

EMERGENCY MEDICINE

A Manual for Training Rural Communities in First Aid



Let us be prepared in emergencies!



IMPACT INDIA FOUNDATION

International Initiative Against Avoidable Disablement
Promoted by the UNDP, UNICEF & WHO in association with the
Government of India

Prepared by **Dr. (Ms.) Sheetal Karande**, MBBS
(Volunteer for Impact's Community Health Initiative, Maharashtra)



February 2007

IMPACT INDIA FOUNDATION is an international initiative against avoidable disablement and is the first, and most successful, of the worldwide network of 18 Foundations, promoted, but not financially supported, by three United Nations agencies: the United Nations Development Programme, UNICEF and the World Health Organisation.

- Impact India is a partnership of the Government, having been formed out of a United Nations General Assembly Resolution; therefore all projects of Impact India Foundation are in joint partnership with the Government, and local organisations. Impact India will do everything possible to ensure that the spirit of this partnership remains.
- Impact acts as a leader catalyst to bring together business houses, Non-Government organisations, the medical profession and the local community in rural health projects.
- Impact India has successfully implemented a range of disability preventive and corrective measures: immunisation against Polio, Diphtheria, Whooping Cough, Tetanus and Measles, Guinea Worm eradication and Malaria Control.
- Impact India is best known for the world's first hospital train, the **Lifeline Express** which runs on a broad gauge railway track.
- To date the train has completed 90 five-week, sponsored projects having medically served 400,000 persons in the remote, rural interiors of India where medical facilities are scarce – all totally free of cost with the 'donated' services of 70,000 Surgeons and medical personnel from all over India and abroad, together with a large number of volunteers.
- At the invitation of the Maharashtra State Government, Impact India has commenced a **Community Health Initiative** (CHI) in the tribal areas of Thane District in Northern Maharashtra (Palghar, Dahanu, Talasari, Jawhar, Mokhada Vikramgad and Wada Blocks) for the dramatic reduction in a number of disabilities affecting a population of over one million persons through curative and preventive measures.
- Our aim is to improve community health, especially neo-natal and maternal care, by providing leadership and catalysing involvement between the Government, Non – Governmental Organisations, the corporate sector and the community itself.
- To ensure sustainability Impact uses the existing Government infrastructure and develops systems, methodologies and monitoring arrangements, replicable in other parts of India and other developing countries.
- The CHI was initiated with the School Health Programme which comprises the Training of Teachers, the School Health Monitor Programme and the deployment of the Lifeline Express Mobile Clinic (Diagnostic Vehicle) for the early identification of disability in school children. Impact has established eight Referral Hospitals and introduced Emergency Medicine Training for rural communities.

February 2007

Table of Contents

Sr. No	Topic	Page no.
1.	Acknowledgements	2
2.	Introduction	3
3.	First aid	4
4.	Bleeding control	5
5.	Shock management	5
6.	Orthopedic injuries/fractures and sprains	6
7.	Head and neck injuries	8
8.	Care of wounds	11
9.	Burns	12
10.	Heat strokes	13
11.	Snake bites	14
12.	Diarrhoea	15
13.	Toxic ingestion	17
14.	Seizures	18
15.	Fever	19
16.	Feasibility training for other communities	20
17.	Conclusion	22

Acknowledgements

The Manual is the result of the collective efforts of Impact India Foundation's staff, associates and friends.

I am grateful to the **State Government of Maharashtra**, Zilla Parishad, Thane and Panchayat Samiti, Palghar, and to **Mrs. Zelma Lazarus**, the CEO of Impact India Foundation, for having provided overall guidance in the preparation of this Manual.

This manual would not have been possible without the initial research and draft manual compiled by **Dr. Christine Zink** of the New York Presbyterian Hospital and **Dr. Mark Foran** of Johns Hopkins University, USA.

I wish to acknowledge the support given by **Mr. Sanjiv Chatrath**, Deputy General Manager, Community Health Initiative - Group I, and am particularly thankful to **Mr. George Rodrigues**, Project Coordinator, Community Health Initiative, who accompanied me on field trips to research the applicability of the manual, identify appropriate target groups and helped in organising training sessions.

