Towards Anytime Aid or Emergency Services

Reckoner

Part 3

Preparedness to protect or preserve life?

Signs of Medical condition?

First Aid or Emergency Services?

Incidence?

Location?

Readiness and Mitigation

A First Aid Reckoner

Key considerations

When it comes to anytime emergency services or **non-structural mitigation** for disaster mitigation and management, there are different norms and guidelines that need to be followed for aspects like

(1) Planning of first-aid

(2) Availing of mobile healthcare units (depending upon need)

(3) Building awareness of the need for public education and protecting of rights of afflicted people in disaster scenarios

(4) Designing of a health-education plan to counsel, advise and offer relief to the afflicted people in disaster scenarios

Key considerations for First-aid (Basic Edition)

By,
K.S.Venkatram
AOEC & SSHGIEC, 2016-2018

Key considerations

What is First-Aid?

Measures to be taken immediately after an incidence or accident not with the idea to cure, or to replace services offered by the medical community but to prevent further harm from happening.

Main objectives of First-Aid

(1) Protect and preserve life
(2) Prevent afflicted person's condition from worsening
(3) Promote well-being and recovery

Goals of First-Aid

(1) The immediate priority being to restore and maintain the vital functions of the person via certain steps for basic life support

(a) Ensuring the AIRWAY is open so that the person's body gets a proper supply of oxygen

Key considerations

(b) Enabling and ensuring BREATHING so that oxygen passes through lungs into the blood stream

(c) Helping and ensuring CIRCULATION where there must be circulation of blood to all parts of the body, so that there is sufficient supply of blood and oxygen

Simple 5 step Action Plan

It is necessary to check if the person has any life-threatening conditions, where the plan of action includes the following steps:

(a) Check for further DANGER at location or spot, if so, then move the afflicted or injured person away carefully

(b) Check for RESPONSE, shake gently, if conscious check for injuries

(c) Check AIRWAYs to see if they are blocked, clear any loose material in mouth

(d) Check for BREATHING by looking for chest rise and fall, or by listening to breathing sounds, or by feeling breath on cheeks or hand.

Key considerations

If there is no breathing, roll person on back with face upwards. Tilt head. Loosen and separate jaws to open airway. Give mouth to mouth resuscitation.

If there is breathing, place person in stable position (sometimes a stable side position is preferred) and check for injuries.

(e) Check CIRCULATION, feel pulse in groove beside Adam's apple.

If there is a pulse, if needed perform mouth to mouth breathing
For children: 20 breaths per minute by puffing and blowing gently
For adults: 12 to 15 breaths per minute by blowing fully

If there is no pulse, perform Cardio Pulmonary Resuscitation (CPR). As this needs skill and training, ensure one who is trained does this. The organization, institution or society interested in providing complete first aid services should put its team through a training on performing CPR.

Key considerations

(A) Heart attack

Palpitations, profuse sweating, nausea, needing more air circulation, chest pain or heaviness affecting mobility, spreading shoulder pain or chest pain followed by a sudden loss of consciousness, has a major cause associated with it

(1) A Critical medical condition - a Heart attack
(2) Incidence of a heart attack due to high levels of internal stress
(3) Incidence of a heart attack due to sleep apnoea which leads to stress
(4) Incidence of a heart attack due to high blood pressure
(5) Incidence of a heart attack due to a chest injury

First-Aid (Do's)

1. Under circumstances, prevent person from falling
2. Lay the person on back facing upwards
3. Tilt head back, keep arms at right angles to body
4. Help person breathe freely (Refer 5 Step action)
5. If possible talk to the person to ask about what is being experienced
6. Check whether the person has a known heart condition. Stabilize person's condition by administering emergency medication like sorbitrate or aspirin for a heart attack. Call for expert medical assistance.

Key considerations

(B) Asthmatic attack or allergic reaction

Breathlessness, gasping, bluish lips, sudden tightening of chest or profuse palpitations, parts of body covered by red blotches has a major cause associated with it i.e.

(1) An Asthmatic attack OR

(2) An allergic reaction

First-Aid (Do's)

1. Under circumstances, prevent person from falling
2. Lay the person on back facing upwards
3. Tilt head back, keep arms at right angles to body
4. Help person breathe freely (Refer 5 Step action)
5. If possible talk to the person to ask about what is being experienced
6. Check whether the person has a known respiratory or allergy problem
7. Stabilize person's condition by administering emergency medication like an antihistamine for an allergic reaction or arrange for a nebulizer for an asthmatic attack
8. Call for expert medical assistance

Key considerations

(C) Fainting or losing consciousness

Loss of consciousness in times of disasters has many causes associated with it i.e.

