kalajar, malaria and high fever can be caused. Diseases like malnutrition and diarrhea are very common in poor families. Firstly, they don't get easily digestible meals and secondly, whatever food is available to them, they don't take it properly due to lack of knowledge and time. For example, hot meal and cooled boiled water minimises the risks of such type of diseases to almost nil level.

Even, if the disease occurs then there should be arrangement of its initial management at family level like administration of mixture of salt and

sugar, lime, putting clove between the teeth etc. This type of family management can help in quickly controlling it. Community management is needed in the remote villages, in the case of not getting quick relief from family management. There is hardly any health center in the villages. Therefore, there is need for persons having vehicular facility in the village to come forward and help families suffering from indigestion and diarrhea. There is also need for persons having mobile phones to inform the nearby health centers. Every home in the village should have Electral powder; if it is not available then mixture of salt and sugar should be administered to the patient.

It is essential for the Village Panchayats to arrange, from time to time, with the help of the self help institutions (NGO), exhibitions and “Nukkad Natak” to inform the people how to protect themselves from the disasters.

ACTIVITY

Students should prepare a list of persons from their family or neighbours who were affected by these disasters and try to know what immediate treatment was arranged.

Cholera and Plague is an epidemic of large scale, which, in true sense, is a community disaster. This type of disaster occurs when number of cases of a particular disease exceeds the expected limit. The main cause of these disasters is the disease wearing bacteria/virus. Infection of these spreads disaster. These disasters spread more in the slums of the cities and toli of the villages. The management of these disasters has already been discussed in detail in the last chapter.

Kala-azar and high fever are almost similar types of disasters. In case of Kala-azar and high fever, the patient experiences too much of shivering. In the environment of unhealthy food and contaminated water these two diseases spread quite rapidly. In case of Kala-azar the effect of high fever remains for long time. It develops through poisonous bacteria. Its basic cause is also the intake of unhealthy food. In this fever the brain of the patient is also affected. In high fever also almost same condition prevails. Normal high fever is the result of such infection which can be controlled after initial treatment

but in case of Kala-azar, the treatment is only possible in big hospitals because its treatment takes longer period of time and hospitalisation of the patient is essential. The mental management of the patient and family members is more essential than the management of transport facility for the transportation of the patient from home to health center and arrangement of money. In this situation, the arrangement of treatment is more important than the nervousness. The disaster can become tragedy if a little human error occurs in its treatment.

(B) Large Scale disasters:

Under large scale disaster transport related accidents, fire, communal riots and terrorist attacks can be included.

Transport related accidents are a big problem for the country like India. Road and rail accidents frequently occur. If you read news paper then you will find that news related to these accidents appear daily. These days air transport related accidents have also become frequent.

(a) Road accidents and Management:

In the disasters associated with road ways, if any Bus accident occurs then people die and get injured in large number. These accidents, at times, take the form of destructive disaster in mountainous regions. In most of the cities and to some extent in villages also we find that normally people, while trying to cross the roads in a hurry, fell victim to accidents. At times, this hurry



Fig. 12.1 Road accident: Result of human error

becomes the cause of their death. The place where the Bus accident has occurred, it is not essential that administrative management is there. In this situation villagers from nearby villages work together to overcome the challenge. They not only administer first aid to the injured but also arrange for them clean water and food. If needed, they collect money through donation from each other and provide financial help to disaster affected people. Accidents that occurs while crossing the road is the outcome of personal mistake.

Students, do you know that you never cross road from everywhere. In the cities roads must be crossed at only those places where there is Zebra crossing.

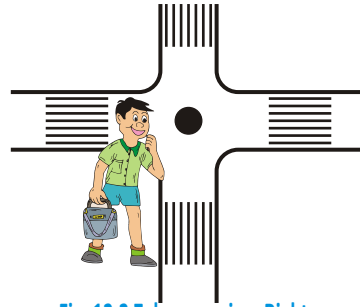
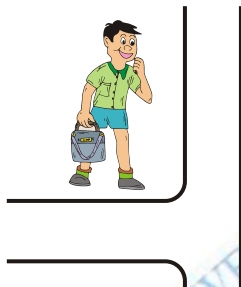


Fig. 12.2 Zebra crossing: Right way of crossing the roads

In the crowded cities, at number of places, surface foot paths or subsurface foot paths are built. If you have gone to Delhi then you might have seen number of routes. At crowded places foot over bridges have been built, you must walk on these bridges. In Villages and rural areas, these facilities are not available for crossing the roads. There, you should only cross the road when you are sure that there is no vehicle coming either from left or from right.