My thanks go to **Mrs. Neelam Kshirsagar**, Impact's Deputy General Manager - Special Projects for her editorial assistance and **Ms. Amruta Godbole**, Project Officer, for her design and editorial inputs.



EMERGENCY MEDICINE TRAINING FOR RURAL COMMUNITIES

INTRODUCTION

Based on the guidelines drafted by Dr. Christine Zink of the New York Presbyterian Hospital, USA during her visit to the Community Health Initiative (CHI) in Palghar, Maharashtra, I started my pilot training in August 2006. Dr. Christine has rightly mentioned that different target groups should be given different levels of training depending on their previous understanding and exposure in handling any emergencies. For instance, an Auxiliary Nurse Midwife* (ANM) conducts deliveries and is very close to medical practice in her day to day work. Hence ANMs are ideally suited to be trained to handle certain difficult methods while managing emergencies, (for example, Cardiac Pulmonary Resuscitation (CPR)/Rescue Breathing etc.).

Meetings with different target groups before the training sessions

Before commencing the training I visited a few Anganwadis*¹ to understand how they work and the kind of emergencies they face on a daily basis. I was told that the Anganwadi Workers (AWWs) were trained earlier on Disaster Management Preparedness by the Aniruddha Bapu Disaster Management (ADM) Preparedness Centre, Mahim, organised by the local Government. On asking about the details of the training, the AWWs said they did not remember what was taught and were not given any hand-outs for reference. I was accompanied by Mr. George Rodrigues (Project Coordinator, CHI) whose knowledge of different village communities and contacts with local governing bodies made my visits smooth and easy.

I also met Medical Officers (MOs) to get a clear idea about the kind of emergencies they come across and included their suggestions on the topics to be covered for training. Accordingly, I finalized the topics for training. (Refer Pg. 20 & 21 of the report).

The target groups were evaluated on certain criteria like intellectual level, their role in the community, availability in the village and geographical location.

*ANMs can provide basic nursing and midwifery care in a limited scope and responsibilities, *¹Government Crèche

TRAINING SESSIONS

Anganwadi Workers:

The first group I selected was that of the newly recruited Anganwadi Workers (AWWs). AWWs provide services for immunisation, health check ups, informal pre-school and nutrition education, supplementary nutrition and referral services. I trained 80 Anganwadi Workers in 4 training sessions, each session for one and a half hours consisting 20 AWWs. I demonstrated emergency handling methods (as detailed in the following pages) which were practiced by the trainees. The success of the first training inspired the Child Development Programme Officer (CDPO) to hold more training sessions for the AWWs.

I. FIRST AID

1. What is first aid?

First aid is the care administered by a person immediately after an accident or illness. Any aid that can be given at the moment is first aid.

Objectives of first aid,

- To save affected peoples' lives
- To reduce the impact of injuries or to prevent further, deterioration
- To relieve pain

2. Who can administer first aid?

One does not need a special degree or qualification to administer first aid. Any individual can learn how to administer first aid. You only require some training, self confidence and a desire to help others.

II. BLEEDING CONTROL

1. How do I stop heavy/serious bleeding?

- 1) Locate points of bleeding; start with the most serious bleeding point.
- 2) Elevate the injured part to try to slow the bleeding.
- 3) With a thick cloth, (if absolutely necessary you may use your hand), apply direct pressure just above the bleeding wound and hold pressure until the part stops bleeding. You may have to apply pressure for 15 minutes and sometimes even an hour.
- 4) Apply ice to the surrounding area.

NOTE: If a foreign object is found in a bleeding wound, DO NOT remove the object; removal could cause further injury.

III. SHOCK MANAGEMENT

1. What is a shock?

Shock results from insufficient blood supply to all cells in the body. Shock can be caused by uncontrolled bleeding, severe infection, dehydration, a large burn, heart failure and a severe allergic reaction. Sometimes shock can become fatal in the short-term and can lead to long-term vital organ damage.