(1) Trauma caused by severe distress, loss of blood, severe coughing fit

(2) Fainting on account of fatigue or low blood sugar levels or lack of oxygen

(3) Epileptic attack or syncope or narcolepsy

(4) Head injury, spinal cord injury

First-Aid (Do's)

1. Under circumstances, prevent person from falling
2. Lay the person on back facing upwards
3. Tilt head back
4. Keep arms at right angles to body
5. Raise legs 8-12 inches to promote blood flow to brain
6. Pinch the person gently to check for response
7. Examine body for injuries. Check whether the person is a diabetic or ails from any known medical condition. Provide remedial action like for example administer sugar in suitable form (glucose gel) to a diabetic or if signs of epilepsy prevent person from biting off the tongue
8. Keep a record of condition of person to help medical assistance

Key considerations

(C) (Continued) Fainting or losing consciousness

First-Aid (Do not's)

1. Do not crowd around the injured person
2. Do not allow the person to get up and move around immediately on regaining consciousness
3. Do not give lots of water or juice to the person as soon as he or she regains consciousness. Be moderate even in the case of loss of blood (visible or internal bleeding) or symptoms of low sugar levels or low electrolyte levels (as per recent blood test reports for the person)

(D) Bleeding from cuts, wounds or punctures

First-Aid (Do's)

1. Wear gloves (if possible) while attending to the injured person
2. Try to stop bleeding by elevating injured part or by applying pressure. Handle with care if fracture is suspected
3. Bandage the injured area to stop bleeding and to prevent infection of wound
4. Give a tetanus injection if required
5. If the injured person loses consciousness, apply **5 step Action Plan**

Key considerations

(E) Burns

First-Aid (Do's)

1. Wrap with blankets or non-inflammable material to put off fire
2. Wear gloves (if possible) while attending to the injured person
3. Cool the burn – immediately apply cloth soaked in cool water for at least 5 minutes till pain subsides
4. Cover the burn – cover the burnt area with dry sterile gauge bandage but do not use cotton or any other fluffy material
5. Give an over-the-counter pain reliever
6. Take off clothes or jewelry covering burn area before swelling or blisters appear

First-Aid (Do not's)

1. Do not remove cloth stuck to burn area
2. Do not wash burn area under extreme water pressure
3. Do not apply oil or ice on affected area
4. Do not attempt to puncture or break blisters

Key considerations

(F) Electrocution

First-Aid (Do's)

1. Cut off the power supply
2. Move the person away from source or spot using a non-conductive material
3. Check for breathing, carry out **5 step Action Plan** or **CPR** as needed
4. Cover the affected area with a clean dressing
5. Arrange for further medical assistance as needed

First-Aid (Do not's)

1. Do not touch or attempt to move person without shutting off power supply
2. Do not move person away from spot without making arrangements for non-conductive material to help do this
3. While attending to person do not touch any non-insulated wire

Key considerations

(G) Fractures

Symptoms

1. Check for pain at or near site of injury (which increases with movement)
2. Check gently if movement is possible (if there is a fracture, movement will be difficult, not possible or painful)
3. Check for swelling around injured part, where later there may be bruising or discoloration
4. Check for deformity at site of fracture
5. Check if injured person is in a state of shock

First-Aid (Do's)

1. If there is bleeding, control bleeding before immobilizing site of fracture
2. Immobilize site of fracture
3. Check if injured person is in a state of shock
4. Revive the injured person using 5 step Action Plan
5. Place ice-pack on affected area to reduce pain and swelling
6. Provide proper padding to affected area before shifting to hospital etc

Key considerations

(G) (Continued) Fractures

First-Aid (Do not's)

1. Do not move the injured person without support
2. Do not ask injured person to move independently
3. Do not move joints above or below the site of fracture
4. Do not massage the affected area
5. Do not force bones back into the wound

Remember the principles of RICE

1. REST- Give rest to injured person and injured part
2. ICE- Apply ice on injured part
3. COMPRESS - Wrap the injured area with crepe bandage
4. ELEVATE - Elevate injured area above level of heart