Students do you know that – whenever you walk on the side of the road, always keep to your left. This will save you from disaster and you will escape from accident.

Fig. 12.3 To walk to the left of the road: Right method



Fig. 12.4 A massive train accident due to human error.

(a) Rail accidents and Management:

There are different types of accidents associated with railways. Never carry combustible materials like – Gas, petrol, oil, diesel and crackers etc. during train journey. If due to some human error, a spark of fire from cigarette and bidi comes in contact with these combustible materials then there is every possibility of fire in the train. At times, anti social elements also set trains on fire in resentment.

In the railway related accidents almost 50% accidents occur on the unmanned railway gates. Large scale railway accidents also occur due to mal functioning of the signal, error on part of the driver and mistake of the management (fig.12.4). In India there are about 3700 unmanned railway crossings. From 2001 to 2006, 27.39% of the total accidents occurred on these gates. Railway gates are those places, where roads and rail routes cut across each other or cross each other and move forward. In absence of a gateman, the rail and road transport remain totally ignorant about each other's arrival and they collide with each other frequently and cause huge tragedy. For its management, it is essential to appraise common people about the necessary rules of crossing the railway gates. When two roads meet each other then gateman is not required because on every road crossing there are several precautionary indications. In big cities there are electronic signal indicators. But in Railways, in absence of gateman, accidents do occur.



Fig.12.5 Railway Crossing

Following preventive measures are essential to prevent accidents on railway crossings:-

- (1) Whenever any railway crossing is approached, before crossing it, the driver himself or his helper must go to railway line and ensure that no engine, train or trolley is arriving; if not, only then railway line should be crossed carefully.
- (2) Gate lamps are installed on the railway crossings which are manned. During night time if the gate lamp shows red light then it means that the gate is closed. If it shows white light then it means that gates are open. During day time whether the gates are open or closed it can very easily be detected.
- (3) If someone tries to cross the gates which are manned even when the gates are closed, then the offender can be sentenced for three year imprisonment.
- (4) In villages and towns, there are schools which are situated near the railway line. The teachers should give full knowledge of the rules to the students of crossing the railway line.

(c) Airways accidents and Management:

Airways are an important means of transportation. The airways travel consumes very less time. The flying of the aircraft depends on several factors; these factors also become cause for accidents. Like –

- (1) **Weather** – If there is fog in the area where aircraft is to land then landing becomes very difficult and possibility of accident is always there. The sudden death of great Indian scientist Homi Jahangir Bhabha was due to similar type of air crash.
- (2) **Technical problems** – Due to some technical snag in the aircraft, there is possibility of blast which takes the form of huge disaster.
- (3) Cigarettes or combustible items must not be kept in the aircraft. Their use should also be prohibited. If this rule is not followed then possibilities of accidents is always there.

- (4) **Storm** – Storms create hindrance in the flying of the aircraft because it can cause accidents.
- (5) **High jacking** – The aircrafts are high jacked by the terrorists to get their demands fulfilled. This causes the situation of extreme mental stress for the passengers. On number of occasions the high jacked aircraft is set on fire after de boarding the passengers.
- (6) **Bomb attack** – Accidents occur if the aircraft is attacked by the bomb which takes the lives of number of people. The Air India aircraft Kanishka was blown by bomb attack in the air when it was coming from Canada to India.

While travelling through air, it is essential to follow certain safety rules. Therefore, it is essential:-

- (1) The passengers should read the safety related rules carefully and follow them.
- (2) While sitting on the seat keep the seat belts fastened and follow the signals.
- (3) Get prior information about emergency gate.
- (4) The passengers should be scrutinised strictly.
- (5) The baggage of the passengers should be checked with the help of modern electronic gadgets before boarding it in to the aircraft. Despite the precautions before the take off of the aircraft, in case the aircraft meets an accident then immediate relief and safety work is essential. In figure 12.6 a picture of this type of relief work can be seen.



Fig.12.6 A scene of relief and safety work after the crash of the aircraft.