2. Symptoms of shock

- Breathing: fast or irregular
- Mental and emotional state: confused, faint, depressed, fearful, drowsy
- Skin: cold, pale, tender and sticky wet
- Digestion: feeling thirsty
- Pulse: fast but weak

3. Treatment for shock

- Make the patient lie down with his/her legs higher than the head.
 - Do not elevate the legs if the patient has a broken leg, severe head, neck or back injury, or, if raising the legs causes severe pain.
- Cover the body with a blanket or sheet to try to maintain normal body temperature.
- Control any causes for bleeding.
- If the patient is conscious and able to drink then try to give him/her sips of water.
 - If you suspect dehydration then try to give the patient lots of fluids.
- Splint any fractures and bandage any wounds.
- Give pain relieving medicine if the patient complains of pain, but DO NOT give a sedative.
- Arrange for professional help immediately.
- Keep the patient calm and try to reassure him/her.
- Do not allow the patient to sleep. Talk to the patient to prevent him/her going into coma.

NOTE: Do not feed liquids or solids through the mouth to any unconscious person.

IV. ORTHOPAEDIC INJURIES/FRACTURES AND SPRAINS

Fractures occur commonly due to car or train accidents and, falls from heights. Improper treatment of fractures can lead to serious injury of the blood vessels and nerves around a bone and can permanently disable an individual. When you suspect a fracture the most important thing you can do is keep the bone in a fixed position to prevent further disability.

1. Symptoms and indicators of fractures and/or sprains

- Pain
- Swelling
- Bruising

- Observe dip or mound near fractured spot
- Difficulty in movement
- Change in size or position of body parts
- Patient may have heard a crack or pop during injury

2. How should I treat a fracture?

Before moving a patient with a fracture to the hospital, support and stabilise the broken bone. This is necessary so as to minimise the risk of permanent disability to the bone, blood vessels and nerves.

- a) Collect supplies for splinting the fractured bone. Supplies may include cardboard, books, folded newspapers, tree twigs, blankets, sheets, pillow, any straight object to specifically ensure that there is no further injury to the patient (by the use of the supporting items!)
- b) Create an appropriately sized splint that will support the fractured bone. Ensure that the joints above and below the fracture are immobilised.
- c) Enlist help from someone else who will support the fracture while you splint it. Ensure that the assistant supports the parts above and below the fracture.
- d) Place the splint around the fractured bone.
- e) Secure the splint in place by wrapping it in bandages or cloth. Tighten the bandages to securely immobilise the fracture, but not so tight that circulation is stopped.
- f) Use rope, thread or tape to tie the loose ends of the splint firmly in place.
- g) Keep the patient in a comfortable position, but restrict movement of the fractured part. If necessary tie up the setting against the body.
- h) Calmly transport the patient to the hospital for evaluation and for cast placement.

If you suspect a neck or back fracture, the head and neck should be moved as little as possible, and the patient should be transported to the hospital very carefully to avoid permanent paralysis.

3. How do I treat a sprain?

It can be difficult to differentiate a sprain from a fracture, so if you suspect a fracture treat the injury as such.

If you suspect a sprain follow the '**RICES**' protocol for treatment.

- **Rest** – rest the injured extremity.
- **Ice** – ice the injured joint to reduce pain and swelling. Do not apply ice directly onto the skin, but wrap it in a cloth. Apply the ice soon after the injury for at least 20 minutes.
- **Compression** – apply a compression dressing to support the injury and help reduce swelling. Apply padding (a sock) around the joint and then wrap the injury with a bandage so that it is comfortably tight.
 - Check peripheral pulses after wrapping the injury to ensure adequate perfusion of the limb. If you do not detect a peripheral pulse then the bandage should be loosened.
- **Elevate** – elevate the affected extremity so that the limb is above the heart. This will also help reduce swelling and pain in the joint.
- **Stabilise** – stabilise the joint with a splint. Splinting the injury is done in the same manner as for a fracture.