Key considerations

(H) Poisoning

Types of poisoning

(1) Snake bite
(2) Scorpion sting
(3) Ingested poisons (orally)
(4) Inhaled poisons (through lungs by inhaling industrial gases, flames from fire, chemical vapors etc)
(5) Absorbed poisons (through skin via contact with poisonous sprays)

Signs and symptoms

1. Bluish lips
2. Difficulty in breathing, chest pain
3. Cough
4. Abdominal pain, loose motions
5. Dizziness
6. Double vision
7. Confusion
8. Fever

Key considerations

(G) (Continued) Snake bite or Scorpion sting (Poisoning)

First-Aid (Do's)

1.a In case of snake bite, speak to victim or search vicinity to try your best to identify the type of snake. This will be very helpful in deciding the antidote for the snake's venom. Add this sighting to the log book of the types of snakes found at the site.

1.b In case of scorpion sting, examine site to check if the sting is still embedded.

2. Check airway, breathing and circulation, proceed with 5-step Action Plan
3. Check for foreign matter in mouth, if found remove immediately
4. Prevent injured person from entering a state of shock
5. (If relevant) Dilute poison by giving milk or water
6. Observer colour and amount of vomit
7. Monitor vital signs
8. Arrange for immediate medical assistance

Key considerations

(G) (Continued) Poisoning

First-Aid (Do not's)

1. Do not try to suck out poison from site of snake bite. This needs training. Try and tie a tourniquet close to the region of snake bite, this can restrict or slow down the flow of poison from the bite site to the rest of the body

2. Do not try to remove an embedded scorpion sting unless trained to do so.

3. Do not induce vomiting unless type of poisoning known

4. Do not panic

Key considerations

(F) (Continued) Inhaled, Ingested or Absorbed Poisoning

First-Aid (Do's)

1. Check airway, breathing and circulation, proceed with 5-step Action Plan
2. Check for foreign matter in mouth, if found remove immediately
3. Prevent injured person from entering a state of shock
4. Dilute poison by giving milk or water
5. Observer color and amount of vomit
6. Monitor vital signs
7. Arrange for immediate medical assistance

First-Aid (Do not's)

1. Do not induce vomiting unless type of poisoning known
2. Do not panic

Key considerations

Bee or wasp sting

First-Aid (Do's)

1. In case of sting, examine site to check if the sting is still embedded
2. Wash with cold water. Apply a pain reliving and anti-inflammatory ointment
3. Monitor vital signs
4. If person shows signs of severe incidence or any other change in vital signs, arrange for immediate medical assistance

First-Aid (Do not's)

1. Do not try to remove an embedded sting unless trained to do so
2. Do not panic

Key considerations

First-Aid Kit

(A) Medicinal items

1. Antiseptics, disinfectants
2. Antihistamine tablets and cream
3. Insulin and Tetanus vials (preserved at required temperatures)
4. Tube of petroleum jelly
5. Analgesics, Pain relievers, Anti-inflammatory medication
6. Paracetamol, Aspirin
7. Antacid
8. Life saving drugs, Oral Rehydration solution (ORS) packets, sugar sachets, glucose gel
9. Anti-diarrhoea medication
9. Laxatives
10. **(B) Bandages**

1. Sterile dressing, cotton wool, adhesives
2. Triangular bandages, band-aids
3. Crepe bandages
4. Make-shift stretchers, crutches, splints

Key considerations

(Continued) First-Aid Kit

(C) Other items

1. Digital Thermometer, Stop clock
2. Sterilized gloves, Latex gloves
3. Towels, napkins
4. Assorted sizes of safety pins
5. Tweezers, needles, syringes, trays
6. Anti-germicidal soaps, cleansing soaps
7. Scissors
8. Torches
9. Disposable bags, garbage bags

(D) Vital equipment (as relevant)

1. Lancing device or portable meter to test blood sugar levels with bracelets to be put onto a person's wrist if blood sugar levels are high
2. Infusion sets/kits, Insulin in pens & ketone testing strips (stored at specified preservation temperatures)
3. Automatic blood pressure monitor with inventory of tags that record pressure with time of reading
4. Portable plastic nebulizer with disposable spacers
5. **Automated External Defibrillator** & CPR Rescue Kits, Bag Valve Masks (when trained to use them)
6. Suitable search and rescue equipment (when trained to use them)

