**Ministry of Health And Family Welfare
Government of India**

सत्यमेव जयते

TRAINING MODULE FOR PARA MEDICAL OFFICERS & HEALTH CARE WORKERS

National Programme on Climate Change and Human Health
MINISTRY OF HEALTH AND FAMILY WELFARE

**National Programme
on Climate Change
and Human Health**

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Chapter 1: **Climate Change and Mental Health**

Specific Learning Objectives:
- Mental health in context of climate change
- Interlinkages between climate change and mental health

The United Nations Framework Convention on Climate Change (UNFCCC), Article 1, defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." UNFCCC thus distinguishes between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes. Climate change can occur in three forms for all living beings. First, these are slowly emerging changes and thus not identifiable without using special measures, e.g., the rise of environmental temperature and pollution. The second category includes acute events, considered disasters, e.g., floods, droughts, landslides and avalanches. Thirdly, humans are subjected to acute and long-lasting climatic changes due to migration, which can be voluntary or forced. These changes influence mental health as well as sleep. They increase the risk of mental health and sleep disorders.

Pathways by which climate change can affect people's mental health and psychosocial well-being

Not enough attention has been paid to mental health and psychosocial well-being in climate change literature, with studies on the topic emerging only since 2007. The connections between climate change, mental health, and psychosocial well-being have been discussed mostly within the health frameworks of emergency and disaster management, particularly in the context of extreme weather events. However, knowledge on the topic is growing, and strong arguments can be made for expanding this focus beyond these frameworks to recognize the role of Mental Health Psychosocial support within broader climate actions.

There are direct and indirect pathways by which climate-related hazards, long-term risks, exposure pathways and vulnerabilities interrelate to impact mental health. These factors do not act in isolation. Instead, hazards may overlap (e.g., cascading events such as storms followed by floods). People may simultaneously be exposed to contaminated water, food insecurity, and mosquito breeding sites. The vulnerabilities of the existing population may be exacerbated by climate hazards and long-term climate risks, resulting in aggravated inequities. The effects have considerable implications for mental health and well-being.

Fig 1 Interlinkages between climate change and mental health with environmental, social and economic determinants of health
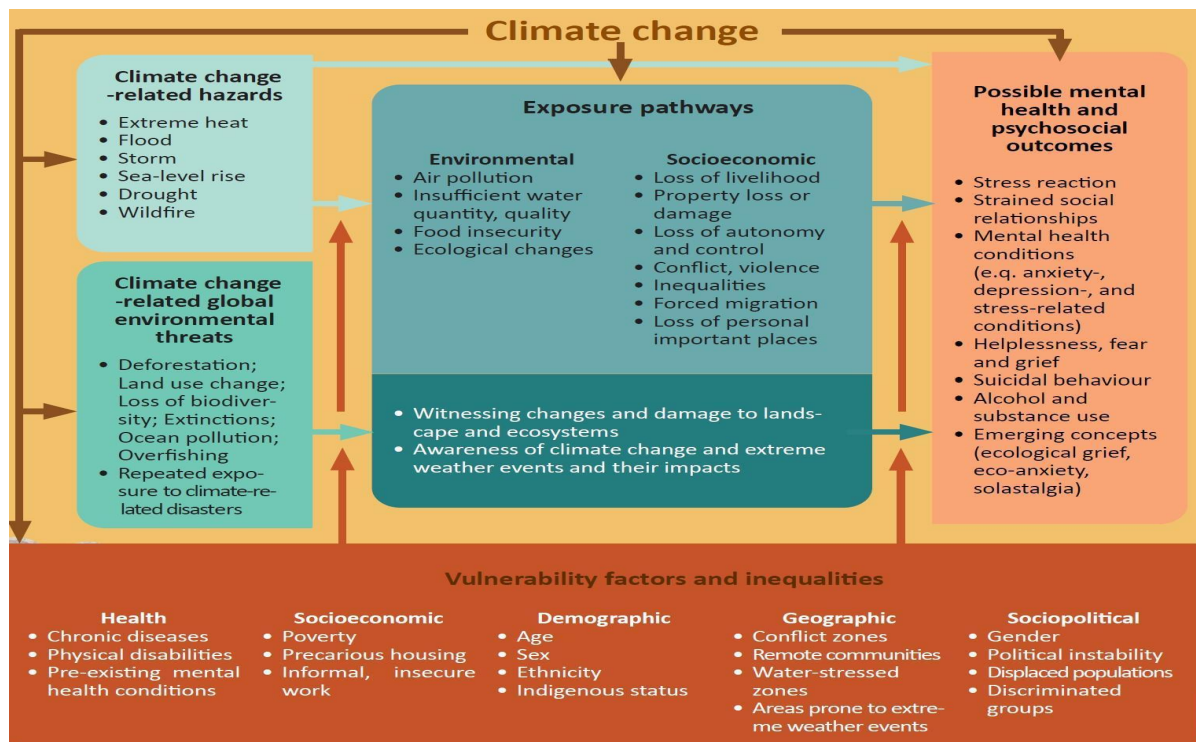
The environmental, social and economic determinants of mental health (identified as exposure pathways in Figure 1) include air quality, water quantity and quality, food security and safety, income and livelihoods, ecosystem changes and a number of other social and economic pathways.

For example, air pollution during periods of high temperatures can cause respiratory diseases that increase demand for health care services, reduce mobility and the capacity to work, and can lead to mental health consequences that range from minimal stress and distress to the development of mental health conditions, particularly in low-income settings.

The case of prolonged droughts demonstrates a clear example of the impacts of climate change on these determinants. Droughts significantly disrupt agricultural production and lead to loss of livelihood, leaving many communities in poverty, a factor clearly linked with many common mental disorders. Droughts can also lead to water scarcity and food insecurity, both of which can negatively impact mental health and increase the risk for mental health conditions, the latter of which is associated with developmental delays, mental health issues and neurological problems that can result from malnutrition.

Both food and water scarcity can also further contribute to population displacement, which disrupts family relationships and can leave those displaced with fewer resources, services,

and social support in the new community, all of which exacerbate mental health risks. Attention to the influence of climate change on determinants of mental health such as these is crucial for both understanding the impact and for taking climate action.

Climate change may also lead to increased conflict, or aggravated conflict dynamics, particularly in regions dependent on agriculture, and to forced migration for some and forced immobility in challenging environments for others. Inevitably, conflict negatively impacts mental health and well-being, with one in five persons exposed to it experiencing a mental health condition and countless others enduring distress in the face of adversity.

Meanwhile, migration is also commonly viewed as a risk factor for mental health and psychosocial problems, though more research is needed with populations migrating for reasons other than conflict.

Why should we worry? There have been increasing efforts to better understand the mental health impacts of climate change. Individuals and communities may experience many intense emotions in the face of a changing climate, including sadness, fear, despair, helplessness and grief along with sleep disturbances. Various terms have emerged to describe these responses, particularly among youth affected by climate change, including climate change anxiety, solastalgia, eco-anxiety, environmental distress, insomnia, sleep apnea, ecological grief and climate-related psychological distress.