V. HEAD AND NECK INJURIES

Head and neck injuries following an accident or fall can be a very serious and common cause of disability in the community. To prevent further disability the head and neck of the injured patient should be moved as little as possible. If the neck/spine is handled improperly following the injury the patient could suffer permanent paralysis.

1. How do I immobilise the neck and spine?

- (a) Upon contact with the patient, align the head in the neutral position. It does not matter if the patient is sitting or is lying face up or face down.
- (b) To immobilise the neck, situate both hands, at about the level of the ears, on each side of the patient's head with the fingers pointing toward the patient's body.
- (c) Splay the fingers around the neck, shoulders and face so that when the patient is moved the neck will stay in a straight line with the back.
- (d) Do not tilt the head in any direction.
- (e) When the patient is rolled or moved, keep the head straight in line with the back so that further injury to the spine does not occur.
- (f) After taking control of the head, you should not let go until the patient has reached the hospital. Any movement of the head can cause extensive injury.
- (g) Enlist help from others to assess other injuries and to manage them appropriately.
- (h) When moving the patient, the person holding the head should always be the leader and should direct when to move and when to stop moving the patient.

If you are unsure whether a patient has suffered a head and/or neck injury you should look for symptoms that suggest an injury. Symptoms may include;

- Headache
- Nausea
- Confusion and/or amnesia of the event
- Deformity of the skull associated with bleeding
- Blood or clear liquid draining from nose or ears
- Bruising around eyes or ears
- Brief loss of consciousness for 1-2 minutes; indicates possible concussion (bruise on the brain).
- Prolonged loss of consciousness for greater than 5-10 minutes; indicates a serious head injury.

2. How do I treat a head injury?

- a. Inspect for evidence of cuts or bleeding and apply pressure as needed.
- b. Situate the patient so that his/her head sits erect to reduce bleeding and cerebral oedema
- c. Immobilise the cervical spine to prevent further injury.
- d. Assess the patient's mental status by asking questions regarding identity, place and time. If the patient answers questions appropriately it is an indication of less serious head injury.
- e. Every hour reassess the patient's mental status. If the patient becomes confused then he/she needs to be taken to the hospital immediately.
- f. If the patient suffers from a brief loss of consciousness (1-2 minutes) then he/she needs to be observed for several hours and transportation to the hospital should be arranged, although not necessarily urgently.
- g. If the patient suffers from a prolonged loss of consciousness (5-10 minutes) then he/she needs to be transported to a hospital immediately.
- h. During transportation ensure stability of the cervical spine/neck.
- i. Monitor for seizure activity and place the patient in a safe environment to protect against injury during a seizure.
- j. If the patient maintains a normal mental status for several hours, assess for neck and spine tenderness, keep the neck immobilised and transport the patient to the hospital.
- k. If the patient complains of neck and /or spinal tenderness, keep the neck immobilised and transport to the hospital.
- l. If the patient does not complain of any tenderness and his/her mental status remains intact then immobilisation of neck can be discontinued.

VI. CARE OF WOUNDS

Care of wounds is aimed at decreasing infection and promotion of healing of an injury. The best ways to accomplish these goals are to ensure that wounds are properly CLEANED and DRESSED.

For small wounds, cuts and scrapes perform the following steps to ensure proper wound management.

- (a) Wash your hands with soap and clean water before touching the wound; try to use universal precautions especially when exposed to body fluids when handling the wound.
- (b) Gently wash the wound with clean water; also use soap if the wound is very dirty. Ensure that all dirt is removed; look under any flaps of skin. Any dirt left in the wound can cause infection.
 - Creating a pressurised spray bottle will clean the wound more effectively. To create a pressurised cleaning solution, create a small hole in the bottom of a bottle of water and squeeze the water out of the bottle through the small hole.
- (c) Place a light piece of clean gauze or cloth over the top of the wound and lightly secure the dressing with tape. DO NOT completely seal the dressing. Allowing some air to get to the wound will promote healing.

NOTE: It is better to have no bandage at all than to have one that is dirty or wet. If sterile gauze pads are not available then a cloth that has been washed and dried in the sun in a clean environment should be used.