INFORMATION OF DISASTER MANAGEMENT AT SCHOOL LEVEL

All students come to school by bus or they walk to the school through road. Therefore, it is essential for students to be apprised of the possible road accidents and safety measures to be adopted at school level. The schools should have one such period in their routine, that gives opportunity to students to learn about disaster management. In this period teachers should give following information to the students :

1. Always keep to your left on the road.
2. If you want to cross the road then cross from the zebra crossing and that too only when green signal is on.
3. There are speed breakers on the roads, the drivers must be informed in advance about slowing down the speed while crossing it.
4. The models of transport and related accident should be exhibited in the schools and students should be encouraged to make such types of models.
5. The bus drivers of the school should be trained and they should always caution students that while boarding and getting down from the bus be sure that bus is completely stopped.
6. The student should never put any part of his body outside the window while sitting inside the bus.
7. The bus must have the first aid facilities and driver should have general knowledge of it.
8. The school should have first aid facility e.g. cuts and rashes while playing must be administered with medicine immediately before sending the students to the doctor.
9. The students should be informed in the school that in case of burning cold water should be put on it immediately and if ice is available then ice pieces should also be kept on the burnt wounds.
10. The children should be informed that in case of burning it should be covered with blanket.



Fig.12.7 A scene of forest fire

DISASTER DUE TO FIRE

Among the human induced disasters, disaster caused by fire is very significant. Fire caused by human error inflicts heavy loss to life and property. It is also seen that the disaster caused by fire causes more death than the deaths caused by cyclone, earthquake and floods together.

CAUSES OF FIRE

1. **Accidents while cooking food** – The fire occurs while cooking food when nobody is present, mechanical snag in Stove or other food cooking equipments. Massive accident occurs when due to gas leak, during cooking food on gas, the fire breaks out.

Students, do you know, who should immediately be informed through telephone, in case of fire in home or neighbour?

Well, in such situations district control room or fire brigade office should be informed.

Collect phone numbers of both these offices.

2. There is always a possibility of fire from water or food material heating equipments. Particular attention must be given while cooking food on electric heater.
3. When the load of the electricity exceeds the capacity of the electric

wire at homes then the fire breaks out which damages the electric gadgets like fan, bulb, electric press, television etc. Due to weak wiring connection also there can be cases of fire.

4. After smoking Bidi and cigarette or throwing combustible materials in the forest, there is every possibility of fire to break out. The tribal population in the forests of Asia and Africa are faced with this problem every year (fig.12.7).
5. When domestic wastes and other useless items are burnt then there is possibility of rendering damage to nearby houses.
6. The stored items like packing materials, liquids, gases etc. combustible materials in a factory could be very dangerous, therefore it should be stored outside the campus in a safe place.
7. The chemical materials like paints, liquids, gas cylinder should be stored separately.

PREVENTIVE MEASURES TO PREVENT FIRE AT HOME

1. Don't keep highly combustible materials inside the home.
2. Keep fire extinguisher at home and train every member of the house about its operation.
3. Switch off all electrical gadgets before leaving the house.
4. Switch off the gas knob after food is cooked.
5. In case of fire, always remember the exit door.
6. Don't attach many gadgets in a single socket.
7. Don't close entrance door by putting Almirah.
8. Try to Crawl or move on your belly in the houses full of smoke.
9. In case of fire call fire brigade, give clear address of your home.
10. In case of fire through electricity, never use water because if you put water then you may receive electric shocks.
11. Never give match box in the hands of children and don't allow smoking of Bidi – Cigarettes inside the home.

COMMUNAL RIOTS AND TERRORIST ATTACKS

Students, after independence the slogan given by Mahatma Gandhi, “Hindu, Muslim, Sikh, Isai Hum Sab Hain Bhai Bhai” was on the tongue of everybody. The chanting of “Bharat Mata ki Jai” could be heard from Kashmir to kanniyakumari and everybody took a vow to ‘do or die’ under the tri color. The huge number of people sacrificed their lives chanting “Inqalab Jindabad”. But in recent years, number of incidents of communal riots and terrorist activities has increased. Number of people dying in such activities has exceeded the number of deaths in natural disasters.

It is frequently seen in the pages of News Papers that in some parts of India due to communal riots and terrorist activities, innocent people are being killed or injured.