Mental Health: WHO defines mental health as "a state of well-being in which every individual realises his or her own potential, can cope with the stresses of life, can work productively and fruitfully and is able to make a contribution to her or his community".

Mental Health and Psychosocial Support: The composite term "mental health and psychosocial support" (MHPSS) is used in the Inter-Agency Standing Committee (IASC) Guidelines for MHPSS in Emergency Settings to describe "any type of local or outside support that aims to protect or promote psychosocial well-being and/ or prevent or treat mental disorder". The global humanitarian system uses the term MHPSS to unite a broad range of actors responding to emergencies and to underscore the need for diverse, complementary approaches in providing appropriate support

Exercise

Q1. What is the United Nations Framework Convention on Climate Change (UNFCCC) definition of climate change?
a) Climate change is a change of climate that is solely due to natural causes.
b) Climate change is a change of climate that is attributed directly or indirectly to human activities that alter the composition of the global atmosphere.
c) Climate change is a change of climate that occurs only in developed countries.
d) Climate change is a change of climate that occurs in a specific geographic region.

Q2. What is one of the goals of the UNFCCC to address the impacts of climate change?
a) To mitigate the impacts of climate change by reducing emissions
b) To ignore the impacts of climate change
c) To increase the impacts of climate change
d) To limit the impacts of climate change to certain regions

Q3. What is the main reason for mental health and psychosocial well-being being impacted by climate change?
a) Changes in atmospheric composition
b) Natural climate variability
c) Exposure to climate-related hazards and long-term risks
d) All of the above

Q4. Which of the following is false about the pathway to climate related mental health problems?
a) Multiple hazards may occur simultaneously
b) Each climatic event can lead to multiple exposure pathways
c) Climate change doesn't directly cause a mental illness, but affects mental health by causing disruption to life
d) Factor related to changing climate interacts with population vulnerabilities and increases the chances of mental illness

Chapter 2: **Effects of climate change on Mental Health and Sleep Disorders**

Specific Learning Objectives:
- Mental health illnesses and sleep disorders linked to climate change
- Direct and indirect effects of climate change on mental health and sleep disorders
- Relationship between mental health and sleep disorders

Climate change can have harmful effects on health and mental health. Though most people will ultimately do well, many individuals impacted by extreme as well as slow emerging weather events experience a range of difficulties.

The mental health consequences of events linked to changing climate include

- Feeling sad or down
- Confused thinking or reduced ability to concentrate
- Excessive fears or worries or extreme feelings of guilt
- Extreme mood changes of highs and lows
- Significant tiredness, low energy, or problems in sleeping
- Detachment from reality (delusions), paranoia, or hallucinations
- Inability to cope with daily problems or stress
- Trouble understanding and relating to situations and people
- Problems with alcohol or drug use
- Excessive anger, hostility, or violence
- Suicidal thinking
- Disturbances of sleep

The impact of climate change on mental health can be either direct or indirect. Direct effects can be acute, sub-acute or long term depending on the type of climate related events. Indirect effects are usually long term. The psychological impacts resulting from these events can overlap and it is important to identify them.

Extreme weather events which are more frequent, intense, and complex under a changing climate can trigger

- Post-traumatic stress disorder (PTSD)
- Major depressive disorder (MDD)
- Anxiety
- Complicated grief, survivor guilt, vicarious trauma, recovery fatigue
- Substance abuse
- Suicidal ideation

Direct mental health problems due to impacts of climate change are as follows:

Acute Mental Health Impacts:

Acute weather events like heat waves, floods and drought can cause varied mental health issues in the people affected by them.

Heatwave

People with mental illness are three times more likely to run the risk of death from a heatwave than those without mental illness.

Floods

They bring mourning, displacement, and psychosocial stress due to the loss of lives and belongings. All these are risk factors for PTSD, depression, and anxiety.

Drought

Drought conditions lead to mental distress, anxiety, depression, suicide, and mental injuries to the immediately exposed, unprotected and helpless people.

Sub-Acute Mental Health Impacts:

These are seen in the individuals who indirectly experience the effects of climate change which can lead to anxiety related to uncertainty about the survival of humans, a sense of being blocked, disorientation, and passivity etc

Long-Term Mental Health Impacts:

The increase in temperature can notoriously compromise the functioning of the central nervous system by directly affecting biochemical levels (altering levels of serotonin and dopamine) or by disrupting the homeostasis of thermoregulation.

Studies show higher risks of mental disorders correlated to warmer temperatures, specifically mania in the elderly, and a positive association with transient mental disorders and episodic mood disorders leading to increased hospital admissions. During an increase in temperature, there is a risk of mental states of aggression resulting in violence and self-harm, inflicted injury/homicide, and self-injury/suicide. Many studies showed no significant associations with cold temperatures.

Although knowledge of the links between increased temperature and mental health is still limited, evidence suggests that impacts could be felt at both the individual and community levels, with mental health outcomes ranging from psychological distress, depression, and anxiety, to increased addiction and suicide rates.

Indirect mental health problems arising out of climate change with respect to socio-political, economic, demographic, geographic, environmental threats etc

Climate change impacts agriculture, infrastructure and livability which consecutively affects professions, quality of life, and the capacity of people to move. Loss of personal and professional identity, loss of social support systems, loss of a sense of control and

autonomy, and other mental health repercussions such as emotions of helplessness, dread, and fatalism are all possible outcomes of these effects. Stress and worry are also connected to physical health issues, including a compromised immune system. Worrying about climate change's real or potential impacts can cause stress, leading to stress-related problems, including substance misuse, anxiety disorders, and depression.

Climate change likewise has mental health impacts at the community level-remote communities. Certain disadvantaged communities, such as indigenous communities, children, and communities' dependent on the natural environment, can experience disproportionate mental health impacts. After ecological and environmental changes in a country, economic crises can occur and increase suicide rates and other mental and behavioral disturbances, especially among the working population. Many potential long-term impacts of climate change, such as population migration, food scarcity, loss of employment, and loss of social support, have consequences on mental health.

Loss of plant biomass due to deforestation has a deeper impact on climate change and its associated consequences, leading to profound maladaptive disorders and depression. Additionally, direct heat could result in sleep disturbances, exhaustion, and heat stress associated with suicide.

Urban greens help maintain low temperatures in the city during summer months, improve air quality, and reduce stress levels. An ever-increasing number of studies show that living in green urban spaces leads to health benefits, including mental health and a longer life expectancy. Older people in contact with parks and green spaces have been noted to be associated with slower cognitive decline. Landscape modification can induce individuals to develop a profound sense of loss of connection and detachment from the environment.

There has been emergence of new concepts related to mental health impacts of climate change such as climate anxiety/Eco-anxiety. Climate change-anxiety is referred to as eco-anxiety, climate distress, or climate anxiety, i.e. anxiety related to the climate crisis and the threat of environmental disaster. Symptoms associated with climate anxiety include- panic attacks, insomnia, obsessive thinking.

