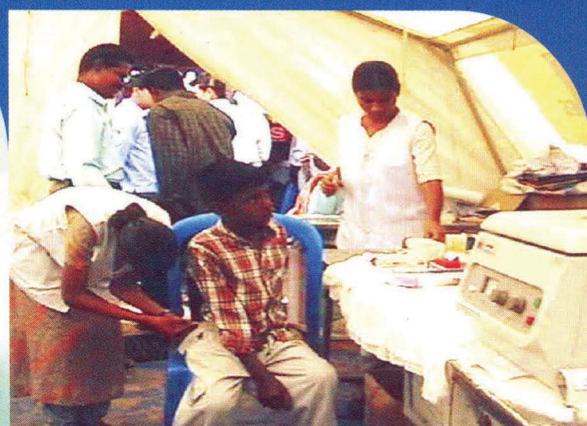
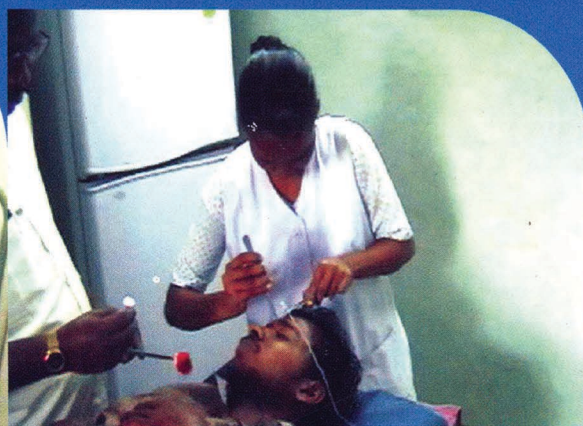


REACHING OUT : Nursing Care in Emergencies



Indian Nursing Council
Combined Councils Building
Kotla Road, Temple Lane
New Delhi-110002

Supported by
World Health Organization
Country Office – India

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Price: Rs. 400/-

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Preface

The Tsunami of 26th December 2004 swept lives and property off the shores of many countries caused devastating damage on the Indian coasts as well especially in the state of Tamilnadu. Support for relief and rehabilitation from around the world has been unprecedented. The affected communities have embarked upon the long, difficult process of rehabilitation with the help of the Government and the other agencies who came forward to help in their efforts.

The impact of the disaster was felt most by the vulnerable population especially the women and children. The health facility network in these areas was also damaged. Often as the only health professional in a school building, nursing faculty and students have a unique Opportunity to be key contributors to emergency planning and response. However, meeting the complex needs of the school system at such a time demands a competent workforce. For nurse being a "first contact" of the community, they can educate the community on vital health issues, serve as a vital link between the community and the health system and provide holistic care.

Recognizing this, Indian Nursing Council (INC) in collaboration with WHO-India country office developed a plan for systemic response to strengthen health system. It was decided to review the curriculum of different nursing courses and also develop appropriate training modules for capacity building of nursing students and faculty.

The module "Reaching out: Nursing care in emergencies" is prepared to train the nursing students and nursing staff to meet the challenges in the aftermath of a disaster. It is expected that this module will help the nursing students to develop relevant skills in disaster management. The module would contribute towards an increased awareness of nurses' roles in emergency preparedness and response and would equip them with necessary competencies to handle psychiatric and health problems and to provide counseling and appropriate referrals to other professional health care personnel.

This module contributes to INC efforts and objective to prepare the nurses for any emergency and disaster. I am sure that these guidelines, when implemented in word and spirit, will go a long way in developing and strengthening the competencies of nursing personnel in disaster management.



T. Dileep Kumar
President
Indian Nursing Council
and Nursing Adviser to
Govt. of India

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ABBREVIATIONS

AIDS	Acquired Immuno Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
ANC	Ante Natal Care
APH	Ante Partum Haemorrhage
ART	Anti Retroviral Treatment
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker
AYUSH	Ayurveda, Unani, Siddha, Homeopathy
BMI	Body Mass Index
CCT	Controlled Cord Traction
CED	Chronic Energy Deficiency
CHC	Community Health Centre
CSSM	Child Survival and Safe Motherhood Programme
DDK	Disposable Delivery Kit
DEC	Diethylcarbamazine
DOTS	Directly Observed Treatment Short course
EAG states	Empowered Action Group States
FHS	Foetal Heart Sounds
FRU	First Referral Unit
Hb	Haemoglobin
HIV	Human Immunodeficiency Virus
IFA	Iron Folic Acid
ICDS	Integrated Child Development Services Scheme
IMNCI	Integrated Management of Neonatal and Childhood Illness
IMR	Infant Mortality Rate
IUCD	Intrauterine contraceptive Device
LAM	Lactational Amenorrhoea Method
MO	Medical Officer
MPW	Multi Purpose Workers
MVA	Manual Vacuum Aspiration
NRHM	National Rural Health Mission
ORS	Oral Rehydration Solution
PHC	Primary Health Centre
PPC	Post Partum Centre
PPH	Post Partum Haemorrhage.
RTI(s)	Reproductive Tract Infection(s)
RCH	Reproductive and Child Health
RNTCP	Revised National Tuberculosis Control Programme
RR	Respiratory Rate
SBA	Skilled Birth Attendance
SDM	Standard Days' Method
SRA	Simple Rapid Assessment
STI(s)	Sexually Transmitted Infection(s)
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

1 *Introduction: Nursing Care in Disasters*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of:

- Disasters, their types and health consequences.
- The Disaster Cycle
- Skills required by a nurse to provide outreach services in emergencies.

WHO defines ‘**Disaster**’ as “Any occurrence that causes damage, economic destruction, loss of human life and deterioration in health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.” Definitions and categorization of disasters vary according to geo-sectors, the geographical and social settings in which they are located. Every new disaster adds a dimension to human suffering. In the absence of ‘official’ definitions, observations from the field suggest that disasters be classified under three broad classifications:

- **Natural:** Natural Disasters can be further classified into –
 - i. Disasters of acute onset such as earthquakes, cyclones, tsunamis and floods. It also includes epidemics of water, food or vector borne diseases and person-to-person transmission of diseases.
 - ii. Disasters of slow or chronic onset such as drought, famine, deforestation, chronic exposure to toxic substances.
- **Human-made:** such as civil strife, war, nuclear explosion, industrial accidents, and other vehicular accidents.
- **Other disasters:** such as the effects of loose policies, which allow the use of tobacco, sale of harmful drugs, uncontrolled use of pesticides and so on.

Amongst these, there are the major disasters and the minor disasters. The categorization of disaster as minor or major depends not only on its destruction potential, but also on the relative importance given to it by the media. However, it is important to remember, that for the vast majority of the people in several states of India, this distinction is purely academic: for them, most disasters are major and occur constantly.

Health Consequences of Disasters

- i. Disasters may cause an unexpected number of deaths, injuries, or illness in the affected community, exceeding the therapeutic capacities of the local health services and requiring external assistance.
- ii. They may destroy local health infrastructures such as hospitals, which will therefore not be able to respond to the emergency. Disasters might also disrupt the provision of routine health services and preventive activities, leading to long-term health consequences in terms of increased morbidity and mortality.
- iii. Some disasters may have adverse effects on the environment and the population, increasing the potential risk for communicable diseases and environmental hazards that will increase morbidity, premature death, and diminished quality of life in the future.
- iv. Disasters may affect the psychological and social behavior of the stricken community. Generalized panic, paralyzing trauma, or antisocial behavior rarely occurs after major disasters, and survivors rapidly recover from their initial shock. However anxiety, neuroses and depression may occur after either sudden- or slow onset emergencies.
- v. Some disasters may cause a shortage of food with severe nutritional consequences, such as starvation or specific micronutrient deficiencies-vitamin A deficiency, during famines.

- vi. Disasters may cause large, spontaneous or organized population movements, often to areas where health services cannot cope with the new situation, thus leading to an increase in morbidity and mortality. Displacing large populations may also increase the risk for outbreaks of communicable diseases both in the displaced and host communities, where large populations of displaced persons may be crowded together and share unsanitary conditions or contaminated water.

Disaster Cycle – Phases of Disaster Management

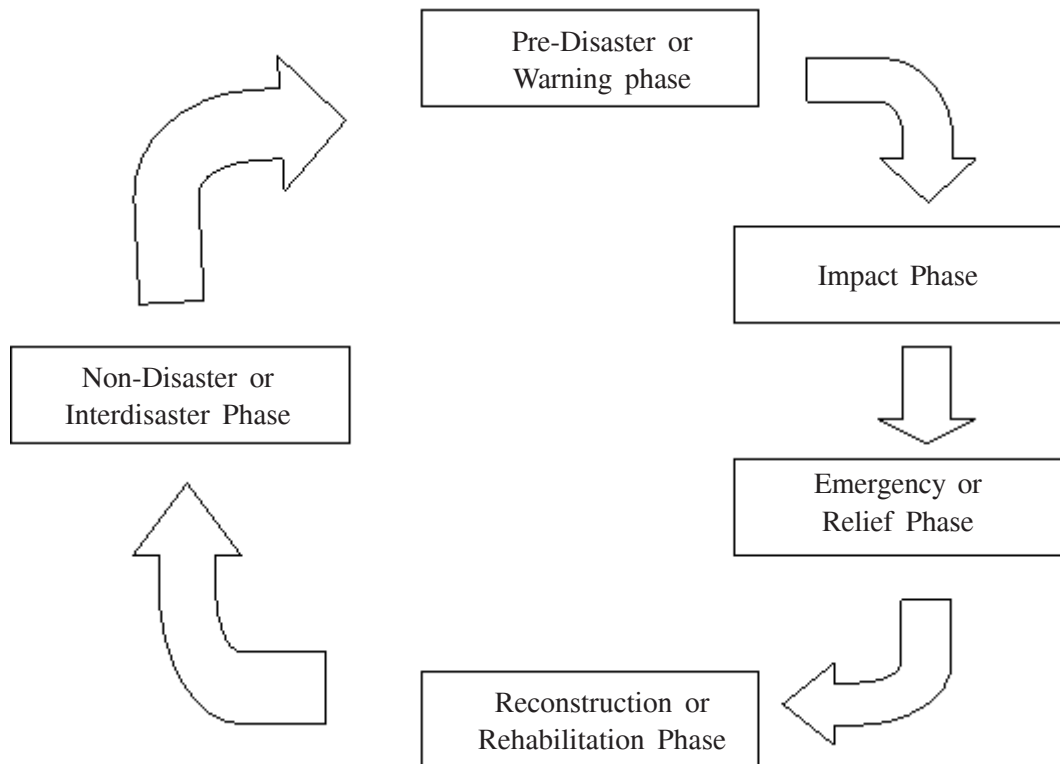


Fig. 1. The Disaster Cycle

There are five different phases of sudden impact disasters: interdisaster, predisaster, impact, emergency and rehabilitation. These phases may last from just a few seconds to months or years, with one phase merging into the next.

The Non-disaster or Interdisaster Phase

This is the phase for preparedness. Before the disaster strikes the officials should have in place disaster prevention measures and should conduct disaster training and education programmes for the community. Several activities should be undertaken in this phase:

- Mapping the potential locations for disasters and associated risks
- Vulnerability analysis
- Taking an inventory of existing resources
- Planning appropriate preventive, preparedness and mitigation measures
- Conducting education and training of health personnel and the community.

The Pre-disaster or Warning Phase

Before a disaster strikes, officials should issue timely warnings, take protective actions, and possibly evacuate the population. The effectiveness of protective actions will depend largely on the level of preparedness of the population,

particularly at the community level. During this phase, several essential emergency-management activities should be undertaken:

- Issuing early warnings on the basis of predictions of the impending disaster
- Implementing protective measures-evacuation, preparing temporary shelters (Safe water supply, sanitation facilities in the shelter places)

The Impact Phase

When disaster strikes, destruction, injuries, and death occur. It may last for a few seconds (earthquakes) or for several days (floods). The impact on human health varies according to the nature of the disaster itself, population density, pre-disaster health and nutritional status, climate, and the organization of health services.

The Emergency Phase (also called the Relief or Isolation Phase)

The emergency phase starts immediately after impact and is the time for providing relief and assistance to the victims. This phase requires actions that are necessary to save lives, including:

- Search and rescue operations
- First aid
- Emergency medical assistance
- Restoration of emergency communications and transportation network
- Public health surveillance
- In some cases, evacuation from areas still vulnerable to the hazard.

In the immediate post impact period the local community is isolated and the survivors themselves accomplish many of the most pressing rescue tasks, by using locally available resources. The existence of district-and community – preparedness plans greatly increases the self-reliance and effectiveness of assistance, contributing to the reduction of disaster-related mortality and morbidity.

The Reconstruction or Rehabilitation Phase

As the emergency or relief phase ends, restoration of pre-disaster conditions begins. The reconstruction phase, which should lead to the restoration of pre-disaster conditions, includes reestablishing normal health services and assessing, repairing, and reconstructing damaged facilities and buildings. This phase is also the time for thinking about the lessons learned from the recent disaster that could assist in improving current emergency-preparedness plans. This phase actually represents the beginning of a new inter-disaster phase. The time span for reconstruction or recovery is often difficult to define. It may start fairly early, even during the emergency period, and may last for many years.

Role of Nurses in providing outreach health services during emergencies

Disasters usually have a devastating impact on peoples' lives. In addition, health systems often collapse and access to primary health care services becomes either limited or completely unavailable. In such situations, a nurse can fulfill the following responsibilities:

- Being the 'first contact' of the community with a health care provider.
- Educate the community on vital health issues
- Serve as a vital link between the community and the health system.
- Provider of 'holistic' care, in terms of addressing psychosocial and environmental health issues in addition to providing selected primary health care services and appropriate referral

Most disasters involve the complete destruction of health infrastructure and disruption of health facilities and require the health services to be set up from scratch. This presents an opportunity for regularizing or even improving health services vis-à-vis the pre-disaster situation. Moreover, communities are often more receptive to health services and recognize the importance of a functional health system in the aftermath of a disaster. These challenging responsibilities necessitate the empowerment of the nurse with certain basic skills for providing care during emergencies. Besides having the ability to provide first aid and treatment of minor ailments, the nurse also needs to be equipped with basic skills for the following:

*“A calamity is both a spur,
and a valuable hint.”*

- **Assessing the needs of the community**
- **Identifying vulnerable groups (eg. Women & children, adolescents, elderly etc.)**
- **Providing appropriate medical assistance and care**
- **Providing health education on vital health issues including feeding practices**
- **Prevention of epidemics & addressing environmental health issues.**
- **Providing psychosocial support**
- **Use of nursing kit (for emergencies)**

This module has been designed to equip the nurse with the above skills, which are essential for rendering outreach services for communities in the ‘Reconstruction’ or ‘Rehabilitation’ phase (see Fig.1, Disaster Cycle). The skills required in the ‘Impact’ phase or ‘Relief’ phase (like Mass Casualty Management, Emergency Medical assistance, resuscitation etc.) are beyond the scope of this module. A separate module will be designed to cover in detail the important issues related to nursing care in the acute phase of an emergency.

2 *Assessing the Health Needs of the Community*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of:

- Objective of Needs Assessment
- Sources and Methods of data collection

Needs Assessment is essential for proper planning of outreach services in emergency situations. The other objectives of Assessment of Health Needs are:

1. To determine the number of individuals affected.
2. To identify the health needs of the affected population.
3. To establish priorities for action
4. To identify existing and potential public health problem
5. To identify local resources
6. To set up the basis for a health information system

Sources and Methods of data collection

Data Sources:

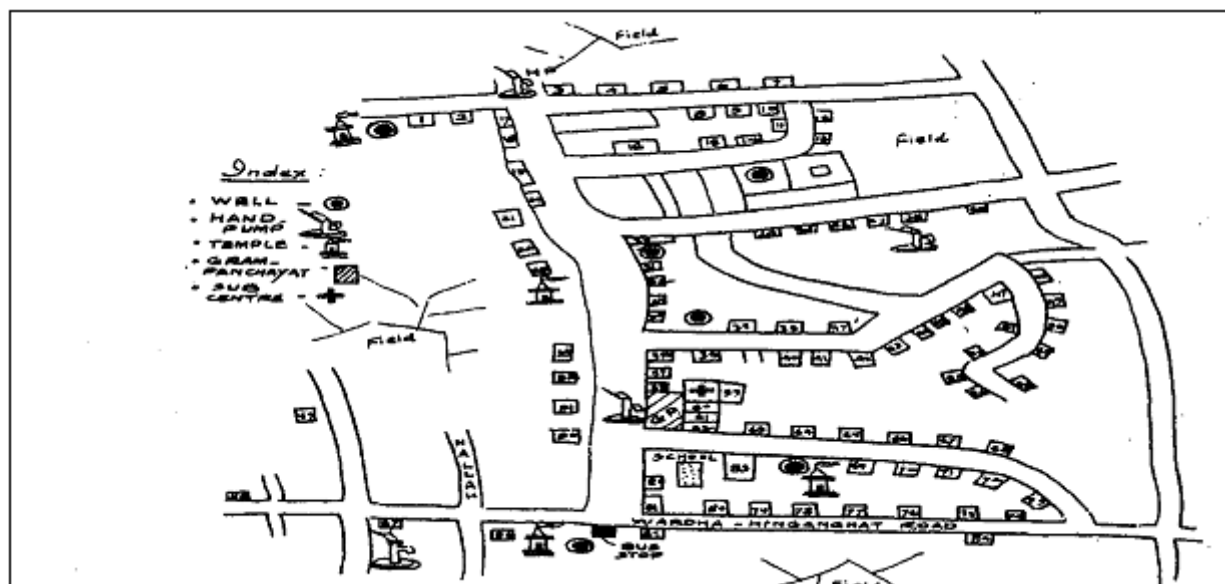
1. Background data about the area would be available with the Panchayat or local authority office, which may need to be collated and used in the form of lists, maps, etc.
2. Available data of government/private health facilities
3. Data maintained by ANM or Anganwadi worker or any local health volunteer.
4. Field visits to the site

Methods of data collection:

The methods of data collection suggested in this module have been designed keeping in view that one nurse would cater to a population or community of about 50 to 100 families or households. Moreover, due to its use after the acute phase, it is advisable to administer any tool for data collection to all the households in the area, rather than to select households chosen by means of a sampling method. The methods and tools can be modified and adapted as per the local situation. The methods suggested are as follows:

Participatory Mapping of the catchment area may be done by inviting a group of the affected population to sketch a map of the entire community on the ground or on a large paper (Figure below) and the location of all key landmarks (e.g., rivers or lakes, roads, health facilities/services, water pumps, cemeteries, etc). Distances should be shown as accurately as possible. They should be asked to identify where different ethnic communities and the most vulnerable group(s) (e.g., the poorest or most malnourished) are located in the map of the catchment area. Guidelines for the same are provided in Annex 1. The participatory mapping exercise will be undertaken at the institutional level and all the villages and communities in their respective catchment areas will be mapped. This exercise will also be supplemented by the quantitative data (Family Health Cards) collected by the nurses in their allotted families.

Example of a Participatory Map



Household Survey using Family Health Card (Annex 2) will help in collecting the quantitative data required for assessing the current status of services, areas for improvement and the number of beneficiaries for the services planned in the future. It consists of the following:

1. Family Schedule
2. Mother schedule
3. Child Schedule
4. Chronic Illness Schedule
5. Family Planning Schedule
6. Miscellaneous

This exercise will help us in ascertaining the following:

- Age & sex distribution
- Drinking water and Sanitation
- Services received by pregnant women
- Services received by children
- Immunization status of children
- Nutritional status of children in the village
- Breastfeeding practice
- People suffering from chronic illness and status of treatment
- Number of eligible couples and use of contraceptives
- Number of disabled individuals in the community
- Causes of deaths in the last one year.

On ascertaining the above, it will be possible to plan services for the community. The exercises will also help in identifying local resources, prioritization of services and ensuring that the services reach those who need it the most. The outcomes of this exercise will also serve as the basis of a health information system for the future.

3 *Monitoring and Supervision*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of the following:

- What is monitoring?
- Steps in monitoring
- Principles of performance assessment and supportive supervision

Monitoring is the periodic collection and analysis of specific data/information carried out in order to ascertain whether key activities are being carried out as planned and are having the expected effects on the target population. In an emergency situation with limited resources, monitoring is specifically helpful in informing the service providers regarding the optimal targeting of services and also helps in making periodic corrections and modifications in the service delivery. Proper supervision is also essential for ensuring minimal quality of services and acceptable performance of service providers. However, it is desirable that the supervision should be positive and supportive and not merely restricted to find faults and should be undertaken within an environment of mutual trust and recognition of each other's strengths and weaknesses. This module will largely be of use to the supervisors (nurse tutors); however the other participants may also benefit by getting a brief idea of the processes involved in monitoring and supervision. The use of Family Health card as a monitoring tool is discussed in separate boxes along with each step of monitoring.

Monitoring procedures

Keep It Straightforward and Simple (KISS): In designing a routine or short-term monitoring system, a few guidelines should be considered: 1) select only information that will be of use; 2) do not overburden staff by collecting too much data; 3) provide feedback in a timely manner; 4) use a reporting format that facilitates data interpretation and action.

Nine steps to activity monitoring are listed below and are described in detail later in this guide. The first four cover the planning stage and seek to ensure that the information collected is relevant, specific, feasible to collect, and can be analyzed. The next four cover the implementation of monitoring: collecting information, compiling and analyzing it, reporting, and using the results for action.

Steps in activity monitoring

Step 1: Specify the monitoring objectives

The first step in designing a monitoring system, no matter how small, is to determine what services are going to be monitored, for what purpose, and for whom.

The following worksheet is used to clarify:

1. **what** services will be monitored, e.g., immunization, logistics;
2. for what **purpose**, e.g., routine or short-term information; decisions about continuing or modifying the service; and
3. **who** will use the monitoring results, e.g., manager, community, or health workers.

What to monitor	Purpose
Immunization	Measure coverage of immunization
ORT	Determine no. clients served
ANC	Determine availability of TT

FAMILY HEALTH CARD AS A MONITORING TOOL:

1) **what** services will be monitored, ANC services, Child health services, Family planning services; 2) for what **purpose**, e.g., routine or short-term information; decisions about continuing or modifying the service; and 3) **who** will use the monitoring results, e.g., nurses, tutors, government health care providers.

Step 2: Decide on the scope of the monitoring

It is usually not possible to monitor all the services at all sites in a programme area. For short term monitoring, it may be a good idea to limit the monitoring to: a) low performance sites or staff, b) selected sites or staff from each geographic area.

WORKSHEET FOR SPECIFYING THE SCOPE OF MONITORING

1. What geographic area will be covered?
2. Which facilities or sub-projects will be monitored?
3. Which personnel (supervisors, providers & volunteers) will be selected?
4. How long will the monitoring continue?

Formulation of Indicators:

An indicator is defined as an indirect measure of an event or condition. Indicators can be formulated in the following ways:

- **Count:** The Simplest type of measure; just count the number of events or objects. For example, 56 visits, 432 CHWs, 9,765 children immunized.
- **Rate:** A measure of the frequency with which some event occurs, such as household visits/day.
- **Ratio:** Two numbers related to each other in a fraction or decimal, such as the number of ANC visits made per pregnant woman (3.2:1) or the number of trained TBAs per population (1:490)
- **Proportion:** A special type of ratio expressing a relationship between a part and the whole. For example, the 3,250 children immunized out of 5,000 ($3,250/5,000 = 0.65$). The numerator is the portion of the total, the denominator is the total.
- **Percentage:** A proportion multiplied by 100. For example, $(3,250/5,000) * 100 = 65$ percent of eligible children immunized.

Possible Indicators (From Family Health card)	Suggested Standards
% of households using latrines	>50%
% of mothers receiving ANC	>90%
% of children received all vaccines (as per Immunization Schedule)	>90%
% of children with malnutrition	<40%
% of patients of chronic illness who have stopped treatment	0%
% of eligible couples using any/modern method of contraception	>70%

Performance standards: In addition to selecting the indicators, the manager should set performance standards for each indicator. This step is often overlooked, but it is very important, especially for where the objective is to make an evaluative judgment or decision. If performance standards are not set at the outset, then it will be impossible to determine whether the activity has been successfully carried out or has been effective. Use the above worksheet to define standards for each indicator.

Step 4: Choose information sources and develop data collection procedures.

For each indicator, determine the source and the procedure for collecting monitoring data. For many indicators, more than one source could provide the necessary data. The methods could range from **Observations of service delivery, Rapid surveys, Interviews with service providers.**

FAMILY HEALTH CARD AS A MONITORING TOOL:

The method used for data collection will be rapid survey.

Step 5: Collect the data

When new data monitoring forms or instruments are developed, the user should first pre-test them on a small scale. This includes the selection and training of data collection personnel and the establishment of procedures for data collection supervision and processing.

FAMILY HEALTH CARD AS A MONITORING TOOL:

The nurses will have to be given proper training in filling the card and a system of back-checking can also be developed. The tutor or supervisor can refill the card for 5% of the families allotted to any nurse.

Step 6: Tabulate and analyze the data

Tally sheets can be used for this purpose.

Example of a two-way tally sheet showing age and gender

	Male	Female	Total
<5		\	26
>5			24
Total	25	25	50

This data can then be presented in the form of simple tables or graphs.

Eg. Population Distribution by Age and Gender

Age	No. of Males	No. of Females	Total
< 5 years	20	20	40
5-14 years	45	35	80
15-49 years	15	45	60
50+ years	10	10	20
Total	90	110	200

Step 7: Present the findings

The results of activity monitoring should be presented to those involved in service implementation: supervisors, health staff, community members. Although results can be presented graphically or in tables, the presentations should be adapted to the level of the users. They should be simple and point out major findings.

FAMILY HEALTH CARD AS A MONITORING TOOL:

The data from the family card can be shared with health care providers and also members of the community.

Step 8: Take appropriate action

Once a solution has been agreed upon, its implementation must be planned. This involves setting objectives and determining what activities must take place, who should carry them out, where the services should be provided, when the services should be offered, and what resources are required.

The action decided upon may itself require additional short-term monitoring to make sure that: a) the interventions selected are implemented as planned; and b) they have the desired effects.

FAMILY HEALTH CARD AS A MONITORING TOOL:

The data will help in targeting and prioritizing services. Updating the information on the cards will help in assessing whether the services are having the desired effects.

Step 9: Decide whether to continue monitoring

Activity monitoring is designed to meet the current needs of users. As those needs change, so should these monitoring requirements.

Principles of performance assessment & Supportive Supervision:

Health workers, supervisors, and managers are usually aware of the performance and problems of their staff long before a formal review is undertaken. This is one reason why continuous, supportive performance assessment is more important than periodic, formal job evaluation.

Good performance assessment is an ongoing process that depends on open communication between the supervisor and staff. It begins with feedback on work plan achievements but includes identification of problems, possible solution, staff needs for training and skill development, and mutual agreement on steps that will be taken by both parties to improve job performance.

The attitude and communication skills of the supervisor are very important in this process. If subordinates sense that they are being criticized rather than helped, they tend to withdraw, close off communication, and become defensive. Some key principles of effective supportive supervision are shown below:

- Focus on improving worker performance
- Supportive rather than critical
- Praises accomplishments as well as identifies weaknesses
- Educational rather than judgmental
- Regularly and frequently conducted
- A collaboration between the supervisor and subordinate, not a top-down, parent-child relationship
- Based on open, frequent communication, and mutual trust
- Designed to find solutions to problems, not to fix blame for them.

4 *Nursing Care for Children in Disasters*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of:

- Management of infant and childhood illness in emergencies
- Infant feeding in emergencies
- Management of scabies and worm infestation

Children up to five years of age are one of the most vulnerable groups during disasters and are prone to suffer from infections and malnutrition. It is eminently possible for nurses to treat most sick children at **health camps** or in the **community** and save them from dying.

Elements of essential newborn care

All newborns must receive the following care:

- * Maintain the body temperature and prevent hypothermia.
- * Maintain the airway and breathing.
- * Breastfeed the baby.
- * Take care of the cord.
- * Take care of the eyes.

The guidelines provided in this module describe the steps to be followed by a **nurse** for the management of a sick child up to five years of age. These guidelines have been adapted from National IMNCI (Integrated Management of Neonatal and Childhood Illness) and can also be used by **trained nurses** to provide preliminary treatment. Due to technical reasons management of illness in young infants below 2 months of age is somewhat different from management of children 2 months to 5 years of age. Guidelines for both groups are presented in this module. Though the module for management of a sick child does deal with issues such as malnutrition and its management, a separate section in this chapter has been dedicated to feeding practices for infants in emergencies.

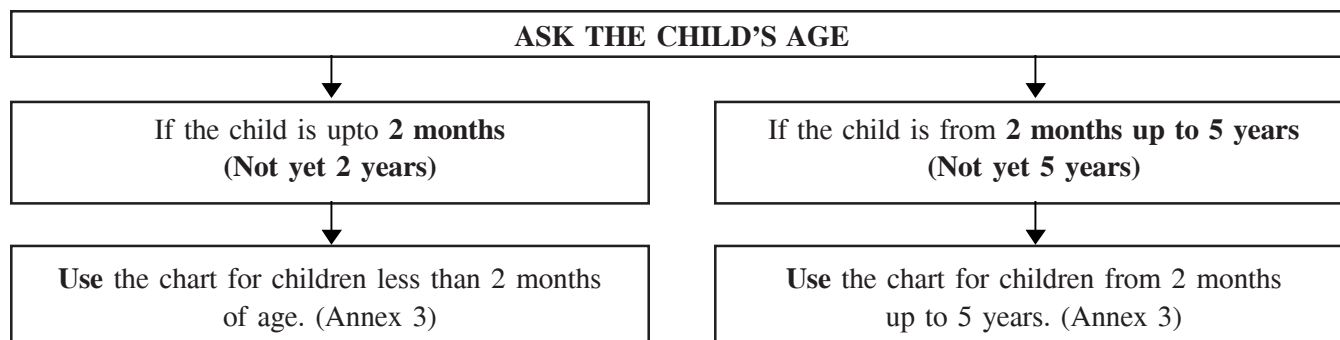
STANDARD CASE MANAGEMENT PROCESS

How to begin when an infant or a child is brought to you:

- **Greet the mother** with a friendly smile
- **Ask the mother what the infant's problems are**
- **Use good communication skills:**
 - **Listen carefully to what the mother tells you.** This will show her that you are taking her concerns seriously and ensure good rapport.
 - **Use words the mother understands.** If she does not understand the questions you ask her, she cannot give the information you need.
 - **Give the mother time to answer the questions.** For example, she may need time to decide if a symptom you asked about is present.
 - **Ask additional questions** when the mother is not sure about her answer

For management purpose the children are divided into two age groups:

- Sick young infants age up to 2 months (0 to 59 days old)
- Sick children 2 months up to 5 years (2 to 59 months)



Introduction to Charts

The Front side of each chart given with this module has three columns. From left to right these are:

“**First**” column lists the **Assessment Steps**

“**Second**” column summarizes the **Signs and Symptoms** present

“**Third**” column lists appropriate **Treatment**

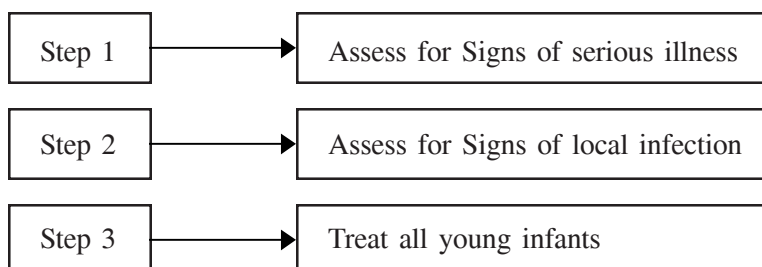
The Charts are organized in three different colours (red, yellow and green):

- Conditions included in the boxes with **red colour** indicate **severe illness**. Children with a severe illness must be **referred** to a hospital or a doctor.
- Conditions included in the boxes with a **yellow colour** need to be treated at home with **medicine** and home care.
- Conditions included in the boxes with **green colour** are to be treated with **home care and do not need medicines**.

Important **steps of treatment** are described on the other side of the Charts.

MANAGEMENT OF YOUNG INFANT (AGE UPTO 2 Months)

It is important to follow ALL steps given below in assessing every Young Infant who is brought to the health worker.



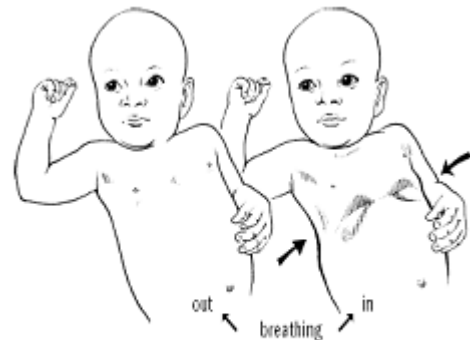
Step 1. Assess for Signs of serious illness (See Annex 3)

- **Convulsions:** Ask the mother if young infant has convulsions.
- **Not able to feed:** If a mother says that the infant is **not able to feed**, watch her try to feed the infant to confirm if infant is able to feed.
- **Fast breathing:** Breathing rate of 60 or more breaths per minute is taken as '*fast breathing*' in a young infant. If the first count is 60 or more, repeat the count. If the second time also the breathing rate is 60 breaths or more, the young infant has '*fast breathing*'.
- **Severe chest indrawing:** Mild chest indrawing is normal in young infant because the chest wall is soft. Severe chest indrawing is quite deep and easy to see.
- **Nasal flaring:** Nasal flaring is widening of the nostrils when the young infant breathes in.
- **Feels hot or unusually cold:** Feel the 'infant' stomach or axilla (underarm) and determine if it feels hot or unusually cold.
- **10 or more skin pustules or a big boil.**
- **Lethargic or unconscious:** A lethargic young infant is not awake and alert when she should be and is difficult to awake by stimulation or has movements less than normal. An unconscious infant cannot be wakened at all.
- **Blood in stool.**

If any one sign is present, Refer the child

- Explain the need for referral
- Calm her fears and discuss possible solutions for any difficulty in referral
- Advise the mother to continue to breast feed the baby and keep the sick young infant warm
- Write a referral slip

For chest indrawing to be present, it must be clearly visible and present all the time. If you only see chest indrawing when the young infant is crying or feeding, the young infant does not have chest indrawing.



Lower chest wall indrawing: with inspiration, the lower chest wall moves in

Step 2. Assess for Signs of local infection (See Annex 3)

- Umbilical redness or umbilicus draining pus
- OR
- Skin pustules (Less than 10 skin pustules)

- Give oral co-trimoxazole (or amoxicillin) for 5 days
- Teach the mother to give local treatment for skin pustules and umbilical infection
- Advise mother to give home care for the young infant

Step 3. Treat all young Infants (See Annex 3)

A) Refer all sick Young Infants having any sign in the red box.

The following steps are necessary for a successful referral:

1. Explain to the mother the need for referral and get her agreement for the same.
2. Calm her fears and discuss possible solutions for any difficulty in referral.
3. Advise the mother to continue to breast feed the baby (if able to feed) and keep the sick young infant warm while transporting the baby. The best way to warm a baby with low temperature is by placing the baby in skin-to-skin contact with the mother (or any adult). Skin to skin contact can be used to keep a baby warm both during transport and at home.
4. Write a referral slip for the mother to take to the hospital, tell her to give this card to the doctor in the hospital.

REFERRAL SLIP		Date
Name	Age	Sex
Signs		
Treatment given:		
Signature		
Designation & Place		

If referral is not possible, and IM antibiotics can be made available:

Arrange for once daily IM gentamicin (5 mg/Kg) and oral amoxicillin for 10 days

B) Treatment for any sign in yellow box (local infection):



- Give oral co-trimoxazole (or amoxicillin) for 5 days. Dose table is given below:
- Teach the mother to give local treatment for skin pustules and umbilical infection
- Advise mother to give home care for the young infant

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) • Give two times daily for 5 days		AMOXICILLIN • Give three times daily for 5 days	
	Adult Tablet single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	Pediatric Tablet (20 mg trimethoprim + 100 mgsulphamethoxazole)	Tablet 250 mg	Syrup 125 mg in 5 ml
Birth up to 1 month (< 3 kg)		1/2		1.25 ml
1 month up to 2 months (3-4 kg)	1/4	1	1/4	2.5 ml

STEPS IN TEACHING THE MOTHER TO GIVE ORAL DRUGS AT HOME

- Determine the appropriate drugs and dosage.
- Demonstrate how to measure a dose.
- Watch the mother practise measuring a dose by herself.
- Explain carefully how to give the drug.
- Ask the mother to give the first dose to her child in front of you.
- Then label and package the drug and explain that all the medicine must be used to finish the course of treatment, even if the infant gets better.
- Check the mother's understanding before she leaves.

Teach the mother to give local treatment for skin pustules and umbilical infection

Apply gentian violet paint twice daily. The mother should:

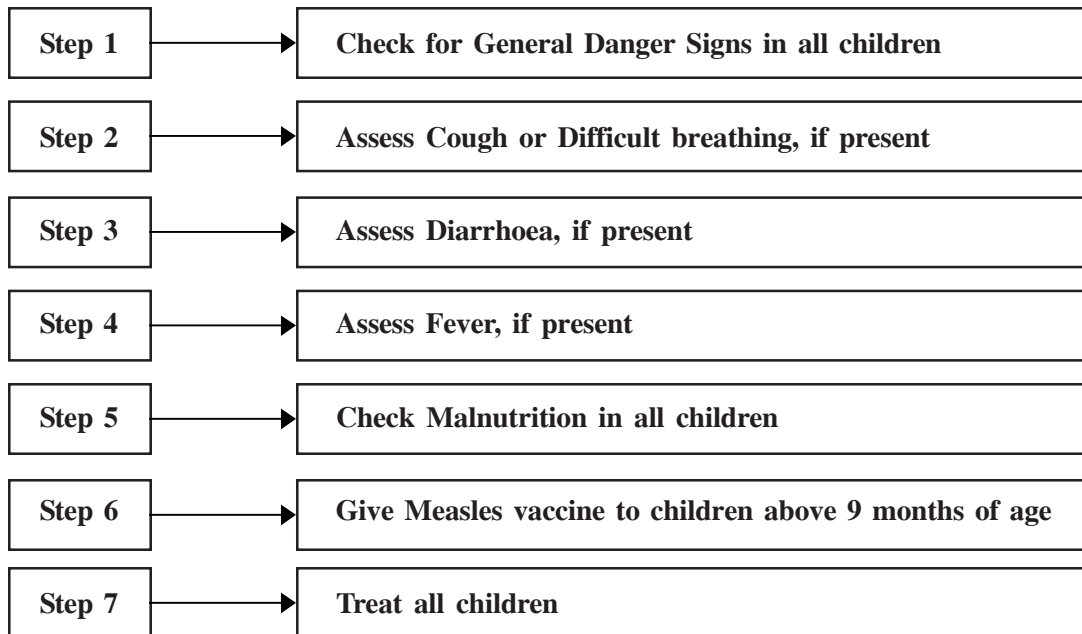
- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint with gentian violet 0.5%
- Wash hands again

C) Advise Mother to Give Home Care:**Home care advice is given to all those young infants who are not being referred**

- Breastfeed frequently, as often (at least 8 times in 24 hours) and for as long as the infant wants, day or night, during sickness and health. Do not give water, other liquids or foods.
- Teach Correct Positioning and Attachment for Breastfeeding
 - Show the mother how to hold her infant
 - with the infant's head and body straight
 - facing her breast, with infant's nose opposite her nipple
 - with infant's body close to her body
 - supporting infant's whole body, not just neck and shoulders.
 - Show her how to help the infant to attach. She should:
 - touch her infant's lips with her nipple
 - wait until her infant's mouth is opening wide
 - move her infant quickly onto her breast, aiming the infant's lower lip well below the nipple.
 - Look for signs of good attachment & effective suckling. If the attachment or suckling is not good, try again.
 - If still not suckling effectively, ask the mother to express breast milk and feed with a cup and spoon
 - If able to take with a cup and spoon advise mother to keep breastfeeding the young infant and at the end of each feed express breast milk and feed with a cup and spoon.
- In cool weather, cover the infant's head and feet and dress the infant with extra clothing. Make sure the young infant stays warm at all times.
- Advise mother to wash hands with soap and water after visiting toilet, and after cleaning the bottom of the baby.
- Do not apply anything on the cord and keep the cord and umbilicus dry.
 - Advise the mother to return immediately if the young infant has any of these signs of severe illness:
 - Breastfeeding or drinking poorly
 - Becomes sicker
 - Develops a fever or feels cold to touch
 - Fast breathing
 - Difficult breathing
 - Blood in stools

MANAGEMENT OF CHILDREN AGED 2 MONTHS UP TO 5 YEARS

It is important to follow ALL steps given below in assessing every child who is brought to the health worker.



Step 1. Check for General Danger Signs in all children

CHECK FOR GENERAL DANGER SIGNS

In all sick children the first step is to check for the following general danger signs. This is important as a child with any danger sign has *very severe disease* and is in danger of dying.

a) *The child is 'Not able to drink or breast feed'*

This means either that:

- the child can not drink at all
- or
- the child is too weak to drink

b) *The child 'Vomits everything'*

- Whenever the child does drink something, he or she vomits everything that's taken.

c) *The child is 'Lethargic or unconscious'*

The lethargic child is sleepy when the child should be awake. A child who stares blankly and does not appear to notice what is happening around is also lethargic.

The unconscious child does not wake up at all. The child does not respond to touch, loud noise or pain.

d) *The child has had 'Convulsions'*

Convulsion(s) in the current illness episode is significant and indicates severe disease

Refer the child to hospital urgently if any general danger sign is present. Complete the rest of the assessment quickly so that referral is not delayed.

Step 2. Assess Cough or Difficult breathing, if present
COUGH OR DIFFICULT BREATHING

Ask the mother if the child has cough or difficult breathing. If she says YES only then proceed further in this step.

Count the child's breathing rate and check for the presence of chest in-drawing.

a) Count the Breathing Rate

The breathing rate must be counted for one full minute. Count the breathing rate only when child is calm and quiet. It will be difficult to count the breathing rate correctly if the child is crying or upset. The breathing rate may be falsely increased if the child is crying.

If the child 's age is	The child has <i>fast breathing</i> If she has:
2 months up to 12 months	50 breaths or more per minute.
12 months up to 5 years	40 breaths or more per minute.

A child with fast breathing has *pneumonia*

b) Look for Chest In-drawing

Make sure that the child's lower chest is fully exposed and you can see it clearly while checking for chest in-drawing. Look for in-drawing of the lower chest wall. **Chest In-drawing is present when lower chest wall goes IN as child breaths IN.** Normally the lower chest wall comes OUT when the child breaths IN.