Key considerations for Mobile Healthcare Units (MHU) (Basic Edition)

By,

K.S.Venkatram

AOEC & SSHGIEC, 2016-2018

Gap Analysis for a MHU

- 1. Are emergency care services and disaster specific services guided by documented policies and procedures, and are they in consonance with statutory requirements? Yes/No/Partially
- 2. Does this also address handling of medico-legal cases? Yes/No/Partially
- 3. Do afflicted people receive care in consonance with policies? Yes/No/Partially
- 4. Do documented policies and procedures guide the triage of patient's condition for initiation of appropriate care? Yes/No/Partially
- 5. Are the MHU staff familiar with the policies and are they trained on the procedures for care of emergency case patients or disaster specific patients? Yes/No/Partially
- 6. Is there adequate access and space for the MHU to operate? Yes/No/Partially
- 7. Does the MHU adhere to statutory requirements? Yes/No/Partially

Gap Analysis for a MHU

- 8. Is the MHU appropriately equipped? Yes/No/Partially
- 9. Is the MHU manned by trained personnel? Yes/No/Partially
- 10. Is the MHU checked on a daily basis? Yes/No/Partially
- 11. Are the equipment on board checked on a daily basis using a checklist? Yes/No/Partially
- 12. Are emergency medications and disaster specific formularies of medications checked daily and prior to dispatch using a checklist? Yes/No/Partially
- 13. Does the MHU have a proper communication system? Yes/No/Partially
- 14. (If relevant) Do documented policies and procedures guide the uniform use of cardio-pulmonary resuscitation or minor surgical procedures? Yes/No/Partially

Gap Analysis for a MHU

- 15. Are MHU staff providing direct patient care trained and periodically updated in cardio-pulmonary resuscitation or minor surgical procedures? Yes/No/Partially
- 16. Do documented policies and procedures guide all activities of the nursing services? Yes/No/Partially
- 17. Do these documented policies and procedures reflect current standards, practices, regulations and purposes of nursing services? Yes/No/Partially
- 18. Do only qualified personnel order, plan, perform and assist in performing procedures? Yes/No/Partially
- 19. Do documented procedures exist to prevent adverse events like wrong patient, wrong side and wrong procedure? Yes/No/Partially
- 20. Is informed consent taken by personnel performing the procedure, where appropriate? Yes/No/Partially

Gap Analysis for a MHU

- 21. Is there adherence to standard precautions and adherence to asepsis during the conduct of the procedure? Yes/No/Partially
- 22. Are patients appropriately monitored during and after the procedure? Yes/No/Partially
- 23. Are procedures documented accurately in the patient record? Yes/No/Partially
- 24. Do documented policies and procedures define rational use of blood and blood products? Yes/No/Partially
- 25. Do documented procedures govern the use of IV, and transfusion of blood and blood products? Yes/No/Partially
- 26. Are transfusion procedures governed by applicable laws and regulations? Yes/No/Partially

Gap Analysis for a MHU

- 27. Is informed consent taken for donation and transfusion of blood and blood products? Yes/No/Partially
- 28. Does informed consent also include patient and family education about the donation and plan of care? Yes/No/Partially
- 29. Does the organization define the process for availability and use of IV, or transfusion of blood/blood components in emergency cases? Yes/No/Partially
- 30. Is a post transfusion form collected, and reactions if any identified and analyzed for corrective and preventive actions? Yes/No/Partially
- 31. Are the staff trained to implement the policies? Yes/No/Partially
- 32. Do more well-defined documented policies and procedures guide the care of people via high dependency MHU units? Yes/No/Partially

Gap Analysis for a MHU

- 33. Is there a documented admission procedure to a nearest healthcare provider and need for treatment criteria in high dependency MHU units? Yes/No/Partially

- 34. Are staff trained to apply these criteria for the care of patients in the high dependency MHU units? Yes/No/Partially

Minimizing the environmental footprint

As quoted in an article on pharmaceuticals and sustainability
In disaster management scenarios, another important factor is to reduce the environmental footprint of healthcare. The hazardous environmental footprint that could occur is mainly due to the following:

1. Improper prescription of antibiotics

2. Over-prescribing and inappropriate prescribing of medicines

3. No guideline recommended or followed to dispose leftover drugs

4. Inappropriate handling of bio-medical waste

All this adds to human morbidity and mortality due to drug abuse and poisonings from diverted drugs, spurious generic drugs, leftover drugs.