Overall, feelings of climate distress might also compound other daily stressors to negatively affect overall mental health, potentially leading to increased stress-related problems such as substance use disorders, anxiety disorders, and depression.

Impact of climate change on sleep

Recent scientific evidence suggests that slowly occurring climate changes, e.g., environmental temperature, changing weather, and pollution, e.g., air pollution and light pollution influences the sleep-wake schedule, and total duration of sleep facilitates the occurrence of sleep disorders like insomnia, insufficient sleep syndrome, and obstructive sleep apnea. The impacts of the above climatic changes with reference sleeping pattern is

as below

Increase in temperature- extreme heat condition

Environmental temperature has a significant impact on human sleep. Increase in minimum temperature beyond
- 10°C has been found to reduce the duration of sleep at the individual level
- 15°C increases chances for early awakening
- 25°C leads to delayed sleep onset

These effects lead to insufficient sleep and have been more pronounced in women and the elderly. The average monthly increase in nighttime temperature increases the number of nights with insufficient sleep with more pronounced effects during summer, in the elderly, and among lower income groups. Effects of daytime temperature (maximum temperature) have also been studied, and it has been found that greater than 32°C
- Worsens sleep quality
- Reduces the length of actual sleep
- Reduces total sleep time
- Increases the number of awakenings

Light Pollution

Light pollution is known to disrupt the circadian rhythm and, thus, the sleep-wake cycle (Patel, 2019; Johnson et al., 2018). An increase of 10 units (nW/cm2sr) of sky brightness during the night has been found to
- Reduce sleep duration by 6 min/day
- Increases the risk of insufficient sleep (<7 hours) by nearly 14% in predisposed people

Increased nighttime skyglow *(defined as the ability to see only one-third to one-fourth of stars compared to what can be seen from an unpolluted natural nighttime sky)* has been found to hamper foetus growth resulting in developmental disorders. This effect is considered to be mediated by the disrupted circadian cycle and insufficient sleep.

Noise Pollution

Noise pollution occurring at nighttime as well as at daytime is associated with the individual group such as

In adults:
- Daytime sleepiness
- Habitual snoring
- Reduced slow-wave sleep

- Poor sleep efficiency
- Non-refreshing sleep

In Children and adolescents:
- Delayed bedtime
- Shorter sleep duration

The effect of noise pollution is likely to be mediated through stress-sympathetic hyperactivity and greater cortisol level

Air Pollution

Air pollution has adversely affected sleep. This effect may be immediate as well as long lasting. Air pollution during pregnancy can affect children's sleep. Exposure to particulate matter greater than 2.5 microns (PM 2.5) during 31-35 weeks of pregnancy reduces total sleep time in children aged 4-5 years. These children were found to sleep for 8 hours/day compared to the recommended 10-13 hours. Exposure to particulate matter and NO2 increases the risk of poor sleep quality and obstructive sleep apnea across ages. Effect of air pollution (PM 2.5, PM 10, and NO2) are mediated through:

Inflammation in upper and lower airway through:

- Direct effects of air pollution on the mucosa
- Allergy-mediated effects of pollutants

Change in neurotransmission in the brain due to pollutants

Temperature, season, and geographical area may influence the obstructive sleep apnea occurring in response to pollutants (PM 2.5, PM 10, and NO2)

Relationship between sleep and mental health issues
Sleep and mental health issues have a complex relationship

- Depression and anxiety increase the risk of insomnia, parasomnia, and poor sleep quality
- Post-traumatic stress disorders increase the risk for poor sleep quality and obstructive sleep apnea

Sleep disorders increase the risk of mental health issues

- Untreated insomnia can lead to depression, anxiety, addiction, and suicide
- Delayed sleep-wake phase disorder increases the risk for depression and addictive disorders

Sleep disorders may mimic psychiatric disorders

- Insomnia and restless legs syndrome may be mistaken for anxiety and depression
- Obstructive sleep apnea may be mistaken for depression, somatoform disorder, and fibromyalgia
- Parasomnia may be mistaken for sleep-related seizures and dissociative disorders

Untreated sleep disorders and mental health issues leads to NCDs

- Metabolic Syndrome
- Diabetes Mellitus
- Coronary Artery Disease
- Systemic Hypertension
- Pulmonary hypertension
- Stroke
- Obesity

Mental Health and Sleep disorders also have large socioeconomic impact

- Increased utilisation of healthcare resources
- Road traffic and industrial accidents
- Work absenteeism
- Reduced productivity
- Expenditure on the treatment
- Deteriorating quality of life

Exercise

Q1. False about impact of climate change on mental health are-
   a) Climate change can cause both direct and indirect effects
   b) Effects of climate change can be acute, sub acute or chronic
   c) Climate change causes disturbances in mood and functioning but not mental health disorders
   d) Climate change can cause long term effects on a person's mental health

Q2. True about effect of heat on mental health are-
   a) People without mental illness are more likely to die due to a heat wave
   b) Increase in temperatures increases the chances of hospital admissions
   c) Colder temperatures are more commonly associated with mania
   d) Increase in temperature leads to lower cases of aggression and harm to others

Q3. Which of the following has an effect on foetal growth?
   a) Increased nighttime skyglow
   b) Decreased nighttime skyglow
   c) Exposure to particulate matter greater than 2.5 microns
   d) Exposure to particulate matter lesser than 2.5 microns

Q4. Which of the following is an effect of disturbed sleep on mental health?
   1. Increase in the chances of depression
   2. Decrease in work productivity leading to distress
   3. Increase in addictions
   4. All of the above

Q5. False about sleep disorders is-
   a) Sleep disorders can cause socio-economic losses
   b) Sleep disorders can mimic mental illness
   c) Sleep disorders can increase the risk of diabetes
   d) Sleep disorders are seen only as a part of mental illness

Chapter 3: **Impact of Disasters on Mental Health and Sleep Disorders**

Specific Learning Objectives:
- Disasters and its impact on mental health and sleep

- Post disaster and mental health and sleep disorder

Relationship between mental health and sleep disorders. Disasters are large-scale events that are often unexpected and cause death, trauma, and destruction of property. Disasters affect millions of people around the globe every year. Many studies reported there were increased mental health consequences, such as depression, post-traumatic stress disorder (PTSD), anxiety and suicide among disaster survivors, especially for vulnerable populations.

According to WHO, disaster is "a severe disruption, ecological and psychosocial, which greatly exceeds the coping capacity of the affected community (WHO, 1992)." The following are the characteristics of a disaster:
- Sudden onset
- Unpredictability
- Uncontrollability
- Huge magnitude of destruction
- Human loss and suffering
- Greatly exceeding the coping capacity of the affected community

The impacts of a disaster can be immediate, sub-acute or long term as described in the table below

Type of impact	Mental Health issues
Immediate/Direct impacts (floods, hurricanes, wildfires, etc.)	Mental injuries to the immediately exposed, undefended and helpless people.
Sub-acute impacts	Indirectly witness the effects of climate change leading to anxiety related to uncertainty about the survival of humans, sense of being blocked, disorientation and passivity.
Long-term outcomes	Social and community outbreaks in the form of violence, struggle over limited resources, displacement, forced migration, post-disaster adjustment and chronic environmental stress.