A child with chest in-drawing has *severe pneumonia* (See Chart)

Chest in-drawing – (Severe Pneumonia)	• Refer urgently to hospital, if possible • Give first dose of co-trimoxazole or amoxicillin before referral • If referral is not possible: Give oral amoxicillin for 5 days
Fast breathing, no chest in-drawing – (Pneumonia)	• Give co-trimoxazole for 5 days • Provide home care • Ask mother to return after 2 days or earlier if child becomes sicker
No fast breathing No chest in-drawing – (No Pneumonia, only cough and cold)	• Provide home care • Cough of more than 30 days, refer for assessment if possible (non urgent referral)

Step 3. Assess Diarrhoea, if present

- Ask the mother if the child has diarrhoea. Diarrhoea is frequent passage of watery stool. Mother's perception that the child is suffering from diarrhea should be accepted.

- If the child has diarrhoea, ask for how long the child has had diarrhoea.

If the duration of diarrhoea is for 14 days or more, the child has *Persistent Diarrhoea*.

- Ask if there is blood in stool.

The child who has blood in the stools has *Dysentery*.

Check all children with diarrhoea for the following 4 signs of dehydration:

- **General condition:**

Is the child '*Lethargic or Unconscious*'? '*Restless and Irritable*'?

When you checked for general danger signs (described above), you checked to see if the child was ***lethargic or unconscious***.

A child has the sign ***restless and irritable*** if the child is crying all the time or every time he is touched and handled. If an infant or child is calm when breastfeeding but again becomes restless and irritable when he stops breastfeeding, he has the sign "restless and irritable". Many children can be consoled and calmed. They do not have the sign "restless and irritable".

- **Sunken eyes:**

Look and decide if the eyes are sunken. Then ask the mother if she thinks her child's eyes look unusual. Her opinion helps you confirm that the child's eyes are sunken.

- **Check the child's ability to drink.**

- Offer the child plain clean water or ORS solution to drink. If the child does not take any water at all or vomits it out completely or is not able to keep any water down, the child is '*not able to drink*'.
- If the child reaches out for the cup or glass or if child opens the mouth when water is offered or begins to cry when the water is taken away, the child has the sign '*drinking eagerly, thirsty*'.
- The child drinks normally if water is taken after some encouragement by the mother.

- **Check for skin pinch:**

Pinch the skin on the abdomen (between the naval and side of the abdomen) with thumb and the first finger by lifting it for one second and releasing it. After leaving the skin, see how soon the skin returns to normal.

- If the skin comes back very slowly, that is, it takes more than 2 seconds the skin pinch is very slow.
- If the skin does not return to normal immediately, the skin pinch is slow
- If the skin pinch returns to normal immediately, it is normal.

Based on these four signs dehydration is classified as 'Severe', 'Some' or 'No' dehydration as described in the following box:

Locate corresponding Section on the Chart

Diarrhoea for 14 days or more	Refer to a hospital
If the child has two or more of the following signs she has SEVERE DEHYDRATION: Lethargic or unconscious Sunken eyes Not able to drink or drinking poorly Skin pinch goes back very slowly.	Refer urgently to a hospital for treatment of 'severe dehydration'. If the child is able to drink, give frequent sips of ORS on the way.
If the child has two or more of the following signs she has SOME DEHYDRATION: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly.	Treat 'some dehydration' with ORS Teach home care
Blood in the stool.	Give cotrimoxazole for 5 days. (2 Pediatric tablet twice daily for a child 2 months up to 12 months and 3 tablets twice daily for a child 12 months up to 5 years)
If there are not enough signs in red or yellow boxes, then there is NO DEHYDRATION	Teach home care

Step 4. Assess Fever, if present

FEVER

First ask the mother if the child has fever. See if child feels hot to touch. Fever is present if the mother gives history of fever or if you have determined that the child feels hot to touch.

Locate corresponding Section on the Chart.

No apparent cause of fever(Malaria)	• Make blood smear if possible • Give Chloroquine for 3 days. • Give paracetamol every 6 hours until high fever is gone
Child has another cause of Fever	• Give paracetamol every 6 hours until high fever is gone? • Advise extra fluids, continue feeding and advise about when to return immediately (Not able to drink or breastfeed, becomes sicker) • If fever is present every day for more than 7 days, refer for assessment.

Step 5. Check Malnutrition in all Children

NUTRITION

Every child should be checked for severe malnutrition and severe anemia.

Check for visible severe wasting

A child has visible severe wasting if the child looks all skin and bones. Remove all the child's clothes to check for wasting. The arms and legs of a severely wasted child look like sticks. The shoulder and buttocks are wasted and there are wrinkles on the buttocks and thighs. Visible wasting is a sign of *severe malnutrition*. A child with this sign should be referred urgently.

Check for swelling (Oedema) of both feet

With your thumb, press gently for a few seconds. Swelling is present if there is depression left in the place where you pressed. This should be checked on the other foot also. The presence of swelling of both feet is a sign of severe *malnutrition*.

Any child with visible severe wasting or oedema both feet is severely malnourished and has high risk of dying. Such children should be referred urgently

Look for severe Palmar pallor.

To check for palmar pallor hold the child's palm open by grasping it gently from the side. Do not stretch the fingers backwards. Compare the colour of the child's palm with your own palm. If the skin of the palm is very pale or so pale that it looks white, the child has severe palmar pallor. Such children should also be referred urgently. (See chart).

Visible severe wasting or Oedema of both feet or severe palmar pallor	• Refer Urgently • Give vitamin A(100,000 I.U) for age 9-12 months and 200,000 I.U for age 1-5 years.
All Other Children	• Up to 6 months of age: Encourage mothers to exclusively breastfeed as often as the child wants, day and night, at least 8 times in 24 hours. Do not give any other fluid or food. • 6 months to 12 months: Breastfeed as often as the child wants. In addition give adequate servings of locally available complementary foods at least 3 times a day. • 12 months to 5 years: Breastfeed as often as the child wants. Give adequate serving of locally available complimentary food at least 5 times a day.

Step 6. Ensure Measles vaccine to children above 9 months of age

MEASLES IMMUNISATION

- Ensure measles vaccine to all children above nine months of age, irrespective of previous immunization status.
- Measles vaccine can be given even to sick children. The disease will not get worse as a result of vaccination. The only time you do not give the vaccine is when you are urgently referring the child to a hospital.
- Very often, in disaster situations, the national authorities decide to immunize all children above 9 months with measles vaccine. During such situations measles outbreak is common and one of the important killers of children.

Step 7. Treat all children

Refer all cases with general danger signs or a sign in any of the red box. Treat all cases with a sign in yellow box with drugs and home care advice. For children in green boxes advise home care.

➤ Treat 'fast breathing' or 'blood in stools' with cotrimoxazole

Age of child	COTRIMOXAZOLE DOSES (Give 2 times daily for 5 days)
	Paediatric tablet (20 mg trimethoprim and 100 mg sulpha-methoxazole)
2 months upto 12 months	2 tablets
2 months upto 5 years	3 tablets

Cotrimoxazole and amoxicillin tablets should be crushed and mixed with food or fluid before giving to young children who can not swallow.

➤ Treat Diarrhea with dehydration with Oral Rehydration Salt (ORS) Solution

The child with diarrhea of less than 14 days duration who has signs of some dehydration should be treated under your supervision with ORS for 4 hours. For this, keep the mother and child under observation, either at the health centre or at the home of the child.

Teach the mother how to prepare ORS:

1. Wash your hands thoroughly with soap and water.
2. Pour all the ORS powder from a packet into a clean container.
3. Measure one litre of clean drinking water and pour it in to the container in which you poured ORS.
4. Stir until all the powder in the container has been mixed with water and none remains at the bottom of the container.
5. Taste the solution so you know how it tastes

Explain to the mother that she should mix fresh ORS solution each day in a clean container, keep the container covered, and throw away any solution remaining from the day before. Ask the mother to give one teaspoon of the solution to the child. This should be repeated every 1-2 minutes (An older child who can drink it in sips should be given one sip every 1-2 minutes). If the child vomits the ORS tell the mother to wait for 10 minutes and resume giving the ORS but this time more slowly than before. Breast fed babies should be continued to be given breast milk in between ORS. Any ORS which is left over after 24 hours should be thrown away.

Use the table below to determine the amount of ORS that should be given to the child in 4 hours.

ORS Cups Size = 150 ml	AGE			
	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
	2	3	5	7
				

After about 4 hours of giving ORS, reassess the child for dehydration. If the child is no longer dehydrated, tell the mother to give home available fluids the same way as she gave ORS. Details of what home available fluids to give are given in the next section. Begin feeding the child even if dehydration persists, continue ORS. If the child is still dehydrated, refer. On the way mother should continue to give ORS to the child.

➤ Treat High Fever

Give paracetamol every 6 hours until high fever is gone

Advise extra fluids, continue feeding and advise about when to return immediately. (Not able to drink, becomes sicker)

If fever is present every day for more than 7 days, refer for assessment

Dose of Paracetamol

Age of the Child	Paracetamol (500 mg tablet)
2 months up to 12 months	1/4
12 months up to 5 years	1/3

➤ Give Chloroquine

Assess Fever, if present

If the child has no apparent cause of fever, treat the child for malaria with chloroquine. First make a blood film if possible.

Explain to the mother that if the child vomits within 30 minutes, she should repeat the dose and return to the clinic for additional tablets.

Dose of Chloroquine Give for 3 days			
AGE	TABLET (150 mg base)		
	DAY 1	DAY 2	DAY 3
2 months up to 12 months	1/2	1/2	1/4
12 months up to 5 years	1	1	1/2

➤ **Home care for cough or cold**

- Continue exclusive breastfeeding for children up to 6 months
- Give extra fluids to older children
- If possible, give soothing remedies like warm tea.
- Teach the mother when to return immediately:
 - Child becomes sicker
 - Not able to drink or breast feed
 - Fast Breathing
 - Difficult Breathing
 - Develops a fever

➤ **Home care for diarrhea no dehydration**

- 1. Give extra fluid (as much as the child will take)**
Such as: ORS, yoghurt drink, vegetable soup, fruit juice, plain clean water (or other locally available fluids. For exclusively breastfed infants 6 months or less use ORS only.
- 2. Breast feeding frequently**
- 3. Show the mother how much fluid to give after each stool in addition to the usual fluid intake:**
 - Up to 2 years: half cup. Give more if the child wants more.
 - 2 years or more: full cup. Give more if the child wants more.
- 4. Continue feeding**
- 5. When to return. Tell the mother to return to the health worker if:**
 - The child is not able to drink or breastfeed
 - The child becomes sicker
 - There is blood in stool
 - The child develops a fever



Umbilicus draining pus



Skin pustules



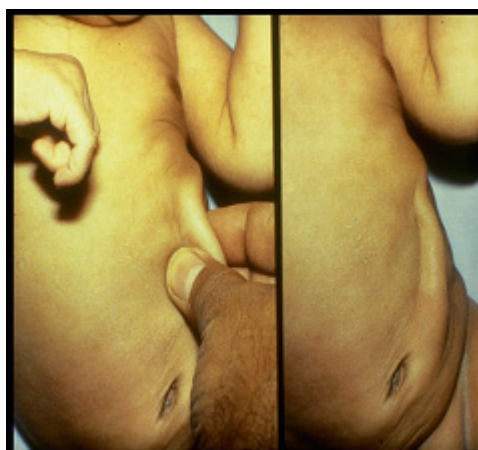
Sunken Eyes



Sunken Eyes



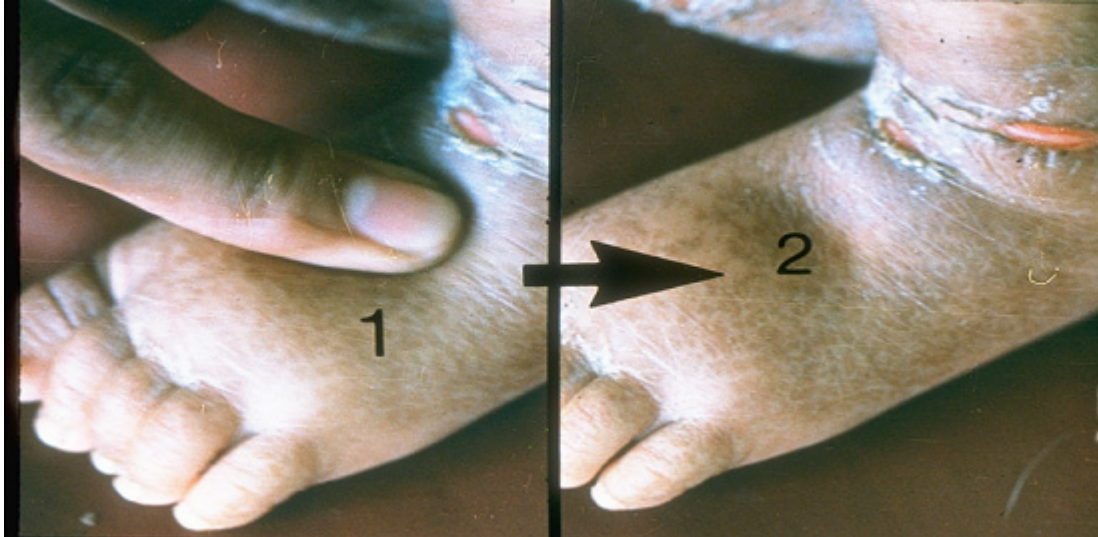
Skin pinch



Skin pinch



Visible Severe Wasting



Swelling both feet

DRUGS/SUPPLIES

Health workers need to have the following drugs/supplies to manage common health problems in children.

Drugs:

- Cotrimoxazole (Pediatric) tablets
- Chloroquine tablets
- Oral rehydration salt (ORS)
- Paracetamol tablets
- Vitamin-A solution
- Gentian Violet for topical use
- Measles vaccine (Only for trained workers)
- Syringes/needles. Auto-disable preferable.

Additional drugs: (These drugs to be used only **by a physician/trained health worker** to manage children in situations where referral is not possible).

- Amoxicillin tablets
- Ciprofloxacin tablets
- Injection chloramphenicol
- Injection gentamicin

Age of child	For Pneumonia	For Blood in Stool
	AMOXICILLIN DOSES Give 3 times daily for 7 days	CIPROFLOXACIN Give 2 times daily for 5 days
	Tablet (250 mg)	Tablet (250 mg)
2 months upto 12 months	½ tablet	¼ tablet
2 months upto 5 years	1 tablet	½ tablet

INFANT FEEDING IN EMERGENCIES

In emergencies, workers are faced with the daunting task of caring for large number of women and infants many of whom are ill, malnourished and traumatized by their experiences. It is common to be faced by women who are so weak that they seem unable to produce milk, or have lost confidence in their ability to breastfeed. The challenges for these workers are enormous. They must make sure there are appropriate conditions and adequate support for women to breastfeed, know when agreed criteria for artificial feeding are fulfilled, cope with limitations in resources and lack of safe water, and know how to deal with donations of infant foods that might be inappropriate.

How Breastfeeding Works?

When the milk secreting cells have produced the milk, it flows into wide ducts called lactiferous sinuses (milk ducts) that are beneath the areola (the darker skin around the nipple). A baby needs to suckle effectively to get the breast milk. To do this, he or she must take enough of the breast into his/her mouth to put pressure with his/her mouth on the milk ducts. This is called being *well attached* to the breast or good attachment. A baby cannot get the milk by sucking only on the nipple. (Poor attachment).

Signs that a baby is attached well to the breast

1. The baby's mouth is wide open
2. The baby's chin touches the breast
3. The baby's lower lip is curled outward
4. Usually the lower portion of the areola is not visible

Recommendations for infant feeding:

Start breastfeeding within one hour of birth.
Breastfeed exclusively for six months.
From six months, add adequate complementary foods.
Continue breastfeeding up to two years or beyond.

Is the baby getting enough breastmilk?

Many mothers worry that they are not producing enough milk. This is especially likely for mothers in emergency situations, but is also true in settled conditions. Nurses in outreach situations can judge whether a baby is getting enough milk by seeing the way the baby feeds. Health and nutrition workers may also worry about breastmilk production and sometimes their own lack of confidence is passed on to the mothers.

To get plenty of milk the baby needs:

- To be well attached so that s/he can suckle effectively and get the milk easily
- To have a mother whose milk flows well even if the surroundings are stressful
- To suckle frequently so that the breasts produce plenty of milk
- To suckle for as long as s/he wants during each feed to get the hind milk as well as to stimulate the breasts more.

A baby who is getting enough milk is usually:

- Not visibly thin (or is getting fatter/putting on weight, if s/he was thin earlier)
- Responsive and active, (appropriately for his or her age)
- Gaining weight (at least 500 g/month if aged under six months) and
- Passing light-colored urine six times a day, or more. (However, one cannot use this sign, if the baby is having water, oral rehydration solution or other drinks as well as breastmilk.)

The best breastfeeding pattern

Frequent and unlimited breastfeeds are the best breastfeeding pattern throughout the infant's first year. This ensures that a baby stimulates his or her mother's breast to make all the milk that s/he needs to grow and develop healthily.

The baby should:

- Suckle as often as s/he wants, day and night, without long periods of separation from the mothers.
- Suckle for as long as s/he wants at each feed, getting the fat-rich milk that comes later in the feed.
- Have the breast kept available if s/he pauses, or lets go of the breast for some moments – pauses do not necessarily mean that s/he has finished the feed.
- Finish the first breast, and then be offered the other breast, which s/he may or may not want. Let the infant decide whether s/he wants one or two breasts at each feed. There is no rule to follow.

This breastfeeding pattern is important even after complementary foods have been introduced at six months.

ASSESSMENT OF BREASTFEEDING IN A FIELD SITUATION:

Simple Rapid Assessment (SRA)

SRA can take place at intake, registration, or any early meeting with nurse. SRA decides whether:

- The baby is not at immediate risk of inadequate feeding, and the mother needs only **supportive care** or
- The baby is at immediate risk of inadequate feeding, and should be referred for **Full Assessment**.

Simple Rapid Assessment

Ask:

1. How old is the baby?
2. Are you breastfeeding him/her?
3. Is the baby getting anything else to drink or eat?
4. Is the baby able to suckle the breast?
5. Have you any difficulties with breastfeeding?

Age _____

Look:

6. Does the baby look visibly thin?
7. Is the baby lethargic, perhaps ill?

Reasons to refer for Full Assessment:

- _____ Not breastfed
- _____ Breastfed but feeding not age-appropriate
under 6 months, not exclusively breastfed
over 6 months, and given no complementary foods
- _____ Baby unable to suckle the breast
- _____ Mother has other difficulties with breastfeeding
- _____ Mother requests breastmilk substitutes
- _____ Baby visibly thin
- _____ Baby lethargic, perhaps ill

Supportive care for breastfeeding

1. Emphasize that breastmilk is best.
2. Actively support women to breastfeed.
3. Avoid inappropriate distribution of breastmilk substitutes.
4. Do not distribute feeding bottles/teats; promote cup feeding.
5. Add complementary foods to breastfeeding at 6 months.
6. Avoid commercial complementary foods.
7. Include pregnant and lactating women for supplementary feeding on priority basis.

Supporting people in their own efforts

First do no harm

- Learn customary good practices.
- Avoid disturbing these practices.

Stress, trauma, grief and sexual violence do not spoil a mother's breastmilk, but all she needs is restorative care. Inappropriate donations of infant feeding products in emergency situations can work against existing breastfeeding practices.

Then, provide active support for breastfeeding:

General support: establish the conditions that will make breastfeeding easy

Individual support: Is given to mothers and families through breastfeeding counseling, help with difficulties, appropriate health care.

Full Assessment (FA)

This usually takes place in a health care setting, when a mother is referred there.

Full Assessment indicates:

- What needs to be improved
- What kind of help is needed.

All mothers should be receiving the supportive care described above. Severely malnourished or ill mothers need immediate care for themselves. They should be referred without delay to appropriate services, with their infants. Full Assessment of infant feeding should be part of treatment within those services.

Management of Scabies:

Assess	Classify	Treat
• Rash or dry cracks in finger webs, front of wrist and elbows, armpits, waistline, thighs & ext genitalia • Severe itching specially at night	Scabies	– Bathe with soap & water – Apply ointment – two applications – Dry – Keep for 24 hours – Repeat after 24 hours for 3 days – Assess & treat other family members – Teach mother hygienic measures – wash all clothing & bedding, Boil if possible, sun dry – Refer if no improvement after treatment

Management of Worm Infestations:

Assess	Classify	Treat
• Pruritis ani-mild itching to acute pain in the night • Excoriation • Secondary infection • Restless sleep, irritability, enuresis	Threadworm, pinworm,	– Refer for treatment – Tab albendazole 400 mg single dose – Repeat after two weeks – Teach mother: handwashing, toilet hygiene, cutting nails, proper disposal of feces, daily bath, prevent scratching of anal region, washing of vegetables and fruits, safe drinking water, wearing shoes while playing
• Passing of adult worms in stools • Small bowel obstruction: colic, abdominal pain vomiting, • Fever, cough sputum • Convulsions, meningism, insomnia, tooth grinding	Roundworm	– Refer for treatment – Tab albendazole 200 mg single dose – Teach mother: handwashing, toilet hygiene, cutting nails, proper disposal of feces, daily bath, prevent scratching of anal region, washing of vegetables and fruits, safe drinking water, wearing shoes while playing
• Anemia • Pallor	Hookworm	– Refer for treatment – Teach mother: handwashing, toilet hygiene, cutting nails, proper disposal of feces, daily bath, prevent scratching of anal region, washing of vegetables & fruits, safe drinking water, wearing shoes while playing

5 *Nursing Care in Pregnancy, Natality and the Post Natal Period*

KEY LEARNING OBJECTIVES

After this session the participant should be aware about

- The importance of antenatal care and skilled attendance at birth, especially during disasters.
- The key actions that a health worker must perform to ensure that the woman receives appropriate and adequate care during pregnancy, delivery and postpartum period

Introduction

Every woman should receive skilled attendance during pregnancy, childbirth and the postpartum period. The presence of a Skilled Birth Attendant (SBA) at every delivery, along with the availability of an effective referral system, can help reduce the maternal morbidity and mortality to a considerable extent.

The provision of Skilled Attendance at Birth to every woman gains an increased importance in a disaster setting because there is a certain level of breakdown of the health system following a disaster. Hence in case obstetric complications do occur, it may prove to be difficult to find a referral facility nearby to ensure timely receipt of care. Skilled care at the hands of a trained provider reduces the number of fatal complications; timely recognition of danger signs results in a greater time at hand in which to seek care at a higher facility; and the provision of obstetric first aid prolongs the window period between the occurrence of a life-threatening complication and death. The guidelines have been prepared keeping in mind that the nurses would be providing care in a domiciliary setting following a disaster.

KEY MESSAGES

- Ensure iron–folic acid supplementation & TT immunization to every pregnant woman.
- Adequate rest and diet for the pregnant woman results in better maternal and neonatal outcomes.
- Provide psychological support to relieve anxiety and stress, which may be aggravated because of the disaster.
- Prepare pregnant women and their families for the eventuality of an emergency and to be ready for referral should the need arise.
- Good record-keeping assists in better case management and follow-up.

Effective antenatal care (ANC) can improve the health of the mother and give her a chance to deliver a healthy baby. Regular monitoring during pregnancy can help detect complications at an early stage before they become life-threatening emergencies. The important components of ANC are discussed below.

Early registration

The first visit or registration of a pregnant woman for ANC should take place as soon as the pregnancy is suspected. You/your institution may arrange ANC clinics in the disaster stricken area on fixed days. Seek the help of the local leaders and other workers such as the AWW to inform and enrol the women for the clinics.

Antenatal check-up

Number and timing of visits

- You must ensure that every pregnant woman makes at least 4 visits for ANC, including the first visit/ registration.

- The first visit is meant for registration of the pregnancy and the first antenatal check-up. The second visit should be scheduled between the 4th and 6th month (around 26 weeks). The third one should be planned in the 8th month (32 weeks), and the fourth one in the 9th month (36 weeks).

Preparing for antenatal care

- If possible arrange to take the pregnant women in the families allotted to you to the ANC clinic organised by you/your institution or the near by health facility.
- The antenatal clinic should be conducted at an appropriate place that allows privacy for conducting an abdominal palpation.
- If you are handling the clinic yourself, ensure that all the required instruments/equipment, such as stethoscope, sphygmomanometer, weighing scale, inch-tape, are available and in working condition.
- Greet every pregnant woman in a friendly manner at each visit.
- Confirm that the present pregnancy is wanted. If not, and the woman wishes to go in for an abortion, refer the woman to a health facility providing safe abortion services.

Take a detailed history and refer the woman to the doctor if her obstetric history reveals any of the following:

- * previous stillbirth or neonatal loss
- * history of three or more spontaneous consecutive abortions
- * birth weight of the previous baby <2500 g
- * birth weight of the previous baby >4500 g
- * hospital admission for hypertension or pre-eclampsia/eclampsia in the previous pregnancy
- * previous surgery on the reproductive tract
- * iso-immunization (Rh -ve) in the previous pregnancy

Physical examination

This activity will be nearly the same during all the visits. Initial readings may be taken as a baseline and compared with the later readings.

General examination

1. Weight
2. Blood pressure
3. Pallor
4. Respiratory rate (RR)
5. Generalized oedema

Abdominal examination

1. Fundal height
2. Foetal lie and presentation
3. Foetal heart sound (FHS) and rate
4. Multiple pregnancy

Breast examination

Observe the size and shape of the nipples for the presence of

1. Inverted or flat nipples.
2. Retracted nipples

3. Crusting and soreness of the nipples
4. Any lumps or tenderness.

Laboratory investigations

The following laboratory investigations are recommended at the primary health care provider level to be carried out as a part of ANC.

1. Haemoglobin estimation
2. Blood grouping
3. Testing the urine for the presence of albumin
4. Testing the urine for the presence of sugar

Interventions

1. Iron-folic acid (IFA) supplementation

All pregnant women need to be given one tablet of IFA (100 mg elemental iron and 0.5 mg folic acid) every day for at least 100 days, starting as soon as possible after registration. If a woman is anaemic (Hb <11 g/dl) or she has pallor, give her two IFA tablets per day for three months. This means a woman with anaemia in pregnancy needs to take at least 200 tablets of IFA.

2. Injection tetanus toxoid (Inj. TT) administration

The first dose of TT should be given just after the first trimester. The second dose is to be given one month after the first dose, but at least one month before the EDD.

Counselling

Birth preparedness and complication readiness

Four out of ten pregnant or postpartum women will experience some complication related to their pregnancy; for about 15% of these women, the complication will be potentially life-threatening and will require immediate emergency obstetric care. Since most of these complications cannot be predicted, every pregnancy necessitates preparation for a possible emergency.

- *Identification of a skilled provider for birth:* (Note that TBAs, trained or untrained, do not fall into the category of “SBAs”). ALL PREGNANT WOMEN MUST BE ENCOURAGED TO OPT FOR AN INSTITUTIONAL DELIVERY.
- *Delivery kit:* All pregnant women, especially when they are nearing completion of their term, should be equipped with supplies required for conducting the delivery at home, especially if the woman has decided to deliver at home.
- *Identify support people:* These people are needed to help the woman care for her children and/or household, arrange for transportation, and/or accompany the woman to the health facility in an emergency.
- *Finances:* The woman and her family should be given an estimate of the expected expenses for the delivery and related aspects (such as transport, etc.). They should also be advised to keep some emergency fund, should a complication arise and more money is required.
- *Signs of labour:* Advise the woman to go to the health facility or contact the SBA if she has any signs which indicate the start of labour:
- *Danger signs:* She must be told that if she has any of the following she should immediately visit a referral hospital, WITHOUT WAITING, be it day or night.

- * Any bleeding P/V during pregnancy, and heavy (>500 ml) vaginal bleeding during and following delivery
- * Severe headache with blurred vision
- * Convulsions or loss of consciousness
- * Labour lasting longer than 12 hours
- * Failure of the placenta to come out within 30 minutes of delivery
- * Preterm labour (labour starting before 8 gestational months)
- * Premature or pre-labour rupture of membranes (PROM)
- * Continuous severe abdominal pain

The woman should visit a PHC if she has any of the following conditions:

- * High fever with or without abdominal pain, and feels too weak to get out of bed
 - * Fast or difficult breathing
 - * Decreased or absent foetal movements
 - * Excessive vomiting, wherein the woman is unable to take anything orally, leading to a decreased urinary output
- *Location of the nearest PHC/FRU:* The woman and her family members should be aware of the nearest health facility, both the PHC and the referral centre, where facilities for a blood transfusion and surgery are available.
 - *Identification of transportation facilities:* A vehicle should be identified which should be available to transport the woman to referral facility should a complication arise.
 - *Preparedness for blood donation:* Blood transfusion can be life-saving in cases of haemorrhage. Voluntary donors (2–3 in number) must be ready, should the need for transfusion arise.

Diet and rest

- Remember, a pregnant woman needs about *300 extra kcal per day* compared to her usual diet.
- The woman's food intake should be especially rich in proteins, iron, vitamin A and other essential micronutrients.
- The *other members of the family* should also be taken into confidence and counselled regarding the recommended diet for the pregnant woman.
- The diet should be advised keeping in mind the *socioeconomic conditions*, food habits and taste of the individual.
- *Food taboos* must be looked into while counselling the woman regarding her dietary intake.
- The woman should be advised to sleep for 8 hours at night and rest for another 2 hours during the day. She should be told refrain from doing heavy work, especially lifting heavy weights, as it can adversely affect the birth weight of the baby.

Infant and young child feeding

Pregnancy is the ideal time to counsel the mother regarding the benefits of breastfeeding her baby. For details refer to the chapter on care of children.

Contraception

The woman should be advised regarding birth spacing (or limiting, as the case may be). Explain to the woman and her husband that, after birth, if she has sex and is not exclusively breastfeeding, she can become pregnant as early as six weeks after delivery. Therefore, it is important to start thinking early about what family planning method they will use.

Ask about the couple's plans for having more children. If they desire more, advise them that a gap of 3–5 years between pregnancies is healthier for the mother and the child.

They should be given the range of family planning methods available to them, such as the ones described below.

Lactational amenorrhoea method (LAM)

A woman can use lactational amenorrhoea as a method of contraception, provided she keeps three points in mind.

- *Amenorrhoea:* The woman should be amenorrhoeic, i.e. she should not have re-started her menses after delivery.
- *Lactation:* The woman should be feeding her baby exclusively, i.e. no complementary foods or fluids; she should be feeding 8 times or more in a day, including at least one night feed; and with a gap of not more than 4 hours between feeds during the day, and not more than 6 hours during the night.
- *Six months:* The woman cannot use this method for more than six months postpartum.

Intrauterine contraceptive device (IUCD)

This can be inserted either immediately postpartum, or 6 weeks after delivery. This has the advantage of offering protection for 10 years or even more, depending on the type of IUCD inserted.

Condoms

These can be safely used as soon as, and for as long as, the woman so desires. It should be emphasized to her to use them correctly and consistently, with each act of sexual intercourse.

Natural methods

Natural methods of contraception such as abstinence, periodic abstinence (the standard days' method [SDM]), cervical mucus method, etc. may be advocated to the couple. This is especially important in cases where religious bindings prohibit the couple from using any other method of contraception.

Permanent methods/sterilization

If the woman has achieved her desired family size, the permanent methods of contraception, such as tubectomy or vasectomy, may be advised to her.

Oral contraceptive pills

The use of combined oral contraceptive pills is NOT advisable during the postpartum period as the woman is lactating during that time. Combined oral contraceptive pills are known to decrease the milk output. However, the woman may be advised to use them after 6 months of delivery.

Symptoms and signs during pregnancy, probable diagnosis and action required to be taken

Symptoms	Signs/investigations	Most probable diagnosis	Action(s) to be taken
• Vomiting during the first trimester		• May be physiological (morning sickness)	• Advise the woman to eat small frequent meals; avoid greasy food; eat lots of green vegetables and drink plenty of fluids.

Symptoms	Signs/investigations	Most probable diagnosis	Action(s) to be taken
			If vomiting is excessive in the morning, ask her to eat dry foods such as biscuits or toast after waking up in the morning.
Excessive vomiting, especially after the first trimester	The woman may be dehydrated	Hyperemesis gravidarum	Refer the woman to the doctor.
Palpitations, easy fatiguability, breathlessness at rest	- Conjunctival and/or palmar pallor present - Hb level <7 g/dl	Severe anaemia	- Refer her to the doctor for further management. - Advise her to have a hospital delivery.
Puffiness of the face, generalized body oedema	- BP >140/90 mmHg - Proteinuria absent - BP >140/90 mmHg - Proteinuria present	- Hypertensive disorder of pregnancy - Pre-eclampsia	- Refer to the doctor for anti-hypertensive medication - Advise her on the danger signs of imminent eclampsia and eclampsia and refer to the doctor.
Heartburn and nausea		Reflux	- Advise the woman to avoid spicy and rich foods. - Ask her to take cold milk during attacks. - If severe, antacids may be prescribed.
- Increased frequency of urination up to 10–12 weeks of pregnancy - Increased frequency of urination after 12 weeks, or persistent symptoms, or burning on urination	- Tenderness may be present at the sides of the abdomen and back - Body temperature may be raised	- May be physiological due to pressure of the gravid uterus on the urinary bladder - Urinary tract infection (UTI)	- Reassure her that it will be relieved on its own. - If permitted, give the woman the first dose of antibiotics as may be recommended - Refer the woman to the doctor.
Constipation		Physiological	- Advise the woman to take more fluids, leafy vegetables and a fibre-rich diet. - If not relieved, advise her to take Isabgol, 2 tablespoonfuls to be taken at bedtime, with water or with milk. - Do NOT prescribe strong laxatives as they may start uterine contractions.

Symptoms	Signs/investigations	Most probable diagnosis	Action(s) to be taken
- Bleeding P/V, before 20 weeks of gestation - Bleeding P/V, after 20 weeks of gestation	- Check the pulse and BP to assess for shock - Check the pulse and BP to assess for shock	- Threatened abortion/spontaneous abortion/hydatidiform mole/ectopic pregnancy - Antepartum haemorrhage	- If woman is bleeding, refer to the doctor - Do NOT carry out a vaginal examination under any circumstances. - Refer to a referral centre
Fever	- Body temperature is raised - Blood peripheral smear is positive for malarial parasite	- Site of infection somewhere, including possible sepsis - Malaria	- Refer to the doctor. - Manage according to the NAMP guidelines for malaria in pregnancy
Decreased or absent foetal movements (NOTE: foetal movements are felt only after about 4 months of gestation)	- FHS heard, and within the normal range of 120-160/minute - FHS heard, but the rate is <120/minute or >160/minute - FHS not heard	- Baby is normal - Foetal distress - Intrauterine foetal death	- Reassure the woman - Repeat FHS after 15 minutes. - If the FHS is still out of the normal range, refer to the doctor. - Inform the woman and her family that the baby might not be well. - Refer to the doctor.
Vaginal discharge, with or without abdominal pain		RTI/STI	- Refer the woman to the doctor. - Advise the woman regarding vaginal hygiene, i.e. cleaning the external genitalia with soap and water.
Leaking of watery fluids P/V	Wet pads/cloths	Premature rupture of membranes	Refer the woman to the doctor.

Care during Labour and Delivery—Intrapartum care

KEY MESSAGES

- Motivate the woman and her family to have a clean and safe delivery.
- Promote and ensure skilled attendance at every birth.
- Promote institutional delivery.
- Let the woman choose the position she desires and feels comfortable in during labour and delivery.
- Ensure active management of the third stage of labour, which will help in the prevention of postpartum haemorrhage.

Conducting a normal delivery at home/at the subcentre

Supplies required for a home delivery

If it is planned to conduct the delivery at home, certain supplies are required. Ask the woman and her family to arrange for and keep ready the following in case of a home delivery:

- Warm area for the birth with a clean surface or a clean cloth. The plastic sheet provided in the DDK (wherever available) is meant for providing the “clean surface”.
- Clean cloths of different sizes: for the cot/bed, for drying and wrapping the baby, for cleaning the baby’s eyes, for the birth attendant to wash and dry her hands, and for the woman to use as sanitary pads.
- Blankets
- Buckets of clean water and some means to heat this water
- Soap. This is provided in the DDK (wherever available)
- Bowls—2 for washing and 1 for the placenta
- Plastic sheet/bag for wrapping the placenta

Supportive care to the woman during labour

- Explain all procedures, seek permission for examination and carrying out procedures, and discuss the findings with the woman.
- Ensure and respect the privacy of the woman during examinations and discussions.
- Always wash your hands with soap and water before examining the woman.
- Ensure cleanliness of the birthing area.
- *Enema* should NOT be routinely given during labour.
- Encourage the woman to empty her bladder frequently.
- The presence of a second person or a *birth companion* of the woman’s choice in addition to an SBA is beneficial.
- The woman should be allowed to *remain mobile* during labour, especially the first stage, as this helps in having a shorter and less painful labour.
- The woman should be free to choose any *position* she desires and feels comfortable in during labour and delivery. Remember, the woman will often change positions, as no position is comfortable for a long period of time.
- *Non-pharmacological methods of relieving pain* during labour include:
 - the calm and gentle voice of the birth attendant
 - offering the woman encouragement, reassurance and praise
 - relaxation techniques performed by the woman such as deep breathing exercises and massage
 - placing a cool cloth on the woman’s forehead
 - assisting the woman in voiding urine and in changing her position.
- Women can have light, easily digested, low-fat *food during labour*, if they wish.

Vaginal examination

This is required to initially differentiate between false and true labour pains and then to decide the stage of labour.

- Do NOT shave the perineal area
- Wash your hands with soap and water before and after each examination.
- REMEMBER; do not carry out a vaginal examination if the woman is bleeding at the time of labour or at any time after 5 months (20 weeks) of pregnancy. Manage this as a case of APH
- During a vaginal examination, *determine the following*:
 - Cervical effacement

- Cervical dilatation in centimetres
- The presenting part.
- The membranes – are they intact?
- Amniotic fluid is clear or meconium-stained.
- Prolapsed cord?
- Remember, vaginal examinations are rarely required more frequently than once *every 4 hours*.
- Oxytocic drugs, such as injection oxytocin should not be given before the delivery. As it is associated with an increased incidence of rupture of the uterus and subsequent severe APH.

Management of the first stage of labour

- *Monitor* the following
 - Contractions.
 - FHR
 - Cervical dilatation (in cm). Unless otherwise indicated, do not perform a vaginal examination more frequently than once every 4 hours.
 - Temperature
 - Pulse
 - Blood pressure
- The presence of any sign that denotes an emergency
- Record the time of rupture of the membranes and the colour of the amniotic fluid.
 - If after 8 hours, there is no progress of labour, refer the woman urgently to a referral centre.

Management of the second stage of labour

- Monitor as during the first stage
- Allow the woman to push down when she has contractions if she has the urge to do so. But bearing down efforts are not required until the head has descended into the perineum.
- It is not advisable to give the woman oxytocics to shorten the second stage of labour.
- Ensure a controlled delivery of the head
- Feel cord around the neck. And manage accordingly if present:
- Conduct the delivery of the shoulders and the rest of the baby
- Give immediate newborn care
- Rule out the presence of another baby by palpating the abdomen and trying to feel for foetal parts.
- Cut the cord
- It is recommended that the umbilical cord stump be left dry, and only routine daily care given with clean, safe water. Do not apply any substance to the stump.
- Place the baby on the mother's chest for skin-to-skin contact.
- Cover the baby to prevent loss of body heat. If the room is cool, use additional blankets to cover the mother and the baby.
- Encourage the mother to initiate breastfeeding.

Management of the third stage of labour

Active management of the third stage of labour

The active management of the third stage of labour consists of the following three activities.

Uterotonic drug

- Giving a uterotonic drug such as Misoprostol/Methyl ergometrine for the prevention of PPH.

Controlled cord traction (CCT)

- This is a technique to assist in expulsion of the placenta and helps to reduce the chances of a retained placenta and subsequent PPH

Uterine massage

- This technique helps in contraction of the uterus and expulsion of the blood clots and thus prevents PPH.

Immediate postpartum care (the first 24 hours)

- After delivery of the placenta, check that the uterus is well-contracted and there is no heavy bleeding.
- Examine the perineum, lower vagina and vulva for tears.
- Dispose of the *placenta* in the correct, safe and culturally appropriate manner.
- Keep the mother and the baby together; do not separate them.
- Ask the birth companion to stay with the mother. Ask the companion to watch the woman and **call for help** if any of the following occurs:

- The bleeding increases.
- The woman feels dizzy.
- The woman has severe headache.
- The woman has visual disturbance.
- The woman has epigastric distress.
- The woman complains of pain in the abdomen.
- The woman complains of increased pain in the perineum.

Counselling

Counsel and advise the woman on the following issues:.

1. Postpartum care and hygiene
2. Nutrition
3. Contraception
4. Care of the newborn
5. Breastfeeding
6. Registration of birth
7. Postpartum visit
8. Danger signs

For the following symptoms and signs in the mother, advise the woman and her family to go to a referral centre immediately, day or night, **WITHOUT WAITING**.

- Excessive vaginal bleeding, i.e. soaking more than 2 or 3 pads in 20–30 minutes after delivery, OR bleeding increases rather than decreases after the delivery
- Convulsions
- Fast or difficult breathing
- Fever and weakness so that she cannot get out of bed
- Severe abdominal pain

Care after delivery—postpartum care

KEY MESSAGES

- You should make two postpartum visits, one in the first 48 hours and another in the first 7–10 days, to help ensure that any major complications during the postpartum period are recognized in time.
- Look out for the symptoms and signs of postpartum haemorrhage, and puerperal sepsis during your postpartum visits, as they are important causes of maternal mortality.

The following guidelines are meant for persons providing PNC at the village or subcentre level.

Postnatal check-ups

Number and timing of PNC visits

- *The first 48 hours* following delivery are the most critical in the entire postpartum period. Most of the important complications of the postpartum period which can lead to maternal death occur during these 48 hours. Hence, a woman who has just delivered needs to be closely monitored during the first 48 hours.

However, if you have not been involved in conducting the delivery, you should go and pay a visit to the woman during the first 24–48 hours. Take a history and do a quick examination, as described later. Find out who attended the delivery and ask the birth attendant about the delivery. If she is not an SBA (for example, she might be a relative of the patient, or a TBA), and she is staying with the woman during the initial postpartum period, explain to her about the possible complications that could arise, the symptoms and signs to look out for, and the necessary action to be taken, including referral.

- The next most critical period is the *first week* following the delivery. A substantial number of complications can occur during this period, both for the mother as well as for the baby. Hence, another visit has to be paid to the mother (and the baby) in the first 7–10 days.

The first postpartum visit

As explained earlier, the first postpartum visit should take place within the first 48 hours after delivery.

History-taking

The following questions should be asked to the woman during the first visit. This is especially important if you were not present for the delivery, and this is your first postpartum visit to the woman.