Planning norms and guidelines for the functioning of health camps, screening camps. mobile healthcare units can protect ecological and human health and safety.

Public Rights and Education Progammes (Basic Edition)

By,

K.S.Venkatram

AOEC & SSHGIEC, 2016-2018

Public Rights and Education

What does a disaster management committee have to plan for in post disasters or emergency situations?

Depending upon the disaster or emergency situations, a disaster management committee will need to plan for different (social responsibility based) norms and guidelines to be followed to protect public rights and also to educate the afflicted on how to live post impact.

The need for public rights and education programmes are more relevant when it comes to disasters like an earthquake, flood, famine, drought, gas leaks, nuclear radiations or forewarned disasters like the outbreak of an epidemic, spreading of a harmful disease etc.

Public Rights and Education

- 1. Does the disaster management committee protect public rights and also counsel or educate the afflicted about how to live post impact or for any mitigation of ensuing threats? Yes/No/Partially

- 2. Are afflicted families informed of their rights and responsibilities in a format and language that they can understand? Yes/No/Partially

- 3. Are violations of public rights and education recorded, reviewed and corrective / preventive measures taken? Yes/No/Partially

- 4. (As relevant) Do public rights and education include respecting of any special preferences, spiritual and cultural needs? Yes/No/Partially

- 5. (As relevant) Do public rights and education include respect for personal dignity and privacy during mitigation, recovery and rehabilitation? Yes/No/Partially

Public Rights and Education

- 6. (As relevant) Do public rights and education include protection from physical abuse or neglect? Yes/No/Partially

- 7. Do public rights and education include right to complain and providing of information on how to voice a complaint? Yes/No/Partially

- 8. (As relevant) Does the committee explain to the afflicted families proposed mitigation, recovery and rehabilitation, including the risks, alternatives and benefits? Yes/No/Partially

- 9. (As relevant) Does the committee explain to the afflicted families the expected results for the proposed mitigation, recovery and rehabilitation? Yes/No/Partially

- 10. (As relevant) Do afflicted families members have a right to information on expected costs for mitigation, recovery and rehabilitation? Yes/No/Partially

Public Rights and Education

- 11. (As relevant) Does the committee explain to the afflicted families the possible complications for the proposed mitigation, recovery and rehabilitation? Yes/No/Partially

- 12. (As relevant) Are afflicted families counseled to make informed decisions and are they involved in the mitigation, recovery and rehabilitation planning and delivery process? Yes/No/Partially

- 13. (As relevant) Do afflicted families have a right to information and education about their healthcare needs due to exposure during the disaster or due to living in proximity with the disaster site? Yes/No/Partially

- 14. (As relevant) Are afflicted families educated about any likely disease process, complications and prevention strategies? Yes/No/Partially

- 15. (As relevant) Are afflicted families educated about due precautions to be followed to prevent disease or epidemics outbreaks? Yes/No/Partially

Public Rights and Education

- 16. (As relevant) Is the afflicted family educated about diet and nutrition? Yes/No/Partially

- 17. (As relevant) Is the afflicted family educated about immunisations? Yes/No/Partially

18. (As relevant) Does the committee have a documented complaint redressal procedure? Yes/No/Partially

19. Are afflicted families made aware of how to lodge complaints? Yes/No/Partially

20. Are all complaints analyzed by the committee? Yes/No/Partially

21. Is corrective and/or preventive action taken on the basis of the analysis of complaints, where appropriate? Yes/No/Partially