- (d) Change the dressing once a day; while changing the dressing examine for any signs of infection.

NOTE: Never apply pastes or liquids to the wound as this may lead to infection and/or may damage healthy skin around the wound that is needed for proper healing. Do not use undiluted Savlon or Dettol or H₂O₂ (Hydrogen Peroxide)

VII. BURNS

Boiling water, steam, hot oil, fire, hot metal, the sun, electric current, lightning, chemicals, acid, or mineral salts can cause burns. Burns are classified into three types based on the depth of skin damage. The treatment for each type of burn varies. Most important it is necessary to keep burns very clean and to treat the patients with lots of fluids to replace what is lost from oozing burns.

Before assessing and treating any burn first STOP THE BURNING. This may require removal of entire clothing. If an individual's clothes catch fire, wrap him/her in a blanket or similar cloth and make him/her lie down on the ground and roll to put out the fire. If your own clothes catch fire, lie down on the floor and roll.

NOTE: Never put grease, ink, butter (ghee), oil, fat, herbs or faeces on a burn.

NOTE: Covering a burn with pure honey may help prevent infection and speed healing. If honey is used on the burn ensure that the old honey is cleaned off and replaced each day. One can also use potato peels and banana leaves.

Other treatments;

- Patients with extensive burn injuries will lose a lot of fluid from the burn; therefore, it is necessary to rehydrate the patient. Patients should be encouraged to drink a rehydration solution, 4 litres per day for a severe burn and 10 litres a day for a very severe burn.
 - Rehydration Solution – in 1 litre of boiled, cooled water mix ½ teaspoon of salt, ½ teaspoon of bicarbonate of soda and 2-3 tablespoons of sugar or honey.
- Avoid the patient catching a chill; cover the patient with a blanket if the burns are extensive.
- Patients who have extensive burns around fingers and other joints need to have gauze pads with Vaseline placed between the joints, to prevent the connection of the new skin with the other joint. The joints also need to be straightened daily to prevent stiffness, which limits movement, from setting in.

VIII. HEAT STROKES

Heat illnesses range from muscle cramps to heat stroke. Heat stroke is uncommon, but can be life threatening. Individuals who are dehydrated, obese, elderly, fatigued, and with a fever or working in an environment warmer than 35 degrees Celsius, are at the greatest risk of suffering from heat stroke. If untreated, the mortality rate of heat stroke approaches 80 percent.

1. Heat Cramps

Some people who work hard and are sweating a lot in the hot sun develop muscle cramps. The cramps may be due to too little salt intake. Salt is lost when a person sweats.

Treatment:

- Administer clean water supplemented with salt (1 teaspoon of salt mixed in 1 litre of clean water).
- Make the patient rest in a cooler environment.
- Massage the painful areas.

2. Heat Stroke

Heat stroke is the end stage of heat exhaustion and is usually present with mental status changes. You will also see the following symptoms:

- Rapid pulse
- Rapid breathing
- Red, hot, dry skin
- Confusion
- Bizarre behavior
- Seizures
- Lack of sweating

Heat stroke requires immediate cooling.

Treatment:

- Cool the patient rapidly by applying ice packs to the neck, axilla (near shoulders) and groin and immersion in cool water if possible.
- Administer boiled and cooled water supplemented with salt (1 teaspoon of salt mixed in 1 litre of clean water). Remember: do not give oral rehydration if the patient is vomiting, has an altered mental status or is unconscious.
- Monitor the patient for seizures and ensure patient safety during a seizure.
- Transfer to a hospital as soon as possible.

IX. SNAKE BITES

Not all snakes are poisonous. The cobra is the most common poisonous snake encountered in Maharashtra.

After a snake bite, carry out the following;

- a) Console the patient and make him lie down in comfort; avoid panic.
- b) Keep the bitten extremity at or below heart level and do not move. The more the patient moves, the faster the venom will distribute through the body.
- c) Wash the bite area with plenty of water.
- d) Apply a pressure dressing directly over the bite site and wrap the area with a wide occlusive bandage or cloth to prevent venous and lymphatic flow. Do not tie the binding so tight that arterial flow is occluded. Check extremity pulses and ensure they are present; otherwise loosen the bandage.
- e) To restrict any movement, splint the affected extremity as if there is a fracture.
- f) Carry the patient to a doctor immediately.