- Where did the delivery take place?
- Who conducted the delivery?
- h/o heavy bleeding P/V: This is important to assess for immediate PPH. Though PPH is defined as vaginal bleeding in excess of 500 ml after childbirth, it is not practically useful in judging for the presence of PPH. Hence, a more practical question would be to ask the woman about the number of pads or cloth pieces getting soaked with blood.
If the woman is bleeding heavily, i.e. she soaks a pad or cloth in less than 5 minutes, this is immediate PPH. It requires urgent management and referral.
- h/o convulsions or loss of consciousness
- h/o abdominal pain
- h/o fever

- When did the child pass urine and/stools (meconium)? Ideally, a newborn should pass urine within 24 hours and meconium within the first 48 hours.
- h/o any problems with the newborn such as:
 - * The child has fever
 - * The child is not suckling well
 - * The child has difficulty in breathing

Examination

- Check the pulse, BP and temperature.
- Look for pallor
- Conduct an abdominal examination to see if the uterus is well-contracted (hard and round) and to rule out the presence of any uterine tenderness.
- Examine the vulva and the perineum for the presence of any tear, swelling or pus discharge.
- Examine the pad for bleeding and assess if the bleeding is heavy.

The second postpartum visit

As explained earlier, the second postnatal visit should take place in the first 7–10 days following delivery.

History-taking

A similar history needs to be taken again, except for a few additional questions that should be asked. Apart from the questions asked during the first visit [*see above, “The first postpartum visit”*], also ask the woman for:

- Continued bleeding P/V: This is known as “delayed” PPH, i.e. postpartum bleeding occurring 24 hours or more after delivery.
- h/o foul-smelling vaginal discharge: This could be indicative of puerperal sepsis. Manage accordingly
- h/o swelling (engorgement) and/or tenderness of the breasts
- h/o pain or problem while passing urine (dribbling or leaking)
- h/o easy fatiguability and “not feeling well”
- h/o feeling unhappy or crying easily. This indicates postpartum depression, and usually occurs after the first one week.
- h/o any of the following problems with the child:
 - * The child has a cough/cold
 - * The child has loose stools
 - * The child has fever
 - * The child is not feeding well
 - * The child has pus discharge from the umbilicus.

Examination

This is similar to the examination conducted during the first visit. It includes the following:

- Check the pulse, BP and temperature
- Look for pallor [
- Conduct an abdominal examination to see if the uterus is well-contracted (hard and round) and to rule out the presence of any uterine tenderness
- Examine the vulva and the perineum for the presence of any tear, swelling or pus discharge.
- Examine the pad for bleeding and lochia. Assess if it is profuse and whether it is foul-smelling.
- Examine the breasts for the presence of any lumps or tenderness.
- Check the condition of the nipples.

Counselling

Diet and rest

- Inform the woman that during lactation she needs approximately 550 kcal extra in a day for the first six months, and 400 kcal extra for the next 6 months, compared to her pre-pregnancy diet. This is not only because she needs to regain her strength, but also because, during the period of exclusive breastfeeding, the baby relies solely on her for his/her nutritional requirements.
- Foods rich in calories, proteins, iron, vitamins and other micronutrients should be advocated
- Food taboos immediately postpartum and during lactation are usually stronger and more in number than during pregnancy. These should be enquired into and, if they are harming the woman and/or her baby, she should be advised against them.
- The woman needs sufficient rest during the postpartum period to be able to regain her strength. She and her husband and other family members should be advised that she should not be allowed to do any heavy work during the postpartum period, except looking after herself and her baby.

Contraception

This issue must be emphasized again. Remind the woman that whenever she restarts her menses, and/or stops exclusive breastfeeding, she can conceive even after a single act of unprotected sex

The various choices of contraceptive methods available to the couple must be told to them, so that they can make an informed choice.

Danger Signs

For the following symptoms or signs, the woman should be advised to visit a PHC as soon as possible.

- Fever
- Abdominal pain
- The woman feels ill
- Swollen, red or tender breasts, or sore nipple
- Dribbling of urine or painful micturition
- Pain in the perineum, or pus draining from the perineal area
- Foul-smelling lochia

6 *Nursing Care for Adolescents in Disasters*

KEY LEARNING OBJECTIVES

At the end of the session the participant should be aware of:

- The common health and other problems faced by adolescents following an emergency
- The management and care required for dealing with the health problems
- The advice and counselling that needs to be given to adolescents.

Adolescence is described as a transition period where an individual is no longer a child but not yet an adult. Adolescents are defined as individuals in the 10-19 year age group, whereas 'youth' are the people in the 15-24 year age group. These two overlapping groups combine to form the group of 'young people'.

Adolescence is a stressful period in life characterised by physical, mental, emotional, social and behavioural changes. These changes make adolescents a vulnerable group requiring special care. Apart from the common health problems, minor ailments and injuries that may affect any demographic group, adolescents have specific problems and concerns that need special action on your part. These include

- Nutritional deficiencies including anaemia
- Psychological and social problems including substance abuse
- Reproductive and sexual health problems including unplanned pregnancies, abortions, RTI/STI & HIV/AIDS and even sexual violence

It must be remembered that these problems in adolescents are not specific to the disaster setting. Unfortunately their vulnerability towards these problems increases during emergencies due to displacement of populations and a breakdown of the social structures, institutions and barriers. Hence, while working in a disaster-affected area, one may encounter greater than usual number of adolescents with problems.

Dealing with the health and related problems faced by adolescents

Adolescents face a number of health problems. It may be within your scope to manage a few but not so for a number of others. But for all the problems that an adolescent may present to you with, you could, at the minimum, offer the following

- A patient hearing to the problems
- A non-judgemental attitude, both in words and in body language
- Privacy
- Confidentiality
- Reassurance
- Treatment as and where applicable
- Referral to a Medical Officer/a higher health facility if the problem is beyond your scope of management

1. **Nutritional deficiencies including Anaemia:** Adolescent girls are at increased risk of suffering from nutritional deficiencies, especially iron-deficiency anaemia. This is due to inadequate dietary intake as a result of the gender imbalance in societies, and also the physiological losses due to menstruation. In an emergency situation, this risk is increased due to the relative scarcity of food. In such situations, even adolescent boys are at risk of developing anaemia. Hence, it should be your effort as a nurse working in that area to ensure the every adolescent receives adequate iron-folic acid supplementation.

If the facilities exist in the area, haemoglobin estimation may be carried out in those cases where the adolescent complains of easy fatigability and/or breathlessness. If the Haemoglobin is found to be less than 12 gm%, the adolescents should receive the therapeutic dose of IFA (one tablet twice daily) for three months at least, following which a repeat Haemoglobin estimate must be done.

2. Menstrual problems: Adolescent girls often complain of menstrual irregularities and other problems such as painful menses etc. These problems become more marked following an emergency because of the psychosomatic impact of the prevailing social conditions. For example it is not uncommon for girls to start having irregular periods when they are under stress.

- a) *Irregular periods:* Tell the girls that periods in the first few years following menarche may be irregular and that they will regularise by themselves over the course of a few years. For a girl whose periods were initially regular but have lost their regularity following the disaster, emotional stress may be the cause. These girls need to be referred to a higher health facility.
- b) *Excessive or prolonged bleeding:* Normally menstrual bleeding lasts for 3-5 days in a cycle. But if it is heavy and/or prolonged, it may cause a lot of anxiety to the girl. It may even result in anaemia. Reassure the girl that the bleeding is likely to normalise as the cycles become regular. Offer Iron-folic acid tablets prophylactically to these girls for the prevention of anaemia. Give a course for treating worm infestation (Tab. albendazole 400 mg stat; or Tab. Mebendazole 500mg stat/100 mg BD * 3 days)
- c) *Painful menses:* Pain or cramping sensation in the lower abdomen during menses (dysmenorrhoea) is usually a harmless condition, but one which is very disturbing for the adolescent girl. A pain killer such as mefenamic acid, aspirin or paracetamol maybe prescribed to the girls especially if the pain is debilitating enough to disrupt the normal routine. These medicines may be taken 2-3 times in a day. If pain does not improve with this medication, refer the girl to a Medical Officer.
- d) *Other discomforts during menses:* Apart from dysmenorrhoea many girls feel tired and weak during menstruation. Check for the presence of pallor in such a girl. If present, start her on the therapeutic dose of IFA i.e. 1 tablet (100 mg elemental iron and 0.5 mg folic acid) twice a day. Even in the absence of pallor, give her the prophylactic dose of IFA (see below). A balanced diet and adequate exercise will also help in reducing the discomfort.

3. Pregnancy and Childbirth: Adolescent girls are at greater risk of developing pregnancy related complications than adults, such as:

- Pregnancy induced hypertension
- Anaemia during the antenatal and postpartum period
- Higher severity of malaria
- Pre-term birth
- Obstructed labour
- Postpartum depression
- Too early repeat pregnancies
- Low birth weight baby
- Perinatal and neonatal mortality
- Inadequate childcare and breastfeeding practices

Adolescent girls, therefore, require much more care during pregnancy and childbirth than adult woman, irrespective of the age or the marital status of the adolescent girl. Any anaemia should be corrected as in severely anaemic adolescents postpartum haemorrhage is a dangerous possibility. They also need to be made aware of all the danger signs and where to seek help should a complication arise. If possible, the caretakers such as the parents or the husband should also be taken into confidence while planning for her delivery. Remember, in very young adolescents, pre-term labour and obstructed labour are more likely to

occur. Hence such girls should be advised to deliver in a hospital setting only which have the full range of emergency obstetric services available, including the facilities for a Caesarean section.

4. **Abortions:** Adolescent girls may visit you for seeking services for termination of an unwanted pregnancy. Refer her to centres offering these services, including those for MVA and medical abortion, regardless of her age or marital status. Remember, confidentiality in such cases, especially when the girl is unmarried is of prime importance. This will prevent these from going in for illegal and unsafe abortions at the hands of quacks and will thus reduce the related complications.

But due to the disruption in routine health services following the disaster, quacks may be easily accessible to the girls who are seeking abortion facilities. Such adolescent girls may present with the complications of unsafe abortions such as haemorrhage, septicaemia, anaemia, psychological problems etc. and must be given the required management which may require referral to a health facility with the complete range of Emergency Obstetric Care services.

5. **RTIs/STIs:** There is a greater probability of adolescents engaging in sexual activity following a disaster, both coerced and consensual. These experiences are also less likely to be accompanied with condom use. Hence there is an increased probability of adolescents suffering from RTIs/STIs following a disaster.

The girls may present with symptoms of vaginal discharge. Remember, a certain amount of discharge is normal during ovulation. But this discharge is clear and not foul smelling. However if it is profuse and accompanied by itching, it could signify an RTI caused due to poor personal and menstrual hygiene. Hence advice on menstrual hygiene (see below) is as important as prescribing drugs for the same. Other symptoms that the girls may present with are inguinal swelling, inguinal ulcers. Boys too may present with inguinal swellings and ulcers and also urethral discharge

The recommendations for management of RTI/STI should be followed even during and following a disaster.

6. **Sexual abuse:** Sexual abuse, coercion and rape become more rampant in a disaster setting because the displacement of populations and breakdown of societal values and norms. Though sexual abuse can and often does take place at home by person/s who are known to the young boy/girl, but the vulnerability increases when the youth are unprotected by families, a situation which is highly likely following a disaster.

Though gender norms in society place the girls at a greater risk, both boys and girls may be victims of sexual abuse and violence. Such abusive episodes maybe both heterosexual and homosexual. Commercial sex/trafficking is often a variant of coerced sex where the sex worker is forced by the circumstances (often financial hardships) to take up prostitution as a means of earning a livelihood.

Remember sexual abuse rarely takes place in isolation from other forms of oppression. Abuse is mainly about a power relationship and young people have little power

When you encounter an adolescent who is a victim of sexual abuse, it is important to remember a few 'dos':

- Be understanding but not pitying
- Help the adolescent understand and get rid of his/her guilt over the incident. S/he needs to understand that s/he is not responsible for what happened.
- Help the adolescent re-gain self-esteem.
- Help the adolescent learn to trust people again.

7. **Mental health and Psychological problems:** The period following a disaster is a time of great stress. Victims who survive may find themselves alone and in great hardships. This time bears a double strain for adolescents as, though they have the ability to grasp the gigantic proportion of the disaster and understand the losses, not matured completely as adults to be able to bear the pressures. They may face various problems such as

- Post-traumatic stress disorders
- Depression
- Eating disorders, like bulimia and anorexia
- Suicidal tendencies

Such adolescents will often need the services of a trained Psychiatrist. On your part you will need to recognise these cases and convince them (and/or the caretakers) and arrange for referral.

Other services:

1. **Haemoglobin estimation and Provision of IFA:** Anaemia is rampant in adolescents especially girls. The situation is aggravated during an emergency. For adolescents who complain of symptoms suggestive of anaemia (see above), try and carry out a haemoglobin estimation (if available) and if found to be anaemic, follow the treatment guidelines mentioned above.

But for all the adolescents who visit you the prophylactic dose of IFA should be supplied to them i.e. one tablet once a day for at least 3 months.

2. **Provision of contraceptives:** Most people initiate sexual activity (both within and outside marriage) during adolescence without adequate knowledge about sexuality or contraception. For unmarried adolescents it may be very difficult to access contraceptives due to fear of the judgmental attitude of providers among other things. This may result in unintended pregnancy.

Following a disaster, adolescents are more likely to indulge in wanted and unwanted sexual activity. Hence the contraceptive requirement increases. For adolescents, the temporary methods such as oral pills and the dual protection methods such as condoms assume greater importance.

Contraceptive provision is part of the routine health care services. But as these services may be disrupted partially or completely following a disaster, a quota for the same has been supplied in the nursing kit provided to you. The same may also be used for adolescents as well as adults.

While offering the basket of choice for methods of contraception, the pattern of sexual activity of the adolescent should be kept in mind. For example, for adolescents who are married or who are involved in regular sexual activity have different requirements compared to those who indulge in occasional and casual sex; or between those who have multiple partners and those who have a single sexual partner. For adolescents who are at risk of contracting STI/HIV/AIDS, the methods which offer dual protection such as condoms should be advised.

Emergency contraception is of vital importance for adolescents, as unplanned and unprotected sex may be more common in this group. Moreover, emergency contraception is also required in cases of forced sexual activity such as rape/coerced sex. While providing any method, provide the required information along with it such as the correct use of the method, effectiveness of the method, its common side-effects, whether or not it protects against STIs and HIV, when to return etc. In case any client requires Emergency Contraception, the nurse may facilitate contact of the client with the public health care provider.

3. **Immunisation with TT:** Under the national immunisation schedule, adolescents are supposed to receive a booster dose of TT at the age of 16 years. But this dose may be missed out on following the disaster. Once the health services are back in place, ensure that all adolescents receive this immunisation. This becomes more important as people in disaster prone areas are more likely to receive injuries that can lead to tetanus.

You may take the help of schools that are operational to access the school going adolescents. For the others who are not attending school, home visits in the area can be used. Immunisation clinics set up for children, or even the ANC Clinics for women where TT is already being administered to different population groups can also be used to give TT to adolescents.

4. **Referral for VCT for HIV/AIDS:** You should be aware of the centres that offer VCT services for HIV/AIDS. Adolescents who follow risky sexual practices may be referred to these centres after some counselling. They must be followed up later on. Remember confidentiality is of prime importance here.

Counselling:

These messages may be given to all adolescents irrespective of whether or not they come to you with a problem. (Some messages may be gender-specific though)

1. **Balanced Diet:** Disasters often lead to a shortage of food. In such circumstances, families now know that babies should be well nourished and therefore make special efforts to provide them with adequate food. However the extra nutrition needs of adolescents are often unknown, and this leads to stunting even in adolescence.

Girls are more at risk because of the social norm of feeding the girls the last and the least. This situation is aggravated in emergencies where there is a shortfall in the amount of food available for the family. The advice is especially important for those adolescents who suffer from Chronic Energy Deficiency.

While giving advice for a balanced diet, keep the following in mind:

- The food items advised for intake should be culturally acceptable, locally available and affordable.
 - Food taboos must be kept in mind, such as the omission of 'hot' and 'cold' foods from the girls' diets during menses.
 - Seek the cooperation and support of the family members/caretakers.
2. **Menstrual hygiene:** All the girls must be informed that maintenance of proper hygiene during menstruation is important and can help prevent a number of local and reproductive tract infections. A few key messages to be given are:
 - Use a cloth or sanitary pad during menstruation.
 - If a cloth is used, it should be clean and washed regularly with soap and water and dried in the sun.
 - If using a sanitary pad, they should be wrapped in a paper bag/newspaper and disposed in a bin/pit
 - Take a bath every day, especially during menstruation
 3. **Safe sex practices:** Many adolescents never have an opportunity to discuss issues related to sexuality with adults. The situation worsens in a disaster setting with broken families, and displaced people. On one hand, the chances of an adolescent receiving the help of an adult become more remote, and on the other, their chances of indulging in sex increase. They need to be told how to protect themselves from unwanted pregnancies and STIs.

You, as the relief worker, need to explain to them the '**ABC**' of safe sex

A – Abstinence: Inform them that this is the most effective method for protection. Therefore it is best to delay the initiation of sexual activity till they are married.

B – Be faithful: In case they cannot practice abstinence, they should at least reduce the number of partners that they have sex with. For example in the case of a married adolescent, this means having sexual relations with the spouse only.

C – Condoms: Condoms are a method of contraception that offer a dual protection, i.e. they prevent unwanted pregnancies and also prevent the transmission of STIs/HIV. This gains extreme importance in cases where the adolescent has multiple partners or where the sexual partner is not faithful or in cases of casual sex, whether or not it is with sex workers. Hence, advise the sexually active adolescents to use condoms correctly and consistently with each act of sex for it to be effective and protective.

4. **The art of 'Saying NO':** Adolescents, especially girls, often do not have the necessary social skills that will enable them to say no to sex with confidence and to negotiate safer sex practices such as the use of condoms, even if they are aware and wish to. Both adolescent boys and girls are thus at risk of unwanted/coerced sex. For the boys it may simply be the peer pressure to initiate sex to prove his 'manhood'.

These skills to resist peer pressure and other social pressures also become relevant in the context of substance abuse, such as smoking, drinking and the use of narcotic drugs.

It has been found that simple awareness regarding the ill-effects of these unhealthy and risky practices does not bring about a change in behaviour. The adolescents need to be imparted with skills that would enable them to recognise the social pressures that influence them and to be able to resist change which usually occurs against their will as a result of these pressures.

Though the exercise of equipping the adolescents with the art of saying NO is not completely within the purview of the health services that you represent, you could at least help the adolescents recognise the pressures that surround them.

7 Nursing Care for the Elderly in Disasters

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of:

- Guidelines for assessment of elderly
- Ensuring Elderly safety
- Problems faced by the elderly and the appropriate nursing care

In emergencies, elderly population form one of the most vulnerable groups due to their physical and cognitive limitations. Moreover, in such situations they are often neglected as the limited resources are usually directed towards the other victims such as women and children.

General Guidelines for Assessment of Older persons

While setting does not matter so much but the method you choose will depend upon various factors i.e. time you allow for assessment, your patient's energy levels, the environment the patient's (client's) consent, language, communication deficits, the patient's attitude about aging – all affect the overall atmosphere of trust, caring and confidentiality.

Tools for functional assessment

FANCAPES

F-FLUIDS – state of hydration and factors contributing

A-AERATION – (adequacy of oxygen exchange)

N-NUTRITION – Mechanical and psychological factors-amount and type of food consumed

C-COMMUNICATION – sight and sound, voice quality, adequate functioning of tongue, teeth, pharynx and larynx, ability to read and understand spoken words

A-ACTIVITY – activity of daily living ADLs, coordination, balance, strength

P-PAIN

E-EVACUATION – bladder and bowel evacuation

S-SOCIALIZATION – giving and receiving love, function in society feelings of self worth

SENSORY DEPRIVATION

Types of sensory alterations

Sensory Deficit	Sensory Overload	Sensory Deprivation
■ A defect in the normal functioning of sensory reception and perception is a sensory deficit. A client may not be able to receive certain stimuli. e.g. blind, deaf, or stimuli becomes distorted. e.g. client may have cataract or may be confused.	■ When a person receives multiple stimuli and cannot perceptually disregard or selectively ignore some stimuli, sensory overload occurs. ■ The acutely ill may fall victim to sensory overload.	■ When a person experiences an inadequate quality or quantity of stimulation such as monotonous or meaningless stimuli.

Persons at risk

- Older adults
- Immobilised clients
- Isolation
- Clients with known sensory deficit
- Hospitalised clients
- Change in environment.
- Anaesthesia
- Patients in delirium & dementia
- Persons on Medication:
 - Antibiotics.e.g. streptomycin, gentamicin, aspirin can permanently damage the auditory nerve;
 - Chloramphenicol can irritate the optic nerve.
 - Narcotic analgesics, sedatives, and antidepressants can alter the perception of stimuli.

SENSORY CHANGES IN OLD AGE

- Visual changes
- Hearing changes
- Taste and smell

Visual changes

- *Presbyopia*
- *Cataract*
- *Glaucoma*
- *Diabetic retinopathy*

Auditory changes

- *Presbycusis*
- *Responds inappropriately*
- *Isolation*
- *Misunderstand conversation*

Taste and smell

- *Blunted*
- *Prefer salty, highly seasoned food.*
- *Bulimia of sweet tastes*

Sensory Alterations	Effects	Treatment
■ Sensory deficits, sensory overload and sensory deprivation are the types of sensory alterations. ■ Sensory deprivation can be due to reduced sensory input, meaningless input, and restricted input. ■ Sensory deprivation can affect the cognition, affect and perception. ■ Old age, hospitalisation, unfamiliar surroundings, restrains, seclusion, sensory losses are the risk factors of sensory deprivation.	Sensory deprivation leads to ■ Confusion ■ Inaccurate perception ■ Faulty reasoning ■ Impaired memory ■ Hallucinations Threats to psychological safety ■ Unfamiliar surroundings. ■ Distance of the hospital ■ Technical terms ■ Loss of control	■ Introduce ■ Call by name ■ Orientation to environment ■ Minimize noise ■ Use of touch appropriately ■ Allow a family member ■ Show him familiar surroundings ■ Calm words ■ Tranquilizers ■ Depends on the cause ■ Dehydration – Fluids ■ Infection – Diagnose and treat

The important steps in Nursing Management, including assessment and interventions are described below.

Nursing Assessment	Goals of nursing care	Nursing Interventions
Identifying persons at risk ■ Physical Assessment ■ Ability to perform self care ■ Environment ■ Social development and support ■ Communication methods ■ Mental status loss PHYSICAL ASSESSMENT Self perception of sensory loss ■ Vision – Ask client to read newspaper or magazine – Snellens chart ■ Hearing – Audiometry, observe patient conversing with others, Inspect for cerumen ■ Taste – Ask client to distinguish different tastes – Ask client if recent weight change has occurred. ■ Position change – Hold finger of the patient, move it up and down. Repeat with toe. ■ Touch – Assess clients sensitivity to light, touch and temperature, sharp and full stimuli, ■ Smell – Have client close eyes and identify nonirritating odours SOCIAL DEVELOPMENT & SUPPORT ■ Visiting relatives and friends ■ Assessment of socialization ■ Socialization impaired in old clients and those with sensory deficits.	■ Provide comfort and wellbeing to the patient. ■ Decrease anxiety and apprehension ■ Maintain optimal functioning of the senses ■ Control the environment and create meaningful stimuli ■ Establish a safe environment ■ Establish contact with reality ■ Prevention of additional sensory loss ■ Communicating effectively ■ Achieving self care ■ Develop insight ■ Keep furniture out of path to bathroom, and do not rearrange furniture.	TEACH CLIENT/FAMILY MEANINGFUL ENVIRONMENT STIMULI ■ Visual ■ Presence of windows ■ Provide flowers, pictures or greeting cards ■ Raise the head of the bed. Remove dividing curtains. ■ Keep patient near the window, provide room with a view. ■ Use a watch or clock that verbally tells time ■ Avoid cluttered furniture, dim light, ■ Ensure bright direct lighting ■ Provide television (other form of entertainment), pictures of family members ■ Allow visitors ■ Provide call bell VISUAL-LOSS OF VISION • Identify name and purpose when entering client's room it helps the client feel secure and decreases social isolation. • Orient to time, place, person, and surroundings. Provide a radio. • Keep side rails up using half or three-quarter rails, and maintain bed in a low position. • Converse with and touch client frequently during care if frequent touch is within client's cultural norm to decrease social isolation. • Walk client by having client grasp attendant's elbow and walk partly behind the attendant. • Orient to time, place, person, and surroundings. Provide a radio for improving orientation and sensory stimulation. • Keep doors completely open or closed. Keep furniture out of path to bathroom, and do not rearrange furniture. Feed client at mealtimes if blindness temporary. • Keep call/light button within client's reach. • Ensure access to eyeglasses. • Pay attention to client's emotional needs. Encourage expression of feelings and expect grieving behavior to prevent loss of identity and control over their lives. Refer to optometrist, ophthalmologist, or specialist in vision loss for vision care if needed. Many clients with eye disorders need frequent medical care to maintain vision.

Nursing Assessment	Goals of nursing care	Nursing Interventions
■ Hearing aid ■ Minimize anxiety in patients with temporary loss of speech. MENTAL STATUS ASSESSMENT ■ Physical appearance and behaviour ■ Motor activity ■ Posture ■ Facial expression ■ Hygiene ■ Cognitive ability ■ Level of consciousness ■ Abstract reasoning ■ Calculation ■ Attention ■ Judgment ■ Ability to read, write, copy figures ■ Recent and remote memory EMOTIONAL STABILITY ■ Agitation, euphoria, irritability, hopelessness, or wide mood swings ■ Auditory, visual, tactile, hallucinations ■ Illusions, delusions SELF PERCEPTION OF SENSORY LOSS ■ Effect on Quality of Life ■ Confidence ■ Effect on socialization ■ Of all the advantages of ageing, sensory changes are the most likely to cause isolation.		AUDITORY-HEARING LOSS • Keep background noise to a minimum. Turn off television and radio when communicating with client. • Stand or sit directly in front of client when communicating. Ensure adequate lighting • Stand or sit directly in front of client when communicating. Make sure adequate light is on attendant's face • Establish eye contact, and use nonverbal gestures. These measures make it easier to read lips and see nonverbal communication, which is a large component of all communication. Sit down and speak with the client. Listen to the client. Play his/her favorite song. • Speak distinctly in lower voice tones if possible. Do not over-enunciate or shout at client. Shouting makes the words less clear and may be painful PERSONALITY TRAITS OF DEAF ADULTS ■ Withdraw from communication with adults who can hear ■ Are less flexible in their daily routines ■ Demonstrate a negative self image ■ Show more dependence ■ Lack of social judgment TASTE AND SMELL ■ Provide food in an attractive manner ■ Food meant to be warm should be warm and cold should be cold TOUCH ■ Use touch appropriately COMMUNICATION METHODS ■ Understand the communication methods, the patient wants to use. ■ Sign language, read and write notes, listen with • Keep environment quiet, soothing, and familiar. Use consistent caregivers. These measures are comforting to the elderly and help decrease confusion. • Avoid providing extremely hot or cold foods or using hot bath water if client has decreased sensation in mouth, hands, or feet. • If client has a sensory deprivation, encourage family to provide sensory stimulation with music, voices, photographs • If client has a hearing or vision loss, work with client to ensure contact with others. Severe loneliness can accompany hearing or vision loss in the elderly as a result of self-imposed isolation

ELDERLY SAFETY

Accidents are one of the major causes of hospital admission, morbidity and mortality among the elderly. It is therefore important to increase the elders' awareness of safety in everyday life.

TEACH CLIENT/FAMILY ABOUT FOLLOWING

Suitable clothing and footwear for the elderly

1. Wear light and fit clothing
2. Wear pants of suitable length
3. Avoid wearing slippers or sandal when going out
4. The sole of shoes should be non-slippery

Protection against changes in weather

1. Dress according to weather daily
2. Keep the house cool and well-ventilated during summer. Drink adequate water (8 cups a day) and avoid prolonged exposure under the sun to prevent heatstroke
3. Put on warm clothing, socks, muffler, shawl, scarf etc. during cold winter
4. Food can help in keeping warm. Choose hot food with high calories e.g. easily digestible food like congee and rice noodles
5. Keep stock of convenient, high-caloric food at home e.g. Rice+Jaggery+coconut snacks
6. Keep the house warm. Heaters must be used with care to ensure safety, and adequate ventilation must be maintained
7. Appropriate exercise increases the blood circulation and helps to keep the body warm by generating more heat
8. High risk groups e.g. the frail elderly and those with chronic illnesses should be more alert to sudden changes in weather so as to take appropriate precautions. Contact neighbors or relatives for help if needed.

Prevention of fire, burn and scald

1. The handle of saucepan and mouth of kettle should be turned inwards during cooking to avoid being toppled over by accident
2. Beware of scald by steam when cooking without the lid of saucepan
3. Always use gloves or towel as heat insulator when holding something hot
4. Avoid carrying containers which are full of hot liquid, especially for those who are frail
5. Before going out, make sure that all gas taps and the unused electrical appliances are switched off
6. After worshipping, sure that the Diya/candles are burnt out before leaving
7. Keep all inflammable objects away from fire e.g. kerosene, paper, (LPG) compressed fuel cylinder etc.
8. Do not refill kerosene stove when it is in use. After refilling the stove, remember to clean up the spillage of kerosene before lighting it
9. Keep paper and curtain away from burning candle or stove

Prevention of Falls

Falls are one of the main disabling conditions of the elderly. One of the important consequences of falls is fracture which may have significant impact on elder's functioning, independence and quality of life. Fractures also have significant impact to carers, health care services and the society as a whole.

Exercise, home modification and use of appropriate walking aids can help in preventing fall of elderly. Participation in exercise also help to prevent fall. For example, proper posture and balance exercise can improve balance,

stretching and strengthening exercise can prevent muscle weakness, protect the joint and mobility. Regular and correct practice of exercise and precautions can reduce the risk of falls.

Nurse needs to teach the client and family as per the following tips to prevent fall:

Potential hazards of fall	Ways to improve and minimize fall
1. Clutter in the walkways 2. Oil or water spills on the floor 3. Loose rugs/uneven floor 4. Poor lighting 5. Accidental fall on rising from bed due to high bed height 6. Chairs with wheels 7. Tripping on loose clothing and slippery shoes 8. Slippery floor 9. Poor vision 10. Taking objects from height 11. Drying of clothes 12. Inappropriate use of walking aids	1. Always keep the walkway clear 2. Wipe all spills immediately 3. Replace with non-slip rugs/be cautious of uneven floor. 4. Maintain adequate lighting 5. A night light or bedside light to avoid fall at night 6. Select suitable bed height to ensure that the feet can reach the floor when sitting 7. Use stable chairs with suitable seat height 8. Avoid tripping • Wear clothing with suitable length • Wear non-slip shoes • Take special care when walking outdoors • Walk close to the wall for support in case of need • Wear appropriate glasses • Hold handrail when climbing stairs • Do not carry too many things 9. Do not stand on foldable stool to get objects from height, when storing objects, those that are frequently used should be put on the middle shelf for easy transfer. Heavy and light objects which are rarely used should be put on the lower and upper shelves respectively 10. When drying the clothes, it would be safer to hang up the clothes in indoor area, or use the frame with pulling ropes. 12. Use walking aids correctly and seek professional advice if in doubt

DRUG SAFETY

Drugs can treat diseases and relieve symptoms. But they can also have side effects. Improper use of drugs can do more harm than good, and even lead to serious consequences. Therefore, everybody should know more about drug safety, and follow the advice of their doctor or health professional while using drugs. As the elderly are more prone to side effects like stomach bleeding, they should be extra cautious, and avoid taking too many drugs unnecessarily.

Nurse needs to teach the client/family the following

General principles on drug usage

1. Know the proper route and method of drug use. Common routes include oral, sublingual, inhalation, rectal and external application.
2. Read the drug label carefully. Note the proper dosage to be taken, timing, desired effects and side effects of the drug; and take necessary precautions. (e.g. If the drug can cause drowsiness, do not drive or operate machines after taking the drug.)
3. Do not take more than one drug at the same time, unless you have clarified with your doctor or health professional that it will not result in drug interactions. This precaution applies to herbal medicine as well.

4. If you suspect development of drug allergy after taking medications, such as symptoms of rash, puffiness of face or lips, or shortness of breath; you should stop the drug immediately and seek medical advice.
5. Do not use drugs after the expiry date or if the appearance has changed.
6. Drugs should be stored in a cool dry place, but not the refrigerator unless specified. Drugs that need refrigerating, such as insulin, should be stored in the lower shelf but not the freezer; otherwise the drug effect may be affected. Drugs should be kept out of reach of children.

Use of prescribed drugs

“Prescribed drugs” are medications prescribed by the doctor after consultation. The following points should be noted while you use prescribed drugs:

1. Follow the doctor’s instructions while using prescribed drugs. Changing the dosage or frequency without supervision is dangerous, since this can lead to overdose or under-treatment.
2. Attend regular follow up. If you experience any undesirable drug effect, discuss with your doctor to see if you need to modify the treatment.
3. Do not share your prescribed drugs with others. Even if the symptoms are similar, the underlying diseases may be different. Wrong use of drugs may cause delay in treatment and undesirable side effects.
4. Consult your doctor, pharmacist, or dispenser for information on adverse effect of the drugs. In general, these include nausea, constipation and dizziness. There are great individual variations in development of these side effects, and usually most of these effects will disappear after taking the drug for some time.
5. Always remember to tell your doctor what other drugs you are taking (or show him the drug label), so that the doctor can avoid possible drug interactions.

THE PROBLEMS FACED BY THE ELDERLY CAN BE BROADLY CLASSIFIED INTO THE FOLLOWING:

- Problems related to sensory deprivation, deficit
- Conditions related to old age
- Other Conditions

PROBLEMS RELATED TO SENSORY DEPRIVATION, DEFICIT

Common Eye Problems and Care Tips

Aging can bring about decreased visual acuity and other eye disorders or diseases. These problems can be prevented/managed by knowing more about different eye problems and adopting proper eye care.

Common Eye Problems	Common Eye Problems and Care Tips
1. Drooping of Eyelids 2. Dry Eyes Causes: degenerative change of the tear gland; extremely dry or polluted environment, eye infection, side effects of some drugs, anti-histamines, diuretics or preservatives in eye-drops, etc.	This is often seen in elders and usually does not cause any discomfort or impaired vision. Assess: If the eyes have stinging, burning sensation & become photophobic. Teach client that: – The discomfort can be relieved by artificial teardrops or by humidifying the air — If dry eyes persist or symptoms of eye infection develop, consult doctor immediately.

Common Eye Problems	Common Eye Problems and Care Tips
3. Excessive tearing 4. Presbyopia 5. Floaters 6. Blurred Vision The most common causes are: 6.1 Cataract: The lens of the eye becomes progressively clouded, blocking light entry and resulting in blurred vision. 6.2 Glaucoma: This is caused by an abnormal rise in pressure in the eyes that damages the optic nerve 6.3 Age-related macular degeneration: The macula is the part of the retina which contains the most optic cells and nerve fibres.	Main causes include: tear-duct blocks; Excessive tearing should be managed according to the cause. Elders having persistent tearing should consult doctors. Corrective glasses can help to correct vision and the glasses should be prescribed by certified opticians or eye doctors. Floaters are mostly transient phenomenon. The amount varies with time and they often disappear spontaneously. The most common problems are: • Gradual diminishing vision & Double vision • Treatment is by extraction of the opaque lens by operation. • After lens extraction-special corrective lens like spectacles are required • And replacement of lens (IOL) corrective lens like spectacles may or may not be required Eye care after cataract operation: Immediately after the operation, allow adequate rest of the eyes and the head. During the recovery period, i. Maintain a balanced diet. ii. Ensure vegetable and fruit intake to avoid constipation. iii. Avoid alcohol, indigestible and spicy food. iv. Avoid dirty water getting into the eyes while washing hair or bathing. v. Follow the prescribed treatment according to instructions given by doctor or nurses. vi. Ensure regular follow up after surgery. The most common problems are: Pain in eyes and headaches and excessive floaters, Treatment with drugs for correction of intra-ocular Pressure, Warning: irreversible damage or even visual loss could occur if not treated promptly. The most common problems are: Distorted vision, e.g. straight lines become crooked or are seen to be magnified or diminished, or sometimes dim spots appear in the center of the visual field. Treatment is corrective cause related surgery (e.g. Laser Surgery) Warning: irreversible damage or even visual loss could occur (Prepare for adjustment to progressive diminished vision) Teach client/family about important Symptoms to be Alert of Consult the doctor immediately if the following appear: • Blurred vision not corrected by appropriate corrective glasses • Persistent eye pain or acute sharp pain • Over-sensitivity to light. Halo or rainbow is seen around lights • Partial loss of visual field • Red eyes or burning sensation experienced • Sudden appearance of large amounts of floaters or black spots in the visual field • Abnormal growth in the eye or on the eyelid • The transparent part of the eye looks cloudy • Eyes become watery, with persistent discharge or crust

Teach client/family some helpful tips to protect Eyes:**1. Personal Hygiene:**

- When washing your face every morning, use a clean towel and water to wipe the lid margin well to prevent infection or styes.
- Do not use public towel or hands to rub the eyes.
- Do not use other people's eye medications or glasses.

2. Daily Activities:

- Take a well-balanced diet with adequate vitamin A and proteins.
- Stop smoking.
- Ensure adequate rest to relax the eyes.
- Be careful when using sprays. Do not spray near the eyes and close the eyes when using hair sprays.
- Watch TV under good lighting. The distance between the eyes and the TV screen should be at least 6 times the screen's diagonal length.
- Make sure lighting is sufficient when using computers. Try to take a short break every half an hour to relax your eyes by looking at some distant objects.
- Tips for reading:
 1. Have adequate, even, and soft lighting or read under natural light.
 2. Make sure that tables and chairs are of suitable height, so that the eyes can be kept at a distance of about 12 inches from the book
 3. Papers are better not of a shiny type.
 4. Prints are clear and large.
 5. When the eyes feel tired, try to have a break. You can look at some distant objects or close your eyes to take a rest.
 6. Do not read in the moving vehicle or in bed.

CONDITIONS RELATED TO OLD AGE

Urinary Problems:

Condition	Assessment	Management
Prostate gland is part of the male reproductive system. 1. Benign prostatic hypertrophy - Enlargement of the prostate gland results in compression of the urethra and causes obstruction to the flow of urine. - Common in male aged 60 and above	- Symptoms and outcomes: - Urinary hesitancy and difficulty in passing urine - Weak stream and dripping of urine - Frequency of urine - Higher risk of bacterial infection of the urinary tract (including bladder, ureter or kidney) In some cases, it may cause bladder stone formation or renal failure	- Seek medical advice when there is difficulty or pain on passing urine. Doctor will arrange appropriate investigation and treatment. - Treatment may vary according to the situation, and may include medications, surgery or laser therapy. Aim of treatment is to relieve obstruction of urine and reduce the chance of complications. - Some clients may need catheterization to solve the problem of urinary obstruction.
Condition	Assessment	Management
2. Prostate Cancer/Prostatic Carcinoma More common in those above the age of 50 and the chance of having the disease increases with age.	Prostate Cancer/Prostatic Carcinoma <i>Symptoms:</i> No specific symptoms in early stage. As the disease progresses, there may be urinary frequency, difficulty in passing in urine, or blood stained urine. If the cancer spread to the pelvic cavity, it may cause pelvic pain or backache.	Depending on the patient's situation, choices include surgery, radiotherapy or hormonal suppression therapy, etc.

Be alert of urinary problems:

- There are many causes of urinary problems which are not due to prostatic disease. Seek medical advice as soon as possible if the following problems occur:
 - Blood in urine or pain on passing urine
 - Sense of incomplete emptying of bladder after urination
 - Dripping of urine
 - Urinary frequency and passing small amount of urine each time, affecting daily activities, e.g. frequency at night that disturbs sleep
 - Increasing difficulty in passing urine

Diabetes Mellitus:

Condition	Symptoms	Nursing Intervention
- Diabetes Mellitus (DM) is a chronic metabolic disease. It is caused by deficiency of insulin, or failure to convert sugar into energy for storage, resulting in high blood glucose, and sugar in the urine. - Type one DM – mainly in young age group. It is due to failure of pancreas to produce insulin. The illness is usually acute, and more serious. - Treatment relies on life-long insulin replacement. - Type two DM – There is inadequate insulin secretion or failure of insulin action. - The onset of illness is usually gradual and symptoms may persist for some time before the diagnosis is made. - Treatment depends on the severity of disease, and includes diet control, appropriate exercise and oral hypoglycemic drugs. Insulin may be required for those who are poorly controlled. Shortness of breath - Mild shortness of breath is common in elderly, especially after performing exercise. Although this may be due to deterioration in lung function, it could also be the symptom of serious disease, such as chronic bronchitis, emphysema, heart failure, renal failure and severe anemia. - Causes of shortness of breath: Chronic bronchitis and emphysema (also known as chronic obstructive airway disease or COAD) is the commonest cause of shortness of breath in the elderly, especially those with history of smoking or passive smoking.	- Many patients have no symptoms and are only found to have DM during health checks. - Frequent urination and easily getting thirsty. - Easy fatigue and weight loss. - Itchiness, especially of under parts. Poor wound healing. Complications: Diabetes can cause vascular damage leading to many complications such as coronary heart disease, kidney failure, cataract, retinopathy (and blindness), skin ulcer, and even gangrene (requiring amputation). Diabetic comas: The blood sugar level of a DM patient fluctuates and is not stable. Loss of consciousness can occur when it is too high (diabetic ketoacidosis) or too low (hypoglycemic coma). These are emergency situations and the patient should be sent to the hospital right away. - Usual symptoms include: - Frequent cough, sputum and wheezing. - Patients with mild disease experience shortness of breath during moderate exercise such as walking upstairs, but those with more severe disease will develop shortness of breath even when they walk on level ground or at rest. Some may need to depend on oxygen therapy.	Nurse should explain to client/family: Treatment for DM - Diet control: this is most important. Many mild patients only require diet control. - Appropriate exercise: this enables the obese to lose weight and by improving blood circulation, helps to prevent complications. - Drug treatment (including oral hypoglycemic agent and/or insulin): they must be used as advised to avoid adverse effects. - DM cannot be cured but it can be controlled. Apart from the above, patients should pay attention to self-care e.g. hygiene and adequate rest so as to ensure proper control of DM and prevention or delay of onset of complications. - Nurse should explain to client/family - Prevention and treatment of COAD - If the shortness of breath is persistent or suddenly worsens, the elderly should seek medical advice - Those with more severe disease will develop shortness of breath even when they walk on level ground or at rest and may need to depend on oxygen therapy. - The most important is quit smoking immediately to help slow down the progression of the disease. - Patients should follow treatment as advised by the doctor to control the symptoms. - The elderly should avoid going to polluted places. While at home, maintain good ventilation. When burning incense, make sure the windows are open. - Influenza vaccination - Influenza vaccination can reduce the complications due to influenza virus infection, especially for patients with COAD or heart diseases. The doctor should be consulted for advice and the vaccination.