Community's and individual's reactions to the disaster usually follow a predictable phase as shown below

Phases after disaster	Phases and mental health issues
	(see table below)

Phases after a disaster	Duration	Characteristics
Occurrence of the disaster	Hours	Apathy, Disorientation, wandering Surprise, Fear, perplexity Anxiety, Helplessness
Heroic	Up to 1-2 weeks	Strong, direct feeling Heroism, Solidarity, Optimism
Honeymoon	2 weeks to 3 to 6 months	Great solidarity, Eagerness to rebuild Sharing of common experience
Disillusionment	2 months to 2 years	Withdrawal, loneliness Anger, frustration Community disorganization Negativity, Hostility Impulsiveness, violence Alcohol and drug abuse
Reconstruction	A lifetime	Acceptance of losses Realistic assessment of the situation Search for alternatives to rebuild lives

(Cianconi, P., Betrò, S., & Janiri, L. (2020). The Impact of Climate Change on Mental Health: A Systematic Descriptive Review. Frontiers in psychiatry, 11, 74)

Immediately after the disaster, survivors in the community usually show altruistic behaviour in the form of rescuing, sheltering, feeding, and supporting fellow human beings. Hence this phase is called the heroic phase. This phase usually lasts from a day to weeks depending upon the severity, duration of exposure and availability of the relief sources from various agencies.

Once the relief agencies step in, survivors are relocated to safer places like relief camps. Free medical aid, free food and shelter, administrations' sympathy, compensation package, rehabilitation promises provides immense sense of relief and faith in survivors that their community will be restored in no time and their loss will be accounted for through monetary benefits. Hence this phase is called honeymoon phase, which usually lasts for 2-4 weeks.

At the end of 2-4 weeks, relief materials and resources start weaning. Administration, relief agencies and NGO's involvement start fading. This brings the survivors to the ruthless world of post disaster life. The reality of complex process of rebuilding and rehabilitating appears a distant dream because of administration hurdles, discrimination, injustice and corruption. This harsh reality of the disillusionment phase provides a fertile soil for breeding mental morbidity which lasts for 3-36 months before the community restores to harmony. The role of mental health workers is immense during this phase.

The final phase is the restoration/reconstruction phase where the population accepts its losses and does the realistic assessment of the situation resulting in slowly rebuilding their lives from thereon.

Mental Health and Sleep Disorders

Disasters can also result in various mental health issues such as

- Adjustment disorders
- Depression
- Post-traumatic stress disorder (PTSD)
- Anxiety disorders
- Non-specific somatic symptoms
- Substance abuse

Grief reactions are normal reactions in abnormal situations. Normal grief resolves over a period of a few months. However, validation of their emotions needs to be done and following to be addressed
- Survivors guilt
- Fear of losing control of emotions
- Becoming mentally ill
- Substance use
- Death wishes and suicidal ideas
- Abnormal grief reactions can be delayed, absent, oscillating grief responses.

Disasters can affect sleep not only immediately but also for years to come and may give rise to sleep disorders. This has been proven in several scientific studies. Unfortunately, this is a lesser-assessed issue in India.

Earthquakes and Tsunamis have a long-lasting effect on sleep. A number of studies have shown that direct and indirect exposure to an earthquake has been associated with sleep disturbances among children and adults for years, even in the form of difficulty falling asleep shorter sleep, poor quality sleep and daytime dysfunction because of poor sleep

Risk factors for sleep disturbances include evacuation and damage to the home, crowded shelters, after evacuation, post-traumatic stress symptoms and young age at the time of the event. These sleep disturbances in turn increase the risk for suicide.

Exercise

Q1. Which of the following is not a characteristic of a disaster?
    a) Sudden
    b) Unpredictable
    c) Within coping capacity
    d) Uncontrollable

Q2. Match the following with the phases of a disaster.

1) Reconstruction	i)	When relief agencies provide free medical aid, free food and shelter and other services to survivors
2) Heroic Phase	ii)	Aid from administration and relief agencies starts fading
3) Disillusionment	iii)	Reality assessment and acceptance
4) Honeymoon Phase	iv)	Survivor's altruistic behavior after a disaster

    a) 1-iv, 2-iii, 3-ii, 4-i
    b) 1-iii, 2-ii, 3-i, 4-iv
    c) 1-iii, 2-iv, 3-ii, 4-i
    d) 1-ii, 2- iii, 3-iv, 4-i

Q3. True among the following-
    a) A disaster is an acute event and can't have long term outcomes
    b) Feeling sad and distressed after the death of a loved one is always a sign of mental illness
    c) Survivor's guilt need not be addressed in counselling
    d) Delayed grief is a type of abnormal grief

Q4. What you should not tell someone who is going through emotional distress after a disaster
    a) Avoid making major life decisions
    b) No point in talking about it and making it a big deal
    c) Reach out for professional help
    d) Give yourself time to experience these feelings

Q5. True about sleep disturbances caused by a disaster include-
    a) Disasters like earthquakes can have long lasting effects on sleep
    b) Disturbances seen in sleep include of difficulty falling asleep, shorter sleep, poor quality sleep
    c) Migration and staying in shelter homes increases the chances of sleep disturbance
    d) All the above

Chapter 4: **National Programme on Climate Change and Human Health (NPCCHH)**

Specific Learning Objectives:
- Introduction to National Programme on Climate Change and Human Health
- Understanding vision, goals and objectives of NPCCHH
- Structure and functions of State, District and National level

National Programme on Climate Change and Human Health (NPCCHH) launched in 2019 under National Health Mission (NHM) and it is implemented in 36 States/UTs. At the national level, the central component functions at National Centre for Disease Control (NCDC) for implementation and monitoring of programme activities. NCDC is the nodal agency for implementation NPCCHH activities and MoHFW is the nodal Ministry for addressing Health Mission of Prime Ministers Council for Climate Change.

Vision: Strengthening of healthcare services for all the citizens of the state especially vulnerable like children, women, elderly, tribal and marginalised population against climate sensitive illnesses**.**

Goal: To reduce morbidity, mortality, injuries and health vulnerability due to climate variability and extreme weathers

Objective: To strengthen health care services against adverse impact of climate change on health.

Specific Objectives

Objective 1:

To create awareness among the general population (vulnerable community), health-care providers and Policy makers regarding impacts of climate change on human health.

Objective 2:

To strengthen the capacity of the healthcare system to reduce illnesses/ diseases due to variability in climate.

Objective 3:

To strengthen health preparedness and response by performing situational analysis at state/ district/ below district levels.

**Objective 4:**

To develop partnerships and create synchrony/ synergy with other missions and ensure that health is adequately represented in the climate change agenda in the state in coordination with the Ministry of Health & Family Welfare.