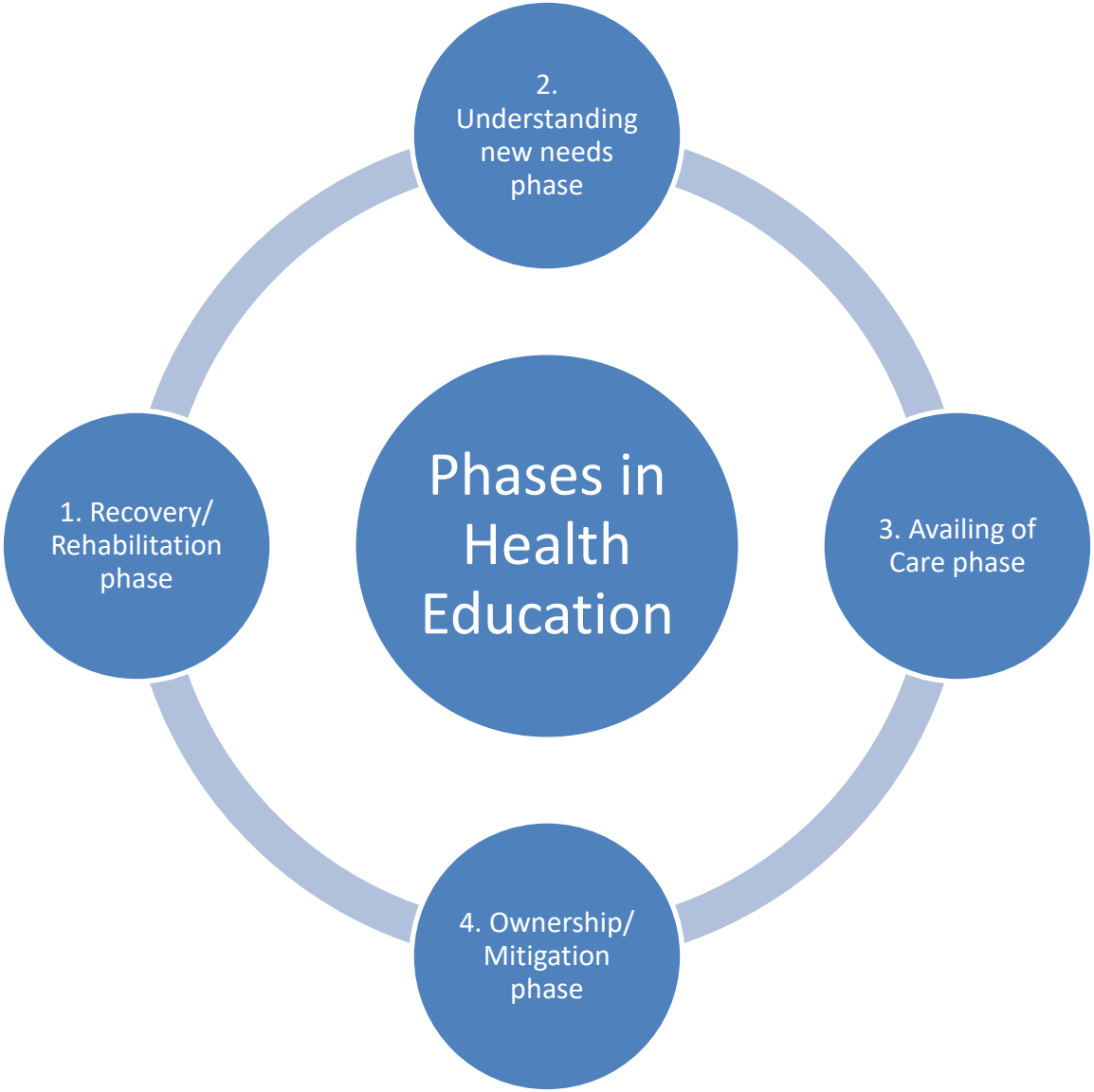
Key considerations in a Health education plan

By,

K.S.Venkatram

AOEC & SSHGIEC, 2014-2018

Key considerations



Key considerations

After a disaster, or during a disaster, people are known to come up with different kinds of needs. Some of these being:

1. Need for immediate healthcare in different extents

2. Need for regular screening, or follow ups to help restore life back to normalcy

3. Need for food, immunizations, medicines, clothing, and provisional accommodation or shelter

4. Need to follow strategies to live without adequate sanitation arrangements and also prevent outbreaks of epidemics or diseases

5. Need to help re-construct sanitation systems as quickly as possible to prevent spread of diseases or occurrence of outbreaks

6. Need to conduct themselves in harmony and with flexibility

Key considerations

To do all this (depending upon the gravity of the disaster and the disaster category), a community will need access to a health education plan. The plan will generally need to:

1. Diffuse the situation and any threats to health with well-rehearsed thinking

2. Save, or help save as many lives, or prevent incidences and outbreaks as far as possible

3. Manage all afflicted people at locations close to the disaster or at relief camps via assistance from mobile healthcare units and patient education programmes

4. Establish the identities of persons affected, their need for treatment or consultation to get back to normalcy

5. Provide best possible care to all the afflicted people via health camps, mobile healthcare units or admission to nearby healthcare providers

Key considerations

6. Minimize the hazards due to unhealthy situations where infection can spread, and also address the need to start from scratch or depend upon limited resources to live from day to day

7. Use a disaster management committee to organize resources / facilities required or make alternate arrangements with maximum efficiency so there is no oversight or negligence

To achieve this, AOEC finds that a concept called Showcased Relief can help communities identify, learn from and implement measures needed in the recovery or rehabilitation phase of any disaster.