Shortness of breath**Coronary Heart Disease:**

Condition	Symptoms	Nursing Intervention
Coronary arteries are arteries which supply blood to the heart to provide nutrients and oxygen. Coronary heart disease occurs when these arteries are narrowed or even blocked. - As one grows older, fatty tissue deposits as plaques on the inside walls of arteries. This becomes thicker and thicker so that the lumen of arteries becomes narrowed. This process is termed atherosclerosis. - If the coronary artery is affected, there will be reduced blood supply to the heart, causing coronary heart disease. - If the wall of the plaque ruptures, blood clots will be formed in the arteries. This will lead to blockage of the arteries and result in a heart attack. - Risk factors for coronary heart disease include: - high blood pressure - high blood cholesterol - smoking - Family history of coronary heart disease - Obesity or Diabetes mellitus - Lack of exercise Chronic stress	Some people may have the following symptoms. Angina – Constricting chest pain. It usually occurs under physical exertion e.g. while doing exercise, brisk walking or under emotional stress. The pain gradually disappears after taking a rest. - Acute myocardial infarction (heart attack) – Sudden onset of severe chest pain that may radiate to the neck, arm or jaw. - The patient may develop profuse sweating, shortness of breath, nausea and vomiting or even pass out. Anyone with these symptoms should immediately seek medical treatment or attend the Accident & Emergency Department in a hospital.	Teach client/family Prevention of coronary heart disease - Quit smoking and avoid excessive drinking. - Regular exercise. - Eat a balanced, low fat diet. - Avoid overweight and obesity. - Have a regular life and manage stress. Regular follow up for chronic illnesses e.g. hypertension and diabetes mellitus.

Osteoarthritis of Hand/Knee:

Condition	Symptoms	Treatment	Nursing Interventions
Osteoarthritis is a disease caused by degeneration due to repetitive usage. It is common among the elderly, and can affect the knee and finger joints. Osteoarthritis is mainly due to aging of the finger joints, decreased secretion of synovial fluid and thinning of cartilage. Improper postures and activities like the carrying of heavy objects increase stress on the finger joints, worsening the condition and leading to more pain.	Common symptoms include joint pain, swelling, warmth and stiffness of fingers. Prolonged inflammation leads to reduced activity of fingers, and can result in muscle weakness and wasting. If there is also improper posture and activity, there may be permanent joint deformity.	There is no cure for Osteoarthritis of hand. Rest and painkillers can help to relieve the pain. However, drugs should be used as advised by a doctor to minimize side-effects. By adopting finger joint protection techniques and adaptive method in daily life, it is possible to reduce pain and inflammation, and prevent further deterioration or permanent deformity of the fingers.	Caring Tips for Osteoarthritis of Hand: • Proper positioning: During acute inflammation, support and elevate the hand by using a firm pillow or folded towel in bed so as to relieve symptoms. • Adequate rest: Avoid overuse of the diseased hand. If necessary, use elastic bandage to relieve swelling and fix the hand in a desired position. • Gentle hand exercise: Simple hand exercise can help to improve circulation and reduce joint swelling and stiffness. Make a fist gently, then open the hand fully but slowly. Repeat 20 times and do this one to twice daily. • Massage: For chronic inflammation, gentle massage can improve circulation. Elevate the hand, then use the well hand to massage the diseased hand from the fingertips to the wrist and elbow. Continue for 15-20 minutes. Repeat two to three times daily. Ice therapy and Heat therapy: Choose the appropriate method according to the symptoms. In general, use ice treatment for acute condition; and heat treatment for chronic condition. (please refers to the pages on 'Heat therapy' and 'Cold therapy') Apply the therapy two to three times daily for 15-20 minutes, to help improve circulation and reduce the inflammation. In case of queries, consult a doctor or physiotherapist. Finger Joints Protection: • Do not ignore pain: When the finger joints are painful, stop the activity immediately to reduce pain and avoid unnecessary damage to the joints. • Change positions frequently: Do not maintain the finger joints in the same position for too long to avoid stiffness and pain. Stretch and relax areas that are tired or tight. • Maintain proper posture of finger and avoid certain positions: Avoid prolonged bending of the fingers and turning movements e.g. turning water tap and wringing towel. • Use larger and stronger joints: Use the larger and stronger joints for heavy work, e.g. use a shoulder bag or knapsack instead of a carrying bag. • Reduce energy loss at work: Organize your work and procedures. Leave time for rest by alternating different activities. Use assistive appliances e.g. buy minced meat, using washing machine, choose shoes without shoestrings or with velcro. • Balance between rest and activity: Balance work and leisure activities by taking short breaks and alternate between heavy and light activities throughout the day. You may need to take longer breaks when the joints become painful.

Parkinsonism

Condition	Symptoms	Management
Parkinsonism is one of the most common neurological disorders in the elderly, usually affecting those in their sixties. Causes It can be divided into idiopathic type and those with secondary causes. Most Parkinsonism among the elderly is idiopathic. The definitive cause is unknown, but it is known that progressive destruction of nerve cells in the brain can lead to the depletion of a neurotransmitter called dopamine, which in turn leads to Parkinsonism. Secondary causes of Parkinsonism include long-term use of drugs like certain anti-emetics, brain trauma, brain infection and recurrent stroke.	• Tremor, which usually starts in one upper limb, may then involve the other limbs and spread to the whole body eventually. • Slowness of movement, which is especially obvious on starting movement and turning around. • Cog-wheel rigidity of limbs and joints. • Other symptoms include loss of facial expression, speech problems and gait problems.	• Medication: Although there is no effective treatment to cure idiopathic Parkinsonism at this stage, drugs can help relieving the symptoms of tremor and stiffness of joints and thereby improve the activities of daily living. Usually, long-term medication is necessary and sudden cessation of medication without medical supervision can make symptoms worse. • Physiotherapy: Training of muscles & joints and proper positioning can reduce symptoms and complications. Appropriate use of walking aids together with proper transferring techniques can improve patients' mobility and reduce the likelihood of accidents • Occupational therapy: It involves the assessment of patients' living environment to identify possible barriers in their daily living, and using appropriate adaptive devices and modifying the home environment to enhance patients' self-care abilities. • Psychological counseling: As patients are prone to develop depressive symptoms, psychological support and empathy from family members are essential. On the other hand, carers can also be overwhelmed by excess stress. Professional advice should be sought if necessary.

Dementia

Condition	Symptoms	Management
Dementia is a progressive disease of the brain. There is decline in cognitive and intellectual function such as memory, comprehension, learning capacity, the ability to think and calculate, as well as language and judgment. Some also present with emotional and behavioral problems. Dementia can be caused due to: 1. Alzheimer's Disease: 2. Vascular Dementia: due to multiple minor strokes 3. Other causes: e.g. brain tumor, head injury, vitamin B 12 deficiency, drug and alcohol abuse, hypothyroidism and depression	1. Early stage – memory loss with decreased ability to think 2. Intermediate stage – easily get lost, mood changes and behavioral problems, deteriorates in ability to perform activities of daily living. 3. Late stage – language impairment, cannot recognize relatives, may become incontinent and totally dependent for ADL	Nurse should explain to client/family – Management 1. Seek early medical advice and treatment if there is suspicion of dementia. 2. Some drugs may improve memory and cognitive functions of patient with early Alzheimer's Disease. Non-cognitive symptoms such as depression, psychotic features and sleep problems may benefit from drug treatment as well. However, there is no cure for dementia. 3. Other treatment includes behavioral therapy, programmes to improve memory and cognitive function. Education and counseling to patients and carers are also important. 4. Carers of demented patient can attend health talks, support groups etc. to acquire more caring skills and stress management techniques. Prevention • Prevention of Alzheimer's Disease is not yet known. • Multi-infarct dementia may be prevented by adopting a healthy lifestyle which includes a balanced diet, regular exercise, no smoking and no excessive drinking. Proper control of hypertension and diabetes mellitus is also essential.

OTHER CONDITIONS INCLUDING ELDER ABUSE

Alcoholism in old age

Signs and symptoms of alcoholism include confused, forgetful and depressed, aches and pains, insomnia, loss of sex drive, depression, anxiety, loss of memory and other mental problems.

Some cannot accept the physical changes that come with age. Others can't handle the loss of a spouse or friends, or they can't adjust to retirement. And, often, these individuals turn to alcohol. This is called late onset alcoholism. The bad news is that this type of alcoholism may go unrecognized. The good news is that late onset clients have a better chance of recovery because they have a history of handling problems successfully.

Some characteristics of late onset alcoholism include:

- presence of significant life events that trigger excessive alcohol use
- minimal, if any, work-related consequences
- fewer marital/family consequences
- absence of consequences with the criminal system
- difficulty with confrontations due to cognitive impairment
- shame as a significant issue
- health or financial restrictions that limit amount or frequency of use
- loss of social network (may be "secret drinkers")

As a result, they may have more difficulty in recovery because of health complications from years of drinking. Some signs and symptoms of early onset alcoholism include:

- experience with or prior history of treatment
- survival into late life despite physical, emotional or psychological consequences of drinking
- "treatment wise" attitude and demonstration of impenetrable prognosis
- lack of acceptance and/or surrender

Treatment for Elderly Alcoholics

Usually referred for treatment by their families. They are likely to say, "I'm not like them. I don't belong here." They do like to deal with their problems privately and do not show their feelings openly. The older client needs more gentle confrontation. It often is more helpful to address issues such as isolation, loneliness, grief and shame, as many of these clients are resistant to the disease concept. Other modifications need to be made to treatment for older alcoholics. For example, programs need to be slower paced. Perhaps the physical environment will need to be modified, i.e., ramps or aids for hearing impaired clients may need to be installed. Physical factors that can complicate treatment include actual physical problems, detox complications, physical disabilities, a hearing and/or vision impairments and decreased stamina and mental deterioration. Emotional factors that could complicate recovery include lack of motivation, alienation, identification and expression of emotions, limited leisure needs and identification with peers. The counselor working with these clients needs to be more flexible and more empathetic. Professionals need to speak slower, thoroughly and patiently, explaining every aspect of the treatment program. But, most important, counselors must realize that elderly clients need to be met where they are, not where the counselor wants them to be.

ELDER ABUSE

Elder abuse is defined as:

'A single or repeated act or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person'

WHO ABUSES?

Anyone in a position of control or authority, whether that is within a family situation or a statutory type environment. This can include a partner, child or relative; a friend or neighbor; volunteer worker; or a health, social care or other worker.

WHERE DOES ABUSE OCCUR?

Abuse can occur in an individual's own home, in a carer's home, in a day Center, in a residential or nursing home or in a hospital

There are five main types of abuse:

Physical:

for example, hitting, slapping, burning, pushing, restraining or giving too much medication or the wrong medication;

Psychological:

for example, shouting, swearing, frightening, blaming, ignoring or humiliating a person;

Financial:

for example, the illegal or unauthorized use of a person's property, money, pension book or other valuables;

Sexual:

for example, forcing a person to take part in any sexual activity without his or her consent – this can occur in any relationship;

Neglect:

for example, where a person is deprived of food, heat, clothing or comfort or essential medication.

An older person may either suffer from only one form of abuse, or different types of abuse at the same time. On suspecting abuse, refer the person to an expert NGO/Counsellor for further investigation and care.

8 *Injuries and Infections in Disasters*

KEY LEARNING OBJECTIVES

At the end of the session the participant should be aware of:

- Injuries and infections in disasters
- The standard management guidelines

Introduction:

India is witnessing several disasters and the recent tsunami is one such disaster. Being one of the most destructive natural calamities, it caused several kinds of impact on the life of affected individuals. Adults both male and female and disabled among them are worst affected individuals. They are vulnerable to develop a number of infections. Injuries and disabilities are some of the common health problems which need continuous attention by healthcare workers or volunteers. Women face specific problems like abortions, reproductive infections, uterine deaths, anemia etc.,

STANDARD CASE MANAGEMENT PROCESS

How to begin assessment

- Greet the family members and the person concerned
- Establish good rapport with the person
- Use simple terms
- Be a patient listener
- Be sensitive to the individual with concerns
- Express caring attitude.

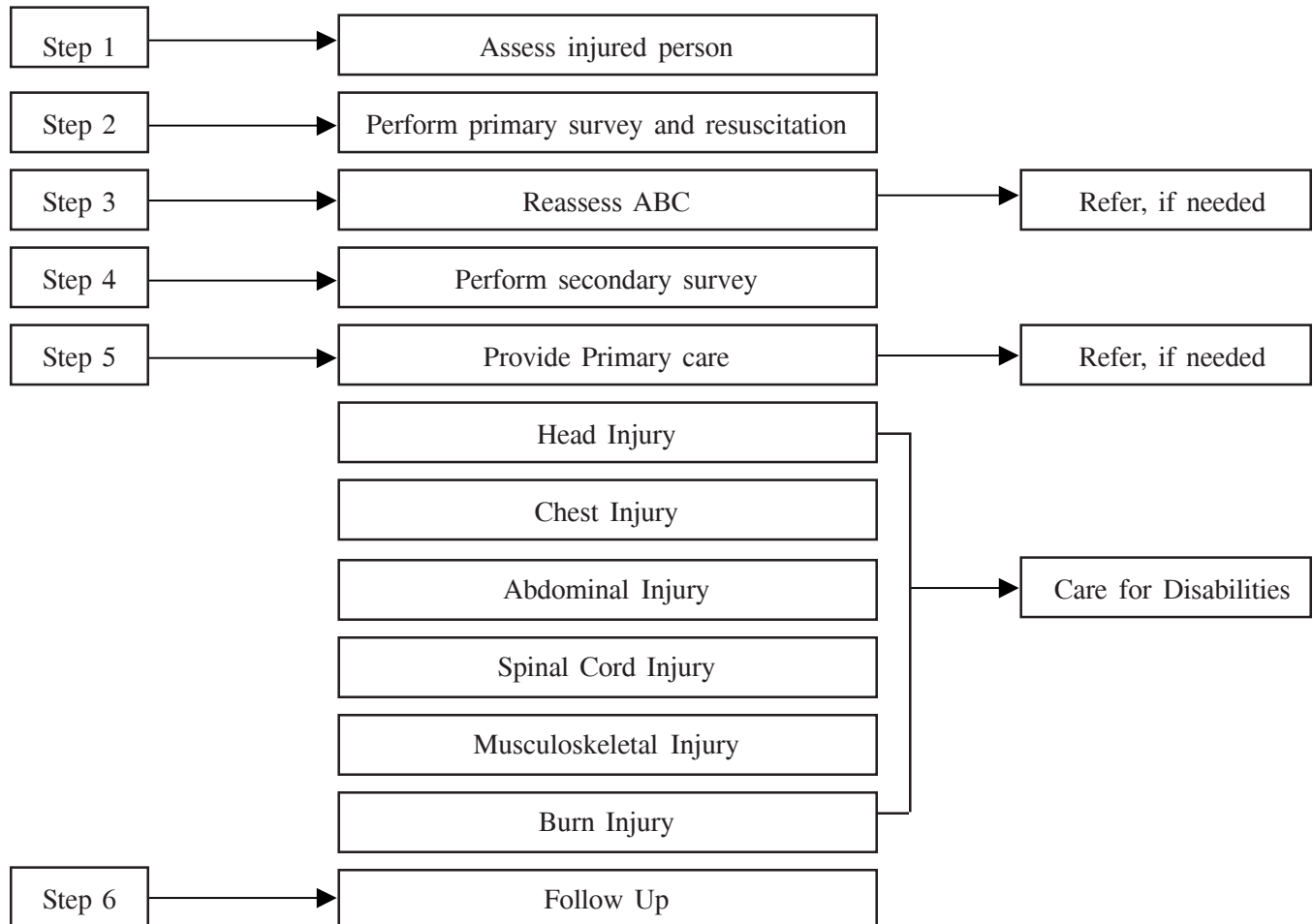
MANAGEMENT OF ADULTS WITH INJURIES

INTRODUCTION

Injury ranks one of the leading causes of death in almost all countries in the present age. Early deaths due to intracranial hemorrhages and multiple injuries with hypovolemia are reduced by timely and appropriate resuscitation. Later deaths are mainly due to sepsis and multi-organ failure and these are helped only by appropriate resuscitation and rapid restoration of cellular oxygenation.

Some of the causes for injuries could be mechanical, thermal, electrical, chemical, radiant energy, drowning, strangulation and freezing. Injuries to the extremities are the primary cause of injury-related disability in many countries. These disabilities can be greatly reduced if promptly recognized and corrected. Appropriate primary care for victims of non-fatal injuries can prevent future fatalities, reduce the amount of short term and long term disability and help those affected to cope with the impact of injury event on their lives.

Primary health interventions are essential. Common problems that affect both male and female adults are categorized together and specific to gender are described separately in the guidelines presented in this module.

MANAGEMENT OF ADULTS WITH INJURIES**STEP 1****ASSESS THE INJURED PERSON**

Quick assessment of victim and immediate environment has to be carried out.

- Perform visual scan at patient for obvious injuries.
- Obtain history from relatives/on looker/patient.

STEP 2**PRIMARY SURVEY AND RESUSCITATION****1. Assess the airway [A]**

Airway is assessed by checking the response of the victim. Cervical spine immobilization is done along with measures to maintain patent airway.

Always assume that a patient sustaining significant blunt trauma or altered consciousness has a cervical spinal injury, till proven otherwise.

If there is no response/inappropriate response, it indicates altered level of consciousness or airway/ventilatory compromise.

Assessment	Management	Referral
1. Airway Signs of airway obstruction Look • Agitation • Cyanosis • Injury/swelling on neck • Retraction & use of accessory muscles of ventilation Listen • Noisy breathing • Gurgling, crowing sounds • Hoarseness Feel • Movement of air • Trachea position	Open the airway a. Chin lift – The fingers of one hand are placed under the mandible which is gently lifted upward to bring the chin anteriorly. The thumb depresses the lower lip to open mouth. Do not hyper extend cervical spine b. Jaw thrust – Grasp the angle of jaw, one hand on each side and displace mandible forward. c. Head tilt – Avoid head tilt if cervical spine injury is suspected	Oxygen Suction Oropharyngeal airway Nasopharyngeal airway Surgical airway – needle or surgical cricothyroidotomy Endotracheal intubation Cervical spine x-ray
2. Breathing Signs of ventilatory inadequacy Look • Symmetrical rise and fall of the chest. • Laboured breathing Listen • Decreased or absent air entry • Hyper resonant • Dull Feel • Tracheal shift • Crepitations over chest and neck	If breathing is not present, Administer 2 breaths Close victim's nose by pinching it with index finger & thumb. Take full breath, place lips around mouth and blow into victim's mouth until you see chest rise. Remove lips and allow chest to fall fully. Deliver another breath. If chest does not rise Check for foreign body by sweeping finger around inside the mouth.	Bagging with mask Endotracheal intubation Mechanical ventilation
3. Circulation Assess for • Carotid pulse	If carotid pulse is absent, start chest compressions. Find with your fingers the point where the ribs meet. Place heel of other hand on breastbone and slide down till it reaches index fingers. Lean over victim. Keep arms straight and press down vertically on breastbone to depress it about 4-5 cm and release pressure without removing hands. Repeat for a count of 15.	ECG Pulse Oximetry Defibrillation Central IV cannulation Blood transfusion Pneumatic splinting device

Assessment	Management	Referral
• Hemorrhage • Hypotension • Hypothermia • Shock – Tachycardia – Hypotension – Oliguria – Altered sensorium – Hypothermia	Establish venous access with large bore canulae (14 or 16 G) Apply tourniquet Control external bleeding – apply direct pressure – elevate bleeding site above level of heart in case of bleeding in extremities Administer 2000 ml of Ringer's lactate Administer warm IV fluids Cover with blanket Administer fluids (RL or NS) Catheterize to find urine output. (urine output of 0.5 ml/kg/hr is adequate for adult)	ABG (Arterial Blood Gas) Analysis CVP (Central Venous Pressure) monitoring
4. Disability Check A – Alertness V – Verbal response P – Pain U – Unresponsiveness Check the level of consciousness using GCS. If GCS is < 9, refer	Appropriate management of specific neurological problem	Transport the patient to the nearby hospital
5. Expose the entire body and look for occult injuries		

Drill on Basic Life Support

STEP 3

REASSESSMENT OF ABC

Reassessment of the ABC is an integral component to ensure that there has been no decompensation. This should be done as each step of the primary assessment is completed or if there is a time lag between components. Reassessment should be done before embarking on Secondary Assessment.

STEP 4**SECONDARY SURVEY**

Once the resuscitation is well under way and vital signs are relatively stable, detailed head to toe exam of the trauma patient is begun.

Assess

- Head & scalp – Run your hands over scalp to find bleeding, swelling or soft area
- Face – Note color, temperature and state of skin
- Eyes – Examine eyes – pupillary size, reaction, equality
- Ears – Test hearing, look for blood or clear fluid through ear indicating damage inside skull.
- Mouth – Look for any airway obstruction, presence of dentures. Examine lip for Discoloration. Blueness indicates poor blood circulation.
- Neck – Loosen clothing around the neck
Take carotid pulse
Check for irregularity or tenderness, bruising at base of skull – suggesting spinal cervical injury
- Trunk – Check for
 - Chest expansions
 - Collar bones and shoulders for irregularity or tenderness
 - Abdomen for any wound, rigidity or tenderness
 - Pelvis for any sign of fracture
 - Incontinence or bleeding from orifices
- Back & spine – Assess for swelling, tenderness at the back suggestive of spinal injury
- Upper limbs – Check movement and sensation
Look for swelling, bruising or deformity
- Lower limbs – Assess for wound, swelling or deformity suggestive of fracture.
- Feet – Check movement and sensation
Blueness of skin – indicates a circulatory disorder or cold injury.

STEP 5**PRIMARY CARE****1. Head Injury**

Assessment	ABC with cervical stabilization.	Monitoring
Pupillary symmetry – Size, reaction to light, equality * Glasgow coma scale – To assess the severity of brain injury. The total GCS is used to classify the severity of head injury: Severe: 8 or less Moderate: 9 to 12 Mild: 13 to 15 Management	IV fluids (DO NOT ADMINISTER DEXTROSE) Suturing for open wounds Anticonvulsant therapy in case of seizures Management of raised ICP Referral	Surgery if needed

Discussion on anticonvulsant therapy for seizures, Demonstration of bandaging

* Glasgow Coma Scale (GCS) – (Adult)

Clinical Assessment	Score
Eye opening	
Spontaneously	4
Opens eyes to call	3
Opens eyes to painful stimuli	2
No response	1
Verbal Response	
Oriented	5
Confused	4
Inappropriate words	3
Incomprehensible sounds	2
No response	1
Motor response	
Obeys commands	6
Localises painful stimuli	5
Withdraws from painful stimuli	4
Abnormal flexion to pain	3
Abnormal extension to pain	2
No response to pain	1

2. Chest Injury

Assessment	Management	Referral
Inspection Rate of respiration Use of accessory muscles Distended neck veins Open chest injury Flail chest Palpation Shift of Trachea Local tenderness Bony crepitations Percussion Hyper resonance Dullness Auscultation Bony crepitations Adequate air entry Poor/No air entry Adventitious sounds Tension pneumothorax Open pneumothorax Flail chest Massive Haemothorax Cardiac Tamponade	Use Palm of hand or victim's hand to cover wound Cover the area with clean cloth or sterile dressing. Cover the area with plastic bag. Secure with adhesive strapping or firm bandaging Support conscious patients to incline towards injured side Put unconscious patients in recovery position on injured side. Refer	Place chest tube Endotracheal intubation if respiratory rate is more than 40/min or $\text{PaO}_2 < 60$ mm Hg on 60% oxygen. Fluid replacement and chest tube placement ECG, pericardiocentesis, open thoracotomy.

Group Discussion

3. Abdominal Injury

Assessment	Management	Referral
History – mechanism of injury, timing, response to treatment, use of seat belt, etc. Physical Examination Inspection Head to toe examination Palpation Tenderness, crepitus, guarding, rigidity Percussion Liver dullness and presence of free fluid Auscultation Presence and absence of bowel sounds	Make patient to lie down Bend and support knees Put large dressing over wound and secure with bandage or adhesive Insert naso gastric tube if available and decompress the stomach. If intestine is protruding, do not touch it but cover with a polythene bag to prevent drying or cover with a clean wet cloth	Blood samples X-rays Emergency laparotomy

4. Spinal Cord Injury

Assume that all victims have spinal cord injuries until proven otherwise. So immobilize with hard cervical collar.

Assessment	Management	Referral
– Check for other signs of spinal injury such as ▪ Pain in the neck or back at the level of injury ▪ Tenderness over spine – If spinal cord injury is suspected, look for ▪ Difficulty in breathing ▪ Paralysis ▪ Loss of sensation/abnormal sensation – Cervical cord injury is suspected in an unconscious patient if there is ▪ Ability to flex but not extend at elbow	If patient's neck is in abnormal position, DO NOT ATTEMPT TO STRAIGHTEN NECK. Immobilize in the same position using sandbags and taping head to a firm backboard. Apply cervical collar when possible. Reassure the victim and instruct not to move Assess and treat for ABC Log roll patient side to side IV fluids	Cervical spine X-ray Catheterization Surgical management

5. Musculoskeletal Injury

Expose the patient and use contra lateral side for comparison. Check for life threatening injuries.

Assessment	Management	Referral
LIFE THREATENING INJURIES 1. Pelvic fracture – Inability to walk or stand – Pain and tenderness at region of hip, groin or back – Blood at the Urinary orifice – Painful urination – Signs of internal bleeding and Shock	Help patient to lie on back with legs straight. Bandage legs together with padding Wrap a sheet tightly around Pelvis. Transport patient safely	S u p r a p u b i c catheterization Open reduction and internal fixation
2. Vascular Injuries – Pulsatile bleeding – Expanding or pulsatile haematoma – Absent distal pulse – Cold, pale limb	Apply direct pressure and do compressive dressing.	Cauterisation of bleeders
3. Traumatic Amputation	All except the most distal amputations are significant threat to life. Transport to referral centre immediately	Surgery if needed

LIMB THREATENING INJURIES

1. Open fractures Check for skin wound, tissue damage and contamination. a. Wound < 1 cm No Contamination } Grade I b. Wound 1-6 cm Moderate Contamination } Grade II Moderate soft tissue loss } c. Wound > 6 cm Excessive Contamination } Grade III Excessive soft tissue damage }	Support injured limb Cover wound with clean cloth Apply pressure to control bleeding Place cotton padding over and around the dressing Bandage firmly but not tightly Keep injured part elevated Keep patient nil orally Administer Tetanus Prophylaxis	Open reduction and internal fixation
2. Compartment Syndrome Observe for – Pain – Paraesthesia – Pallor – Pulselessness – Paralysis	Remove all constricting dressings or clothing. If patient is on cast, remove the cast	Surgical – Fasciotomy
3. Nerve Injuries Sensation Movement	Immobilization	Nerve repair

Group discussion on care of patient with cast

6. Burns Injury

Assessment	Management	Referral
Assess for – extent of burns with rule of 9 – full thickness or partial thickness involvement – Weight of patient	DOs Lay victim down. Douche the burns with lots of cold fluids for 10 min. Gently remove clothes and accessories. Cover injury site with fresh linen Raise & support burned arms, legs or head. Administer fluids (In 1 ltr of drinking water, add ½ teaspoon of salt, ½ teaspoon of bicarbonate of soda, and 2 – 3 teaspoon of sugar or honey) Administer Analgesics for pain DON'Ts Remove anything sticking to the burns. Over cool Burst blisters Touch injured area Apply lotions or ointments	Nurse in Burns unit

Group discussion on psychosocial impact of burns
 Drill of fluid replacement for burns

CARE OF DISABILITIES

Disability is defined as any restriction or lack of ability to perform an activity. Primary care is focused on promotion of optimal health and prevention of complications.

SELF CARE

Assessment	Management	Referral
• Eating – oral – NG tube feeding • Grooming • Bathing • Dressing • Toileting	• Ensure correct method of feeding by helper. • Ensure prevention of aspiration • Teach importance of well balanced diet – high fiber, high protein and fluid diet. • Enhance self care techniques • Find resources for aids in self care • Plan self care regime and discuss with patient and helper • Find resources to provide training • Encourage use of prosthesis and orthoses.	• Gastrointestinal complications needing surgical treatment. • Provide aids for self care

Group discussion on Rehabilitation

BOWEL FUNCTION

Assessment	Management	Referral
Type of bowel – spastic – flaccid Assess for complications • Haemorrhoids • Anal fissures • Involuntary bowel movements • Constipation • Diarrhoea	• Teach SELF for successful bowel control program S-Schedule E-Exercises L-Liquids F-Fiber • Teach use of appropriate medications and enema • Teach digital stimulation and evacuation	Proctoscopy Surgical treatment

BLADDER FUNCTION

Assessment	Management	Referral
Type of bladder – reflex – non-reflex – incontinent Assess for Signs and symptoms of complications such as – Infection (UTI) – Renal stones – Hydronephrosis – Autonomic dysreflexia	• Teach intermittent clean catheterization • Teach care of external catheters • Take measures to prevent complications • Administer antibiotics if urine culture is positive • Teach signs and symptoms of complications • Teach Kegel's exercises	Cystoscopy Surgical Options

Discussion on antibiotic therapy

Demonstration on intermittent clean catheterization

LOCOMOTION

Assessment	Management	Referral
Check – ROM (Range Of Motion) – Muscle Strength – Ability to transfer – Need for mobility aids	Teach • ROM exercises • Strengthening exercises • Posture • Skin care • Positioning • Care of cushion/wheel chair	• Surgical treatment of contractures • Sophisticated equipment for home modification

Demonstration of ROM exercises

STEP 6**FOLLOW UP**

Patients who require follow up at home or PHC need to be visited and encouraged to do so.

MANAGEMENT OF ADULTS WITH INFECTIONS IN DISASTERS

Introduction

Every country has its own health problems depending upon the standard of living of its people. Infectious diseases play a major role in increasing the morbidity and mortality rates especially in disaster affected areas in our country. The victims of some of these diseases may become disabled. This affects their efficiency to work which in turn affect the family and community. The infectious diseases which are prevalent in our country are respiratory infections, intestinal infections, skin infections, sexually transmitted diseases and arthropod infections. Training nursing students and health workers on infectious diseases is essential to equip them with adequate knowledge, skills and attitude to provide preventive, promotive and rehabilitative health care services in their respective communities. Management of infectious diseases in adults both men and women are presented in this module.

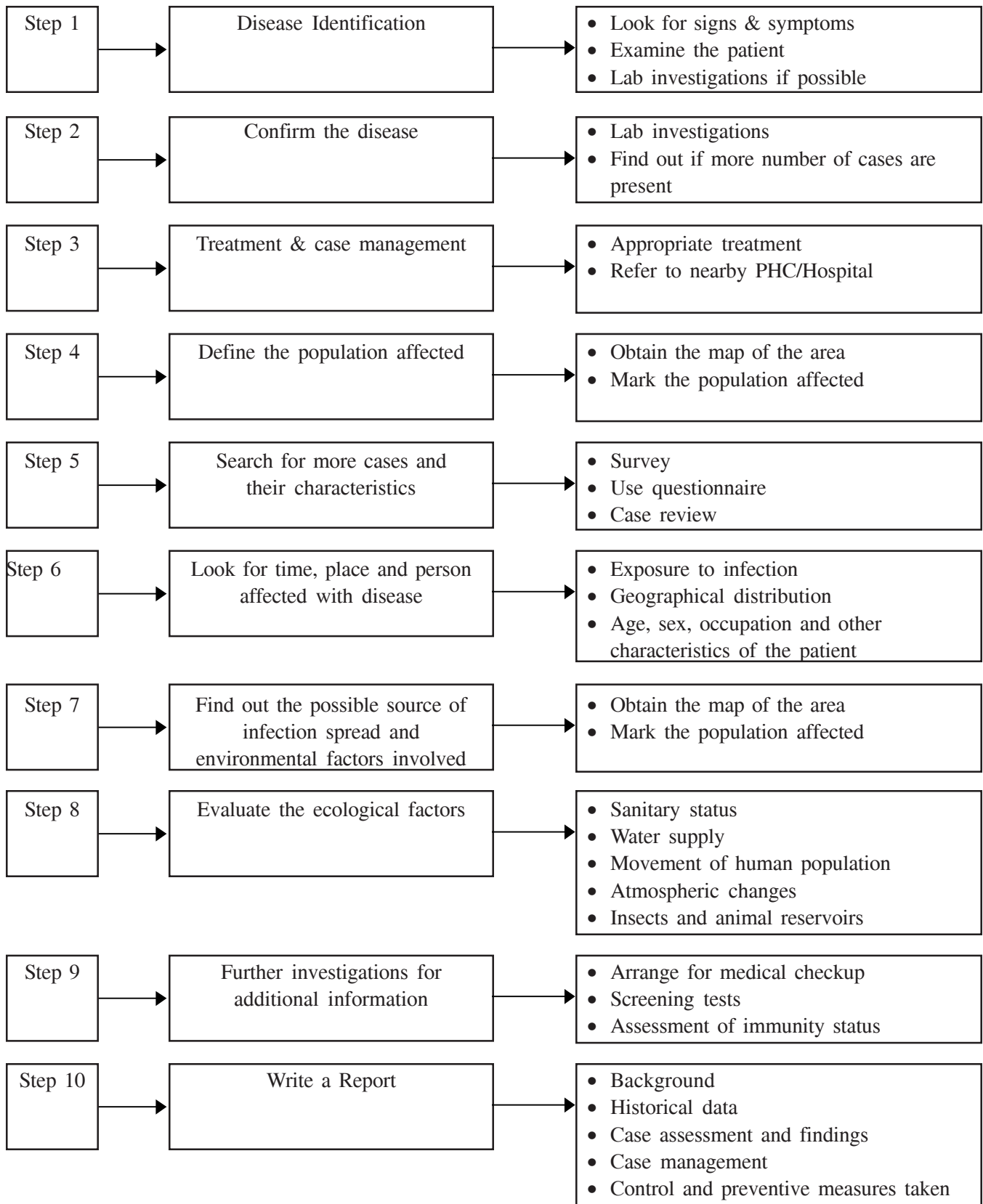
Overall Objective

This module is intended to provide health workers a ready source of information on how to recognize a specific infectious disease, how to manage the patients so that they do not become sources for new cases and to provide guidance for their treatment and control measures to preserve lives. Primary health interventions are essential. Common problems that affect both male and female adults are categorized together and specific to gender are described separately in the guidelines presented in this module.

INFECTIOUS DISEASE TRANSMISSION

	Mode	Common Infectious diseases
Direct Transmission	Direct Contact	STDS, AIDS, Skin and eye infections
	Air	Respiratory infections, Fever and Tuberculosis
	Contact with Soil	Worm infestation and tetanus
	Inoculation into skin	Rabies and Hepatitis B
	Transplacental	Syphilis, AIDS and Hepatitis B
Indirect Transmission	Vehicles	Diarrheas, Typhoid fever, cholera, Hepatitis A, food poisoning & worm infestation
	Vectors	Malaria & Filaria
	Air	Tuberculosis, fever, respiratory infections & pneumonia
	Fomites	Typhoid fever, dysentery, Hepatitis A, Eye and Skin infections
	Unclean hands & fingers	Typhoid fever, Hepatitis A, dysentery & worm infestation

INVESTIGATION OF AN INFECTIOUS DISEASE



RESPIRATORY INFECTIONS

TUBERCULOSIS (Also see “Revised National Tuberculosis Control Programme” in Chapter 15)

Case Identification

- Persistent cough for more than 3 weeks
- Evening rise of temperature
- Chest Pain
- Haemoptysis

Case finding tools

- Sputum examination
- X-ray
- Tuberculosis test

All patients with cough of 3 weeks or more should have 3 Sputum Samples examined for TB.

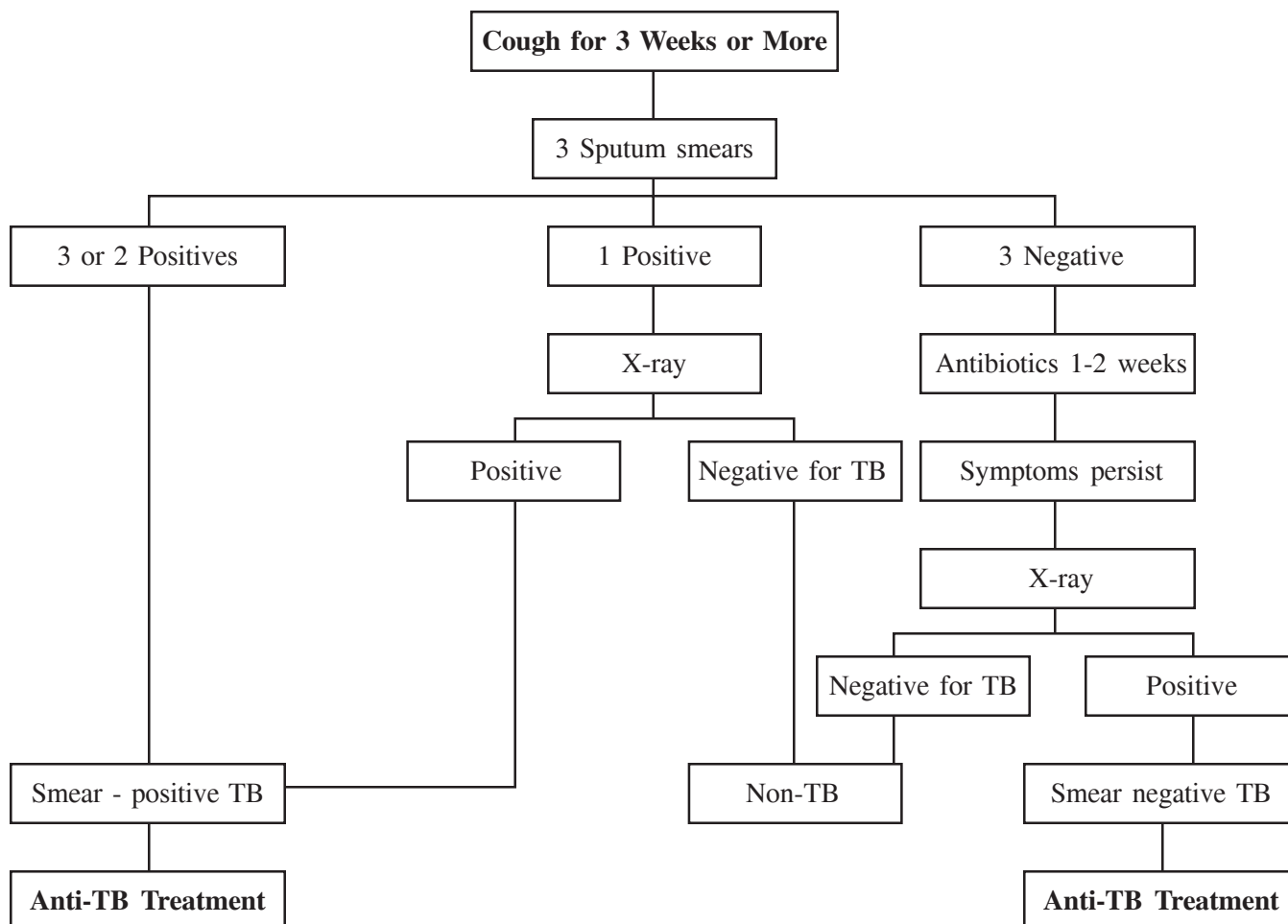


Fig. 1: Diagnosis of tuberculosis in RNTCP

Treatment

Refer to PHC for DOTS (Direct Observation Treatment)

Preventive and Control measures

- Educate the patient and the family
- Isolation
- Safe disposal of sputum at home
- Family contact screening
- BCG vaccination
- Avoid over crowding
- Provide well balanced diet

Short-course anti-tuberculosis treatment with multiple drugs may limit the spread of TB in a crowded refugee settlement.

However, in some situations, establishing a TB control programme may cause more harm than good for the following reasons:

1. TB requires prolonged treatment, which may not be completed by migrating populations.
2. Treatment failure may lead to the development of multi-drug resistant bacilli.

TB control programmes may be appropriate under certain conditions, as shown in the table below.

Implementation of a TB Control Program:

TB Program not recommended	TB Program Recommended
During the emergency phase following the population displacement	Emergency phase is over
During warfare of significant insecurity	Security in the camp envisaged for at least 6 months.
Very unstable population (e.g. nomadic or population moving up and down a border.)	Stability of the camp for at least 6 months.
Major health problems not fully addressed	▪ Basic needs of water, adequate food, shelter and sanitation are available. ▪ Laboratory services for sputum smear microscopy will be available. ▪ Essential clinical services and basic drugs are available. ▪ Data indicate that TB is an important health problem.
Limited financial resources	▪ Sufficient funding and drug supplies available.

ACUTE RESPIRATORY INFECTIONS (ARI)

Case Identification

- Fever
- Headache
- General body ache
- Malaise

- Anorexia
- Running nose
- Cough
- Difficulty in breathing
- Ear problem

Assessment

- History
- Check vital signs
- Clinical assessment
- Count respiratory rate
- Auscultation of lungs for breath sounds
- Take a throat swab (incase of sore throat)

Management

- Antipyretics for fever
- Cough mixtures
- Advise to take plenty of oral fluids
- Saline gargle if sore throat is present
- Give steam inhalation
- If associated with complications such as laryngitis, bronchiolitis or pneumonia – refer to PHC/nearby hospital and specific antibiotic therapy.
- Advice rest

Preventive and control measures

- Educate on preventive measures
- Safe disposal of discharges from mouth and nose
- Cover mouth and nose while coughing
- Avoid overcrowding
- Use a separate kerchief/cloth to wipe the secretions.

INTESTINAL INFECTIONS

Case identification

Assess/check for

- Watery stools
- Abdominal pain
- Anorexia and vomiting
- Fever, body ache
- Muscular cramps
- Decreased urine output
- Malaise

Assessment

- History
- Check vital signs

- Look for associated symptoms
- Observe for signs of dehydration
- Check about urine color, volume
- Do the abdominal palpation for tenderness or liver enlargement
- Observe the color and consistency of stools
- Look for worms
- Do a stool examination (if possible)

Management

- Oral rehydration fluid
- Appropriate diet and feeding
- Advise rest
- Give antihelminthiics in case of worm infestation
- Give antipyretics(if fever is present)
- Arrange for vaccination for contacts
- If there is severe dehydration refer to PHC or Hospital
- Isolation if needed (Typhoid and Cholera)
- Incase of shigella, typhoid or cholera refer for appropriate treatment and specific antibiotics
- Report to local health authority

Preventive and Control measures

- Educate the public on safe food, water and sanitation measures
- Advise personal hygiene
- Advise importance of hand washing
- Safe disposal of stools and urine
- Isolation of affected person in case of cholera and Typhoid fever
- Appropriate vaccination for Typhoid, Cholera, Polio and Hepatitis B.