There are misconceptions regarding treatment of snake bites. The following treatments should not be performed as they do not help and may even be more harmful.

DO NOT:

- Cut the flesh or skin around the bite
- Tie a tourniquet near the bite
- Put ice on the bite
- Shock the patient with electricity
- Suck the venom or blood out of the bite

X. DIARRHOEA

1) How do I treat diarrhoea and dehydration?

Fluid replacement is the basis of treatment for diarrhoea. Patients need to drink enough fluids to replace all fluids lost. Usually no medicines are needed to treat diarrhoea and the symptoms resolve on their own within a few days if you give the patient rehydration therapy (see X. 2 on Pg. 16) and food.

- The first step in treatment is to prevent dehydration. As soon as the symptoms begin the patient should start rehydration therapy. Even if the patient does not want to drink insist that he/she does.
- The patient may take small sips every few minutes. Continue to encourage rehydration therapy even if the patient is vomiting because the patient will not vomit all of the replaced fluid.
- The patient should continue eating food even if he/she can consume very little at a time. If the patient can only eat small amounts at a time then feed him/her more often.
- Diarrhoea directs food to pass through the gut more quickly and leads to malnutrition. Therefore, it is important to feed the patient more often. An infant should continue breastfeeding.

2) What is rehydration therapy?

Rehydration therapy is treatment with any fluid that contains water and salts. Water alone is not an adequate solution to replenish the salts that are also lost in diarrhoea. Rehydration packets are available for use in some areas; however, rehydration solution can be made at home. The following is a list of home-made rehydration therapy options. Patients may also be treated with fruit juices, tea and soups.

Home-made rehydration therapy

- Method 1: In 1 Litre of clean, boiled and cooled water mix $\frac{1}{2}$ teaspoon salt plus 8 teaspoons of sugar or honey.
- Method 2: In 1 Litre of clean, boiled and cooled water mix $\frac{1}{2}$ teaspoon salt plus 8 teaspoons of powdered cereal or powdered rice.
- Method 3: 1 Cup of fruit juice plus 3 Cups of boiled and cooled water plus $\frac{1}{2}$ teaspoon of salt.
- Method 4: In 1 Litre of clean, boiled and cooled water mix a WHO oral rehydration solution packet.

Give the patient sips of the rehydration solution every 5 minutes. An adult needs at least 3 litres per day and a child needs at least 1 litre per day normally.

3) When should the patient seek medical attention at the Primary Health Centre (PHC)?

Patients should go to the PHC/hospital for further treatment with antibiotics if

- The Diarrhoea does not stop within 4 days.
- The patient shows signs of dehydration and is not improving.
- If the patient vomits everything he/she drinks or drinks nothing or, if frequent vomiting continues for 3 hours following initiation of rehydration therapy.
- If the patient has convulsions.
- If the patient was sick and/or malnourished before the Diarrhoea began.
- If there is blood in the stool.

XI. TOXIC INGESTION

Ingestion or inhalation of toxic substances can damage internal organs and cause severe internal burns. Children commonly swallow toxic substances that are left unattended by adults; therefore, all poisons should be kept out of reach of children. The following is a list, of possible poisons you may encounter;

- Kerosene, petrol or gasoline
- Pesticides
- Rat poison
- Acid
- Lye
- Bleach
- Rubbing or wood alcohol
- Poisonous leaves, berries or mushrooms
- Nails and stones

1) What should I do if someone ingests a poisonous substance?