Objective 5:

To strengthen state research capacity to fill the evidence gap on climate change impact on human health

NPCCHH: Organisational Framework
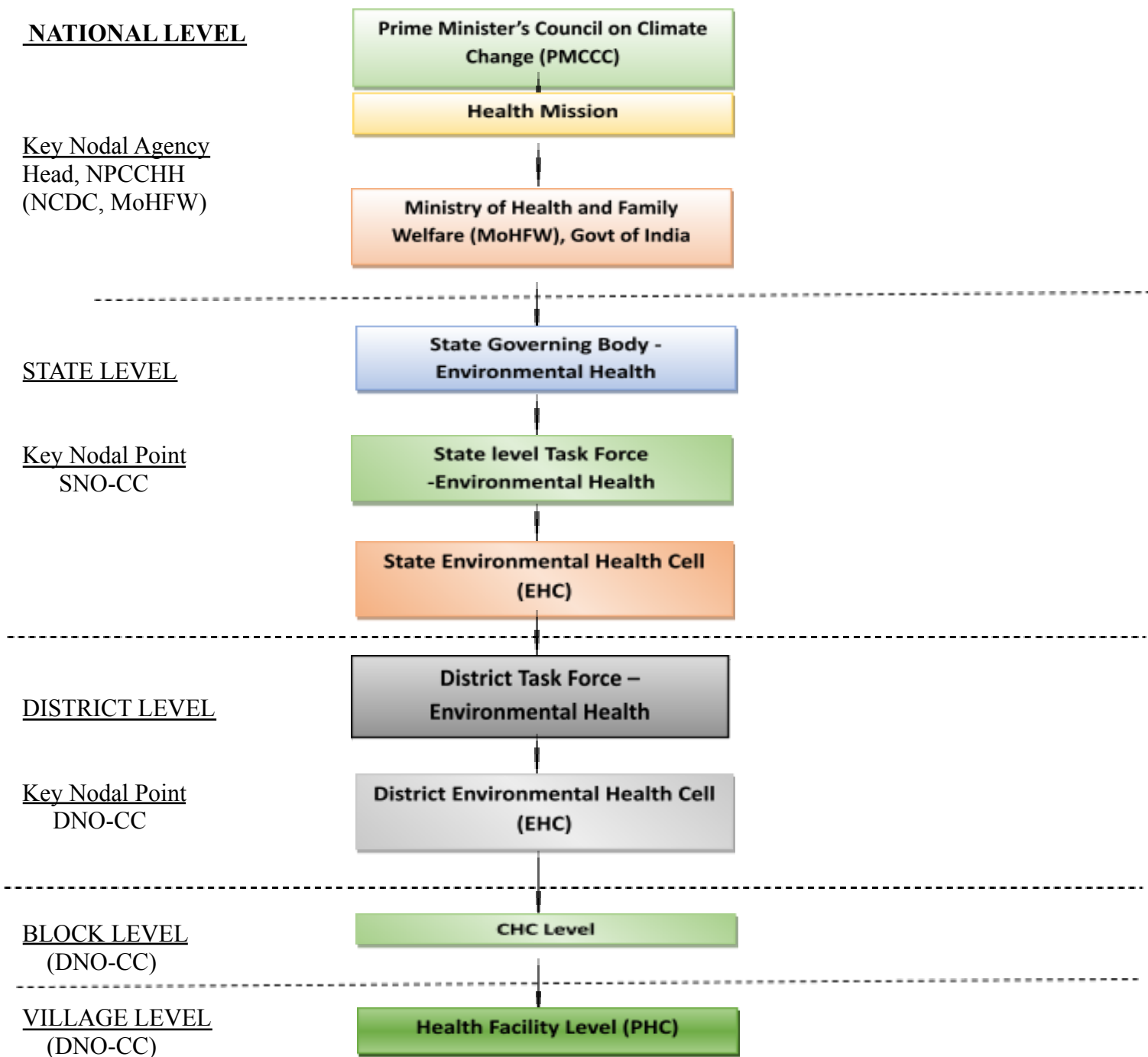
Management Structure of NPCCHH

Central Level:

National Programme on Climate Change & Human Health functions at central level functions at Center for Environmental and Occupational health, Climate Change and Health – CEOH & CCH Division, NCDC for overall implementation of the programme in the country. CEOH&CCH provides technical inputs and support to State and UTs on the programme components - awareness generation, capacity building, strengthened health care preparedness, intersectoral coordination and research and development. Director, NCDC is the Technical Head for the programme functioning and Additional Director & HoD CEOH&CCH coordinates the programme activities in State/UTs. Joint Director, Deputy Director, Medical Officer, Sr Consultants and Technical Officer are the human resource under the programme.

Functions of the Central level

- Execution of the components of NPCCHH.
- Monitor progress of implementation of all the components of the programme.
- Obtain reports from States on various activities under the programme
- Production and dissemination of prototypes standard guideline, manual, modules, IEC materials for training and awareness generation on climate change and health issues
- Intersectoral coordination with central agencies, NGO and other organisations
- Support States and UTs for development of health adaptation plans and operational guidelines for climate sensitive health issues.
- Organizing periodic review meetings, field observations, workshops, meetings regarding implementation of NPCCHH.
- Strengthening health care preparedness through green measures and surveillance systems
- Strengthening of health care system by involving premiere institutes and organisations for development of guideline, training manual, IEC etc

State Level:

The States are responsible for implementing programme activities in conformity with the National guidelines through the State Environment Cell established at Department of Health and Family Welfare. State Environment Cell is supported by State Nodal Officer and Consultant at the State level for rolling out the programme activities.

- Awareness generation through IEC, mass media on climate sensitive health issues
- Organising and coordination of all training, capacity building programmes, meetings on climate sensitive health issues
- Analysis of all data received form the district and transmitting to the centre
- Coordination with other related programs in the State /District on climate change and human health along with intersectoral coordination
- Implementation of State Action Plan on Climate Change and Human Health

- Monitor programme, review meetings, field observations.
- Timely issue of warning/ alerts to health professionals and related stakeholders as well as general public through campaign or using mass media
- Social mobilisation against preventive measures through involvement of women self-help groups, community leaders, NGOs etc.

State level Committee: The State to constitute State Governing Body for policy decision with respect to climate change and human health and State Level Task Force for implementation of the State Action Plan for Climate Change and Human Health (SAPCCHH) in their State/UT.

District Level:

The focal point of all programme related activities at the periphery is the District Environmental Cell established at the Office of Chief Medical Office. District Environmental Cell is headed by District Nodal Officer plays a key role in functioning of the programme activities

- Awareness generation through IEC, mass media on climate sensitive health issues
- Vulnerability assessment and risk mapping of climate sensitive health issues
- Organise training/ workshop and meetings with respect to climate sensitive health issues
- Implementation of District Action Plan on Climate Change and Human Health.
- Maintain physical, financial, epidemiological profile for climate sensitive health issues.
- Timely issue of warning/ alerts to health professionals and related stakeholders as well as general public through campaign or using mass media
- Social mobilisation against preventive measures through involvement of women self-help groups, community leaders, NGOs etc.