Terrorism is human induced disaster which follows the means of violence to fulfill the political goals. It is politically motivated violence which has only one aim is to throw away the present system. Most of the prominent terrorist organizations of the world, don't work within their political peripheries; they work in more than one area. Al Qaida has become an international terrorist organisation. Their cruelty and staunchness was at their worst when they attacked the world trade center of United States of America on 11th September, 2001 with the help of passenger aircrafts. In this attack hundreds of people lost their life. In India also, there is hardly any day that the terrorist don't show their misdeeds in Jammu and Kashmir. The serial bomb blast in the cities like Bangaluru, Jaipur, Surat and Delhi by the terrorists organisations in 2008 shows their malicious ideas. The Punjab state was also a victim of terrorists in the decade of 1980. On 13th September, 2001 the terrorist attacked Indian Parliament. The most gruesome picture of terrorism was exhibited on 26th November, 2008 when the terrorists attacked several parts of Mumbai in which about 200 people lost their life. Several senior officers sacrificed their lives while fighting with the terrorists. In Fig.12.8 five star hotel Taj with huge amount of smoke coming out from it can be seen. This picture of cruelty is the testimony of terrorists attack on 26th November, 2008.

The terrorists mostly target public places like roads, main market,



Fig.12.8 Terrorist attack on Taj Hotel

public and community places, railway station and bus stands for bomb blast and indiscriminate firing. Rajiv Gandhi and Benazir Bhutto the former Prime Ministers of India and Pakistan, respectively were killed by terrorists.

The violence that emerges from communal riots and terrorist activities disturbs the communal harmony. For unity and progress of India, it is very essential to keep a check on communal riots and terrorism.

PREVENTIVE MEASURES TO CHECK COMMUNAL RIOTS

1. It is essential for the prevention of communal riots that we should not spread rumours and we should not believe them also.
2. The nearest police station should be informed of any rumour.
3. Don't give shelter to the persons involved in communal riots.
4. Constitute peace committees in villages or in mohallas of cities.
5. Through Pamphlets or by arranging meetings on public places, inform the people about the legal consequences of their involvement in the communal riots. In such cases life imprisonment, death sentence and rigorous imprisonment can be imposed.
6. The persons involved in the spread of the communal riots should be

warned that if they are caught then the life of their family will be very miserable and their family members can be an object of communal hatred.

7. The teaching in the schools should be so designed that the students should respect their religion on one hand and on the other they should not hate other religions.

PREVENTIVE MEASURES TO CHECK TERRORIST DISASTER

In the terrorist attacks mainly bombs and grenades are used. To protect ourselves from this, following precautions are essential –

1. If you see a abandon bundle then don't touch it, instead inform the police.
2. Immediately inform the police if you see suitcase, box or bag kept un-cared in any area.
3. If you notice any person with suspected activities then immediately inform the police. If you cannot approach police then inform your teacher or your parent.
4. Identify the person while giving your house to him on rent and inform his full details to the police with his photographs.
5. The government should ensure the boys involved in terrorist network that if they part with violence and start living with the common people then no punishable action will be taken against them instead along with pardon, monetary help for business will be given to them.
6. The students should be informed about problems that emerge from terrorism in their school.
7. Committees should be formed for creating social environment against terrorism in every village and in Mohalla of the cities.

Students, you have seen that due to human error and lack of understanding huge disasters occurs. These disasters disturb the existing communal harmony. India is a country of 121 crore people. Together we can neutralise the communal and terrorist elements and together we can also build a good India.

EXERCISE QUESTIONS

OBJECTIVE TYPE QUESTIONS

1. In how many categories common disasters are categorised?
(a) 1 (b) 2 (c) 3 (d) 4
2. Cause of high fever?
(a) Bacteria (b) Virus (c) Fungus (d) None of these
3. From where should the roads be crossed in cities?
(a) Where there is no zebra crossing (b) Where there is zebra crossing
(c) As per your wish (d) none of these
4. On which side of the road is it deal to walk?
(a) On right (b) In the middle (c) On left (d) as per your wish
5. What are the things that should be kept in mind while travelling by train?
(a) Don't look to your left and right while crossing the railway gate.
(b) Don't carry inflammable materials while travelling by train.
(c) The children should not have knowledge of crossing the railway line.
(d) None of these

SHORT ANSWER TYPE QUESTION

1. Which are the rules of safety that should be kept in mind while travelling by air?
2. What are the things that should be kept in mind while crossing a railway crossing?
3. What important things should be kept in mind while travelling by road?
4. What is the disaster that emerges from fire?
5. Describe any three measures to prevent communal riots?
6. Describe any three measures to prevent terrorist disaster?

LONG ANSWER TYPE QUESTION

1. Give a detailed account of causes of fire and its prevention in the fire induced disaster?
2. What is terrorism? Describe in detail the measures to prevent terrorist disaster?
3. Give detailed account of school level knowledge of disaster management.
4. Give detailed account of causes and ways prevention from small scale disasters.