The next section looks at key aspects for Showcased Relief under headings of Health, Growth and Immunity, where all three aspects are important for a community experiencing or surviving a disaster.

Showcased Relief for HGI Improvement (Basic Edition)

By,

K.S.Venkatram

AOEC & SSHGIEC, 2016-2018

Showcased Relief for Health

- **Some of the connected issues affecting health of afflicted people are**
- 1. They need to cope with a long-term condition where there has been a possible damage to the heart or brain or limb

- 2. They need to be helped to conquer fears that they may not outgrow in this long-term condition

- 3. They need to undergo immunisations, vaccinations or regular screening to deal with spread of diseases or epidemics

- 4. They need to deal with pain or develop an interpretation that helps them understand recovery

- 5. They need to be instilled with a power of reasoning to help them understand which defense mechanisms need to be built up

- They need to be provided with suitable training and counseling to restore self-sufficiency

Showcased Relief for Health

- 6. They need to be helped in overcoming addictions/ special likes/ fears in not wanting to eat what may be right for one at this stage. Added to this, they need to be made to understand that one may need to drink right quantities of fluids/and other preparations as recommended by the doctors

- 7. They need to understand ways to cope with stress and condition themselves to improve recovery

- 8. They need to deal with negative emotions and let go of any painful memories, as negative emotions affect health and longevity

- 9. There is a need to prevent adverse medication errors : As medication errors are more common in mass health management scenarios i.e. the doctors or staff in health camps, relief camps, or MHUs should follow guidelines to ensure that errors do not occur when procuring the drug, prescribing it, dispensing it, administering it (as relevant), and monitoring its impact

Showcased Relief for Growth

- **Some of the connected issues affecting growth of afflicted children are**
- 1. They need to be provided well-balanced nutrition
- 2. They need to be given vitamin supplements for a short period (as relevant)
- 3. They need to be provided clean drinking water (free of germs and contamination)
- 4. They need to observe guided personal hygiene
- 5. They need to be vaccinated or immunized for better chances of survival
- 6. They need to be taught to keep the environment around them clean
- 7. They need to be involved with some activity that makes them laugh everyday or makes them feel love/attachment to help battle trauma, stress, and illness

Showcased Relief for Immunity

- **Some of the connected issues affecting immunity of afflicted people are**
- 1. They need to be protected from wrong or inappropriate dosages of antibiotics

- 2. They need to be told that scrubbing ones hands thoroughly before cooking, or eating, or before touching articles while cooking is important as this can affect ones health if not done

- They need to be told to hydrate themselves to purge poisons. They could be guided on how the regular use of garlic, tomatoes, ginger, spices like cinnamon, clove, turmeric etc and porridge oats in cooking can improve longevity

- 3. They need to guided on how to minimize use of contaminated or hardened water for cooking

- 4. They need to guided on how oral hygiene is important even under afflicted conditions (this is most important for children)

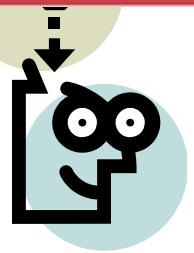
- 5. They need to taught how to keep their environment clean and free from contamination as this can otherwise lead to diseases

The reckoner has been designed using best current knowledge. No part of this booklet can be reproduced, stored in a database or retrieval system or transmitted in any other form or by any means, electronic, mechanical, recording or otherwise, without understanding this.

Effectiveness in disasters, sudden incidences and emergencies

This reckoner can help protect and preserve life at times of incidences like heart attacks, loss of consciousness, injury, burns, electrocution, fractures, poisoning…

Lifesaver™
First Aid Services



- Disasters/emergencies
- Standards and Practices
- Readiness/Mitigation

The consultant K.S.Venkatram has a B.E. in Computer Engineering, and also holds MCP, MCAD and MCSD certifications. He has 20 years of experience in IT Service Management,5manufacturing, healthcare etc