District level Committee: The District to constitute the District Level Task Force for implementation of the District Action Plan for Climate Change and Human Health.

Exercise

Q1. Which of the following is the nodal agency for NPCCHH?
a) NIMHANS
b) NCDC
c) Environmental Health cell
d) IMD

Q2. Which of the following is not true about functioning at the state level?
a) State Environment Cell is established at Department of Health and Family Welfare
b) State Environment Cell is lead by the Director, NCDC
c) State Environment Cell analyses all data received form the districts and transmits it to the centre
d) State Environment Cell issues timely warning/alerts to health professionals and related stakeholders as well as general public

Q3. The district environmental health cell is established at-
a) the DMHP
b) centre for environment and human health
c) office of the medical officer
d) office of the climate change consultant

Q4. Which of the following is not true about functioning at the district level?
a) District environmental cell does vulnerability assessment and risk mapping of climate sensitive health issues
b) They organise training/workshops with respect to climate sensitive health issues
c) It is lead by a climate change consultant
d)The District Level Task Force ensures implementation of the District Action Plan

Specific Learning Objectives:
- Awareness generation

- Capacity building

- Intersectoral coordination

Awareness generation through IEC

Information, education and communication (IEC) materials are intended to raise awareness among the general public of each individual's personal responsibility for action to reduce inequalities affecting the mental health and psychosocial well-being of different gender groups caused by effects of climate change. The educational component of these IEC materials contains approaches and tips on how to address such inequalities and how to contribute on individual, family and community levels to the betterment of mental health and well-being of all.

IEC materials such as brochure, posters, audio, video developed by NIMHANS on the impact of climate change on mental health (Annexure 2,3,4,5) These IEC materials are to be utilised to raise awareness among general public and health care professionals in addressing the climate change and mental health issues. Some of the IEC materials as an illustration are shown below

Fig1: IEC material – brochure on impacts of climate change on mental health and sleep

Fig 2: IEC posters- Effects of Climate change and vulnerable population mental health

IEC dissemination activities in the area of climate change and mental health are as below

Climate change and its impacts on mental health

The effects of climate change can include feelings of sadness, guilt, tiredness, mood changes, sleep disturbances, problems with substance use etc.

Mental health effects of climate change on vulnerable population

The populations groups of children, women, elderly, pre-existing mental health conditions, etc are more vulnerable to the mental health effects of climate change

Stress management techniques

Activities related to the reduction of Mental health issues – at an individual and community level to handle stress and build resilience etc.

Sources of help

Availability of various sources of help for psychological issues arising due to climate change (acute/long term)

Emerging concepts

Awareness generation about newer concepts of mental health problems arising due to climate change like eco-anxiety, eco-grief, solastalgia etc

Responsibilities of a Paramedical officer

- Dissemination of IEC materials to the stakeholders and community levels
- Organise periodic IEC campaign, sensitization programme at schools, community level, vulnerable populations
- Observe environment and health events such as World Health Day, World Mental Health Day, International Day for clear air for blue skies etc

Capacity Building

Training programmes to be organised with the focus on the following

- impacts of climate change on mental health and sleep,
- social determinants affecting the mental health in context of climate change,
- mental health and sleep disorders associated with change in climate,
- extreme weather events such as disasters, heat wave etc,
- preparedness and response of the healthcare facilities and promotion of health

The above areas are to be sensitised to the health care professionals and to the community level through regular training programmes. This manual comprises all the above chapters with illustrations and learning objectives and lessons learnt enlisted in the document.

Responsibilities of a Paramedical officer

- Participate in training programme for healthcare professionals such ASHA, ANM, Healthcare workers and at the community level- vulnerable population
- Organise sensitization programme for schools, social groups, self-help groups etc

Intersectoral Coordination

Since climate variability is not limited to one part of the health sector and relates to many dimensions/sectors, there is need for coordination with other sectors such as government and non-government for effective action to achieve sustainable health outcomes. The intersectoral coordination with rural development, urban development, women and child department, agriculture, forest department etc

Responsibilities of a Paramedical officer

- Coordination with various national health programmes, government departments and non-government agencies with respect to climate change and mental health.
- Organise meetings with the various departments and agencies
- Coordination with National Mental Health Programme for integration of climate change variables

Health system strengthening

Climate-related hazards and vulnerabilities interrelate to impact mental health and sleep. The Paramedical staff play a key role in managing the response with respect to mental health disorders by utilising the MERIT screening tool (Annexure 1) in association with the National Mental Health Programme as per Comprehensive Primary Mental Health Services under Ayushman Bharat.

ANNEXURE

Annexure 1: MERIT Screening Tool (Applicable for > 18 years of age)

A	Alcohol and Tobacco / शराब और तंबाकू		
1.	Have you been consuming alcohol in the past few months?	YES	NO
	a.) Has that caused any health problems?	YES	NO
	b.) Has that caused difficulty in work or relationships?	YES	NO
2.	Have you consumed BEEDI/GUTKA/CIGARETTE/ KHAINI- early in the morning (Just after waking up from bed) in the past few months	YES	NO
B	**Anxiety** / उलझन घबराहट		
3.	Have you experienced uncontrolled anxiety/stress/tension/worries/nervousness for no reason or trivial reasons in the past few weeks or months?	YES	NO
C	**Depression & Somatization /** उदासी/ अवसाद/ साइकोसोमैटट **(सोमाटोफॉर्म) लक्षण (मानसिक बिमारी के शारीरिक लक्षण)**		
4.	In the past few weeks/months, have you experienced sadness or felt tired without any reason, or have experienced multiple physical or bodily complaints despite assurances by the doctor against the presence of a physical ailment?	YES	NO
D	**Psychosis (Severe Mental Disorder) /** अस्त व्यस्त रहने वाले, टहंसक अथवा डरे हुए लोग		
5.	Has anybody in your family heard voices in isolation/seen things that others don't see, smile or talk to himself/herself, or behaved in a strange manner anytime, during the past few weeks or months?	YES	NO
6.	Has anybody in your family experienced suspiciousness/ odd beliefs or making tall claims such as holding super powers etc. in the past few weeks or months?	YES	NO
7.	Does he /she have poor self-care (not bathing or changing clothes for many days) or wanders? (behaviour conducted during the past few weeks or months)	YES	NO
8.	Has he /she experienced excess happiness without any apparent reason, over talkativeness, hyperactivity, and increased self-esteem in the past few weeks or anytime in the past?	YES	NO
9.	Have you experienced suicidal ideas or attempted suicide recently or in the past few weeks/months?	YES	NO