- (a) Determine whether the patient is conscious or unconscious. Also, try to identify which substance was swallowed. This is important because different toxic ingestions are treated differently.
- (b) If the patient is conscious try to induce vomiting. Vomiting can be induced by sticking your finger down the patient's throat, giving the patient syrup of ipecac, or by forcing the patient to drink a glass of water with mild soap in it.
- (c) If available, give the patient activated charcoal. Universal Antidote: Milk of Magnesia + burnt bread + strong black tea
- (d) If the patient is conscious and has ingested kerosene, acid or lye give him/her plenty of water or milk to dilute the corrosive substance.

CAUTION: If the patient is unconscious or has swallowed kerosene, acid or lye DO NOT induce vomiting as this may lead to further change

- (e) If the patient is unconscious seek medical help immediately.
- (f) After treatment, if you suspect that the poisoning is severe, seek medical help immediately.

XII. SEIZURES

Seizures or convulsions or fits may occur for several different reasons. Some individuals may have an illness called epilepsy, which is hereditary and causes healthy individuals to have seizures. However, some seizures may be caused by illnesses such as,

- High fever
- Severe dehydration
- Meningitis (Swelling of meninges)
- Malaria of the brain
- Poisoning

During a seizure, the patient loses his/her consciousness and makes strange, jerking movements. These jerking movements can harm the patient if he/she is in a dangerous place. Therefore, it is important to protect the patient when he/she is having a seizure. It is common for the patient to bite his/her tongue during a seizure and/or lose control of his/her bladder and/or bowels.

1) What should I do when a person is having a seizure?

- a) Try to keep the patient from hurting himself/herself by removing all hard and sharp objects from the area.
- b) DO NOT put anything in the patient's mouth to prevent biting of the tongue and do not try to feed the patient any food, drink or medicine.
- c) Try to identify the reason for the fit.
 - If the patient has a high fever then try to lower the body temperature immediately with cool water.
 - If the patient is dehydrated slowly give an enema of rehydration therapy. DO NOT give anything by mouth.
 - If you suspect meningitis or cerebral malaria seek medical help immediately.
- d) Let the person sleep after the seizure if he/she remains dull and/or confused.
- e) If the seizure lasts a long time (more than 5 minutes), seek medical help immediately.

Most seizures will stop after about a minute, but it is important to identify the reason for the seizure by following up with the doctor.

XIII. FEVER

A person has a fever when his/her body temperature is above 98.5 degrees Celsius. Fevers can be caused by different illnesses and most commonly infectious diseases. It is important to bring the patient's body temperature down and to treat the cause of the fever to prevent long-term negatives effects. Very high fevers can cause seizures or even permanent brain damage.

1) How should I treat a patient with fever?

- a) Uncover the patient. Children should be left completely naked until the fever comes down. Never wrap a person with a fever in blankets.
- b) Put the patient in an area where he/she will have a cool breeze. The cool breeze will help bring the fever down and will not be harmful to the patient.
- c) For a very high fever, you may pour cool water (NOT COLD) over the patient or apply a cloth soaked in cool water on his/ her chest and/or forehead.
- d) The patient should drink lots of cool, clean water and juices. Remember that the water should be disinfected either with tablets or by boiling for 10 minutes and then cooling.
- e) Administer paracetamol to help bring the fever down.
- f) The cause of the fever should be identified and should be treated properly by an appropriate health care provider.

FEASIBILITY OF TRAINING OTHER RURAL COMMUNITY GROUPS

- **Bhagats (traditional healers) Anganwadi Helpers and Self Help Groups (SHGs)** — I met these target groups along with George and Dr. Anjali Pant from Johns Hopkins, USA who was on a visit to Palghar in the month of November, 2006.

- **Bhagats**

Bhagats (Traditional Healers) are the closest link to the community in health related matters and therefore ideally positioned for training. But there are practical problems in training this target group. Firstly, the majority of Bhagats are old (in the age group of 65-85 years) and being very rigid about their treatment strategies are not keen on learning new methods. (On the other hand, a few middle aged Bhagats were more willing to get trained). Secondly, Bhagats reside in very remote places and to organise them for training is a very difficult task. Coordinating with them to attend the training at a convenient venue is time consuming. Additionally, there is no governing body which authorises Bhagats to attend a training. Finally, some recent feedback from a few tribals suggested that fewer people are now seeking treatment from Bhagats.