SKIN INFECTIONS

Case identification

Check for

- Skin rashes
- Skin lesions
- Itching may or may not be present
- Fever

Assessment

- History
- Deviation sites involved
- Look for type of lesions, associated symptoms like fever
- Skin smear (if possible)
- Appropriate blood tests to rule out STIs
- Refer for skin biopsy
- Blood tests to rule out STIs

Management

- Isolation if needed
- If scabies, after a thorough scrub bath apply 25% Benzyl Benzoate for 3 days
- Give antipyretics if fever persists
- Keep the fingernails cut short and clean
- Avoid scratching
- In case of Leprosy refer to nearby PHC or Hospital
- For specific anti-leprosy drugs and do the follow up.
- In case of STI skin lesions, refer to nearby PHC appropriate treatment apply appropriate local application if prescribed

Preventive and Control measures

- Report to local health authority in case of leprosy and STD
- Disinfection of cloth and bed linen and dry them under sunlight
- Do contact screening
- Advise consumption of well cooked meat to avoid Taenia skin infections
- Educate the public importance of personal hygiene

SEXUALLY TRANSMITTED INFECTIONS

These infections are mainly spread through sexual contact. The commonest are Gonorrhea, Syphilis and AIDS. Multifaceted approach is needed to contain this group of infections. Identification of these infections require specific skills of questioning and interview. Development of good rapport is essential to encourage them to talk about these sensitive concerns and symptoms.

Case Identification

Assess for relevant manifestations such as:

Localized

- Pus discharge from urethra
- Pain and burning sensation during urination
- Sores and ulcers on the penis
- A sore (Chancre) appearing on the penis, which is clean, painless and hard is suggestive of primary stage syphilis
- Enlargement of glands in groin
- Presence of sore throat, ulcers in mouth, swollen joints is suggestive of secondary stage syphilis and the tertiary stage syphilis affects bone, brain, joints, heart leading to paralysis and insanity.
- In females genital ulcer, vaginal discharge, pain during intercourse, lower abdominal pain

Generalized

- Fever
- Persistent cough
- Sore throat
- Swollen lymph glands
- Swollen joints
- Generalized pruritis
- Weight loss
- Thrush in the mouth
- Chronic diarrhoea

MAIN MODES OF PRESENTATION OF RTI/STI:**1. MODE OF PRESENTATION: URETHRAL DISCHARGE****History**

- History of unprotected coitus up-to 2 weeks
- Pain or burning on passing urine (dysuria)

Examination

- Examine the meatus for redness and swelling and look for evidence of urethral discharge.
- If none is seen, gently massage the urethra from the ventral part of the penis towards the meatus and look for thick, creamy greenish-yellow discharge.

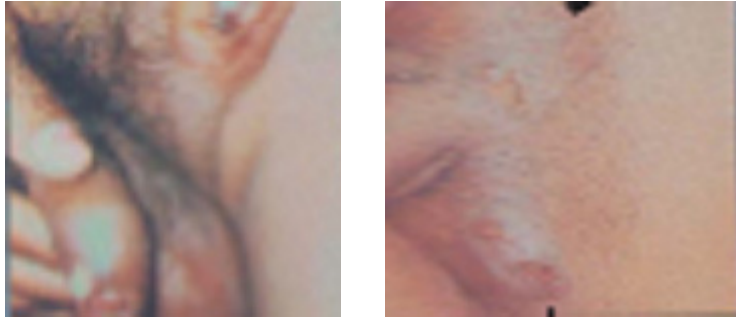
2. MODE OF PRESENTATION: SCROTAL SWELLING**History**

- History of unprotected coitus up-to 2 weeks
- Pain or burning on passing urine (dysuria)
- Swelling and pain in the scrotal region

Examination

- Scrotal swelling
- Tenderness of the epididymis and vas deferens
- Redness and edemas of the overlying skin.
- Look for associated urethral discharge/genital ulcer

3. MODE OF PRESENTATION: INGUINAL BUBO



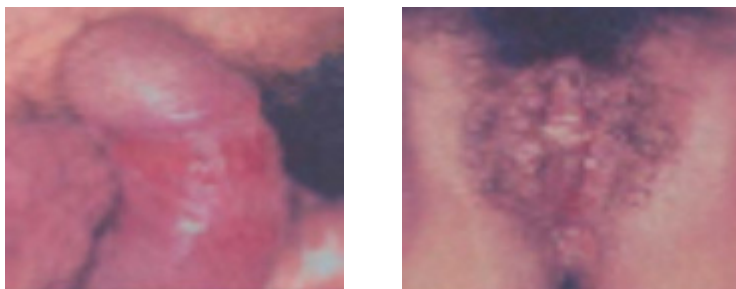
History

- History of unprotected coitus
- History of swelling in inguinal region which may be painful
- History of associated genital ulcer or discharge

Examination

- Localized enlargement of lymph nodes in the groin area which may be tender and fluctuant.
- Look for presence of genital ulcer or urethral discharge

4. MODE OF PRESENTATION: GENITAL ULCER



Vesicles



Genital ulcer

History

- History of unprotected coitus
- History of genital ulcer

Examination

- Presence of vesicles
- Presence of genital ulcer
- Associated inguinal swelling

5. MODE OF PRESENTATION: VAGINAL DISCHARGE**History**

- Discharge per vaginum, whitish, foul smelling.
- Itching of genitals
- Burning
- Presence of any ulcer, swelling in the vulval or inguinal region
- Similar complaint in sexual partners

6. MODE OF PRESENTATION: LOWER ABDOMINAL PAIN**History**

- Lower abdominal pain and backache
- Vaginal discharge
- Menstrual irregularities
- Dyspareunia (pain during intercourse)
- Dysuria (Difficulty in urination)
- Fever

REFER ALL PATIENTS WITH SYMPTOMS OF RTI/STI TO PHC OR PUBLIC HEALTH CARE PROVIDER FOR TREATMENT

Prevention and control measures (Action by Nurse)**Give all patients**

1. Ensure that patients take proper treatment as per the guidelines.
2. Instructions for dosing and follow-up.
3. Education and Counseling
4. Condoms and instructions on proper use of the condom.

Education and counseling for patients

1. Taking the full course of treatment will cure most STIs.
2. Avoid sex during treatment period to prevent spread of STIs.
3. Help your sexual partner(s) to get treatment.
4. Stay uninfected with use of condoms.
5. Reduce risk of acquiring new infection by having just one sex partner.
6. Protect yourself against HIV/AIDS. – Seek counseling to see if you should be tested for HIV.
7. If the patient's wife is pregnant, report to the antenatal clinic as soon as

Maintain personal hygiene and reduce stress and seek medical attention for health problems like opportunistic infections.

ARTHROPOD – BORNE INFECTIONS

The common arthropod-borne infections are

1. Dengue fever
2. Malaria
3. Filariasis

I. Dengue Fever

Case identification

- Sudden onset of fever
- Body ache
- Intense headache
- Anorexia
- Liver enlargement
- Hemorrhagic
- Retro-orbital pain

Assessment

- History
- Check vital signs
- Look for petechiae, purpura or ecchymosis
- Do blood test to look for Thrombocytopenia and
- Haemoconcentration

Grading of Dengue Hemorrhagic fever

Grade I	Fever with non specific symptoms Presence of positive tourniquet test
Grade II	Fever with spontaneous bleeding in the skin
Grade III	Rapid and weak pulse, narrowing of pulse pressure (20 mm of Hg)
Grade IV	Profound shock with undetectable BP and Pulse

Management

- Advice bed rest
- Antipyretics for fever
- Sponging if needed
- Avoid Tab. Aspirin give plenty of oral fluids and parenteral fluids if needed
- In case of haemorrhagic fever hospitalization is needed
- Maintain intake and output chart
- Management of shock if necessary
- Isolation if necessary

Preventive and control Measures

- Educate public about importance of destroying
- Mosquito breeding sites
- To use personal protective measures from
- Mosquitoes such as nets and repellents.
- Report to local health authority
- Investigation of contacts.
- Arrange for fogging

II. Malaria

Case Identification

- Severe headache
- Nausea
- Fever with chills
- Vomiting
- Body ache

Cold Stage (¼-1 Hr)	Headache, nausea and chilly sensation lasts for an hour and the temperature rises to 30-41°C. Severe headache, pulse is rapid and weak
Hot Stage (2-6 Hrs)	Patient feels burning hot, intense headache and pulse is full and rapid respiration
Sweating Stage (2-4 Hrs)	Fever decreases with profuse sweating, skin is cool and moist patient is comfortable and falls asleep

Assessment

- History
- Look for distinct stages mentioned above
- Take blood smear (both thin and thick film)
- Check viral signs
- Palpate the abdomen to rule out spleen enlargement
- Refer to PHC/Hospital for further blood test

Management

- Advice bed rest
- Give plenty of oral fluids
- Give antipyretics
- Isolation
- Refer to nearby PHC or hospital for anti-malarial drugs (presumptive or radical treatment)
- Look for toxic effects of drugs like nausea, vomiting, Blurring of vision and cyanosis
- Report to local health authority
- Prompt and effective treatment of identified cases
- Chemoprophylaxis to potentially infected cases
- Educate public about rigid anti mosquito sanitation measures.
- For treatment of malaria, refer to Chapter 16 – National Health Programmes (section on “Anti Malaria Drug Policy”)

III. FILARIASIS

Case identification

- Fever
- Lymphangitis
- Lymphadenitis
- Lymphoedema

Assessment

- History
- Check vital signs
- Night blood survey
- Look for lymphadenitis, lymphoedema
- In the legs, scrotum, arms, penis, vulva and Breasts
- Do serological tests (if possible)

Management

- Advise on rest
- Isolation during acute stage (if possible)
- Refer for anti filariasis drugs to PHC
- Tab. Diethylcarbamazine (DEC) 6 mg/kg body weight per day for 12 days
- Look for toxic reactions of DEC such as nausea, Vomiting, allergy or any local inflammation

Preventive and control measures

- Report to the local health authority
- Educate the public about anti mosquito sanitation measures
- Mass DEC Therapy
- Take measures to remove Pistia plant
- Environment management to control mosquito breeding.

PARASITIC INFESTATIONS**Case Identification**

- Loss of appetite
- Abdominal pain
- Distended abdomen
- Nausea
- Vomiting
- Diarrhoea
- Pale face
- Puffy cheeks
- Cough and breathlessness
- Perianal itching
- History of passing worms

Assessment

- History
- Clinical assessment
- Observe the stool
- Stool examination for Ova and cyst

Management

- Treat with antihelminthics
- Sanitation technology

Recommended Anthelmintics

Parasitic infestation	Treatment	Duration
Amoebiasis	Metronidazole 30 mg/kg/day	3 divided doses for 8-10 days
Ascariasis (Round worms) & Pin worms Mebendazole 100 mg	Piperazine 75 mg/kg/day (Maximum dose of 3.5 gms for 2 days)	Single dose for 2 days
	Two divided doses for 3 days	
Hook worms Mebendazole 100 mg	Albendazole 400 mg	Single dose
	Two divided doses for 3 days	
Tape worms	Praziquantel 15 mg/kg/day	Single dose and to be repeated after 14 days
	Niclosamide 60-80 mg/kg/day (Maximum of 2 gms/day)	Two divided doses for 5-7 days

Prevention and control measures

- Use latrines for defecation
- Thorough cooking of meat
- Wash vegetables and fruits before eating
- Keep the finger nails cut short and clean
- Wash hands well with soap and water before eating, cooking and after defecation
- Boil the water, cool it and drink
- Keep the food items covered
- Safe disposal of wastes and human excreta
- Wear chappels

9 Psychosocial Care

KEY LEARNING OBJECTIVES

After this session the participants should be able to:

- Understand the various psychological responses to the disaster among the affected population.
- Deliver psychosocial interventions for disaster affected populations
- Identify people who may need referral for specialist care.
- Aware of psychosocial interventions for special groups like children, women and elderly.

Disasters impose a huge burden on the community not only in physical terms but also in terms of the psychological trauma they suffer. A major challenge that faces communities and their governments is to cope with adverse physical and psychological conditions effectively. Although disaster-affected individuals do need and benefit from the material assistance and physical healthcare provided to them as part of relief work, they also need appropriate psychosocial care to help them cope better with the psychological trauma they undergo during and after the disaster. Psychological support should be available from the acute phase immediately after the disaster, and extend till the community is rehabilitated both physically and psychologically.

It should be noted that EACH AND EVERY PERSON in the population is psychologically affected to some extent. Thus, in terms of numbers, the magnitude of the problem of psychological stress is as large as the size of the population affected by the disaster. It is imperative that psychosocial interventions are accessible to each person in the community. Immediately after the disaster, there is an outpouring of concern, sympathy and the desire to assist the victims as much as possible. Money, material and personnel are mobilized to help the disaster victims. Unfortunately, such assistance, although well meaning, is sometimes lacking in professional standards and is often based on the belief that doing something is better than doing nothing. Psychological interventions provided by untrained or unsupervised workers can even be harmful.

The term 'social intervention' is used for interventions that primarily aim to have social effects, and the term 'psychological intervention' is used for interventions that primarily aim to have psychological effects. It is acknowledged that social interventions have secondary psychological effects and that psychological interventions have secondary social effects as the term psychosocial suggests. The term 'psychosocial interventions' in the context of disaster management does not refer only to highly specialized interventions by mental health experts. In fact most psychosocial interventions for disaster-affected people can be carried out effectively by community level relief workers, if they are trained and supervised to do so.

RESPECT FOR LOCAL CULTURE IN IMPLEMENTING PSYCHOSOCIAL INTERVENTIONS

In addressing the psychosocial needs of the community, the cultural foundations of the community must be kept in mind. All programmes being implemented must be culturally sensitive and appropriate to the local community. A deep appreciation of the culture, its historical roots, and the way it has shaped indigenous concepts of mental health and healing requires an ongoing commitment to learning. Complete understanding of local cultures helps determine the appropriateness and feasibility of specific interventions. The culture of a community may affect the choice of interventions in many ways.

Important considerations include:

- Help-seeking expectations (e.g., persons used to dealing with traditional healers may expect almost immediate relief);
- Duration of treatment (which may need to be short because of limited access to care);
- Attitudes toward intervention (e.g., preference for or dislike of medication);

- Cost-effectiveness of the intervention; and
- Family attitudes and involvement (many cultures emphasize the family over the individual).

Respecting the concerns, needs, resources, strengths and human rights of individuals, their families, communities, cultures and nations are extremely important.

SOCIAL SUPPORT

The psychological well-being of disaster-affected victims can be promoted by attention to some social issues which concern the victims. Strategies to improve social well-being include:

- Providing uncomplicated and accessible information on location of corpses.
- Discourage unceremonious disposal of corpses.
- Helping to trace the families of unaccompanied minors, the elderly and other vulnerable people.
- Encourage members of field teams to actively participate in grieving.
- Encourage recreational activities for children including opening schools.
- Widely disseminating uncomplicated, reassuring, empathic information on normal stress/trauma reaction to the community at large (religious leaders, teachers and other social leaders should be involved actively).
- Encourage the re-establishment of normal cultural and religious activities
- Involve adults and adolescents in concrete purposeful activities (e.g., repair of housing, distributing food, sanitation measures, etc.)
- Assist illiterate people to deal with official documentation required in order to obtain aid.
- Occupational rehabilitation for those who may have lost their means of livelihood.
- Please keep in mind that the local communities may be sensitive to the dress and demeanor of the workers especially if they happen to be from outside the community.

NEED FOR EXTERNAL PSYCHOSOCIAL SUPPORT SYSTEMS

Under normal circumstances, there are social support systems built into community life, like prayers, rituals, a role for each family member, neighbours sitting with the family members and providing support, etc. However in the unique circumstances of the present disaster, we must address the need of people who have not only lost loved ones, homes, means of livelihood, but their entire neighborhoods and, with it, their life's context which essentially defines every individual. The best method in such a situation would be to find people in neighboring villages or communities, people of similar cultural background, who understand the cultural norms to help them.

GETTING STARTED IN THE COMMUNITY

After appropriate training, when the relief workers arrive in the community they should do the following:

- (1) Establish contact with community leaders of the area where they will work and introduce themselves and explain the work they will be doing.
- (2) Integrate the psychosocial support activities with other ongoing relief, rehabilitation and rebuilding efforts.
- (3) Form special groups for group counseling such as women's groups, groups of elderly, etc.
- (4) Locate and establish contact with the backup medical/mental health services of the region where they are working.

SECTION I. PSYCHOLOGICAL RESPONSES OF DISASTER AFFECTED POPULATION

Disasters leave a psychological impact on affected peoples varying from transient reactions to the incident among the survivors, to lifelong emotional problems. The need for emotional support is crucial in order to enable people to begin the process of recovery, and to help them cope with the hardships imposed upon them due to the disaster. Depending on the time that has elapsed since the disaster, psychological reactions seen among the victims vary.

The emotional reactions generally observed in the affected population after disasters include:

Immediate reactions (within 24 hours)

- (1) Tension, anxiety, panic
- (2) Stunned, dazed, shocked, disbelief
- (3) Elation or euphoria among survivors/or people suffering lesser losses
- (4) Restlessness, confusion
- (5) Agitation, crying and withdrawal
- (6) Survivor's guilt

These reactions are seen in nearly everybody in the affected region and can be considered 'NORMAL REACTIONS TO AN ABNORMAL SITUATION', and need not necessarily require specific psychological interventions.

Within days to weeks after the disaster

- (1) Being fearful, vigilant, hyper-alert (irritable, angry, and unable to sleep)
- (2) Worried, despondent
- (3) Repeated 'flashbacks'
- (4) Weeping, guilt feeling (including survivor's guilt)
- (5) Sadness
- (6) Positive reactions including: hoping/thinking of future, getting involved in relief and rescue work
- (7) Acceptance of disaster as nature's doing

All these are normal responses and may need minimal psychosocial intervention. Not all emotional consequences of the disaster among the survivors are maladaptive. A majority of people demonstrate healthy and mature coping responses to the situation.

Common coping skills adopted by individuals and communities are listed in the box below:

Common coping skills of the disaster-affected population (positive and negative patterns – these may vary with culture)**Positive coping skills**

- Participation in relief and recovery efforts
- Ability to orient oneself rapidly
- Planning and execution of decisive action
- Appropriate use of assistance resources
- Appropriate expression of painful emotions
- Tolerance of uncertainty without resorting to impulsive action
- Use of will power and modes of tension relief to cope with anxiety
- Active life style

Negative coping skills

- Excessive denial and avoidance
- Impulsive behaviour
- Over-dependence
- Violent behaviour
- Withdrawal from society
- Alcohol or substance abuse
- Use of tranquilizers

After about three weeks of disaster

The previously noted reactions may persist and manifest as:

- (1) Restlessness
- (2) Feeling panicky
- (3) Continued intense sadness, unrealistic pessimistic thoughts
- (4) Outward inactivity, isolated and withdrawn behavior
- (5) Anxiety manifested as physical symptoms such as palpitations, dizziness, restlessness, nausea, headache, etc.

These responses usually do not necessarily amount to a mental disorder. Individuals reporting these symptoms are likely to be helped by relief workers trained in providing some of the basic psychological intervention skills described in Section II.

Mental disorders after a disaster

Some disaster survivors may develop full blown mental disorders which become apparent usually a few weeks to months after the disaster. These are briefly described below.

Acute stress reaction: A reaction that develops in an individual without any other apparent mental disorder solely in response to the disaster and that, in most cases, subsides within hours or days. The symptoms show a typically mixed and changing picture and include an initial state of “daze” with some constriction of the field of consciousness and narrowing of attention, inability to comprehend stimuli, and disorientation. This state may be followed either by further withdrawal from the surrounding situation (to the extent of a stupor), or by agitation and over-activity.

Bereavement and grief: Grief refers to “the feelings and behaviours such as sadness, distress, anger, crying, etc. accompanying the awareness of irrevocable loss (not necessarily but including loss through death)”. The term bereavement is used when the loss is because of death. Following disasters there may be grief for the loss of loved ones, home, valued possessions, livelihood, etc. Factors influencing the manifestations of grief include the individual’s personality, previous life experiences, past history of psychological problems, the significance of the loss, the existing social network and presence of other stressors. Usually grief reactions diminish in their intensity, gradually over a period of 4 to 6 weeks after the disaster. But, for some persons, grief may become complicated or chronic and may lead to severe depression. There may be recurrences at the time of anniversaries of these events.

Diagnosable mental disorders: Some mental disorders may occur following exposure to disaster. These include Anxiety and Depressive disorders. These are the most common disorders but others like Adjustment disorders (with anxiety and/or depressive symptoms), Somatoform disorders (physical symptoms due to stress) can also be seen. Depressive disorders are characterized by continuous sadness, lack of interest in work, socialization and leisure time activities, pessimistic thoughts, easy fatigability, crying, lowered self-esteem and decreased sleep. Anxiety disorders are characterized by undue anxiety for trivial matters, restlessness, irritability, inability to concentrate, body-aches, palpitation, dryness of mouth and disturbed sleep. You may notice that some of the psychological responses listed at the beginning of this module can persist or appear as symptoms of Depressive disorders and Anxiety disorders as mentioned here. It is important to note that a group of symptoms is considered as a mental disorder only when the symptoms are severe enough to cause significant distress and/or impairment in social, occupational, and other important areas of functioning.

Alcohol and drug abuse: There may be increased use of alcohol and/or other addictive substances resulting in substance use related problems.

Post-traumatic stress disorder: Post-traumatic stress disorder (PTSD) is characterized by symptoms similar to acute stress disorder but lasting for more than 1 month. PTSD may begin several weeks or months after the exposure to disaster and if untreated, may run a protracted course, although many people recover over time without any intervention. The symptoms of PTSD can be categorized in three dimensions: (i) re-experiencing the trauma, (ii) avoiding stimuli associated with the trauma and (iii) experiencing symptoms of increased autonomic arousal such as difficulty in falling or staying asleep, irritability or outbursts of anger, difficulty in concentrating, hyper vigilance and exaggerated startle response.

Pre-existing mental disorders: Persons, who are suffering from established mental disorders, may be more vulnerable to developing psychosocial problems following disasters. Their existing condition (especially epilepsy, depression and psychoses), may get exacerbated as a result, or they may suffer from relapse of episode or recurrence of previous symptoms.

Physical symptoms: Some people undergoing psychosocial trauma may complain of physical symptoms such as headache, tiredness, palpitations, loss of appetite, pain in the abdomen, nausea or unidentifiable pain all over the body. It is important to recognize the psychological nature of these symptoms, and manage these as signs of emotional distress. However, since it is not always necessary that physical symptoms are due to psychosocial trauma, refer the individual to a physician whenever you think there is a possibility of symptoms being caused by physical illness, or if the symptoms are not responding to psychosocial intervention.

SECTION II: PSYCHOSOCIAL INTERVENTIONS FOR DISASTER AFFECTED POPULATIONS

Intervention during the acute emergency phase (first three weeks)

In the acute emergency phase, although the grief is overwhelming, the most urgent tasks are to attend to the injured and perform the last rites for the dead. In the first few days after the disaster, mental health concerns should complement humanitarian work so as not to unduly burden relief operations. Thus, it is advisable to conduct as few psychosocial interventions as critically needed, so there will be little interference with responses to vital needs such as food, shelter and control of communicable diseases. The Rehabilitation workers can help people to cope with the disaster situation more effectively during this phase so as to minimize the adverse psychosocial consequences of disaster. This help can be in the form of general measures aimed to reduce the emotional turmoil immediately after the disaster. The crucial component in this phase is the complete breakdown of service delivery to known cases of serious mental and neurological disorders, such as, schizophrenia and epilepsy. Efforts should be made to ensure that these patients continue to receive and take their medication.

General psychosocial measures to enhance the emotional well-being of disaster-affected people during the acute emergency phase

- Provide uncomplicated and accessible information on location of corpses.
- Discourage unceremonious disposal of corpses.
- Provide family tracing for unaccompanied minors, the elderly and other vulnerable people.
- Encourage people to organize group activities like prayers, collective performance of rituals and other socio-religious activities.
- Encourage members of field teams to actively participate in grieving.
- Encourage recreational activities for children.
- Inform the people about the normal psychological reactions that occur after disaster and assuring them that these are NORMAL, TRANSIENT, SELF-LIMITING and UNIVERSAL (all the people in all the disasters have these kinds of reactions).
- Disseminate simple, reassuring but accurate information on normal stress/trauma reaction to the community at large (religious leaders, teachers and other social leaders should be involved actively).
- Encourage people to work together in looking after their needs like organizing community kitchen, having meals together, doing sanitation activities.
- Involve healthy survivors in relief work.
- Motivate community leaders and other key persons like teachers etc., to participate in group discussion/ and encourage people to share their feelings
- Ensure the dissemination of accurate information to people.
- Ensure equitable distribution of relief aid.
- Deliver services in a 'healing manner' empathizing with people and showing no callousness towards any section (e.g. weaker or minority) of the community.

Important Do's and Don'ts:**Do's**

- Approach the people actively
- Listen attentively
- Be empathetic, avoid sympathy
- Respect people's dignity
- Accept and appreciate people's views on their problems
- Be aware of the need for privacy and confidentiality
- Ensure continuity of care

Don'ts

- Do not force your help/support
- Do not interrupt people when they share their emotions
- Do not pity them
- Do not be judgmental
- Don't allow rumours to spread
- Do not label people with psychiatric diagnoses. Instead refer them to a medical doctor or mental health professional

Try to show Empathy rather than Sympathy

Empathy	Sympathy
(1) I can understand what you are going through.	(1) Poor you, it is really bad that this happened to you.
(2) I can understand that you are feeling angry at what has happened to you.	(2) It is horrible that this has happened to you
(3) I accept that you are very scared	(3) Don't be scared, I am here to help you however I can.
(4) Simply sitting in silence while the survivor expresses his/her feelings or weeps.	(4) I am so sorry for you, don't worry everything will be all right.

Intervention during the post-disaster reconsolidation phase (after 3 weeks)

Once the acute phase is over the rehabilitation workers should focus on providing psychosocial care along with general relief work. Disaster-affected people may experience different kinds of psychological reactions and may require different levels of psychosocial care, as follows:

- (1) **General psychosocial measures:** A majority of people are able to cope with psychological reactions with their own innate coping mechanisms with minimal support from others in the community. The rehabilitation workers can help these people by enhancing their emotional well-being by general psychosocial measures as given in the acute emergency phase.
- (2) **Specific psychosocial interventions:** Many victims suffer from psychological symptoms (but not necessarily mental disorders) and require psychosocial care from rehabilitation workers in the form of specific interventions like emotional first aid, grief counseling, etc. The methods by which these services can be provided are described below.
- (3) **Identification and referral:** Some people require treatment from a mental health professional because they suffer from either (a) an acute anxiety reaction that is so severe in that it limits basic functioning (such as being able to talk to people) or they suffer from (b) severely distressing or disabling psychological symptoms that do not improve over time and that do not improve through psychosocial intervention by rehabilitation workers.

SCREENING FOR MENTAL HEALTH PROBLEMS

A tool for screening of Mental Health Problems is given as Annex 4. The interpretation of the scores is as follows:

- 11-12 – Typical – Provide counseling, focusing on empathetic listening and follow up
- >15 – Evidence of distress – Refer to trained counselor and to a health facility if required
- >20 – Severe problems and psychological distress – Refer for specialist care.

Specific psychosocial interventions (basic counseling) by the rehabilitation workers

Many of the disaster survivors will have psychological and behavioral symptoms requiring psychosocial support. Most of them do not need treatment from a psychiatrist or any other mental health specialist. REHABILITATION WORKERS CAN HELP THEM AFTER TRAINING IN BASIC COUNSELLING SKILLS. Early identification and early intervention can help these people to cope better. Rehabilitation workers should learn these counseling skills during the training programme and whenever possible practice these skills initially in the presence of supervisors/trainers so that they can build up adequate confidence to implement them.

Who will require help?

- (1) Individuals reporting symptoms/problems like restlessness, panic, sleep problems, nightmares, frequent recollection of traumatic events, frequent bouts of crying and inability to think properly.
- (2) People who are seen to remain isolated/withdrawn most of the time and show no overt interest in the activities going on all around them (like distribution of food, blankets etc.).
- (3) Individuals who, on being approached, break into an irritated outburst or simply start weeping.
- (4) Individuals showing extreme reluctance to communicate when approached.
- (5) People who appear extremely distressed.
- (6) People who have significant losses (like death of family members).

How to help these people?

- (1) While delivering your routine services, pay special attention to identify such people.
- (2) Establish rapport with them by approaching them in a friendly and sympathetic manner.
- (3) Ask about their well-being and the help they need; offer the help.
- (4) Encourage them to talk about their problems and experiences.
- (5) Consider specific intervention techniques that can benefit them (such as Psychological/Emotional First Aid, Trauma and Grief Counseling, Re-grieving and Anticipatory Guidance, Crisis counseling, Crisis intervention, Problem solving counseling etc.). (See Chapter 12 “Counseling Skills for the Nurse”)
- (6) Deliver the chosen counseling

It should be noted that some forms of counseling can be harmful to individuals whether they are attempted by non mental health professionals or by Rehabilitation workers. Counselors need to take great care not to push or force people into expressing feelings that they are not ready to express. The affected person needs to have a choice about whether or not to think about the disaster and whether or not to express feelings related to it. Although, it is true that thinking about the specifics of the trauma and getting in touch with feelings related to it can be helpful, forcing people to talk about it can be harmful. However, sometimes counselors make the mistake to push trauma-survivors into focusing more on the trauma than they are able to bear. Harm should be avoided (the first rule in medicine is: do no harm). Indeed, one of the aims of trauma counseling is to create a safe environment in which the trauma survivor from his or her own choice decides to talk about the trauma and about ways of coping with it.

Identification and referral of cases requiring specialist care

Some individuals will require evaluation and treatment by a mental health professional (psychiatrist or clinical psychologist) as the simple counseling skills described in the previous section will not be enough to help these individuals. It is important to learn to identify the common signs and symptoms of mental disorders so that they can be referred to specialists available in the area.

- (1) **Previously known cases of mental disorders:** As mentioned in the beginning of this sub-module, some disaster-affected people are likely to suffering from mental disorders prior to the disaster. You may find exacerbation/relapse in symptoms of known cases of mental illnesses (e.g. psychoses, depression). Similarly, you may find a relapse in patients suffering from epilepsy due to discontinuation of antiepileptic medication during this period. Ask all the families in your area if there are any known cases of epilepsy or psychoses and ensure the continuation/restarting of the treatment of these cases through proper referral.
- (2) **Individuals who continue to report/develop significant psychological symptoms after three weeks and which do not reduce after intervention by relief workers:** As mentioned in section I some individuals may develop mental disorders after a disaster and may have significant ongoing distressing and disabling symptoms which do not remit over time and to not improve despite interventions by relief workers. Such people should be referred to a doctor or a mental health professional.
- (3) **Individuals who are grossly dysfunctional** in activities of daily living based on the following observations:
 - Remaining isolated and inactive
 - Extremely poor self-care
 - Loss of sense of responsibility for self and others
- (4) **Suicidal ideation/intent:** People who talk about committing suicide or have attempted suicide should be immediately identified and referred to a mental health professional. Community members should be able to identify such persons. Such persons should never be left alone.
- (5) **Withdrawal symptoms or increased consumption of alcohol and substance abuse:** Whenever you come across somebody complaining of severe body aches, restlessness, insomnia, muscle cramps, running nose and excessive watering of eyes or tremors, restlessness, irritability, insomnia, anxiety and craving for alcohol/drugs, enquire if the person is a habitual user of alcohol or drugs. If yes, refer the patient to a specialist. If you find excessive drowsiness, slurring speech, unstable gait or disorientation in somebody, ask if he has increased his consumption of alcohol/drugs. If yes, ask him to see a specialist.
- (6) **Physical violence in the family:** Violence within the family usually perpetuated by the man against women and children or by the women against children may be an indirect indicator of a mental disorder. Sometimes this physical violence may be related to alcohol abuse. Such persons also need referral to the specialist for evaluation and treatment.

SECTION III: PSYCHOSOCIAL INTERVENTION FOR SPECIAL GROUPS

Certain groups of people are more vulnerable to the psychosocial effects of a disaster. These include children, women, elderly, disabled people and persons suffering from mental or severe/chronic physical problems. In addition, bereaved people who have lost their family members or close relatives are also more vulnerable to psychosocial problems. You need to specifically attend to these groups of people to take care of their psychosocial needs.

Box items in this module describe the usual problems of these special groups and also provide guidelines to relief workers for rendering psychosocial care to these groups.

Psychosocial needs of disaster-affected children

Age group	Emotional responses seen
Pre-schoolchildren	(1) Irritable, crying excessively. (2) Clinging behavior. (3) Expressing intense fear and insecurity repeatedly, excessively dependent behaviour. (4) Fearful of water – even of water used for domestic purposes (5) Excessive quietness and withdrawn behaviour, avoidance or passive behavior. (6) Thumb-sucking, bedwetting, excessive temper tantrums etc., (even if the child was not doing so before the disaster). (7) Play activities may spontaneously involve aspects of the disaster event. (8) Reporting frightening dreams (nightmares and night terrors) waking up frequently from sleep and refusal to go to bed at times.
School goingage group (age 6-12)	(1) Withdrawal. (2) Guilt. (3) Feelings of failure. (4) Anger, rage and aggressive behaviour. (5) Fearfulness, anxiety or suspiciousness. (6) Feeling low, decreased activity and interaction level. (7) Feeling nervous, unable to concentrate. (8) Recurrent memories or fantasies of the event (9) Fantasies of playing ‘rescuer’. (10) Intensely pre-occupied with details of the event. (11) Dangerous, risk-taking behavior, rejecting social rules showing aggressive behaviour, (in adolescents only). (12) Loss of interest in studies, refusal to go to school, significant drop in academic performance. (13) Psycho-somatic symptoms like stomachache, headache, giddiness, vomiting, heavy breathing and fainting attacks.

Measures to be taken by relief workers for children

- (1) Ensure that the infant/child remains close to its mother/family.
- (2) Ensure adequate nutrition and meeting of all physical needs.
- (3) Encourage and help the families to re-establish child’s previous routine of eating, playing, studying, sleeping and interacting with others.
- (4) Try engaging the children in activities like drawing, storytelling, drama, games, etc., (do not too strongly encourage children to express disaster-related feelings through these activities; allow children control over the decision whether or not to think about the trauma and to express feelings about it).
- (5) Encourage the families (in groups) to facilitate play time activities specially the group games of the children.
- (6) Advise families/community leaders to start some kind of teaching activities (even non-formal) for school going children till the children are able to go back to their usual schools. Mobilize the help of educated youth volunteers for this.
- (7) Advise parents and families not to discourage children when they verbalize their feelings (but at the same time do not too strongly encourage children to express their feelings; allow children control over the decision whether or not to think about the disaster and to express feelings about it).
- (8) Whenever you meet small children in the field re-assure them verbally. Offer to be supportive and ask what they wish. If they wish to talk – listen – but do not encourage the re-experiencing of the trauma. Offer physical contact, but only if sought and in a way that cannot be misinterpreted at a later time.

Ask parents/teachers to report on children who continue to show the symptoms even after one month and despite the appropriate measures listed above. These children may require specialist mental healthcare.

Specific measures for adolescents (Age: 11-18 years)

- Ensure privacy and confidentiality while interviewing them about their problems.
- Be cautious about gender sensitivity issues.
- Help them in deciding their future course of action.
- Encourage continuation of formal education especially of secondary and higher-secondary students.
- Involve them in formation of community groups.
- Encourage participation of older adolescents in community humanitarian activities.

Psychosocial care of the elderly

Elderly people may show one or more of the following psychological reactions to disaster:

- Immediate fear response followed by anger and frustration.
- Feel agitated; feel lonely and hopeless with a feeling of multiple losses.
- Increased dependence on families and refusing assistance from authorities.
- Withdrawn behaviour, crying repeatedly, feeling depressed
- Sleep disturbances
- Suicidal tendency.
- Disoriented as routine is interrupted.
- Concentration and communication difficulties.
- They are especially vulnerable if they are:
 - a. Physically disabled.
 - b. Living alone.
 - c. Lacking help from other resources.
 - d. Having to face the shock of losing all that they had attained in life.

Helping elderly people

- Ensure that they are not isolated and try to place them with their families or relatives or someone to whom they want to be attached.
- Ensure their physical safety and day-to-day physical needs.
- Facilitate easy access to aid and support services including health facilities.
- Help them to re-establish their daily routine
- Help them maintain their sense of identity.
- Keep them informed of the happenings.
- Involved them in relief work by asking for their suggestions and guidance.
- Interact with them about the tragedy and gently encourage them to express their feelings (but do not do this too strongly). Allow them to cry.
- Provide opportunities to feel a sense of continuity, culture and history.
- If the symptoms are causing gross dysfunction almost on a daily basis for at least two weeks then consider referral to a mental health professional (if available), or a physician.

Psychosocial care of women

Women tend to be more vulnerable to the psychosocial effects of the disaster and are likely to have more severe psychological problems than their male counterparts. They are more prone to depressive and anxiety symptoms as well as to psychosomatic symptoms. Of course, they are also able to provide higher levels of strength and ability to support others. Details for psychosocial care for women are provided in Chapter 11; “Helping Women Cope with Disasters.”

10 *Substance Abuse in Disasters*

KEY LEARNING OBJECTIVES

At the end of the session the participant should be able to:

- Conduct Assessment of substance abuse
- Undertake Stepwise Management of substance abuse

Disaster nursing refers to nursing services offered to victims of disasters. Following any disaster, most people will experience some psychological stress including altered sense of safety, hyper vigilance, sadness, fear, decreased concentration and difficulty in sleeping. Others may alter their behaviour by traveling less, avoiding public events (or) increasing smoking or alcohol/drug use.

Situation determinants of substances use

- Relief from sick feeling
- Physical/emotional relaxation
- Relief from bad mood
- Escape from anxiety/fear
- To gain peer acceptance
- Identify with anti establishment sub-groups
- Tune out intolerable environmental conditions.

STANDARD CASE MANAGEMENT PROCESS

How to begin assessment interview

- Greet the family members with friendly smile
- Establish mutually agreed assessment boundaries at the beginning (e.g. the agenda and time frame)
- Use simple general open ended questions in the beginning
- Give time to answer questions
- Express caring for the individual
- Ask closed question based upon information on the client's give in responses.

MANAGEMENT OF SUBSTANCE ABUSE IN ADULT

It is important to follow ALL STEPS given below in assessing every client.

- | | |
|----------|-------------------------------|
| STEP I | Assess level of substance use |
| STEP II | Problem Analysis |
| STEP III | Treatment Planning |

Step 1: ASSESS LEVEL OF SUBSTANCE USE

A. DRUG COUNT CHART

S.No.	Drug Name	Prescribed or not	How often	How much	Route	Duration	Age of 1 st use
1.	Alcohol						
2.	Drug						

B. ASSESS DEPENDENCY INDICATORS

- **USE CAGE SCREENING TEST**

- a) Have you ever felt the need to cut down on your drinking/drug use.
- b) Have you ever felt annoyed at criticism of your drinking/drug use
- c) Have you ever felt guilty about some thing you have done when you have been drinking or taking drugs
- d) Have you ever had an eye opener, taking drugs? First thing in the morning to get going or to avoid withdrawal symptoms

Two yes answers indicate probable alcoholism

Tolerance

- a) Increasing the dose for the same level of intoxication

Withdrawal Symptoms

- a) Shake (or) tremors
- b) Cramps – diarrhoea (or) rapid pulse
- c) Feeling fearful (or) paranoid
- d) Difficulty in sleeping
- Loss of control of amount frequency (or) control use
- Desire or efforts to decrease use (or) control use
- Pre-occupation (increasing time spent on use and obtaining substances)
- * Activities affected by use
 - a) Social
 - b) Vocational
 - c) Recreational
 - d) Family
- Previous alcohol/drug abuse treatment
- Explain need for referral

If any one sign is present refer the individual to nearest **PHC/hospital/De-addiction centre**

- Reassure family members
- Write in referral slip

*Refer Annexure 1 (at end of chapter)

*Refer Annexure 2 (at end of chapter)

Step 2: PROBLEM ANALYSIS

- **Summarize assessment data**
- **Review with the client**
- **Undertake functional analysis and explore causes and complications of substance abuse**
(Refer to Annexure 2 – (at end of chapter))
- **Locate positive associations**
 - Family support
 - Good motivation
 - Social support network
- **Highlight negative associations**
 - Personality factor
 - Co-morbid illness
 - Poor motivation
 - Poor family support
 - Peer influence
 - Societal attitude

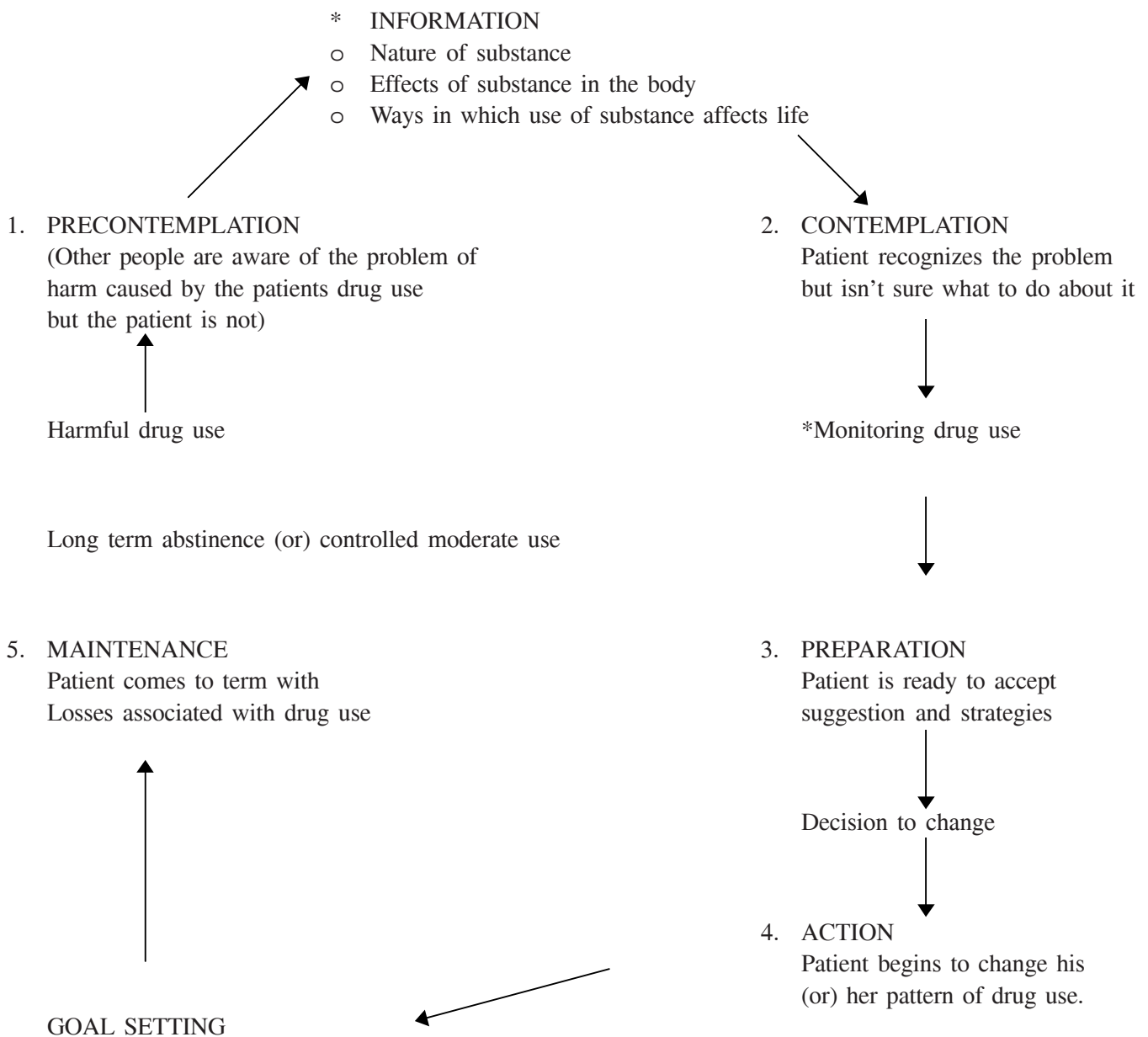
Step 3: TREATMENT PLANNING

Treatment planning depends on client's readiness and commitment of change

Five key stages of change

Pre contemplation	:	See no reason to change
Contemplation	:	Aware of problem and begin to consider change
Determination	:	Decide to change and plan now
Active change	:	Engage in change and Implement plans
Maintenance	:	Prevent relapse and consolidate change

COMPREHENSIVE MODEL OF CHANGE



(Source: Laraia, Stuart, Principles practice of psychiatric Nursing, 7th Edn, 514)

*Refer Annexure 1 (at end of chapter)

*Refer Annexure 2 (at end of chapter)

The Process of Treatment

The process of treatment moves through four stages

Treatment stages	Client stages of change
1. Engagement – (Information)	Pre contemplation
2. Persuasion	Contemplation, determination
3. Active treatment	Active change
4. Relapse prevention	Maintenances

1. Engagement

- Establish a therapeutic relationship
- Employ a non confrontative and empathetic approach

2. Persuasion

- Education about drugs and the problems that may be associated with use
- Presentation of objective assessment data (liver function test, urine analysis result etc).
- Balance sheets on which the client lists the pros and cons of continued use/abstinence.