10.	Any other psychological/behaviour symptoms not covered above, describe:	YES	NO
E	**INSOMNIA**		
	Did you experience trouble in any of the following during the night in the past few days?		
	a. Falling asleep	YES	NO
	b. Maintaining the Sleep	YES	NO
	c. Waking up earlier than desired wake time	YES	NO
	Did you experience any of the following during the day after a poor night's sleep?		
	❖ Fatigue/ Low energy	YES	NO
	❖ Headache	YES	NO
	❖ Irritable/ low mood	YES	NO
	❖ Difficulty to focus	YES	NO
F	**OBSTRUCTIVE SLEEP APNOEA**		
	Did anyone tell you or have you noticed that you snore?	YES	NO
	Did anyone tell you as if you stop breathing for moments during sleep?	YES	NO
	Did you ever wake up feeling choking/ shortness of breath?	YES	NO
	Do you need to go to the washroom more than two times at night?	YES	NO
	Does your throat dry up during sleep?	YES	NO
	Do you experience any of the following during the day?	YES	NO
	❖ Fatigue/ Low energy		
	❖ Headache		
	❖ Irritable/ low mood		
	❖ Difficulty to focus		
	❖ Falling asleep at odd times or sleepy during the day		

IDENTIFICATION:

- Basic Counselling

✔ Informing and educating about the presence of possible mental health issues and sleep disorders

✔ Explaining the need for a doctor's evaluation – starting treatment early to prevent further dysfunction and enable early improvement

✔ Informing them about various resources for treatment and the availability of doctors who will evaluate and initiate treatment at the Local PHC/ District Hospital/ Tertiary care Centre (Medical College or Specialised Institute**)**

- **<u>Treatment Counselling</u>**

  Once a doctor evaluation is done and medication or other advice is given, the following key points should be remembered-

✔ Onset of action of psychiatric medications is slow- it takes around 2-3 weeks before the effect of the medication starts

✔ Treatment improves insomnia almost the same day. However, if the patient is not improving despite treatment refer him to a sleep specialist

✔ Longer duration of treatment: Treatment needs to be continued even after complete improvement is achieved as per the doctors' advice. For a few conditions, treatment goes on for a few months, and for others, it may be longer

✔ Do Not stop medications suddenly: Medication should be continued as per the advice of the doctor

✔ Treatment of obstructive sleep apnoea is complex. Such patients should be encouraged to undergo Level 1 polysomnography and adhere to the treatment prescribed by the specialist

- Follow-up Counselling

✔ Check about their well-being, ask about the improvement they have achieved

✔ Ask if they are experiencing any side effects of the medication

✔ Advice to follow-up with the doctor regularly

✔ Follow-ups should be done even after complete improvement is achieved as long as the doctors suggest – it is best to discuss with the doctors about this issue.

✔ Medications should be continued even after complete improvement is achieved

✔ Encourage patient and family to discuss their doubts about the treatment if any with you and the treating doctor

• What to do if the person stops treatment?

First and foremost, do not get angry or criticise the patient

✔ Enquire about the reason for stopping to help them with that reason

✔ Check for relapse of symptoms

✔ Advise them to consult a doctor at the earliest

✔ If a person with alcohol addiction or problems due to other habit-forming substances resumes using the substance- discuss it with the person and family and advise them to seek help from the doctor at the earliest.

Psychological first aid:

This should be offered to any individual who reports experiencing psychosocial distress. It consists of five essential steps

1. Listening non-judgmentally
2. Assessing risk of harm to self or others
3. Giving reassurance and information
4. Encouraging the person to get appropriate help if needed
5. Encouraging self-help strategies

Listen without judgement:

✔ Listen to what the person describes without being critical or thinking they are weak

✔ Don't give advice such as 'just cheer up' or 'pull yourself together'

✔ It is important that you should understand that whatever the person is saying is a part of the illness and not their personality.

✔ It is important that you stay patient with them and not get overwhelmed yourselves

✔ Avoid getting into an argument with the person

Give reassurance and information:

✔ Provide hope for the person and their family and talk about a good outcome for that person

✔ Tell the person that he/she has an illness that can be treated

✔ Let them know that you want to help.

Encourage the person to get appropriate professional help

✔ You can encourage the person to consult with the Medical Officer at PHC or other higher centres.

✔ Then you can follow up by supporting the person and their family.

✔ If the person is very unwell, i.e. you think they are suicidal or psychotic (harmful to self/ others), and he/she is refusing to get any help from a doctor, encourage the family to consult with the doctor so that they can explain the situation and get professional support.

Encourage self-help treatments, follow ups, maintaining compliance

Suggest actions that the person can perform him/herself that can help relieve the symptoms of a mental disorder, such as:

✔ Getting enough sleep

✔ Eating a healthy diet

✔ Regular exercise

✔ Relaxation and breathing exercises, e.g. yoga

✔ Avoiding alcohol /other substances (tobacco, ganja, etc.)

✔ Joining support groups for women, men, or youth

Assess the risk of suicide and harm to self or others

✔ People with mental disorders sometimes feel so overwhelmed and helpless about their life that their future appears hopeless

✔ Engage the person in conversation about how they are feeling and let them describe why they are feeling this way

✔ Ask the person if they are having thoughts of suicide. If they are, find out if they have a suicide plan. This is not a bad question to ask someone who is mentally unwell. It is important to find out if he/she is having these thoughts to refer him/her for help

If you believe the person is at risk of harming him/herself, then:

✔ Don't leave the person alone; alert the family members/ HWC team members about what you have found out.

✔ Seek immediate help from PHC-MO

✔ Try to remove the person from access to the means of taking their own life

✔ Try to stop the person from continuing to use alcohol or drugs.

Sleep Hygiene education:

✔ Follow a regular sleep-wake schedule
✔ No matter what time you fall asleep, wake up at a fixed time
✔ Avoid naps during the day
✔ Exercise during the morning
✔ Avoid stimulants, e.g., coffee, tea, or cold drinks
✔ Do not go to bed with a stomach too full or too empty
✔ Have dinner at least two hours before bedtime
✔ Keep the environment of the bedroom such that it promotes sleep

REFERRAL:

Red Flags

✔ When the symptoms appear severe

✔ If the individual expresses death wishes

✔ If there is the use of alcohol/tobacco/sleeping pills along with other symptoms of significant psychological distress

✔ When the individual/family appears significantly distressed

✔ When there is a risk of suicide or harm to others

✔ Catatonic behaviour symptoms (abnormal movements – no movement/speech/response to stimuli or excessive movements)

✔ Poor general health condition

✔ Refusal to take orally (meals & medications)

✔ When a patient is not responding to treatment

FOLLOW-UP:

Provision of follow-up care:

After the initial assessment and cross-referral (if needed), you would be expected to provide the patient with follow-up care near his/ her house. Some important check-points to be ensured during the follow-up care visits include:

✔ Since you would be responsible for providing follow-up care to patients, once the acute phase of illness has subsided, it is important that you are aware and

vigilant about the signs and symptoms suggesting a relapse or treatment failure for arranging an immediate re-referral to the specialist

✔ Identify and address any psychosocial issues, misconceptions, or myths affecting access to healthcare, compliance with treatment, or clinical prognosis.