- **Anganwadi Helpers**

The Anganwadi Helper (AH) assists the AWWs in the Anganwadi Centres (AWCs). Since AHs are governed by the ICDS, they can be organised for training in a short time. Training was held in consultation with the authorities, but met with poor response. There were not more than 7-10 helpers were present.

- **Pada Workers**

Pada Workers have a contract of only 5 months during the monsoon and they have to reapply every year to be hired on a new contract.

We had requested the Extension Officer (Health) to arrange a training session for Pada workers on the day they were paid their salary so that they

would be readily available as a group. Because of some administrative problems the response for the training was not very encouraging as only 8 Pada workers were present.

- **Self Help Groups**

After meeting the SHGs, I understood that they are not suitable for training in the long term as it is not sustainable. Some of the SHG members told us that the groups start well but, within 2-3 months most of the members back out and stop attending meetings. This results in the dissolution of the groups and the purpose of making women financially independent is defeated.

The SHGs were willing to be trained for handling emergencies, only after the harvesting season. Clearly, they have their own priorities and are busy struggling for survival.

CONCLUSION

After conducting a pilot training for the Anganwadi workers, I came to the following conclusions:

- We have to motivate people to understand the importance of training for handling emergencies.
- I discovered that ANMs are trained in aspects of Emergency Medicine once a year as part of the Government refresher training schedule. Hence I did not train them. I learnt that ANMs do not stay in the villages where they work and may not be available at the time of emergencies.
- Target groups like Bhagats and Self Help Groups, who are not under the control of any governing body, need to be encouraged and organised with great patience. The attendance of these groups is likely to be poor and therefore, covering a large area of population is very slow.
- CPR/Rescue breathing, being the hallmark of Emergency Medicine training, should be included in the training using Dummies/Mannequins and trained assistants. Aniruddha Bapu Disaster Management Preparedness Centre, Mahim, can conduct training for volunteers from the village community in CPR/Rescue breathing on Sundays or on weekdays between 6 and 9 pm. Government employees are unable to attend these sessions as it is beyond their working hours.
- Training sessions can also be incorporated during the Teacher Training sessions of the School Health Programme*.
- Since Anganwadi workers meet every month, the topics for training could be revised at least once in 6 months.
- Training different target groups without sustained follow up will lose its utility and purpose.
- An active and educated group within the community should be trained to carry out training for the other village community groups.
- After the training a hand-out should be given to the trained group written in the local language, so that they can refer to it at a later date.
- The Emergency Medicine Training should be institutionalised to maintain sustainability if taught to high school children as part of their curriculum. If ANMs, AWWs, AHs and Pada Workers are trained at regular intervals (every 6 months) by the Government then the programme can prove to be very effective in ensuring timely First Aid.

*For details refer IIF's School Health Manual

GLOSSARY

ANMs: Auxiliary Nurse Midwives

Anganwadi: Government Crèche

Bhagat: Local Traditional / Alternative Medicine Practitioner

CEO: Chief Executive Officer

CHI: Community Health Initiative

IIF: Impact India Foundation

Pada: Hamlet

PHC: Primary Health Centre

Z.P: Zilla Parishad – District Office

ICDS: Integrated Child Development Scheme

AWW: Anganwadi Workers

AH: Anganwadi Helpers

SHG: Self Help Groups

ADM: Aniruddha Bapu Disaster Management

CPR: Cardiac Pulmonary Resuscitation

CDPO: Child Development Programme Officer

MO: Medical Officer



IMPACT INDIA FOUNDATION

P.O. Box Number 468, G.P.O., Mumbai 400 001, India

Nhava House, 65 Maharshi Karve Road, Mumbai 400 002, India

Tel: (91 22) 66339605/06/07 Fax: (91 22) 2201 0594

E-Mail: impactindia@mtnl.net.in/ Web: www.impactindia.org

**An International Initiative Against Avoidable Disablement
Promoted by the UNDP, UNICEF & WHO in association with the Government of India**