FRAMES MODEL

Effective Elements of Brief Intervention

Feedback Provide patients with personal feedback regarding their individual status, such as personal alcohol and other drug consumption relative to norms, information about elevated liver enzyme values, and so forth. Responsibility Emphasize the individual's freedom of choice and personal responsibility for change. General themes are as follows: 1. It's up to you; you're free to decide to change or not. 2. No one else can decide for you or force you to 3. You're the one who has to do it if it's going to happen	Advice Include a clear recommendation or advice on the need for change, typically in a supportive and concerned, rather than in a judgmental, manner. Menu Provide a menu of treatment options, from which patients may pick those that seem more suitable or appealing. Empathic Counseling Show warmth, support, respect and understanding in communication with patients. Self-efficacy Reinforce self-efficacy, or an optimistic feeling that he or she can change.
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BALANCE SHEET

Old Behaviour	New Behaviour
Pros/Benefits ➤ Like the taste of alcohol ➤ Helps me to relax ➤ Sources of fun and socialization ➤ Makes me forget my problems	Pros/Benefits ➤ Better relationship with spouse ➤ No more DWIs ➤ Save money feel better about myself ➤ More time for other activities and people in my life.
Cons/costs ➤ Costs a lot of money-led to (Drug withdrawals or Intoxication) DWI – costly embarrassing and inconvenient ➤ Spouse gets upset ➤ Poor role model for children ➤ Feel bad about myself ➤ If I lose my driver's license, I could lose my job	Cons/costs ➤ Will miss my drinking friends ➤ Don't know how to have fun without it. ➤ It will be harder to face my problems ➤ I'll feel left out different ➤ I'll be more up-tight, less relaxed

- Exploration of barriers to the attainment of future goals.
- Reframe problems (or) past events emphasizing the influences of substances use.
- Offer a range of treatment options for client to select from.
- Promote clients belief in their activity to achieve goals (self efficacy)

3. Active treatment**a. Admission to Hospital**

- Unsuitable poor family or, community support
- Severe withdrawal symptoms
- Severe psychological or physical complications.

If there is no emergency refer to Primary Health Center

b. Specific treatment intervention will vary for individual clients. However two broad target areas recommended are

1. Coping skill training
2. Life style modification

Coping skill training

Many clients will use substances as a way of coping with personal and environmental stressor therefore attainment of abstinence will require the learning of new skills. Like conversational and assertiveness skill.

SKILLS TRAINING TOPICS

Interpersonal	Intrapersonal
Starting conversations	Managing thoughts about alcohol
Giving and receiving compliments	Problem solving
Nonverbal communication	Increasing pleasant activities
Receiving criticism	Relaxation training
Receiving criticism about drinking	Awareness and management of anger
Drink and drug refusal skills	Awareness and management of negative thinking
Refusing requests	Planning for emergencies
Close and intimate relationships	Coping with persistent problems
Enhancing social Support networks	

Life style modification

Methods of achieving life style modification

Lectures Counseling sessions Group therapy Introduction to self-help groups	Minimum for a period of 3 weeks
➤ Encourage the client to avoid the people and places associated with substances use. ➤ Minimize those cues which lead to drinking. alcohol/use drug ➤ Structure time and engage client in drug free leisure activities ➤ Use transitional or support employment project.	

4. Relapse prevention

➤ Identify possible high risk situation ➤ Develop and rehearse coping strategies proactively ➤ Family education ➤ Support groups ➤ Follow up ➤ Medical assistance ➤ Counseling sessions ➤ Relapse prevention programmes	At least for minimum of 2 years
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Family Education

When caring for the patient and family with substance abuse, be sure to include the following topic areas in the family's teaching plan:

- Psychopharmacologic agents, if used, including drug action dosage, frequency and possible adverse effects.
- Manifestations of intoxication, overdose and withdrawal.
- Emergency medical system activation
- Nutrition

- Coping strategies
- Structured planning
- Safety measures
- Available treatment programs
- Family therapy referral
- Self-help group and other community resources.
- Follow-up laboratory testing, if indicated.

WOMEN AND SUBSTANCE ABUSE

Drug and alcohol use during pregnancy can have serious detrimental effects on the course of pregnancy and on the physiologic status of the fetus and newborn. For pregnant women who are substance dependent social and emotional pressures and concerns associated with their treatment are heightened because treatment affects the well-being of their children.

Clinical issues facing addicted mothers

- Feelings of guilt and shame
- Difficulties being a single parent (if applicable)
- Care and responsibility of raising children in early sobriety
- Lack of access to treatment facilities.
- Anger and blame from caregivers.
- Need for parenting skills training and knowledge of infant care and child development.
- Potential for child abuse and neglect.
- Lack of medical and other supportive services such as prenatal care housing and child care.

Management

- Convey hope for future
- Assist patients in having realistic expectation for themselves and their children.
- Be sensitive to their special needs (Social, economical and legal issues)
- Plan comprehensive treatment with perinatal period including prenatal and perinatal care.
- Pharmacologic intervention
- Life skill training (relapse prevention and social skill training).
- Mother infant development assessment.
- Encourage family involvement.

ANNEXURE – I

Meaning of Terms

1. Substance use

- Does not have possible danger or potential legal problems.
- Engages in use to enhance social situations and interaction.
- Is not intended to result in intoxication.
- Has control of the amount and frequency of use.
- Exhibits socially acceptable behaviour while using.

2. Substance Abuse

- Use for intoxication or feeling of being “high”
- Use that interferes with normal life, function (e.g. producing sleep when inappropriate, excitability or irritability interfering with social interaction).
- Potential harm to self or others (e.g., driving while intoxicated, use of injection drug equipment)
- Use that has legal consequence (ie, all use of illicit drugs)
- Use resulting in socially unacceptable behaviour (eg., public drunkenness, verbal/physical abuse)
- Use to alter normal feeling states such as sadness or anxiety.

3. Substance Dependence

- Supplementing medication with alcohol or drugs
- Soliciting more than one physician for the same medication.
- In ability to control the amount and frequency of use.
- Tolerance to larger amounts of the substance.
- Withdrawal symptoms when stopping use.
- Severe consequence from alcohol or drugs use.

4. Substance Addition

- Drug Craving
- Compulsive use
- Presence of aberrant drug – related behaviours
- Repeated relapse into drug use after withdrawal.

5. Symptoms of withdrawal – may be simple or complicated

Symptoms of simple withdrawal

- Tremors
- Nausea
- Vomiting
- Fatigue
- Headache
- Insomnia/Hypersomnia

Symptoms of complicated withdrawal

- Seizures
- Hallucinations (Auditory/Visual)

- delirium tremens (occurs in alcoholics after 10 yrs or more yrs of heavy drinking and is characterized by tachycardia, sweating, hypertension, irregular tremor, delusions, vivid hallucinations, and wild, agitated behaviour).

CLASSIFICATION OF ADDICTIVE DRUGS

- Narcotic Analgesics
- Stimulants
- Depressants
- Hallucinogens
- Cannabis
- Volatile Solvents
- Other drugs of abuse

NARCOTIC ANALGESICS

Pain killing or pain relieving drugs with opium like effects

Natural sources – Opium – Morphine, Codeine Semi synthetic: Heroin (brown sugar) Synthetic: Buprenorphine (tidigesic), Methadone, Pentazocine.

Mode of intake

- Opium – oral, inhalation
- Morphine – injection
- Codeine – oral (tablets and cough syrups)
- Heroin – injection, inhalation, chasing
- Buprenorphine – oral, injection.

Short-term effects

- Euphoria
- Thought process impairment, drowsiness, apathy
- Feelings of hunger and pain are not felt
- Overdose of heroin can cause convulsions, coma and death

Long-term effects

- Mood instability
- Reduced libido
- Constipation
- Respiratory impairments
- Physical deterioration

Infections like serum hepatitis and HIV can occur among IV users due to use of unsterile needles. In female abusers, menstrual irregularity and fetal addiction/abnormality can occur.

Tolerance and dependence develop

Withdrawal symptoms

- Feeling of unpleasantness
- Aches and pains all over the body

- Diarrhoea
- Dilation of pupils
- Insomnia

STIMULANTS

Drugs which excite or speed up the central nervous system

Type and mode of intake

- Amphetamines – oral
- Cocaine – snorted

Short-term effects

- A heightened feeling of well being, euphoria
- A sense of super-abundant energy
- Increased motor and speech activity
- Suppression of appetite
- Increased wakefulness

Long-term effects

- Chronic sleep problem
- Poor appetite
- Rapid and irregular heart beat
- Mood swings
- ‘Amphetamine psychosis’ may occur

Tolerance and dependence develop

Withdrawal symptoms – No major physiological disruption.

- Extreme fatigue
- Disturbed sleep
- Voracious appetite
- Moderate to severe depression

DEPRESSANTS

Drugs which depress or slow down the functions of the central nervous system.

Type and mode of intake

Sedative-hypnotic – Barbiturates, Benzodiazepines (oral tablets) Alcohol

Short-term effects

- Relief from anxiety and tension
- Euphoria
- Lowering of inhibitions
- Poor motor coordination
- Impaired concentration and judgment

- Slurred speech and blurred vision
- Sedation, sleep with larger doses

Long-term effects

- Depression
- Chronic fatigue
- Respiratory impairments
- Impaired sexual function
- Decreased attention span
- Poor memory and judgment
- Chronic sleep problems

Tolerance and dependence

- Tolerance does not develop uniformly
- Cross tolerance can develop
- Physical and psychological dependence develop

Withdrawal symptoms

- Tremors
- Insomnia
- Irritability and restlessness
- Hallucinations
- Convulsions
- Delirium tremens

HALLUCINOGENS

Hallucinogens are drugs which affect perception, emotions and mental processes.

Type and mode of intake

LSD – Lysergic acid diethylamide (oral tablets)

PCR – Phencyclidine (snorted/smoked)

Mescaline (oral tablets)

Psilocybin (smoked).

Short-term effects

- Alterations of mood
- Distortion of the sense of direction, distance and time
- ‘Pseudo’ hallucinations
- Synesthesia – melding of two sensory modalities
- Feelings of depersonalization.

Long-term effects

- Flash back or spontaneous recurrence of on LSD experience can occur
- Motivational syndrome
- LSD precipitated psychosis.

Tolerance and dependence

Tolerance develops rapidly Withdrawal symptoms are not reported.

CANNABIS**Drugs from cannabis plant come under this category**

- Ganja/Marijuana
- Hashish/Charas
- Hashish oil
- Bhang

Mode of intake: Smoking

Short-term effects

- Mild euphoria
- Lowering of inhibitions
- Reddening of eyes
- Sense of smell, touch and taste are often enhanced
- Altered sense of time perception
- Impaired short-term memory
- Impairment of ability to perform complex motor tasks

Long-term effects

- Decreased cognitive ability
- Motivational syndrome
- Psychosis
- Respiratory problems
- Sterility/impotence
- In women abusers, fetal damage can occur

Tolerance and psychological dependence develop**Withdrawal symptoms**

- Sleep disturbances
- Loss of appetite, irritability
- Tremors
- Depression or psychotic symptoms may become prominent.

VOLATILE SOLVENTS

Drugs under this category are volatile hydrocarbons, Petroleum derivatives.

Type and mode of intake

Glue and solvents like varnish and eraser fluids and petrol through sniffing.

Short-term effects

- Euphoria
- Clouded thinking
- Slurred speech
- Staggering gait
- Hallucinations
- Sudden death

Long-term effects

- Psychosis
- Permanent brain damage
- Liver, kidney and heart damage

OTHER DRUGS OF ABUSE

Medically used drugs that do not fall into any of the above categories.

- Muscle relaxants
- Painkillers
- Anti-histamines, prescribed for allergies
- Anti-emetics
- Anti-depressants/anti-psychotics.

These drugs are taken orally as tablets or used in the form of injections. The effects and subsequent dependence and withdrawal symptoms vary.

Damage due to Addiction

Irrespective of the drug abused, addiction leads to

- Physical deterioration
- Psychiatric problems
- Intellectual impairment
- Personality deterioration
- Increased risk of accidents and higher susceptibility to high risk behaviour in the form of unprotected sex or use of unsterile needles
- Legal risks.

ANNEXURE – 2

Stressors Leading to Chemical Dependence during Disaster

Related factors	Conception of disaster	Conception of Patient	Substance use
Environmental	Unsafe environment	Victims of circumstance	Pooling of resources
Social	Loss of social network (Society, family)	Negative distortions helpless, Hopeless powerless	Maladaptive coping
Moral	Morally weak, cant say no	Morally deficient	Peer influence
Disease	Injuries and infections	Loss of body functions/part, pain and distress	Relief
Personality	Antisocial, anxious, Borderline	Vulnerability	Vulnerability
Cultural norms	Alcohol use is accepted	Need for alcohol	Availability & Accessibility

PHYSICAL CONSEQUENCE OF SUBSTANCE ABUSE

Respiratory System:

decreased respiratory rate and cough reflex, pooling of secretions, and increased susceptibility to infection and trauma.

- Hematological:**

anemia lack of vitaming K production. Alternation in bone marrow function.

Reproductive System:

- In Males**

Prostatitis and interference with voiding or sexual functioning

- In Females**

Fetal Alcohol Syndrome characterized by facial malformation, cardiac problems, hyperactivity growth deficiency microencephaly, joint abnormalities and fine motor dysfunction.

**Nervous system**

Peripheral neuropathy

Defects in nerve conduction with tingling, numbness

Prickly sensations, burning itching, weakness

Paralysis and foot pains, change in gait.

Cardiac

Affect cardiac rate, and output
Hypertension

Heart failure shortness of breath, and enlargement of heart

GI tract: affect stomach pancreas and liver

- Symptoms of morning nausea and vomiting
- Abdominal distension (or) pain, belching (or) haematemesis.
- Fatty liver
- Alcoholic hepatitis (fever jaundice, abdominal swelling and foot oedema.
- Defective carbohydrate and vitamin metabolism

Social consequences of alcohol/drug use:

Family problems

- Marital conflict
- Violence
- Financial hardship
- Social deprivation

Accidents

- Fall
- Road traffic accidents
- Burns

Criminal Acts

- Offence committed under the influence of alcohol/drug
- Stealing
- Violent Crimes

Employment

- Repeated absenteeism
- Poor time keeping
- Frequent job changing

Vagrancy

- Homelessness

Psychological consequences of substance abuse

- Pathological intoxication – highly irrational or aggressive behaviour
- Short time loss of memory (Black outs) Total loss of memory for specific events during heavy bouts of drinking.
- Fits – generalised tonic clonic seizure.
- Amnestic syndrome – Acute reaction to severe vitamin B1 deficiency, causing atrophy of frontal cortex and eventually chronic brain syndrome.
- Confabulation – Mind devoid of store of recent memory. So the gap is filled with false stories.
- Personality change – Apathy, loss of initiative and self neglect.

Associated Psychiatric disorder

- Hallucinoses – typically auditory but often in more than one sensory modality
- Residual effective disorders
- Depression
- Personality deterioration
- Dishonest
- Irresponsible

11 *Helping Women Cope with Disasters*

KEY LEARNING OBJECTIVES

At the end of the session the participant should be able to:

- Understand problems faced by women in disasters.
- Help women cope with the problems.

INTRODUCTION

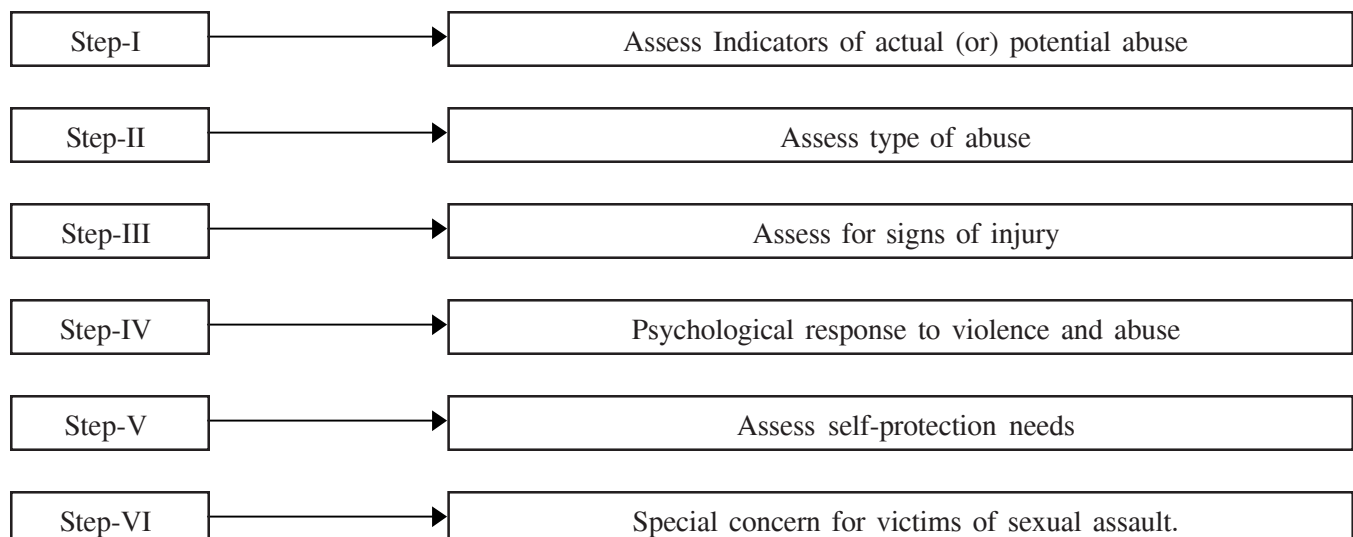
Through out the history, disasters have been portrayed from the fatalist perspective that man had little control over catastrophic events. Research has reported that women exhibit higher level of distress than do men, after disaster especially victims of abuse. Abuse of any type permanently changes the survivors' construction of reality and the meaning of her life. Therefore the nurses' role is to support the patient through the crisis and to facilitate the use of patient's coping skill.

STAGES OF ACUTE TRAUMATIC STRESS MANAGEMENT

- Assess for Danger/Safety for self and others.
- Consider the mechanism of injury (physical and perceptual impact)
- Evaluate the level of responsiveness.
- Address medical needs.
- Observe and identify (signs of traumatic stress).
- Connect with the Individual.
- Ground the individual.
(DISCUSS facts have him tell his story etc.)
- Provide support (empathetic)
- Normalize the response
(Normal person trying to cope with an abnormal event)

MANAGEMENT OF SURVIVORS OF ABUSE

It is important to follow ALL steps given below in assessing every client.



Step-I: INDICATORS OF ACTUAL OR POTENTIAL ABUSE**LOCATE CORRESPONDING SECTION ON THE CHART**

Nursing observations: <i>General observations</i> Observations that differ significantly from history. Family Members inadequately clothed or groomed. <i>Home Environment</i> In appropriate sleeping arrangement. Total household disorganization. Inadequate food. Spoiled food not discarded. <i>Emotional climate</i> Tense, secretive atmosphere. Unhappiness. Lack of affection. Apparent fear of other family members. Verbal arguing. <i>Family Community Pattern</i> One family member answer all questions. Looking for approval of other family members before answering the question.	
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STEP-II: ASSESS TYPE OF ABUSE**LOCATE CORRESPONDING SECTION ON THE CHART**

1. Have you even been emotionally or Physically abused by some one? Yes – No – 2. With in the past year have you been hit, slapped, kicked or other wise physically hurt by some one? Yes – No – If yes by whom – Member of time – Mark the area of injury – 3. Within the past year, has anyone forced you to have sexual activities? Yes – No – If yes who – 4. Are you afraid of anyone listed above? Yes – No –	
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- Emergency medical treatment.
- Prevention of pregnancy/sexually transmitted disease.
- Correct collection and preservation of legal evidence.

STEP-IV: ASSESS PSYCHOLOGICAL RESPONSE TO VIOLENCE AND ABUSE**LOCATE CORRESPONDING SECTION ON THE CHART**

➤ Depression ➤ Acute stress disorder ➤ Post traumatic stress disorder ➤ Dissociative identity disorder	Refer to psychiatric units.
➤ Low self esteem ➤ Shame and Guilt ➤ Anger ➤ Fear revictimization ➤ Feeling of helplessness or hopelessness ➤ Sleep disturbances ➤ Suicidal risk.	➤ Help them to identify their strength and validate thoughts and feelings. ➤ Allow them to verbalize their experience. ➤ Promote healthy daily activity ➤ Teach anger management and conflict resolution ➤ Promote exercise and leisure time ➤ Device escape route. ➤ Schedule periods for relaxation before retiring ➤ Teach Sleep hygiene ➤ Crisis intervention

Assisting with psychotherapy or counseling:

(Refer to psychiatric nurse specialist)

Goal of the therapy is to integrate the patient's traumatic memories with the remainder of the patient's personal history and identify, manage painful affect and restructure the meaning of the traumatic experience.

Provide psycho education.

STEP-VI: SPECIAL CONCERNS FOR VICTIMS OF SEXUAL ASSAULT

Key interventions to prevent short or long term psychopathology.

LOCATE CORRESPONDING SECTION ON THE CHART

➤ Early treatment ➤ During the forensic rape examination ➤ In regard to: 1. Unwanted Pregnancies. 2. Medical termination of pregnancies. 3. Administration of medication to prevent sexually transmitted disease.	Initial level of distress contributes to later level of PTSD, panic and anxiety disorder. Supportive, caring and non-judgmental nursing intervention. Anxiety reduction education, counseling and emotional support.
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Some strategies to help women

- Involve them in community level activities like in community kitchen, sanitation, group religious activities.
- Involve them in ongoing relief activities like arranging group games or teaching activities for the children, identifying physically ill people in the community etc.
- Encourage them to form self-help groups to find ways of coping with their feelings and the current situation.
- Specific intervention techniques described in previous module may be more frequently required by women.
- Extend special care to pregnant and nursing mothers by ensuring adequate nutrition, appropriate medical care, physical safety and privacy

12 *Counseling Skills for the Nurse*

KEY LEARNING OBJECTIVES

At the end of the session, the participant should be aware of:

- Elements of basic counseling (The GATHER Approach)
- Tools for counseling
- Role of the counselor
- Counseling of the depressed patient and family
- Counseling techniques in disaster situations.

What is counseling?

- Counselling is One Person helping another as they talk person to person.
- Consists of two way communication;
- Focus of counselling is Problem Solving;
- Clients have a right to make informed choices. An informed choice is a thoughtful decision based on accurate understanding of the full range of options and their possible results. Counselling helps clients their own informed choices

All providers can apply counseling skills in a range of situations. These include:

- Educating patients
- Providing emotional support
- Supporting patients with mental illness such as depression or anxiety disorders
- Addressing multiple aspects of HIV care (HIV testing, disclosure of HIV status, safer sex and condom use, adherence to care and treatment)
- Intervening in a crisis situation

Elements of basic counseling (The GATHER Approach)

G: Greet Clients

A: Ask Clients about themselves

T: Tell Clients about their choices

H: Help clients choose

E: Explain what to do

R: Return for Follow-Up

Greet the client

- put client at ease, show respect and trust
- emphasize the confidential nature of the discussion

Ask how can I help you?

- ask how can I help you?
- encourage client to bring out his/her anxieties, worries and needs, determine his/her access to support and help in his/her family and community;
- find out what steps he/she has already taken to deal with the situation
- encourage the person to express his/her feelings in own words
- show respect and tolerance to what he/she says and do not pass judgement
- actively listen and show that you are paying attention through your looking
- encourage through helpful questions

Tell the client any relevant information he/she needs:

- provide accurate and specific information in reply to his/her questions
- give information on what he/she can do to remain healthy. Explain any background information needed to know about the particular health issue
- keep your language simple, repeat important points and ask questions to check if the important points are understood
- provide the important information in the form of a leaflet if possible that he/she can take away

Help him/her to make decisions

- explore the various alternatives
- raise issues he/she may not have thought of
- be careful of letting your own views, values and prejudices influence the advice you give
- ensure that it is his/her own decision and not one that you have imposed
- help make a plan of action

Explain any misunderstandings

- ask questions to check understanding of important points
- ask the person to repeat back in his/her own words and key points

Return to follow-up

- make arrangements for a follow-up visit or referral to other agencies
- if a follow-up visit is not necessary, give the name of someone he/she can contact if he/she needs help.

Useful tools for counseling:

- Use more open-ended than closed questions.
 - Open-ended question: What problems have you had recently in taking your medicines?
 - Closed question: Did you take your medicine today?
- Listen carefully, paying attention to verbal and non-verbal communication.
- Clarify responses that you do not understand.
- Use role-playing to help the patient develop skills and confidence to carry out a plan.
- Allow time for questions from the patient.
- Ask about suicidal thoughts (in the case of crises and mental illness).

The counselor's role:

- Provide confidentiality.
- Provide support.
- Help the patient prioritize problems.
- Be aware of the patient's treatment.
- Be aware of other referral resources.
- Be aware of the patient's social-support resources.
- Advocate for the patient.

When working with patients:

- Ensure privacy.
- Minimize interruptions.
- Ensure patient's comfort.
- Agree on the length of time you need.
- Make arrangements for follow-up when necessary.

Counsel the depressed patient and family

- Review the symptoms of depression that the patient is experiencing.
- Give essential information.
 - Explain that the symptoms are part of the illness called depression.
 - Depression is common and effective treatment is available.
 - Depression is not a sign of weakness or laziness.
 - The patient is trying hard to manage.
- Recognize the distress of the patient by saying that you understand how badly s/he feels and that you want to be of some assistance to him/her.
- Inquire of the patient how depressed s/he feels at the moment compared to how s/he has been feeling, in order to inform your treatment plan.
- Ask if s/he has thought about hurting themselves or if s/he is thinking much about death. If risk of suicide and harm to others, refer for expert care immediately.
- Plan short-term activities which give the patient enjoyment or build confidence.
- Identify current life problems or social stresses. Focus on small, specific steps the patient might take towards managing these problems.
- Encourage patient to resist pessimism and self-criticism
- If counseling is not sufficiently helpful, refer to support group or refer to skilled counselor.

STEPS IN COUNSELLING

Number of models have presented for problem management during disasters. All these models have been analyzed and simplified into a five stage model for collaborative disaster management. The model provides a framework or set of guidelines for your choices in helping your clients manage their problems more effectively. The five stage of the collaborative model are:

- D** Describe and identify the problem(s)
- O** Operationalize the problem(s)
- S** Set goals and negotiate interventions
- I** Intervene
- E** Exit and consolidate self-help skills

Task	Illustrative helper skills	Client behaviours
Stage I Describe and identify the problem(s)		
Build a working alliance and help clients to reveal, identify and describe their problems(s)	Structuring, permission to talk, disciplined listening, continuation messages, emphatic responses, helpful questioning, encouraging self-talk, slight confrontations, summarizing	Identify problem areas Specify details Share thoughts, feelings and personal meanings
Stage II Operationalize the problem(s)		
Elicit relevant information to define and state problem(s) operationally	Facilitation skills plus: focusing on accurately attributing responsibility, advanced empathic responding, didactic/interpretive confronting, developing different perceptions, focused information gathering, defining and stating problems operationally	Help identify and acknowledge skills deficits Relate to problems(s) more directly Develop new insights and perceptions.
Stage III Set goals and negotiate interventions		
State working goals and negotiate interventions to attain them	Translating problems definition into goal statements, choosing and negotiating treatment interventions, answering questions, aiding the generation and execution of alternative courses of action.	Help set goals Acknowledge the need to work actively on problems Contribute to realistic discussion of interventions and to action planning.
Stage IV Intervene		
Work to lessen skills deficits and to build skills resources in problem areas(s)	Basic facilitation skills plus implementing appropriate interventions focused on client's feelings, thoughts and actions; establishing session agendas, negotiating homework, monitoring and evaluating progress, encouraging and supporting self help, reverting to earlier stages of model as necessary.	Work to acquire skills resources and to lessen skills deficits. Discuss difficulties and successes in implementing approaches. Help evaluate problem management process. Acquire knowledge and skills for self-help.
Stage V Exit and consolidate self-help skills		
Terminate helping contact and consolidate self-help skills	Anticipatory structuring for termination, contributing to review of progress and of attainment of goals, facilitating consolidation of learning and self-help, getting feedback, handling affective and relationship issues, saying goodbye	Share in review of progress Present any personal termination issues. Consolidate learning Strive to implement problem management self-help skills in daily living.

COUNSELING SKILLS IN DISASTER SITUATIONS

Disaster work involves both listening and guiding. Survivors benefit from both talking about their disaster experiences and being assisted with problem-solving and referral to resources. Here are some suggestions for workers:

Establish rapport

Survivors respond when workers offer a calm presence and show interest. Conveying respect and being nonjudgmental are necessary ingredients for building rapport.

Effective communication with disaster-affected people:

Attentive listening

- Establish eye contact with the person while talking to him/her in a culturally appropriate manner
- Listen attentively to everything a person says
- Respond by gestures and words (hmmm...) to indicate that you are listening attentively
- Do not interrupt as far as possible
- Reassure the person at the end

Reflective Listening (also known as active listening)

- Establish eye contact with the person while talking to him/her
- Listen attentively
- Use short phrases (along with gestures) to indicate that you are listening, but do not interrupt frequently
- Try to encourage the person to talk more by repeating his/her words/phrases
- Reflect upon the contents and clarify wherever necessary
- Reflect upon your own feelings and emotions while listening to other's experience
- Summarize the contents in between and at the end of the talk
- Empathize with the person by sharing the experience of others
- Reassure the person but do not make false promises

Try to practice Reflective listening as much as possible

Counseling techniques to be used:

I. Emotional first aid:

The most frequent psychological help which relief workers will need to provide is emotional first aid. Technique of emotional first aid includes:

- (1) Identify people who you think are not coping well with the disaster situation as evident from the psychological symptoms reported by them.
- (2) Establish rapport with them.
- (3) Take care of their immediate physical needs: protect them from further harm (like dangerous behaviour or impulsive life-altering decisions).
- (4) Convey that everybody in the disaster-affected area is having distress.
- (5) Start communicating with them; listen to their problems, convey compassion and assure them of help (but never in a forceful manner as it may insult their self respect).
- (6) Mobilize social support for them (but do not force it).
- (7) Keep them under supervised care till the reaction passes off.

II. Trauma Counseling

This basically means creating safe opportunities for people to focus their thoughts, talk about them and express associated feelings. You have to facilitate this by the following actions:

- Listen attentively.
- Ask questions and clarifications to bring more details of the experiences (but never do this in a forceful/ intruding manner). Some people need time before they are ready to share their experiences. Other people may not want to share their experiences and should not be forced to do so.
- Try to understand and share the pain and distress felt by the survivors and affected people.
- Communicate to them that you are with them i.e., you do understand what they went through (assuming that you do understand).
- Convey that anybody who undergoes similar situations will have feelings and distress. Share the experiences of other people.
- Talk about the ways in which the person has been trying to cope and brainstorm together for better ways to cope.
- Reassure the person that over time he will be able to cope better and better with the new situations and problems in the aftermath of the disaster.

III. Grief Counseling:

This is a technique similar to **‘trauma counseling’**: but modified to help bereaved survivors (i.e. those who have lost their close ones). The person is gently encouraged to talk about his relatives. This will hasten the process of mourning and its resolution. The following are to be done as a part of Grief Counseling:

- Approach the person in a gentle assuring manner; ask him about the overall welfare of his family members and then talk about the deceased person.
- Encourage him to share maximum information about the deceased family member. (e.g., to show and discuss the photo of a family member)
- Focus on pre-disaster relationship network, with the dead person and the personal meaning of the loss.
- Enquire about ‘survivor guilt’ in this context and reassure survivors that it is a natural human reaction to feel guilty about being unable to save loved ones.
- Try to ensure that the bereaved person performs various mourning rituals.
- Ensure that survivor gets an opportunity to meet other survivors who know something more about the dead person.
- An opportunity to meet other people like nurses, doctors, or persons who extricated the body is also useful.
- One can use group approaches such as, the group viewing the site of death and holding a public memorial service to make the process of grieving easier.

IV. Anticipatory Guidance:

- Such guidance helps the victims to accept their reactions as ‘normal’ and thus reduces feelings of uncertainty and helplessness.
- Provide information about the natural stress reactions that may be expected and that over time the intensity of feelings will very likely reduce.
- You can do it by holding information meetings.
- Focus not only on information about reactions, but also on what survivors themselves and their close network can do to deal with these reactions.

V. Crisis Counseling:

Often the disaster survivors may be in the middle of an ongoing personal or family crisis or stressful situation. For example, someone in the family may have a severe illness, or there may be a theft, or a child may be suddenly found missing, etc. These situations impose additional trauma and stress on the affected person who will need help and sensitive handling to deal with the crisis. You may help by providing crisis counseling consisting of the following components:

- Help the survivor to understand the problems and difficulty generated by the crisis.
- Help the survivor to enlist various alternatives and strategies for handling the situation.
- Help the survivor to assess the support network available to him.
- Help the survivor to take appropriate decisions.
- Help the survivor to develop steps for implementing the decisions.
- Try to restore a sense of capability in the survivor.

VI. Problem solving counseling

You can help the survivors by providing counseling to them in finding solution to their problems in a systematic way rather than avoiding the problem or reacting to the problem inappropriately and unproductively. You can help persons to solve specific problems by following these steps:

- Identify the problem
- Identify the alternative solutions through brainstorming
- Compare the pros and cons of each solution
- Identify the most suitable solution
- Implement the chosen solution

General suggestions that can be made to individuals for psychosocial well-being

- Stay away from danger but remain in familiar surroundings with close family members.
- Begin reconstruction of physical infrastructure as soon as possible.
- Avail of all possible government and other bonafide assistance
- Listen only to authentic and reliable information.
- Get back to your daily routine as soon as possible.
- Share your feelings and experiences; do not try to suppress your emotions.
- Try to help others by participating in relief and rehabilitation operations.
- Take time to relax and engage in some pleasurable activities such as meditation, prayers, music or movies.
- Do not consume excessive amounts of alcohol or sedative medications.
- Eat right and sleep well.

13 *Caring for Your Own Emotional Well-Being: Guidelines for Relief Workers*

KEY LEARNING OBJECTIVES

At the end of the session, the participant should be aware of:

- Reasons for stress in relief workers
- Warning signs of unmanageable stress
- What can be done for ensuring the emotional well being of relief workers.

Workers participating in rescue and relief work after a disaster are exposed to stress which may affect their own emotional well-being. It has been observed and documented that relief workers develop stress-related problems during their work and even after relief work is over. Supervisors must make sure that field workers are properly briefed about what to expect in the situations where they are going. Many community-level workers will never have seen mutilated bodies or misery in such a large scale as in disasters. They must be appropriately counseled on these matters before they start their work.

STRESS IN RELIEF WORKERS: WHY DOES IT OCCUR?

You are constantly exposed to stress during relief work due to the following reasons:

- You are repeatedly exposed to grim experiences such as handling bodies, dealing with multiple casualties, powerful emotions and tormenting stories of people affected by death and loss.
- You frequently carry out physically difficult, exhausting, or dangerous tasks.
- You are exposed to unusual personal demands to help meet the needs of survivors.
- Frequently, you put your own physical and emotional needs at low priority to ensure maximum service to disaster-affected people.
- You neglect your sleep, food, and at times, even personal hygiene in your excessive concern for survivors.
- At times you perceive that you are not able to do enough for people and therefore you feel frustrated and helpless.
- At times you feel guilty that you have better access to food, shelter, and other resources than the survivors.
- Frequently, you face moral and ethical dilemmas.
- You are exposed to the anger and apparent lack of gratitude of some affected people.
- You may be away from your home and family which deprives you of a very effective psychosocial support system.
- You may feel frustrated by the policies and decisions of your superiors.

WARNING SIGNS OF UNMANAGEABLE STRESS

You should be aware of some warning signs of unmanageable stress either in yourself or in your colleagues. These signs include:

- Mental confusion, inability to make judgments and decisions, inability to concentrate and to prioritize tasks
- Inability to clearly express verbally or in writing
- Anxiety, irritability, depression, excessive rage reactions
- Neglecting one's own safety and physical needs

- Sleep difficulties
- Appetite disturbances
- Excessive tiredness
- Progressive decline in efficiency
- Loss of spirit
- Self-blame
- Decreased self-esteem
- Heroic but reckless behaviour
- Grandiose beliefs about yourself
- Excessive use of alcohol, tobacco or drugs

WHAT YOU CAN DO FOR YOURSELF

- Try not to be emotionally involved, i.e. do not transfer the grief of others onto yourself. Be very kind and humane but be somewhat detached. Keep a perspective on things.
- Be proud of yourself for volunteering your services. Realize that your work is very important even if at times people do not appreciate this. Remember that your reactions are normal and largely unavoidable. Be aware of your tension and consciously try to relax. You may also do deep breathing exercises for 10 to 15 minutes once or twice a day.
- Try to find time to do something you enjoy e.g., listen to music, read a book, go for a walk or a jog, play with children, connect with a friend etc.
- If you cannot sleep or feel too anxious, discuss this with someone you can trust. Don't take sleeping pills, tranquilizers, alcohol or other drugs.
- Talk to someone with whom you feel at ease; describe to him/her what you were thinking or feeling. You may want to talk about very stressful things that you have experienced or witnessed during the disaster or you may want to talk about the stress of relief work and how you are coping with this. It is your choice whether or not to focus on traumatic events. It can be helpful to discuss traumatic events but you should not be hurried or pushed to talk about it. Neither should you push others to talk and think about events they may not yet be ready to focus on. Listen to what people close to you say and think about the event. It has affected them too, and they may share insights that will benefit you. They may also share with you their ways of coping with the suffering.
- Stay actively engaged in day-to-day activities, if possible. Continue to work on routine tasks if it is difficult to concentrate on demanding duties. Ask your colleagues/supervisor to reschedule your duties if work is too difficult.
- Tell your peers and team leader/supervisor about how the distressing event and the current stress are affecting you, so that they can understand. Avoid inflated or perfectionist expectations, either about yourself or others, lest you feel frustrated. Participate in peer group exercises to discuss and find ways of coping with the stressful experiences. After a few weeks if you still feel uneasy about your reactions, you should seek professional advice.
- Do not self-medicate under any circumstances. If at all possible, communicate with your family on a daily basis.
- Try to practice meditation. This can be very helpful in coping with stress.

Self-help groups for managing stress

Relief workers should form strong bonds with their own colleagues and openly discuss the nature of their work and the possibility that it can be stressful. Small groups should be formed and the possibility of any of them getting “burnout” should be openly discussed. These discussions should start even before there is evidence of the workers being affected by stress. The group must realize that each person can have a different response to the stressful

situation. Nobody should be termed as “weak”, or be “chastised” for “breaking down”. These groups can have three kinds of sessions to provide psychosocial support to members.

- (1) Informal interaction and socialization during and after work.
- (2) Formal sessions held periodically to discuss the work plan and other activities.
- (3) Specific group exercises aimed to discuss and find ways of coping with the stressful experiences of relief workers.

Peer support groups

Peer support group is a process of initiating semi-structured group discussion which involves discussing the problems different group members face in their life and work. These may be problems that existed before the disaster, these may be problems of memories related to the disaster, or these may be problems faced after the disaster. In the course of these discussions group members are not in any way pressured to discuss in detail the sequence of events as experienced by each participant (relief worker). The discussion focuses on the cognitive and emotional reactions of relief workers who are trying to cope with the distressing situations that accumulate from their work and life experiences.

Activities of the peer support group are carried out as follows:

- It is done in small groups (approximately 6) of relief workers. A person with experience in counseling leads the group. The group exercise is done in a supportive and confiding environment.
- It is done once or twice a week and ideally with the same group members. Each session usually lasts for about one and a half to two hours.
- It begins with each worker reporting turn by turn a problem he or she feels comfortable discussing.
- This should be followed by other people asking questions to understand the situation better and to find out how the person has been feeling and coping.
- Group members brainstorm together on how to find better ways to cope with the problem. In this manner a problem of each group member is discussed for about 15 minutes.
- The group leader (and other participants) should show their appreciation of the work that the relief workers are doing and for being able to cope with the situation and its stresses. The positive gains made during relief work should be stressed here.
- Groups should advise and support relief worker(s) who have shared their difficulties in coping with the situation they encounter in the field. All discussions should be kept confidential and group leaders should facilitate an atmosphere of interpersonal respect and encouragement. The group leader should be able to identify any relief worker in need of more specific and individual attention and help.

OTHER SUPPORTIVE MEASURES FOR EMOTIONAL CARE OF RELIEF WORKERS

Some of the measures which a distressed relief worker may need at an individual level for his/her emotional care are as follows:

- (1) **Consultation:** A relief worker should consider approaching his or her supervisor/leader or a mental health professional, if available, to seek consultation (advice, guidance, treatment, whatever may apply) if he is unable to cope effectively with his stressful experiences.
- (2) **Crisis Intervention:** This may be required in rare instances where a relief worker is in a crisis situation due to any reasons – personal, family or fieldwork related. The supervisor or the group leader has the responsibility for organizing appropriate support in these cases.

14 *Safe Water, Environmental Health & Hygiene in Disasters*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of the following:

- Drinking water supply
- Food safety
- Vector control
- Solid waste management
- Waste water disposal
- Hygiene promotion

INTRODUCTION

Environmental health is defined as the control of those factors in the environment that may have deleterious effects on people's physical, mental, or social well-being. Because disasters expose people to danger by disrupting or threatening to disrupt their immediate environment, effective management of environmental health after a disaster is of primary importance. Taking appropriate measures to maintain environmental health helps to reduce or eliminate the risks of preventable diseases and deaths. Such measures contribute not only to the health of individuals in and near disaster-stricken areas, but they also contribute to decreasing the high cost of providing emergency health services in the aftermath of disaster.

The environmental health measures that must be considered after a disaster include the provision of appropriate shelter for individuals or group of people left homeless, the distribution of safe and accessible water, first in sufficient quantities for drinking purposes and then for other domestic uses, and the protection and distribution of safe food products. Other measure that must be considered for the control of environmental hazards associated with disaster are sanitary evacuation of excreta, liquid wastes, refuse, and protecting population from common vector of disease in stricken areas and promoting healthful living, particularly sanitary housing and basic personal hygiene.

Increased population density results from the effects of disaster and this in turn disrupts normal community life by causing health related conditions to worsen and increasing the need of environmental health services. Disruptions or overloading of water supply systems, excreta and liquid wastes removal systems and solid waste disposal system also are likely consequences of disasters. When excreta and liquid waste disposal system are disrupted the probability of waster – borne and food – borne diseases increases. Other water related diseases and general nuisances are also more likely to affect disaster – stricken populations. As sanitation decreases with the disruption of solid waste disposal systems the contamination of food and water supplies and the proliferation of vectors increase the risk of diseases. The bothersome condition that accompanies breakdowns in solid waste disposal may contribute to the mental stress that disaster victims undergo. The growth of population of vectors of diseases such as malaria, yellow fever, tularemia and typhus is a further common consequence. Decrease of general housing sanitations and personal hygiene are among the most common effects of disaster upon environmental health conditions and services. The lack of proper clothing, water, soap, detergent and basic cleaning and-washing facilities make it difficult to maintain usual standard of personal hygiene. As a result, there are increases in diarrhoeal diseases, vector borne disease like typhus and condition like scabies.

The highest priority should be accorded to environmental health services that are essential for the protection of the well being of individuals in the high-risk areas. The cooperation of persons in high-risk areas should be sought, and they should be actively involved in the provision of services. The minimum levels of services that must be provided are the following

- Adequate shelter for displaced persons
- Sufficient quantities of accessible drinking water
- Facilities for excreta and liquid waste disposal
- Protection of food supplies against contamination
- Protection of individuals against vector borne diseases
- Provision of basic facilities for personal hygiene

Community participation is of fundamental importance if sanitary programmes/projects are to be successful. Health education and sensitization measures are also a prerequisite for such participation.

DRINKING WATER SUPPLY

Protection of quality (chemical and bacteriological)

- Proper health education should be given to people for not using unsafe water.
- Water must be stored in clean containers and kept safe until consumed.
- Water sources be kept away from pollution points (at least 30 meters).
- Disinfection of water (chlorination) and chlorine residual check should be done regularly.
- Leakages in the distribution system especially pipe and valves should be plugged immediately.

Disinfection

- Disinfection kills pathogenic organisms and can be achieved in a variety of ways.
- Chlorination is the most readily available and widely used chemical disinfection for water supply.
- Boiling is an effective physical method of complete sterilization. It is practicable for small quantities only.
- Solar disinfection (SODIS) can also be used for household use. Use of plastic bottles or carboys can be made (not necessary to be new). Keep the container filled with water in hot sun for four hours and use the water after getting cool.

Chlorination

- The aim of chlorination is destruction of pathogens and protection of water supply.
- Chlorine dose must be sufficient to meet the chlorine demand of water and leave a residual, in order to give protection against further contamination. (Free residual chlorine of 0.5 mg/L) after a contact time of 30 minutes.
- Chlorination should be done at the community level as far as possible. However in case of emergency may be practiced at individual level for a small quantity and a short period.
- Colour and turbidity should be removed before applying chlorination
- Chlorinated water should be stored in a clean and covered container.
- Chlorine residue must be measured before the water is supplied to communities.
- Exercise care to avoid over chlorination of water

Guidelines for use of chlorine compounds.

- Advise people how to use it
- Storage containers should be available.
- Technical assistance is provided to help.
- Most common chlorine compound in use is known as chlorine tablets. Instructions for use are usually given on the container.
- The water should be stirred and left to stand for 30 minutes before it is consumed.
- If bleaching powder (30-35 % available chlorine) is used than make 1 % solution by adding two-tea spoonful of powder in one-liter solution. Add 8 drops of this solution in 20 liters of water to be chlorinated.

- If sodium hypo chlorite (4-6 % available chlorine) is used, than use ten drops for 20 liters of water.
- If the taste of chlorine is too strong, don't use it for few hours or pour it from one to another container for several times.

Use of chloroscope

- Use chloroscope to measure residual chlorine
- Chloroscope should be available with the field staff.
- Chloroscope is easy to handle and operate.
- Ensure stock of ortho toluidine reagent for replenishment.
- Provide operational instructions to the user.

FOOD SAFETY

Ten golden rules for safe food preparation (WHO)

- Cook raw food thoroughly.
- Eat cooked food immediately.
- Prepare food for only one meal.
- Reheat cooked food thoroughly
- Avoid contact between raw foods and cooked foods
- Choose processed food for safety.
- Wash hands repeatedly.
- Keep all food preparation premises meticulously clean.
- Store cooked food well (Protect food from insects, rodents and other animals.)
- Use safe water for cooking.

VECTOR CONTROL

Vector-borne diseases are a major cause of sickness and death in many emergency situations. Although malaria is probably the vector-borne disease of greatest public health concern, a number of others can pose a major threat to health. Flies may play an important role in the transmission of diarrhoeal disease. The control of vector-borne disease involves efforts in several areas, including health services, shelter, site selection and planning, and environmental health services, including water supply, excreta disposal, solid waste management and drainage. Although the nature of vector-borne disease is complex and addressing vector-related problems often demands specialist attention, there is much that can be done with simple and effective measures once the disease; the vector and their interaction with the beneficiary population have been identified. Although not of primary public health concern, so-called nuisance pests, such as bed bugs, can cause significant discomfort and loss of sleep and are often worthy of attention for their indirect impact on health

SOLID WASTE MANAGEMENT

Encourage and educate communities to ensure that:

- Domestic refuse is removed from the settlement or buried on site before it becomes a nuisance or a health risk.
- There are no contaminated or dangerous medical wastes (needles, glass, dressings, drugs etc) at any time in the living area or public spaces.
- There is a correctly designed, constructed and operated incinerator with deep ash pit within the boundaries of each health facility.
- There are refuse pits, bins or specified areas at markets and slaughtering areas, with a daily collection system.

- Final disposal of solid waste is carried out in such a place and in such a way as to avoid creating health and environmental problems. Any dwelling should be located more than 15 metres from a refuse container or household refuse pit, or 100 metres from a communal refuse pit. One 100 litre refuse container is to be made available per 10 families, where domestic refuse is not buried on site.

WASTE WATER DISPOSAL

Action

- Develop soak-ways consisting of pits filled with small stones or gravels in to which wastewater is directed.
- Where infiltration methods do not work effectively because of low permeability, disposed of wastewater by using it for irrigation.
- Even when infiltration methods are possible, use in vegetable gardening may be appropriate where irrigation water is scarce.
- Take care to avoid mosquito nuisance by irrigation.
- In absence of irrigation allow the wastewater to flow into shallow pans where it simply evaporates.
- Use soap free wastewater for watering livestock.

HYGIENE PROMOTION

Action

- Assess the state of hygiene and community accepted beliefs concerning hygiene.
- Overcrowding in sleeping quarters should be avoided.
- Sufficient quantities of water should be made available.
- Establish communal washing facilities for men and women in consultation with users and make them to maintain themselves.
- All affected people should be encouraged to acquire the habits of personal hygiene
- There are three essential steps to improve hygiene
 - Avoid overcrowding and over population which increase transmission of diseases brought about by vectors like fleas and lice.
 - Reduce faecal/oral transmission risk by introducing hand washing before cooking and eating.
 - Encourage personal hygiene including cloths by providing facilities for water and washing.

Important and simple messages.

- Use boiled or disinfected water
- Avoid wasting water
- Wash hands before handling food.
- Do not scatter refuse and other food wastes.
- Clean and wash cooking/eating utensils
- Avoid eating raw/uncooked food and over-ripe fruits
- Never leave food too long or uncovered.
- Observe personal cleanliness

15 *Structure of the Primary Health Care System*

KEY LEARNING OBJECTIVES:

At the end of the session, the participant should be aware of:

- Structure of the Primary Health Care system
- Roles and Responsibilities of personnel at the various levels
- Services provided at the various levels

In 1977, the Government of India launched a Rural Health Scheme, based on the principle of “placing people’s health in people’s hands”. It was a three tier system of health care delivery in rural areas based on the recommendation of the Shrivastava Committee in 1975. Close on the heels of these recommendations an International conference at Alma-Ata in 1978, set the goal of an acceptable level of ‘**Health for All**’ the people of the world by the year 2000 through primary health care approach. As a signatory to the Alma-Ata Declaration, the Government of India is committed to achieving the goal of Health for All through primary health care approach which seeks to provide universal comprehensive health care at a cost which is affordable.

In disaster situations, it would be essential for the provider of outreach services to have basic knowledge of the structure of the primary health care system. This would not only help in assessing and utilizing the available resources at the different levels, but would also help in regularizing the primary health care services.

The structure and functions of the primary health care system at the various levels are as follows:

1. VILLAGE LEVEL

One of the basic tenets of primary health care is universal coverage and equitable distribution of health resources. That is, health care must penetrate into the farthest reaches of rural areas, and that everyone should have access to it. To implement this policy the following are available at the village level:

- a. Village Health Guides
- b. Local Dais
- c. ICDS worker
- d. ASHA

a. Village Health Guides

A Village Health Guide is a person with an aptitude for social service and is not a full time government functionary. The Village Health Guides Scheme was introduced on 2nd October 1977 with the idea of securing people’s participation in the care of their own health. The scheme was launched in all States except Kerala, Karnataka, Tamil Nadu, Arunachal Pradesh and Jammu and Kashmir which had alternative systems (e.g., Mini-health Centres in Tamil Nadu) of providing health services at the village level.

The Health Guides are now mostly women. A circular was issued by Government of India in May 1986 that male Health Guides would be replaced by female Health Guides. The Health Guides come from and are chosen by the community in which they work. They serve as links between the community and the governmental infrastructure. They provide the first contact between the individual and the health system.

The guidelines for their selection are:

- (a) They should be permanent residents of the local community, preferably women
- (b) They should be able to read and write, having minimum formal education at least up to the VI standard.

- (c) They should be acceptable to all sections of the community and
- (d) They should be able to spare at least 2 to 3 hours every day for community health work.

After selection, the Health Guides undergo a short training in primary health care. The training is arranged in the nearest primary health center, subcentre or any other suitable place for the duration of 200 hours, spread over a period of 3 months. On completion of training, they receive a working manual and a kit of simple medicines belonging to the modern and traditional systems of medicine in vogue in that part of the country to which they belong. Broadly the duties assigned to health guides include treatment of simple ailments and activities in first aid, mother and child health including family planning, health education and sanitation. The manual or guidebook gives them detailed information about medical care of common illnesses – of what they can and cannot do. In practical terms, they know exactly what should be done when confronted with a situation, when they can begin treatment by themselves and when they should refer the patient immediately to the nearest health center. The Health Guides are free to attend to their normal vocation.

b. Local Dais

Most deliveries in rural areas are still handled by untrained dais who are often the only people immediately available to women during the prenatal period. An extensive programme has been undertaken, under the Rural Health Scheme, to train all categories of local dais (traditional birth attendants) in the country to improve their knowledge in the elementary concepts of maternal and child health and sterilization, besides obstetric skills. The training is for 30 working days. Training is given at the PHC, subcentre or MCH center for 2 days in a week, and on the remaining four days of the week they accompany the Health worker (Female) to the villages preferably in the Dai's own area. During her training each Dai is required to conduct at least 2 deliveries under the guidance and supervision of the HW (F), ANM or HA (F). The emphasis during training is on asepsis so that home deliveries are conducted under safe hygienic conditions thereby reducing the maternal and infant mortality.

After successful completion of training, each dai is provided with a delivery kit and a certificate. These dais are also expected to play a vital role in propagating small-family norm since they are more acceptable to the community.

c. Anganwadi Worker

'Angan' literally means a courtyard. Under the ICDS (Integrated Child Development Services) Scheme, there is an anganwadi worker for a population of 1000. There are about 100 such workers in each ICDS Project. As of date over 5320 ICDS blocks are functioning in the country. The anganwadi worker is selected from the community she is expected to serve. She undergoes training in various aspects of health, nutrition, and child development for 4 months. She is a part time worker and is paid an honorarium for the services rendered, which include health check-up, immunization, supplementary nutrition, health education, non-formal pre-school education and referral services. The beneficiaries are especially nursing mothers, other women (15-45 years) and children below the age of 6 years. Along with Village Health Guides, the anganwadi workers are the community's primary link with the health services and all other services for your children.

d. ASHA (Accredited Social Health Activist)

The Government of India has decided to launch a National Rural Health Mission (NRHM) to address the health needs of rural population, especially the vulnerable sections of society. The ANM is heavily overworked, which impacts outreach services in rural areas. Currently Anganwadi Workers (AWWs) under the Integrated Child Development Services Scheme (ICDS) are engaged in organizing supplementary nutrition programmes and other supportive activities. The very nature of her job responsibilities (with emphasis on supplementary feeding and pre school education) does not allow her to take up the responsibility of a change agent on health in a village. Thus a new band of community based functionaries, named as **Accredited Social Health Activist (ASHA)** is proposed to fill this void.

ASHA will be the first port of call for any health related demands of deprived sections of the population, especially women and children, who find it difficult to access health services. Every village/large habitat (approximately 1000 population) will have a female Accredited Social Health Activist (ASHA) – chosen by and accountable to the Panchayat- to act as the interface between the community and the public health system.

Roles & Responsibilities

ASHA will be a health activist in the community who will create awareness on health and its social determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing health services. She would be a promoter of good health practices. She will also provide a minimum package of curative care as appropriate and feasible for that level and make timely referrals. Her roles and responsibilities would be as follows:

- ASHA will take steps to **create awareness** and provide information to the community on determinants of health such as nutrition, basic sanitation & hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilization of health & family welfare services.
- She will **counsel** women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception and prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs) and care of the young child.
- ASHA will **mobilize the community and facilitate them in accessing** health and health related services available at the village/sub-center/primary health centers, such as Immunization, Ante Natal Check-up (ANC), Post Natal Check-up (PNC), ICDS, sanitation and other services being provided by the government.
- She will **work with the Village Health & Sanitation Committee of the Gram Panchayat** to develop a comprehensive village health plan.
- She will arrange **escort/accompany** pregnant women & children requiring treatment/admission to the nearest pre- identified health facility i.e. Primary Health Centre/Community Health Centre/First Referral Unit (PHC/CHC/FRU).
- ASHA will **provide primary medical care** for minor ailments such as diarrhoea, fevers, and first aid for minor injuries. She will be a provider of Directly Observed Treatment Short-course (DOTS) under Revised National Tuberculosis Control Programme.
- She will also act as a depot holder for essential provisions being made available to every habitation like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet (IFA), chloroquine, Disposable Delivery Kits (DDK), Oral Pills & Condoms, etc. A Drug Kit will be provided to each ASHA. Contents of the kit will be based on the recommendations of the expert/technical advisory group set up by the Government of India.
- Her role as a provider can be enhanced subsequently. States can explore the possibility of graded training to her for providing newborn care and management of a range of common ailments particularly childhood illnesses.
- She will **inform** about the births and deaths in her village and any unusual health problems/disease outbreaks in the community to the Sub-Centres/Primary Health Centre.
- She will promote construction of household toilets under Total Sanitation Campaign.
- Fulfillment of all these roles by ASHA is envisaged through continuous training and up gradation of her skills, spread over two years or more.

2. SUB-CENTRE LEVEL

The sub-centre is the peripheral outpost of the existing health delivery system in rural areas. They are being established on the basis of one sub-centre for every 5000 population in general and one for every 3000 population in hilly, tribal and backward areas. Each sub-centre is manned by one male and one female multipurpose health worker. At present the functions of a sub-center are limited to mother and child health care, family planning and

immunization. It is proposed to extend the facilities at all sub-centers for IUD insertion, and simple laboratory investigations like routine examination of urine for albumin and sugar. Creation of these facilities would go a long way in securing greater acceptance of IUD and early detection of complications of pregnancy. The work at sub-centres is supervised by male and female health assistants.

3. PRIMARY HEALTH CENTRE LEVEL

The health planners in India had visualized the primary health center and its sub-centres as the proper infrastructure to provide health services to the rural population. The Central Council of Health at its first meeting held in January 1953 had recommended the establishment of primary health centers in community development blocks to provide comprehensive health care to the rural population. The number of primary health centers established since then had increased from 725 during the First Five Year Plan to 5484 by the end of the Fifth Plan (1975-1980) – each PHC covering a population of 100,000 or more spread over some 100 villages in each community development block. The Declaration of Alma-Ata Conference in 1978 setting the goal of Health for all by 2000 AD had ushered in a new philosophy of equity, and a new approach, the primary health care approach. The National Health Plan (1983) proposed reorganization of primary health centers on the basis of one PHC for every 30,000 rural population in the plains, and one PHC for every 20,000 population in hilly, tribal and backward areas for more effective coverage. As on 31st March 2003, 22936 primary health centers have been established in the country against the total requirement of about 23,000.

Functions of the PHC:

The functions of the primary health center in India cover all the “essential” elements of primary health care as outlined in the Alma-Ata Declaration. They are:

1. Medical Care
2. MCH including family planning
3. Safe water supply and basic sanitation
4. Prevention and control of locally endemic diseases
5. Collection and reporting of vital statistics
6. Education about health
7. National Health Programmes – as relevant
8. Referral services
9. Training of health guides, health workers, local dais and health assistants
10. Basic laboratory services

It is proposed to equip the primary health centers with facilities for selected surgical procedures (e.g., vasectomy, tubectomy, MTP and minor surgical procedures) and for paediatric care.

Staffing Pattern

At present in each community development block, there are one or more PHCs each of which covers 30,000 rural population. In the new set-up each PHC will have the following staff:

At the PHC level

Medical officer	1
Pharmacist	1
Nurse mid-wife	1
Health worker (female)/ANM	1
Block Extension Educator	1
Health assistant (male)	1

Health assistant (female)/LHV	1
U.D.C.	1
L.D.C	1
Lab. Technician	1
Driver (subject to availability of Vehicle)	1
Class IV	4

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At the Sub-centre level:

Health worker (female)/ANM	1
Health worker (male)	1
Voluntary worker	1

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Notwithstanding the strong criticism of primary health centers it must be emphasized that their establishment is a valuable national asset. Their establishment is the fruit of many years of great efforts to increase the outreach of the health services.

4. COMMUNITY HEALTH CENTRE LEVEL

As on 31st March 2003, 3076 community health centers were established by upgrading the primary health centers, each community health center covering a population of 80,000 to 1.20 lakh (one in each community development block) with 30 beds and specialists in surgery, medicine, obstetrics and gynecology, and pediatrics with X-ray and laboratory facilities. For strengthening preventive and promotive aspects of health care, a new non-medical post called community health officer has been created at each community health center. The community health officer is selected from amongst the supervisory category of staff at the PHC and district level with minimum of 7 years experience in rural health programmes. Some states have not accepted this scheme and have opted for a second medical officer.

The specialists at the community health center may refer a patient directly to the State level hospital or the nearest/ appropriate Medical College Hospital, as may be necessary, without the patient having to go first to the sub-divisional or District Hospital.

Staff for Community Health Centre:

Medical officer	4
Nurse mid-wives	7
Dresser	1
Pharmacist/Compounder	1
Lab.technician	1
Radiographer	1
Ward boys	2
Dhobi	1
Sweepers	3
Mali	1
Chowkidar	1
Aya	1
Peon	1

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5. FIRST REFERRAL UNIT

Under the Child Survival and Safe Motherhood Programme (CSSM), the First Referral Units (FRUs) for emergency obstetric care were designated to all subdistrict community health centres (CHCs), post partum centres (PPCs), upgraded primary health centres (PHCs) of only six states – Assam, Bihar/Jharkhand, Madhya Pradesh/Chhatisgarh, Orissa, UP/Uttaranchal, Rajasthan initially, then later on to all districts of the country. The minimum package of services to be provided includes:

- Vacuum extractions
- Administration of anaesthesia
- Blood Transfusion
- Caesarean section
- Manual removal of placenta
- Carry out suction curettage for incomplete abortion
- Insert Intrauterine devices
- Sterilization operation, eg. Vasectomy and tubectomy.

16 *National Health Programmes*

KEY LEARNING OBJECTIVES

At the end of the session, the participant should be aware of:

- National Health Programmes
- Systems for delivery of these programs

Various National Health Programmes are currently being implemented in the country. During a disaster, the systems for delivery of these programs are usually disrupted. It is necessary for the disaster relief worker to have the basic knowledge of these programmes in order to facilitate better coordination and optimum utilization of human and material resources.

NATIONAL RURAL HEALTH MISSION

Recognizing the importance of Health in the process of economic and social development and improving the quality of life of our citizens, the Government of India resolved to launch the National Rural Health Mission to carry out necessary architectural correction in the basic health care delivery system. The Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care.

The overall Goal of the Mission is to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

Goals

- Reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR)
- Universal access to public health services such as Women's health, child health, water, sanitation & hygiene, immunization, and Nutrition.
- Prevention and control of communicable and non-communicable diseases, including locally endemic diseases
- Access to integrated comprehensive primary healthcare
- Population stabilization, gender and demographic balance.
- Revitalize local health traditions and mainstream AYUSH
- Promotion of healthy life styles

Strategies

(a) Core Strategies:

- Train and enhance capacity of Panchayati Raj Institutions (PRIs) to own, control and manage public health services.
- Promote access to improved healthcare at household level through the female Accredited Social Health Activist (ASHA).
- Health Plan for each village through Village Health Committee of the Panchayat.
- Strengthening sub-centre through an untied fund to enable local planning and action and more Multi Purpose Workers (MPWs).

- Strengthening existing PHCs and CHCs, and provision of 30-50 bedded CHC per lakh population for improved curative care to a normative standard (Indian Public Health Standards defining personnel, equipment and management standards).
- Preparation and Implementation of an inter-sectoral District Health Plan prepared by the District Health Mission, including drinking water, sanitation & hygiene and nutrition.
- Integrating vertical Health and Family Welfare programmes at National, State, Block, and District levels.
- Technical Support to National, State and District Health Missions, for Public Health Management.
- Strengthening capacities for data collection, assessment and review for evidence based planning, monitoring and supervision.
- Formulation of transparent policies for deployment and career development of Human Resources for health.
- Developing capacities for preventive health care at all levels for promoting healthy life styles, reduction in consumption of tobacco and alcohol etc.
- Promoting non-profit sector particularly in under served areas.

(b) Supplementary Strategies:

- Regulation of Private Sector including the informal rural practitioners to ensure availability of quality service to citizens at reasonable cost.
- Promotion of Public Private Partnerships for achieving public health goals.
- Mainstreaming AYUSH – revitalizing local health traditions.
- Reorienting medical education to support rural health issues including regulation of Medical care and Medical Ethics.
- Effective and viable risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

REPRODUCTIVE AND CHILD HEALTH PROGRAMME (PHASE-II) (2005-2010)

Introduction:

World Health Organization (WHO) has defined *reproductive health* as follows: “Within the framework of WHO’s definition of health as a state of complete physical, mental and social well being, and not merely the absence of disease or infirmity; reproductive health addresses the reproductive processes, functions, and systems at all stages of life. Reproductive health therefore implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide, if when, and how often to do so.” The definition focuses on the right of men and women to be informed of and to have access to safe, effective, affordable, and acceptable methods of fertility regulation of their choice, and the right of access to appropriate health care services that will enable women to go through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. India changed the strategy of the National Family Welfare Programme to Reproductive and Child Health in 1997 with the launch of the RCH Programme (Phase I – 1997-2002).

Areas	National Family Welfare Programme (Old Approach)	RCH Programme (New Approach)
Primary Goal	Meet norms of two child	Still encourage smaller family but help clients to meet their own health and family planning goals.
Priority services	Family Planning (Sterilization and Immunization)	Full range of reproductive and child health services: ➤ Prevention and management of unwanted pregnancy ➤ Maternal care that includes antenatal, delivery and post partum services

Areas	National Family Welfare Programme (Old Approach)	RCH Programme (New Approach)
		➤ Child survival services for newborns and infants ➤ Management of Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs)
Performance assessment	Number of cases	Quality of care, satisfaction, coverage measures
Management Approach	Top down, Target driven	Decentralized and client's need based, abolition of targets
Attitude to client	Male dominated, motivate, persuade	Gender sensitive, listen, assess need, inform, advise
Accountability	To the government system	To the client, community and health and family welfare staff.

The country has initiated the RCH Phase II program as scheduled from 1 April 2005. The program implies a “paradigm shift” looking upfront at performance and upholding the desired standards of quality and client sensitivity.

Goals of RCH Phase II program

Indicator	Tenth Plan Goals (2002-2007)	RCH Phase II Goals (2005-10)	National Population Policy 2000 (By 2010)	Millennium Development Goals
Infant Mortality Rate	<45/1000	<30/1000	<30/1000	
Under-5 Mortality Rate 1990 levels	–	–	–	Reduce by 2/3 from
Maternal Mortality Ratio	200/100000	<100/100000	<100/100000	Reduce by 3/4 by 2015
Total Fertility Rate	2.3	2.1	2.1	–

The immediate objective, as envisioned in the National Population Policy 2000 (NPP) is to address the unmet needs of contraception, health care infrastructure, health personnel and provide an integrated service delivery for basic reproductive and child health care, with special focus on states facing the biggest socio-demographic challenges.

The medium term objective outlined in the NPP 2000 is to bring the Total Fertility Rate (TFR) to replacement level by 2010, through coordinated implementation of the inter-sectoral linkages.

The long-term objective is to achieve a stable population by 2045, at a level consistent with the requirements of sustainable economic growth, social development and environmental protection.

Objectives:

More specifically, in the context of the Tenth Plan and NPP 2000 the objectives are to:

- Reduce the decadal rate of population growth between 2001 and 2011 to 16.2%
- Reduce IMR to <45 per 1000 live births by 2007 and <30 per 1000 live births by 2010
- Reduce TFR to 2.1 by 2010
- Improve coverage of full Ante Natal Care (ANC) from 44.5% (RHS 2002-03) to 89% in 2010
- Improve coverage of institutional deliveries/safe deliveries from 39.8%/54.07% (RHS 2002-03) to 80% in 2010

- Improve coverage of fully immunized children from 48.2% (RHS 2002-03) to 100% in 2010
- Improve Contraceptive Prevalence Rate (CPR) from 44.8% (RHS 2002-03) to 65% in 2010
- Improve quality, coverage and effectiveness of the existing, FW and essential RCH services with special focus on the EAG states
- To improve management performance, establishing state ownership of the program and institutional strengthening at the centre, state and districts levels for timely and coordinated utilization of project resources
- Concentrate on intensive development of human resources through the strengthening of institutions and enhancement of skills, complemented by an efficient support system to enhance the quality of monitoring and evaluation (M&E), procurement, financial management and service delivery
- Expand essential RCH services through the universalization of RCH in small and medium towns, as well as introduce a package of essential RCH services for the vulnerable groups.

VECTOR BORNE DISEASE CONTROL PROGRAMME

Directorate of National Anti Malaria Programme (NAMP) is the national nodal agency for prevention and control of major vector borne diseases of public health importance namely malaria, filarial, Japanese encephalitis, Kala-azar and dengue/dengue haemorrhagic fever. Till 2002-2003, the centrally sponsored schemes viz. national anti-malaria programme, national filarial control programme and kala-azar control programme, had been operative in the country on cost sharing basis between centre and states. There was no specific centrally sponsored programme for JE and dengue/DHF, and the states were managing these diseases out of their own resources and with limited need based support and technical guidance from the directorate of NAMP. However, in pursuance of the concept of convergence, the Government of India has approved a National Vector Borne Disease Control Programme (NVBDCD) from the year 2003-2004 by inclusion of JE and dengue/DHF with other three ongoing programmes.

In 1999, the Government of India decided to drop the term “National Malaria Eradication Programme” and renamed it “*National Anti-Malaria Programme*”.

The anti-malarial activities have been intensified with additional inputs in 100 selected districts of the states of Andhra Pradesh, Bihar, Gujarat, Maharashtra, Madhya Pradesh, Rajasthan and Orissa. In 19 cities/towns in these states and in the states of Karnataka, Tamil Nadu and West Bengal, an *Enhanced Malaria Control Project* with World Bank support has been launched on 30th September 1997. The total cost of the project is about Rs. 891 crores spread over a period of 5 years.

The selection of PHCs was based on the following criteria.

- annual parasite incidence (API) of more than 2 for last 3 years;
- P. falciparum cases being more than 30 per cent of total malaria cases;
- 25 per cent or more population of PHC being tribal; and
- reported deaths due to malaria from the PHC.

The main components strengthened under the project include:

- early case detection and treatment;
- selective vector control and personal protection methods including insecticide treated mosquito nets;
- epidemic planning and rapid response;
- intersectoral coordination, institutional and management capabilities strengthening; and
- use of larvivorous fish.

1045 PHCs predominantly inhabited by tribals in 100 districts in these 8 states are also being provided additional support including operational expenses under Enhanced Malaria Control Project (EMCP) with World Bank assistance.

Synthetic pyrethroids, bednets, rapid diagnostic kits, artether injections, blister packs for the radical treatment of adult patients are provided. Funds are also provided for training, IEC activities. States have been advised to have

one volunteer in each village for distribution of chloroquine tablets to patients with fever, so that the anti-malaria drug is available within easy walking distance. This is in addition to the treatment facilities available at the health facilities and hospitals. The government of India provides funds for training and for anti-malaria drugs. EMCP was launched in September 1997 for a period till March 2003. It received two year extension up to March 2005.

Anti-malaria Drug Policy

The National Anti-malaria Drug Policy was drafted in 1982 to combat the increasing level of resistance to chloroquine detected in Pf. However, there were large scale malaria epidemics reported in recent time that has generated great concerns. An expert committee was formulated under the chairmanship of DGHS to revise the drug treatment policy and the committee submitted its recommendations:

1. The first the treatment is with chloroquine and in the second line Sulphalene/Sulphadoxine Pyrimethamine combination can be given. In case of resistant to these two drugs and in severe/complicated cases quinine will be used.
2. The presumptive treatment is given in all cases of fever with history of fever during the preceding 15 days immediately after the blood smear is collected. It is given to all persons according to the age. Even the pregnant women in any month of pregnancy or during postpartum period should receive presumptive treatment. The presumptive treatment is also to be administered to all fever cases where the blood smears are not collected.

a) **Low Risk Areas:** Presumptive treatment comprises of a single dose of chloroquine phosphate of 10mg/kg body weight (total of 600 mg = 4 tablets for adult);

b) **High Risk Areas:** Presumptive treatment of all suspected/clinical malaria cases is as follows:

Day 1. Chloroquine base	10 mg/kg	(600 mg adult)
Day 1. Primaquine	0.75 mg/kg	(45 mg adult)
Day 2. Chloroquine base	10 mg/kg	(600 mg adult)
Day 3. Chloroquine base	5 mg/kg	(300 mg adult)

c) **Radical Treatment:** All microscopically positive cases of malaria are to be given radical treatment with Primaquine for its gametocytes and anti relapse properties. This ensures a complete cure from malaria in the positive case and makes him non-infective to mosquitoes.

1. Radical treatment for microscopically confirmed Pv malaria infections: The adult dose/drug schedule is as follows:

A single dose of 600 mg chloroquine (10mg/kg body weight) and 15mg Primaquine (0.25mg/kg body weight) on the first day followed by 15 mg Primaquine (0.25mg/kg body weight) daily for the next four days. Infants and pregnant women are not to be given Primaquine.

2. Radical treatment for microscopically confirmed Pf infections: The adult dose/drug schedule is as follows: A single dose of 600mg chloroquine (10 mg/kg body weight) and 45 mg Primaquine (0.75 mg/kg body weight) is to given stat.
3. The radical treatment of cases in chloroquine resistant strain areas for P. falciparum as suggested under the revised drug policy is as follows:

Sulphalene/Sulphadoxine	1500 mg single dose
Plus	
Pyrimethamine (3 tablets)	75 mg
Thereafter	
Primaquine	45 mg single dose

Note: These drugs should be given cautiously and not on the same day as both are known to precipitate hemolytic crisis in sensitive cases with G-6-PD deficiency. The drug administrator should ensure that the patient swallows Sulpha combination tablets in her presence and gives clear instructions to the patient to consume Primaquine tablets on the following days without fail. Sulphalene/Sulphadoxine and Pyrimethamine combination does not take care of *P. vivax* cases.

4. In cases of resistance to above drugs, and in severe and complicated malaria with *P. falciparum* infection (microscopically confirmed) intravenously quinine is to be used in doses as follows: Quinine 10mg/kg body weight thrice daily as intravenous infusion in 5% dextrose/glucose solution over 4 hours. When the patient regains consciousness the same dose schedule is given orally to complete 7 days treatment. Monitor Blood Sugar level since Quinine intravenously may precipitate hypoglycemic crisis. Quinidine may be used under strict cardiac monitoring.
5. Mefloquine can be used for treat of *Pf* cases resistant to chloroquine only and not for treatment of *Pv* cases.
6. Halofantrine is not to be introduced in India because of its erratic absorption and toxic effects.
7. Artemisinin and its derivatives may be given if quinine is not available for the management of severe and complicated *Pf* infection in area of resistance foci.
8. Pregnant women in endemic and hyperendemic areas should receive chemoprophylaxis at the end of first trimester of pregnancy.
9. Travelers including service Personal going for working in hyper or mesoendemic areas should receive chemoprophylaxis starting before the transmission period and terminating 4 weeks after the transmission period is over. The chloroquine is the drug of choice and should be given with a loading dose of 10 mg/kg followed by a weekly dose of 5 mg/kg. In pregnant lady chemoprophylaxis should be continued till one month after delivery. No other drug is recommended for chemoprophylaxis.
10. Quality control, health education, labeling in regional languages with English and reviewing of drug policy after 2 years, etc. are also recommended by the committee.

NATIONAL FILARIA CONTROL PROGRAMME

The National Filaria Control Programme (NFCP) has been in operative since 1955. According to recent estimates about 420 million people are exposed to the risk of infection. 19 million manifest the disease, and 25 million have filarial parasites in their blood.

Filaria control strategy includes vector control through anti larval operations, source reduction, detection and treatment of microfilaria carriers, morbidity management and IEC. National Filaria Control Programme is being implemented through 206 filaria control units, 199 Filaria clinics and 27 survey units primarily in endemic urban towns. In rural areas anti filarial medicines and morbidity management services are provided through primary health care system.

Revised filarial Control Strategy

The strategy follows the WHO recommendation of annual single dose mass drug therapy with DEC/DEC with albendazole as a supplement to existing NFCP strategy in 30 highly endemic districts to reduce transmission of filarial to a very significant low level. During 2003-04, central assistance of Rs. 19.5 crores has been provided to the endemic states for supporting lymphatic filariasis elimination operations in the endemic districts.

NATIONAL LEPROSY “ERADICATION” PROGRAMME

The National Leprosy Control Programme (NLCP) has been in operation since 1955 as a centrally aided programme to achieve control of leprosy through early detection of cases and DDS (dapsone) monotherapy on an ambulatory basis. The NLCP moved ahead initially at a slow pace, presumably for want of clear-cut policies or operational objectives for nearly two decades. The programme gained momentum during the fourth Five Year Plan after it was made a centrally-sponsored programme. In 1980, the Government of India declared its resolve to “eradicate” leprosy by the year 2000 and constituted a Working group to advise accordingly. The Working Group submitted its report in 1982 and recommended a revised strategy based on multi-drug chemotherapy aimed at leprosy “eradication” through reduction in the quantum of infection in the population, reduction in the sources of infection and breaking the chain of transmission of disease. In 1983 the control programme was redesignated National Leprosy “Eradication” Programme (NLEP) with the goal of eradicating the disease by the turn of the century. The aim was to reduce case load to 1 or less than 1 per 10,000 population.

STRATEGY:

The revised strategy is based on early detection of cases (by population surveys, school surveys, contact examination and voluntary referral), short term multi-drug therapy, health education, ulcer and deformity care and rehabilitation activities. The regimens recommended by WHO have been adapted to suit the operational and administrative requirements.

NLEP provides free domiciliary treatment in endemic districts through specially trained staff, and in moderate to low endemic districts it provides services through mobile leprosy treatment units and primary health care personnel. Treatment of leprosy cases with MDT (Multi Drug Therapy) was taken up in a phased manner. As a result the numbers of cases discharged as cured are increasing progressively over the year.

Revised National Tuberculosis Control Programme

The Government of India, WHO and World Bank together reviewed the National Tuberculosis Programme (NTP) in the year 1992. Based on the findings a revised strategy for NTP was evolved. The salient features of this strategy are:

- 1) Achievement of at least 85 per cent cure rate of infectious cases through supervised Short Course Chemotherapy involving peripheral health functionaries;
- 2) Augmentation of case finding activities through quality sputum microscopy to detect at least 70 per cent estimated cases; and
- 3) Involvement of NGOs; Information, Education and communication and improved operational research.

The revised strategy was introduced in the country as a Pilot Project since 1993 in a phased manner as Pilot Phase I, Pilot Phase II and Pilot Phase III. By the end of 1998, only 2 per cent of the total population of India was covered by RNTCP. Large – scale implementation began in late 1998. At the request of Govt. of India, WHO facilitated a comprehensive joint programme review from 4 to 6 Feb. 2000. The review found that implementation of RNTCP is successful. Patients are accurately diagnosed, drug supply is regular and uninterrupted and there has been a striking increase in the proportion of patients cured. The RNTCP has expanded rapidly over the past two years. The population covered by the programme increased from 18 million in the 1998 to 851 million by the end of May 2004, covering more than 466 districts and 76 per cent of the country’s population, and the entire country is expected to be covered by the end of 2005.

Under the RNTCP active case finding is not pursued. Case finding is passive. Patients presenting themselves with symptoms suspicious of tuberculosis are screened through 3 sputum smear examinations. Sputum microscopic examination is done in designated RNTCP microscopy centres. Microscopy centres are established in the RNTCP districts for every one lakh population. They are located either in the CHC, PHC, Taluka Hospitals or in the TB

dispensary. Each centre has a skilled technician to ensure quality control a senior TB laboratory supervisor is appointed for every 5 microscopy centres. The senior TB laboratory supervisor rechecks all the positive slides and 10 per cent of the negative slides of these five microscopy centres. Thus the error in diagnosing a patient is minimized. It is essential to examine 3 sputum specimens of each patient before a conclusive diagnosis can be made. One sputum sample is not sufficient for diagnosis as the chance of detecting smear positive case is only 80 per cent as compared to 93 per cent with two samples and 100 per cent with 3 samples. Sputum microscopy not only confirms the diagnosis, but also indicates the degree of infectivity and response to treatment Fig. 1 shows the criteria of diagnosis and initiation of treatment.

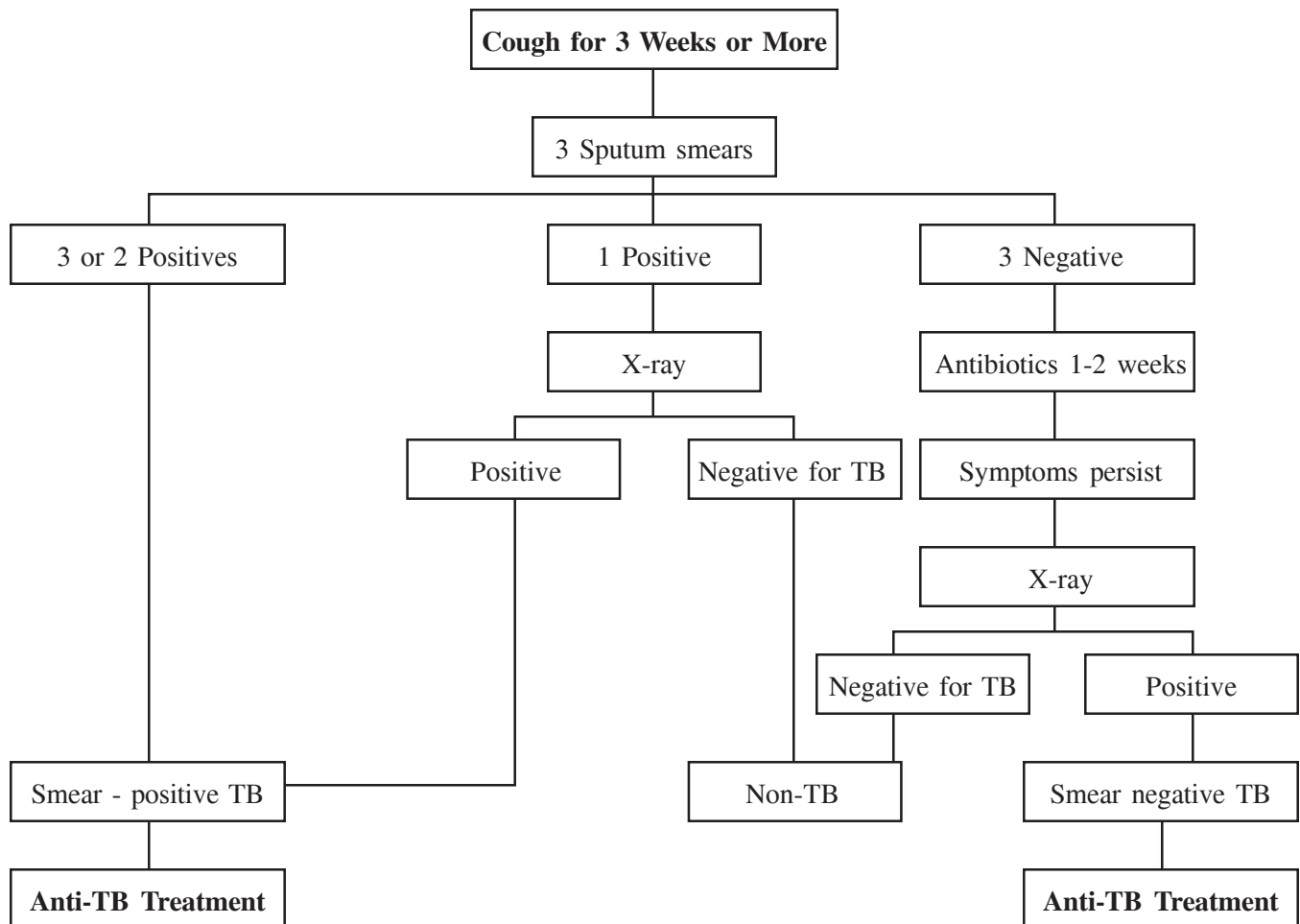


Fig. 1: Diagnosis of tuberculosis in RNTCP

All patients are provided short-course chemotherapy free of charge. During the intensive phase of chemotherapy all the drugs are administered under direct supervision called Direct observed Therapy short-term (DOTS). DOTS is a community-based tuberculosis treatment and care strategy which combines the benefits of supervised treatment, and the benefits of community-based care and support. It ensures high cure rates through its three components: appropriate medical treatment, supervision and motivation by a health or non-health worker, and monitoring of disease status by the health services. DOTS is given by peripheral health staff such as MPWs, or through voluntary workers such as teachers, anganwadi workers, dais, ex-patients, social workers etc. They are known as DOT 'Agent' and paid incentive/honorarium of Rs. 150 per patient completing the treatment.

The success of DOTS depends on five components:

- Political commitment
- Good quality sputum microscopy
- Directly observed treatment
- Uninterrupted supply of good quality drugs
- Accountability

The drugs are supplied in patient-wise boxes containing the full course of treatment, and packaged in blister packs. For the intensive phase, each blister pack contains one day's medication. For the continuation phase, each blister pack contains one weeks supply of medication. The combipack drugs for extension of intensive phase are supplied separately.

DIRECTLY OBSERVED TREATMENT, SHORT COURSE (DOTS) CHEMOTHERAPY

DOTS is a strategy to ensure cure by providing the most effective medicine and confirming that it is taken. It is the only strategy which has been documented to be effective world-wide on a programme basis. In DOTS, during the intensive phase of treatment a health worker or other trained person watches as the patient swallows the drug in his presence. During continuation phase, the patient is issued medicine for one week in a multiblister combipack, of which the first dose is swallowed by the patient in the presence of health worker or trained person. The consumption of medicine in the continuation phase is also checked by return of empty multiblister combipack, when the patient comes to collect medicine for the next week. The drugs are provided in patient-wise boxes with sufficient shelf-life. In the programme alternate-day treatment is used.

The cases are divided into three types of categories – category I, category II and category III. The Table given below shows the type of cases included in each kind of category, the treatment regimen and the duration of treatment.

In the end it may be stated that the main problem of chemotherapy today is not the need to introduce new regimens or more potent drugs, but to apply the existing ones successfully. The cornerstone of successful chemotherapy is adequate and regular drug intake. Patient compliance is critically important throughout the prescribed period of treatment. All other considerations are secondary.

TREATMENT REGIMENT			SPUTUM, EXAMINATIONS FOR PULMONARY TB			
Category of treatment	Type of patient	Regimen*	Pre-treatment sputum	Test at month	IF: result is	THEN:
Category I	New sputum smear-positive	2 (HRZE) ₃	+	2	–	Start continuation phase, test sputum again at 4 and 6 months [#]
					+	Continue intensive phase for one more months [#]
	Seriously ill sputum smear-negative Seriously ill extra-pulmonary**	4(HR) ₃	–	2	–	Start continuation phase, test sputum again at 6 months [#] .
					+	Continue intensive phase for one more month, test sputum again at 3, 4 and 7 months [#]

TREATMENT REGIMENT			SPUTUM, EXAMINATIONS FOR PULMONARY TB			
Category of treatment	Type of patient	Regimen*	Pre-treatment sputum	Test at month	IF: result is	THEN:
Category II	Sputum smear-positive Relapse***	2 (HRZES) ₃ 1 (HRZE) ₃ 5 (HRE) ₃	+	3	–	Start continuation phase, test sputum again at 5 and 6 months [#]
	Sputum smear-positive Failure***					
	Sputum smear-positive treatment after default.				+	Continue intensive phase for one more month, test sputum again at 4, 6 and 9 months [#]
Category III	Sputum smear-negative, not seriously ill	2 (HRZ) ₃ 4 (HR) ₃	–	2	–	Start continuation phase, test sputum again at 6 months [#]
	Extra-pulmonary, not seriously ill				+	Re-register the patient and begin Category II treatment [#]

* The number before the letters refers to the number of months of treatment. The subscript after the letters refers to the number of doses per week. H: Isoniazid (600 mg), R: Rifampicin (450 mg), Z: Pyrazinamide (1500 mg), E: Ethambutol (1200 mg), S: Streptomycin (750 mg). Patients who weigh more than 60 kg receive additional Rifampicin 150 mg. Patients more than 50 years old receive streptomycin 500 mg. Patients in categories I and II, who have a positive sputum smear at the end of the initial intensive phase, receive an additional month of intensive phase treatment.

** Examples of seriously ill extra-pulmonary TB cases are meningitis, disseminated TB, tuberculosis pericarditis, peritonitis, bilateral or extensive pleurisy, spinal TB with neurological complications and intestinal and genito-urinary TB.

*** In rare and exceptional cases, patients who are sputum smear-negative or who have extra-pulmonary disease can have Relapse or Failure. This diagnosis in all such cases should always be made by an MO and should be supported by culture or histological evidence of current, active tuberculosis. In these cases, the patient should be categorized as 'Other' and given Category II treatment.

Any patient treated with Category I or Category III who has a positive smear at 5, 6 or 7 months of treatment should be considered a Failure and started on Category II treatment, afresh.

NATIONAL AIDS CONTROL PROGRAMME

The National AIDS Control Programme Phase II has two key objectives:

- To reduce the spread of HIV infection in India; and
- To strengthen India's capacity to respond to HIV/AIDS on a long term basis.

Operationally, the project interventions would seek to achieve the following by the end of the project:

- to keep HIV prevalence rate below 5% of adult population in Maharashtra, below 3% in Andhra Pradesh, Karnataka, Manipur, Tamil Nadu where the HIV prevalence is moderate and below 1% in remaining States, where the epidemic is still at a nascent stage

- to reduce blood – borne transmission of HIV to less than 1%;
- to attain awareness level of not less than 90% among the youth and others in the reproductive age group; and
- to achieve condom use of not less than 90% among high risk categories like commercial sex workers.

During 2003-2004; the programme on the prevention and control of HIV/AIDS has been given a more balanced combination of initiatives to cope up with the emerging profile of the epidemic. The initiatives are as follows:

A. Prevention

1. High risk populations

- a) Targeted interventions
- b) STD treatment
- c) Condom programming
- d) Multisectoral collaboration
- e) Public private partnership

2. Low risk populations

- a) Holistic IEC and social mobilization
- b) Safe blood
- c) Voluntary counseling and testing
- d) AIDS vaccine initiative
- e) Sensitizing youth and adolescents
- f) Work place interventions

B. Care (Low cost care and support)

1. Prevention of parent to child transmission
2. Management of HIV-TB co-infection
3. Treatment of opportunistic infections
4. Piloting ART
5. Post exposure prophylaxis

C. Surveillance (Evidence based planning)

1. Annual sentinel surveillance
2. AIDS case detection
3. Mapping of high risk groups
4. Behavioral surveillance

NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS

The National Programme for Control of Blindness (NPCB) was launched in the year 1976 as a 100 per cent centrally sponsored programme and incorporated the earlier trachoma control programme started in the year 1968.

The strategy of the programme is as follows:

1. Strengthening service delivery;
2. Developing human resources for eye care;
3. Promoting out reach activities and public awareness;
4. Developing institutional capacity; and
5. To establish eye care facilities for every 5 lakh persons.

Based upon the findings of surveys conducted during 1998-99 and 1999-2000 following measures were included in the programme.

Revised Strategies:

- To make NPCB more comprehensive by strengthening services for other causes of blindness like corneal blindness (requiring transplantation of donated eyes), refractive errors in school going children, improving follow-up services of cataract operated persons and treating other causes of blindness like glaucoma;
- To shift from the eye camp approach to a fixed facility surgical approach and from conventional surgery to IOL (Intra Ocular Lens) implantation for better quality of post operative vision in operated patients;
- To expand the World Bank project activities like construction of dedicated eye operation theatres, eye wards at district level, training of eye surgeons in modern cataract surgery and other eye surgeries and supply of ophthalmic equipments etc. to the whole country;
- To strengthen participation of Voluntary Organizations in the programme and to earmark geographic areas to NGOs and Government Hospitals to avoid duplication of effort and improve the performance of Government Units like Medical Colleges, District Hospitals, Sub Divisional Hospitals; Community Health Centres, Primary Health Centres etc.;
- To enhance the coverage of eye care services in tribal and other under-served areas through identification of bilateral blind patients, preparation of village-wise blind register and giving preference to bilateral blind patients for cataract surgery.

IODINE DEFICIENCY DISORDERS (IDD) PROGRAMME

The IDD Control Programme – has been initiated in which nation-wide, rather than area-specific use of iodized salt is being promoted. It was decided as a national policy to fortify all edible salt in a phased manner by end of 8th Plan. The essential components of the national IDD programme are use of iodized salt in place of common salt, monitoring and surveillance, manpower training and mass communication.

17 *Nursing Kit for Disasters*

A nursing kit for emergencies has been designed keeping in mind the various activities to be undertaken by the nurse. The contents of this kit will however need to be modified and adapted to the local situation.

1. Dressing Materials
2. First Aid Medications: Sterilized dressing, Antiseptic in a bottle, Scissors, Forceps.
3. ORS packets
4. IFA tablets
5. DD kits
6. Contraceptives: Oral Contraceptive Pills, Condoms
7. Assessment articles: Infant weighing scale, bathroom scale, Thermometer, Measuring Tape, Torch
8. Hand Washing articles: Soap, Hand Towel
9. Urine Testing Kit (Can be sourced from Public health care provider)
10. Haemoglobin Estimation kit (Can be sourced from Public health care provider)
11. Chloroscope (Can be sourced from Public health care provider)
12. Chlorine Tablets (Can be sourced from Public health care provider)
13. Labeled Medicines for Essential Treatment of Minor ailments: Paracetamol, Chloroquine, Co-trimoxazole, Vitamin A, Gentian Violet
14. Stationery (Paper, Pencil, Pen, Scale, Eraser)
15. Family Health Cards
16. Laminated Charts for Management of Childhood Illness.
17. General Health Questionnaire for Screening for Mental Health Problems

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ANNEX 1

GUIDE FOR MAPPING THE CATCHMENT AREA FOR OUTREACH SERVICES IN AN EMERGENCY

Module for Training of Nurses in providing outreach services during emergencies

Introductory note to the investigator:

Mapping is a participatory rural appraisal (PRA) technique wherein the investigating team seeks to involve the residents of the catchment area in developing a map that depicts the locations of key parameters of interest. The local people are natives of the area and therefore, have a greater ability to represent their surroundings accurately and diagrammatically irrespective of their literacy status. This PRA technique is particularly useful since it gives accurate information within a short period of time. At the same time, it is highly enjoyable for all involved – particularly the local residents.

Mapping also allows the investigators to gain insights into the ways in which the local people think as well as their priorities and reasons for wanting/not wanting, doing/not doing certain things. Through various mapping exercises either in series or in combination, it is possible to study various aspects of their life.

This particular exercise in mapping seeks to understand the availability of health resources within/close to the area. Such a map will enable the research team to identify gaps in access to health facilities.

POINTS TO REMEMBER:

- Before going to the site, spend some time thinking about the exercise. For example, how are you going to go about it? Who all can be involved? Why do you need to do the exercise? What are you going to depict?
- Mapping is usually conducted in the center of the locality. Have a fair idea about the terrain and the features of the area you are visiting.
- The mapping exercise involves as many people as are available at the site. More and more people usually join when the map is being developed. It is important to brief the people about the exercise and its purpose right in the beginning.
- Past experience shows that even illiterate residents can draw accurate maps. So, let one or more residents draw the map themselves.
- Mapping does not require any materials if done spontaneously. However, it is advisable to carry large sheets of chart paper and markers. The map can from the beginning be drawn on the chart paper itself. This record can then be carried back from the field. However, if the map has been spontaneously made on the ground, it can be copied onto chart paper.

- Mapping on paper can be done with pencil and marker. It is advisable to start the exercise with pencils and then use markers after the details and features are finalized.
- Remember, mapping is always accompanied by active discussion among the residents. The role of the investigating team is to listen actively and make sure that the required information is depicted on the map. From time to time, they can ask questions which lead the mapping exercise in the desired direction.

CONDUCTING THE MAPPING EXERCISE

1. **Reach** the center of the catchment area and start talking to people who show some curiosity in you. In particular, try to talk to women who are in the 15-44 year age group. The well/river or the Anganwadi center is usually a good place to find a group of target group women.
2. **Give a small introduction** such as: “Good morning. I have come from an organization which works with people living in areas affected by the disaster. We are interested in studying the health and nutrition issues in the area, and in particular, the health care facilities available to you and your family in the village. We would like to know the problems you face in obtaining health care when you fall ill. We welcome ideas which can help us in developing outreach health facilities right here in the village.”
3. **Start** by asking small questions such as: Where do you go if you fall ill? Is there a doctor in the village? A nurse?
4. **Keep the discussion informal.** Once 4-5 people have become involved and the discussion heats up, suggest using the ground to depict the exact locations. Involve the local residents in the selection of the spot. It should be a flat place which is fairly open so that active discussion is possible.
5. **Bring out the chart paper** and pass pencils around so that each person can make his/her contribution.
6. Always **encourage women** to participate. Usually women are shy and not forthcoming when men become involved. Try as much as possible to keep the men out without being rude. Your encouragement can motivate women to freely contribute especially since they are intimately involved with looking after the health needs of family members.
7. **Facilitate** the exercise in such a way so as to promote participation. Do not interrupt the flow of work once it gets going. Let the people argue among themselves and come to decisions regarding size, color, shape, location, etc.
8. **Ensure** that the map is clearly labeled after consensus is reached among the group members.
9. The range of questions that will need to be asked to ensure that the health infrastructure map for the village is complete include:

Questions to obtain the general layout of the site

- Okay, let's start. What is the shape of the site? Can you draw the boundaries? What is the village surrounded by? For example, roads, mountains, rivers, ponds, etc. which is the approach road? Where does this road go down further?
- Which are roads/lanes/paths within the area?
- Where are we at the moment?
- Where are the houses, the fields, school, temple, Anganwadi center etc?
- What are the chief occupations of the people in this area?
- Where does the village head live? Where do the farmers with their own land live? Where do agricultural laborers live? Where do other villagers (mention people with different occupations) live? Where do the poorest people in the village live? Which area was most affected by the disaster?
- What are the various religions that people in this village follow? Where do they live?
- Show the houses of 0-3 years children, 15-44 years women and 12-19 years adolescent girls.
- Which are the different drinking water sources?
- What are means of communication? Where is the bus stand, auto stand? What are the different means would be available in night? How many houses having 3 wheelers and 4 wheelers?

Questions to obtain information on available health care facilities

- Is there a government health centre in the village? Where is it located? Where do the doctor and the nurse from the centre live?
- Are there any doctors in the village? Where do they live? Where do they practice? How many have recognised degree like MBBS, BHMS, BAMS, DHMS, and BUMS?
- Are there any faith healers or ojhas in your village? Where do they live?
- Is there any shop, chemist or individual from which you can purchase medicines? Where it is located? If outside the village, how far is it from this village?
- Who gives/ From where do you obtain ORS packets? Where is it? Please indicate all such places where you can buy ORS packets on the map.

- What about family planning materials? Is there any place where you can get them? Within the village? Outside the village? How far away from the village?
- How far is the nearest hospital? Where is it located?
- Is there an Anganwadi centre? Where does the Anganwadi worker live? How many children of age group 3-6 years are going to the Anganwadi?
- Where are most of the deliveries in the village conducted? At home or some where else?
- Do you have access to DDK? In future if there is a clean place which can be used as a delivery place then what is your opinion about the place.

At the end of the discussion, sit back and review the entire information depicted on the map in brief. This will help in identifying any missing information or links required to explain the collected information.

THANK THE PARTICIPANTS FOR THEIR ACTIVE PARTICIPATION IN THE MAPPING EXERCISE.

FAMILY HEALTH CARD

Date of Visit_____

I) FAMILY SCHEDULE

Age/Sex: _____

Address/Village: _____

Religion: Hindu/Muslim/Christian/Others

House : Pucca /Semi pucca /Kachha / Makeshift shelter (Camp)/ Other (Specify) _____

Water Supply: Well/ Tap/ Both/ Other (Specify) _____

Latrine: Service/ Water Seal/ Open

Drainage: Open/Closed/ No Drainage facility

Other Members of the Family:

[illegible]

* For Children less than 1 month, ask for Date of Birth and write exact age in days. ** Codes for education: Illiterate=1, 0-4 = 2, 5-7 = 3, 8-10=4, 11-12=5, Graduation=6, Post graduation & above=7

II) MOTHER SCHEDULE

Is there a pregnant lady in the family? If yes, complete the table below. If no, go to CHILD SCHEDULE

[illegible]

III) CHILD SCHEDULE Is there a child below 5 years in the family? If yes, complete the table below. If no, go to CHRONIC ILLNESS SCHEDULE

Name of child			
Date of Birth			
Age in completed months/ Sex			
Was the delivery conducted at Inst=1/ Home=2?			
If home delivery, was DD kit used? (Yes/No)			
Immunization, BCG, OPV (at birth) (Yes/No)			
Immunization, DPT1, OPV (Yes/No)			
Immunization, DPT2, OPV (Yes/No)			
Immunization, DPT3, OPV (Yes/No)			
Immunization, Measles (Yes/No)			
Immunization, DPT, OPV (booster) (Yes/No)			
For Child less than 3 yrs; Was a dose of Vit. A given in the last six months? (Yes/No)			
Weight of the child			
Nutritional Status (See from Growth Chart) (Normal, Grade I, Grade II, Grade III, Grade IV)			
Visible severe wasting/Swelling or oedema both feet (Yes/No)			
Pallor (Yes/No)			

If child is less than one year old, complete the box given below or else go to next schedule.

Simple Rapid Assessment of Breastfeeding

Ask: How old is the baby?

Age _____

1. Are you breastfeeding him/her?
2. Is the baby getting anything else to drink or eat?
3. Is the baby able to suckle the breast?
4. Have you any difficulties with breastfeeding?

Look:

5. Does the baby look visibly thin?
6. Is the baby lethargic, perhaps ill?

IV) CHRONIC ILLNESS SCHEDULE

Is anyone in the family suffering from any chronic disease? (Yes/No). If yes, fill in the information below, If No, go to next schedule.

Name of family member: _____

Name of Disease: Tuberculosis/ Leprosy/ Diabetes Mellitus/ Hypertension/ Heart Disease/ Epilepsy/ Others
(Specify) _____

Status of treatment: On regular Treatment/ irregular/ Stopped treatment.

V) FAMILY PLANNING SCHEDULE (for eligible couples)

Are you using any method of contraception/ Family Planning? (Yes/No)

If yes, State the method: oral pills/Condom/IUD/ Terminal Methods (tubectomy, vasectomy)/ Others (Specify)

If no, do you want another child? (Yes/No)

If yes, do you want a child now or after some time? Now/Later

VI) MISCELLANEOUS:

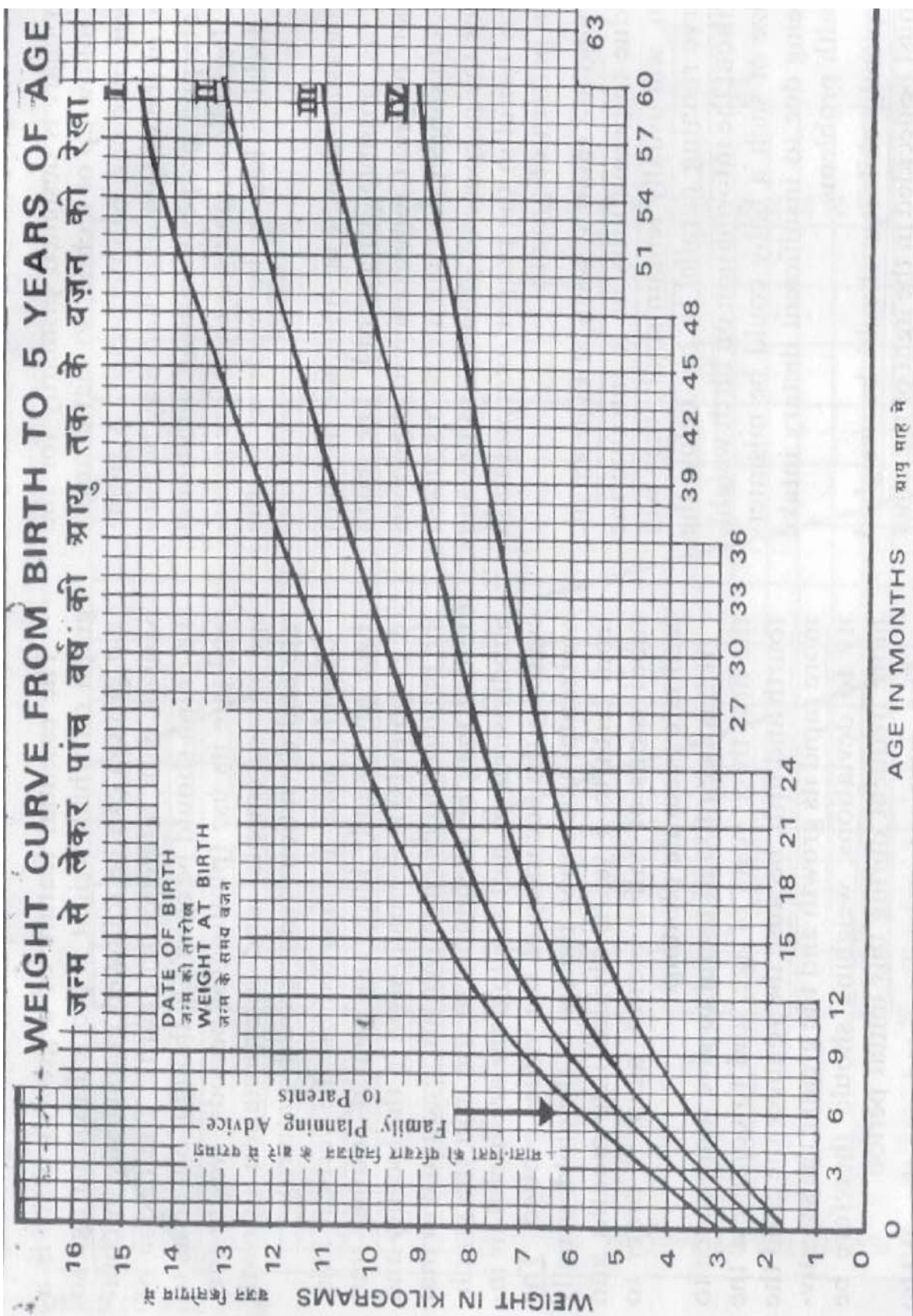
Is there anybody in the family suffering from any disability/handicap? (Yes/No)

If yes, specify _____

Was there a death in the family in the last one year? (Yes/No)

If yes, what was the cause of death? _____

GROWTH CHART



Field Guide for filling the Family Health Card

Household Survey using Family Health Card will help in collecting the quantitative data required for assessing the current status of services, areas for improvement and the number of beneficiaries for the services planned in the future. It consists of the following:

1. Family Schedule
2. Mother schedule
3. Child Schedule
4. Chronic Illness Schedule
5. Family Planning Schedule
6. Miscellaneous

Method for numbering households (Family ID No.) to be decided by the institution providing services to the catchment area. The usual practice is to consider all members taking meals from a common kitchen as 'one household'.

Materials required: Family Health Card, Stationery (pen, pencil, eraser etc.), Measuring Tape, Weighing Machine.

Respondent: The Head of the Family will be the respondent of choice for all the schedules, except mother and child schedule. Additional inputs could be taken from other adults in the family for these schedules. (Eg: wife of head, pregnant lady, mother-in-law etc). In the absence of head of family, other adults in the family can also be consulted for filling up the schedules.

IMPORTANT

It is important to assess the state of mind of the respondent before beginning the interview. If the respondent is greatly bereaved, it would not be advisable to conduct the interview, as it could cause further grief and the information provided may also be inaccurate. In such a situation, it would be advisable to fix another date and time for the interview.

Introduce yourself to the Respondent: Give a small introduction such as: "Good morning. I have come from an organization which works with people living in areas affected by the disaster. We are interested in studying the health and nutrition issues in the area, and in particular, the health care facilities available to you and your family in the village. We welcome ideas which can help us in developing outreach health facilities right here in the village. May I ask you a few questions regarding the health status of you and your family? It would only take about 20 minutes."

I Family Schedule

- Write down clearly the complete name of the head of the family along with age and sex. Also write down the complete address in order to facilitate proper identification.
- Enquire regarding the Education level (Codes for education: Illiterate=1, 0-4 = 2, 5-7 = 3, 8-10=4, 11-12=5, Graduation=6, Post graduation & above=7), Religion, and condition of house.
- Assess the environmental sanitation by enquiring about bathroom, latrine, waste disposal and drainage.
- Fill out details regarding other family members including name, relationship with head, age (For Children less than 1 month, ask for Date of Birth and write exact age in days), sex, education (Codes for

education: Illiterate=1, 0-4 = 2, 5-7 = 3, 8-10=4, 11-12=5, Graduation=6, Post graduation & above=7) and marital status.

II Mother Schedule

This schedule is to be filled only if there is a pregnant woman in the family, or else go to Child Schedule.

- Write down clearly the complete name of the pregnant lady.
- Ask her if she can recall the date of the first day of her last menstrual period (LMP). If she cannot recall the exact date, assist the lady by asking her to recall any major event or festival during that time.
- Calculate Expected Date of Delivery (EDD) by adding nine months and seven days to the LMP.

Examples of calculation of EDD:

LMP	9th January 2005	20th May 2004	12th November 2005
EDD	16th October 2005	27th February 2005	19th August 2006

- Enquire about the ANC checkups received till date. Also, ask whether the pregnant woman has received TT injection and whether she is consuming IFA tablets.
- Measure Height (in cms) with a measuring tape and Weight (in kgs) using a bathroom scale. Measure BP.
- Examine the lady for pallor. (Look at palpebral conjunctiva – lower eyelids, tongue and nails). Ask whether Urine Examination has been done or not.

III Child Schedule

This schedule is to be filled only if there is child less than 5 years of age in the family, or else go to Chronic Illness Schedule.

- Write down clearly the complete name of the child along with date of birth, age in completed months and sex.
- Enquire whether the child was born at home or in an institution. In case of home delivery enquire whether DD (Disposable Delivery) Kit was used.
- Enquire about the immunization status of the child. Ask, “Which vaccines has the child received till date?” If the respondent is unable to answer, ask for each vaccine. Also examine child for BCG scar.
- For Child less than 3 yrs; ask whether a dose of Vit. A given in the last six months.
- Measure weight of the child (in Kgs) using weighing machine. Assess the Nutritional Status of the child. (See from Growth Chart) (Normal, Grade I, Grade II, Grade III, Grade IV)

Weights of average well-fed healthy children should be above the uppermost line I.

Children whose weight falls between lines I & II (Grade I) are undernourished and require supplementary feeding at home.

Children whose weight falls between lines II & III (Grade II) are undernourished and require supplementary feeding at home.

Children whose weight falls between lines III & IV (Grade III) are severely malnourished. (Consult the doctor and follow his advice).

Children whose weight falls below line IV (Grade IV) will have to be hospitalized for treatment.

- For Child less than 3 yrs; ask whether a dose of Vit. A given in the last six months.
- Check for visible severe wasting: A child has visible severe wasting if the child looks all skin and bones. Remove all the child's clothes to check for wasting. The arms and legs of a severely wasted child look like sticks. The shoulder and buttocks are wasted and there are wrinkles on the buttocks and thighs. Visible wasting is a sign of *severe malnutrition*. A child with this sign should be referred urgently.
- Check for swelling (Oedema) of both feet: With your thumb, press gently for a few seconds. Swelling is present if there is depression left in the place where you pressed. This should be checked on the other foot also. The presence of swelling of both feet is a sign of severe *malnutrition*.

IMPORTANT

Any child with visible severe wasting or oedema both feet is severely malnourished and has high risk of dying. Such children should be referred urgently

- Examine the child for pallor. To check for palmar pallor hold the child's palm open by grasping it gently from the side. Do not stretch the fingers backwards. Compare the colour of the child's palm with your own palm. If the skin of the palm is very pale or so pale that it looks white, the child has severe palmar pallor. Such children should also be referred urgently.
- If child is less than one year old, conduct Simple Rapid Assessment of Breast feeding. This involves asking certain questions regarding breastfeeding and looking for visible thinning or any illness or lethargy. If any of the below are present, refer the child to a health facility for Full Assessment.

Reasons to refer for Full Assessment:

- _____ Not breastfed
- _____ Breastfed, but feeding not age-appropriate
under 6 months, not exclusively breastfed
over 6 months, and given no complementary foods
- _____ Baby unable to suckle the breast
- _____ Mother has other difficulties with breastfeeding
- _____ Mother requests breastmilk substitutes
- _____ Baby visibly thin
- _____ Baby lethargic, perhaps ill

IV Chronic Illness Schedule

- Enquire whether any member of the family is suffering from any chronic disease. (Duration more than 1 month). If yes, write down the complete name of the family member, identify and write the disease (or describe in patient's own words in the space given). Also enquire about the status of treatment. If possible, ask for the case paper or treatment records, if any. Remember to reassure the patient (or respondent) that this information would be strictly confidential.

V Family Planning Schedule

This schedule is to be filled only if there is an 'eligible couple' in the family, or else go to next Schedule. An 'eligible couple' refers to a currently married couple wherein the wife is in the reproductive age, which is generally assumed to lie between the ages of 15 and 45 years.

- Enquire whether the couple is using any method of family planning/ contraception. If yes, ask the method. If they are not using any method of family planning, ask whether they want a child. If the answer is yes, ask whether they want the child now or later.

All couples currently not using any method of contraception and not wanting a child should be strongly counseled for adopting a permanent or temporary method of contraception.

All couples currently not using any method of contraception and wanting a child later should be strongly counseled for adopting a temporary method of contraception.

VI Miscellaneous Schedule

- Enquire whether any member in the family is suffering from any disability or handicap. Describe the disability or handicap in the space provided.
- Enquire if there was a death in the family in the last one year. Ask for the cause of death. Write down the cause of death from the death certificate, if available.

ANNEX 3

AGE: UP 2 MONTHS



ASSESSMENT	SIGNS	TREATMENT
Step 1 Check for Signs of serious illness	• Convulsions: Ask the mother if young infant has convulsions. • Not able to feed: If a mother says that the infant is not able to feed, watch her try to feed the infant to confirm if infant is able to feed. • Fast breathing: The breathing rate of 60 or more breaths per minute is taken as '<i>fast breathing</i>' in a young infant. If the first count is 60 or more, repeat the count. If the second time also the breathing rate is 60 breaths or more, the young infant has fast breathing. • Severe chest indrawing: Mild chest indrawing is normal in young infant because the chest wall is soft. Severe chest indrawing is quite deep and easy to see. • Nasal flaring: Nasal flaring is widening of the nostrils when the young infant breathes in. • Feels hot or unusually cold: Feel the 'infant' stomach or axilla (underarm) and determine if it feels hot or unusually cold. • 10 or more skin pustules or a big boil. • Lethargic or unconscious: A lethargic young infant is not awake and alert when she should be and is difficult to awake by stimulation or has movements less than normal. An unconscious infant cannot be wakened at all. • Blood in stool	If any one sign is present, Refer the child • Explain the need for referral • Calm her fears and discuss possible solutions for any difficulty in referral • Advise the mother to continue to breast feed the baby and keep the sick young infant warm • Write a referral slip
Step 2 Check for Signs of local infection	• Umbilical redness or umbilicus draining pus OR • Skin pustules (Less than 10 skin pustules)	• Give oral co-trimoxazole (or amoxicillin) for 5 days. • Teach the mother to give local treatment for skin pustules and umbilical infection. • Advise mother to give home care for the young infant.

STEP 3

TREAT ALL YOUNG INFANTS

A) Refer young infants with a sign in red box.



B) Treatment of any sign in yellow box(local infection):

- Give oral co-trimoxazole (or amoxicillin) for 5 days
- Teach the mother to give local treatment for skin pustules and umbilical infection
- Advise mother to give home care for the young infant

AGE or WEIGHT	COTRIMOXAZOLE (trimethoprim + sulphamethoxazole) • Give two times daily for 5 days		AMOXICILLIN • Give three times daily for 5 days	
	Adult Tablet single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	Pediatric Tablet (20 mg trimethoprim + 100 mg sulphamethoxazole)	Tablet 250 mg	Syrup 125 mg in 5 ml
Birth up to 1 month (< 3 kg)		1/2		1.25 ml
1 month up to 2 months (3-4 kg)	1/4	1	1/4	2.5 ml

C) Advise Mother to Give Home Care:

Steps in teaching the mother oral drugs

- Determine the appropriate drugs and dosage.
- Demonstrate how to measure a dose.
- Watch the mother practise measuring a dose by herself.
- Ask the mother to give the first dose to her child.
- Explain carefully how to give the drug, then label and package the drug.
- Explain that all the medicine must be used to finish the course of treatment, even if the infant gets better.
- Check the mother's understanding before she leaves.

Home care advice is given to all those young infants who are not being referred



- Breastfeed frequently, as often and for as long as the infant wants, day or night, during sickness and health. Do not give water, other liquids or foods.
- In cool weather, cover the infant's head and feet and dress the infant with extra clothing. Make sure the young infant stays warm at all times.
- Advise mother to wash hands with soap and water after defecation and after cleaning the bottom of the baby.
- Do not apply anything on the cord and umbilicus dry.
- Advise the mother to return immediately if the young infant has any of these danger signs:
 - Breastfeeding or drinking poorly
 - Becomes sicker
 - Develops a fever or feels cold to touch
 - Fast breathing
 - Difficult breathing
 - Blood in stools

ANNEX 3

AGE: 2 MONTHS UP TO 5 YEARS

Step 1: Check for General Danger Signs in all children	- Not able to drink / breastfeed OR - Vomits everything OR - The child is lethargic/ unconscious OR - The child has had convulsions	Refer To Hospital urgently if any danger sign is present. if able to take orally, give one dose of cotrimoxazole before referral
Step 2: Assess Cough or Difficult breathing, if present - Look for chest indrawing - Count the breathing rate in one minute: Breathing rate is ___/ minute	Chest Indrawing	- Refer urgently to hospital, if possible - Give first dose of cotrimoxazole or amoxicillin before referral - If referral is not possible: Give oral amoxicillin for 5 days
	Fast Breathing (2 months up to 12 months - 50 or more 12 months up to 5 years - 40 or more)	- Give cotrimoxazole for 5 days - Provide home care
	None of the above signs	Provide home care
Step 3: Assess Diarrhoea, if present ASK:- "Is there blood in the stool?" "Is diarrhoea of more than two weeks duration?" "Look at the child's general condition. Is the child: - Lethargic or unconscious? - Restless and irritable? Offer the child a fluid to drink - Drinks poorly - Drinks eagerly - Drinks normally Pinch the skin over the abdomen - Very slow - Slow - Normal	Diarrhoea for 14 days or more	Refer to a hospital
	If the child has two or more of the following signs she has SEVERE DEHYDRATION : - Lethargic or unconscious - Sunken eyes - Not able to drink or drinking poorly - Skin pinch goes back very slowly.	Refer urgently to a hospital for treatment of severe dehydration. If the child is able to drink, give frequent sips of ORS on the way.
	If the child has two or more of the following signs she has SOME DEHYDRATION : - Restless, irritable - Sunken eyes - Drinks eagerly, thirsty - Skin pinch goes back slowly.	- Treat some dehydration with ORS - Provide home care
	Blood in the stool.	- Give cotrimoxazole for 5 days. (2 Pediatric tablet twice daily for a child 2 up to 12 months and 3 tablets twice daily for a child 12 months up to 5 years)
	No dehydration	Provide home care
Step 4 Assess Fever, if present (By history/ feels hot)	NO APPARENT CAUSE OF FEVER (Malaria)	- Give Chloroquine for 3 days. - Give paracetamol every 6 hours until high fever is gone
	Child has another cause of Fever	- Give paracetamol every 6 hours until high fever is gone - Advise extra fluids, continue feeding and advise about danger signs (<i>Not able to drink or breastfeed, becomes sicker</i>) - If fever is present every day for more than 7 days, refer for assessment.
Step 5 Check malnutrition and anemia in all children	- Visible Severe Wasting or - Oedema of both feet (Severe Malnutrition) Severe Palmar Pallor	- Refer Urgently - Give vitamin A(100,000 I.U) for age 9-12 months and 200,000 I.U for age 1-5 years.
	All Other Cases	- Up to 6 months of age: Encourage mothers to exclusively breastfeed as often as the child wants, day and night, at least 8 times in 24 hours. Do not give any other fluid or food. 6 months to 12 months: Breastfeed as often as the child wants. In addition give adequate servings of locally available complementary foods at least 3 times a day. 12 months to 5 years: Breastfeed as often as the child wants. Give adequate serving of locally available complimentary food at least 5 times a day.
Step 6: Give Measles Vaccine	Give Measles vaccine, if above 9 months of age	Give measles vaccine to all children above nine months age

STEP 7

TREAT ALL CHILDREN

- Refer all cases with general danger signs or a sign in any of the red box.
- Treat all cases with a sign in yellow box with drugs and home care advice.
- For children in green boxes advise home care.

Treat Fast Breathing or Blood in Stools with cotrimoxazole for 5 days			Treat malaria with Chloroquine (150 mg base) Tablet for 3 days.			Treat High Fever
Age (weight) of child	Cotrimoxazole Doses Give 2 times daily Paediatric tablet (20 mg trimethoprim and 100 mg sulpha- methoxazole)	Amoxicillin Doses Give 3 times daily Tablet (250 mg)	DAY 1	DAY 2	DAY 3	Paracetamol (500 mg tablet) Give paracetamol every 6 hours until high fever is gone
2 months upto 12 months	2 tablets	½ tablet	1/2	1/2	1/4	1/4
12 months upto 5 years	3 tablets	1 tablet	1	1	1/2	1/3

Treat diarrhoea with dehydration with Oral Rehydration Salt (ORS) Solution

ORS	AGE			
	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
Cups	2	3	5	7
				

Home care for cough or cold • Continue exclusive breastfeeding for children up to 6 months • Give extra fluids to older children • If possible, give cough soothing remedies like warm tea. • Teach the mother to look for signs of illness when to return ➤ Child becomes sicker; ➤ Not able to drink or breast feed, ➤ Fast Breathing; ➤ Difficult Breathing; ➤ Develops a fever	Home care for diarrhea no dehydration 1. Give extra fluid (as much as the child will take) Such as: ORS, milk, yoghurt drink, vegetable soup, fruit juice, plain clean water (or other locally available fluids). For exclusively breastfed infants 6 months or less use ORS only 2. Breast feed frequently 3. Show the mother how much fluid to give after each stool in addition to the usual fluid intake: – Up to 2 years: half cup. Give more if the child wants more. – 2 years or more: full cup. Give more if the child wants more. 4. Continue feeding 5. When to return immediately. Tell the mother to return to the health worker if: – The child is not able to drink or breastfeeding; – The child becomes sicker; – There is blood in stool; – The child develops a fever.
---	---

ANNEX 4

SCREENING TOOL FOR MENTAL HEALTH PROBLEMS (GENERAL HEALTH QUESTIONNAIRE)

Name:

Address:

A. Family particulars

1. Name of the head of the household:
2. Number of people in the family
3. Number of family members affected by Disaster

	☐	☐
Men	☐	☐
Women	☐	☐
Children	☐	☐
4. Loss due to Disaster (yes: 1; no:2)

Deaths	☐
Physical handicap	☐
Property loss	☐
Livelihood loss	☐
Land / crops	☐
5. Assistance received till now (yes: 1; no:2)

From Government	☐
From NGOs	☐
6. Type of assistance needed (yes: 1; no:2)

House/ household goods/ food	☐
Livelihood	☐
Education	☐
Medical	☐
Any other	☐

B. Individual particulars

- | | | |
|---|--------------------------|--------------------------|
| 1. Gender (male: 1; female: 2) | | ☐ |
| 2. Age | ☐ | ☐ |
| 3. Habits (yes: 1; no: 2) | | |
| Alcohol | | ☐ |
| Tobacco chewing | | ☐ |
| Tobacco smoking | | ☐ |
| 4. Pre-existing diseases (yes: 1; no:2) | | |
| Diabetes | | ☐ |
| Hypertension | | ☐ |
| Heart disease | | ☐ |
| Asthma | | ☐ |
| Other diseases | | ☐ |
| Occupational disease | | ☐ |

C. General Health Questionnaire

We want to know how your health has been in general over the last few weeks. Choose the response that best applies to you. Thank you for answering all the questions.

Have you recently:

- | | |
|---|--------------------------|
| 1. been able to concentrate on what you're doing? | ☐ |
| better than usual(0); same as usual(1); less than usual(2); much less than usual(3) | |
| 2. lost much sleep over worry? | ☐ |
| Not at all; no more than usual ;rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 3. felt that you are playing a useful part in things? | ☐ |
| more so than usual; same as usual; less so than usual; much less than usual | |
| (0) (1) (2) (3) | |
| 4. felt capable of making decisions about things? | ☐ |
| more so than usual; same as usual; less than usual; much less than usual | |
| (0) (1) (2) (3) | |
| 5. felt constantly under strain? | ☐ |
| Not at all; no more than usual; rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 6. felt you couldn't overcome your difficulties? | ☐ |
| Not at all; no more than usual; rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 7. been able to enjoy your normal day to day activities? | ☐ |
| more so than usual; same as usual; less so than usual; much less than usual | |
| (0) (1) (2) (3) | |
| 8. been able to face up to your problems? | ☐ |
| more so than usual; same as usual; less than usual; much less than usual | |
| (0) (1) (2) (3) | |
| 9. been feeling unhappy or depressed? | ☐ |
| not at all; no more than usual; rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 10. been losing confidence in yourself? | ☐ |
| not at all; no more than usual; rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 11. been thinking of yourself as a worthless person? | ☐ |
| not at all; no more than usual; rather more than usual; much more than usual | |
| (0) (1) (2) (3) | |
| 12. been feeling reasonably happy, all things considered? | ☐ |
| more so than usual; same as usual; less so than usual; much less than usual | |
| (0) (1) (2) (3) | |

Total score:

(Scores about 11-12 typical. Score >15 evidence of distress. Score >20 suggests severe problems and psychological distress)