✔ Acknowledge any progress towards treatment goals and reinforce adherence to medicinal and non-medicinal treatment

✔ Undertake home visits, if necessary

✔ Promote active rehabilitation of patients by linking them to appropriate organisations/ self-help groups

Annexure 2: Psychosocial Care Techniques

RELAXATION / RECREATION

Relaxation will help to decrease the effect of stress on one's mind and body. It can help to cope with stresses of everyday lives. The need to do something for recreation is an essential element of human biology and psychology.

EXTERNALIZATION OF INTEREST

After a disaster occurs it is imperative to find or continue one's own interest and channelize the energy to other productive work. The importance of engaging in activities and continuing the same will help them in the recovery process after a disaster event. Such activities may include sewing and stitching, engaging in community kitchens, transporting the fuel to the storage area etc.

SPIRITUALITY

The term 'Spirituality' differs from person to person. For some, it is about participating in an organized religion such as going to Temple, Mosque and Church. For others, it is more personal, some people get in touch with their spiritual side through private prayer, yoga, meditation, quiet reflection, or even long walks.

- These are simple techniques which anyone can use to help survivors of any disaster.

- The immediate effects of psychosocial care may not be seen, however, it sets the foundation for long term rebuilding to take place.

- These techniques will help in dealing effectively with the survivors and provide faster recovery.

- Application of these techniques may vary based on the needs of the individual.

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PSYCHOSOCIAL CARE TECHNIQUES

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What is Psychosocial Care?

Psychosocial care is an integral part of any emergencies. It helps individuals and communities to recover from the psychological wounds and rebuild their lives after a disaster occurs.

Why psychosocial care is needed?

- Reduce the distress from developing to pathology
- Enhances survivors coping and resilience
- It helps in fastest recovery

Who can provide psychosocial care?

Any person (volunteers and non- mental health professionals) who is trained in psychosocial care in disaster.

PSYCHOSOCIAL CARE TECHNIQUES

- VENTILATION
- EMPATHY
- ACTIVE LISTENING
- SOCIAL SUPPORT
- RELAXATION / RECREATION
- SPIRITUALITY
- EXTERNALIZATION OF INTEREST

VENTILATION

A person who has experienced some trauma will have strong emotions, which will often be suppressed. If there is no space or environment for the release of these emotions, then the pressure will keep on building until one day the person will break down. It is important for helpers to be able to meet with people and help them talk about what they have experienced and share their feelings and emotions.
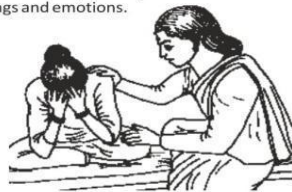
EMPATHY

Often when we are thinking from our point of view it is very easy, but to be able to get into another person's feelings and try and see it from their perspective is very difficult. However, if we look at things from other person's perspective, it will give us a clearer picture of what that person is going through.

ACTIVE LISTENING

Good listening is an important skill to provide emotional support. This can be ensured through maintaining eye contact, responding occasionally while listening, avoiding interruptions, being non-judgmental, and empathizing.

SOCIAL SUPPORT

Everyone feels very comfortable with a certain level of emotional support that comes from others around him or her. Social support networks are extremely important for feeling comfortable and secure. In a disaster situation all of these support systems get disrupted.

Annexure 3: Self-care Management Strategies in Disaster

With Family

Evaluate your lifestyle- As a parent, it's important to model healthy behaviours for your children.

Talk about it- If you notice that your children are looking worried or stressed, ask them what's on their minds.

Create a healthy environment- Your home, work space and even social environment can influence your behaviours.

Focus on yourself- When you and your family are experiencing stress, make a conscious decision to take care of yourselves.

Spend time together- Spend time with family over a good meal, or shopping.

Change your reaction- Remember that while you can't control stress, you can change your reaction to it.

Replace- Replace each negative thought with a positive one.

Create happy memories- Look back through pictures of happy memories - family vacations and special events.

With Colleagues

- Listen to each other's feelings.
- Do not take anger too personally.
- Avoid criticism unless necessary.
- Give each other comfort and care.
- Encourage and support co-workers.
- Reach out to others when you are feeling low.
- Support others if they are down.
- Check for fatigue and stress symptoms.
- Take a break when required.
- Develop a buddy system with a co-worker.

"Stress is Inevitable
Self-care is your responsibility
Mental health is a priority
Choice is yours"

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IEC-12

SELF CARE MANAGEMENT STRATEGIES IN DISASTER

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Stress

It is a normal physical response to events that make you feel threatened or upset your balance in some way. They are of two types.

1. Eustress / Positive stress

When stress is good and leads to something desirable such as receiving a good grade on the exam or receiving a promotion at work, it is called eustress.

2. Distress/ Negative stress

When the stress has negative effects such as confusion, an inability to make decisions, and illness, it is called distress.

Stress Warning Signs and Symptoms

Stress isn't always bad. In small doses, it can help you perform under pressure and motivate you to do your best. But when you're constantly working in disaster situations, your mind and body becomes weakened. You can protect yourself by recognizing the signs and symptoms of stress and taking steps to reduce its harmful effects.

Physical Symptoms	Behavioural Symptoms
Aches and pains	Eating more or less
Diarrhea/ constipation	Substance use
Chest pain/ rapid heartbeat	Procrastination
Nausea/dizziness	Isolating yourself

Cognitive Symptoms	Emotional symptoms
Memory problems	Moodiness
Inability to concentrate	Irritability or short temper
Anxious	Iinability to relax
Constant worrying	Sense of loneliness

Why self- care is important for caregivers?

- Working with the survivors of disaster can be stressful.
- Care givers are equally vulnerable.
- Stress can cause an internal tension.
- It takes toll on one's body.
- Working with the survivors of disaster needs physical and emotional well-being.
- Sustain one's ability to serve the survivors of disaster.
- Care giver's need to do take preventive actions to enable one self to cope with stresses.
- It is important for care givers to practice self-care.
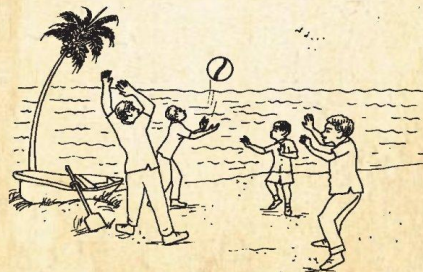
Things to do for oneself
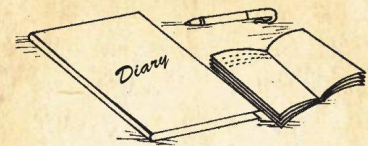
Diary

- Keep a diary of your activities and experiences.
- Do physical exercise daily.
- Spare enough time for rest.
- Listen to music, read books, watch television every day.
- Practice relaxation techniques like meditation and breathing exercises.
- Relax through pleasant visual imagery.
- Stay in touch with your family.
- Share your thoughts and feelings with others.
- Identify one day in the week for your personal work and relaxation.

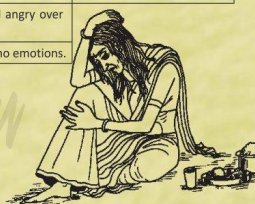# Annexure 4: Psycho-Social Referral

Thought

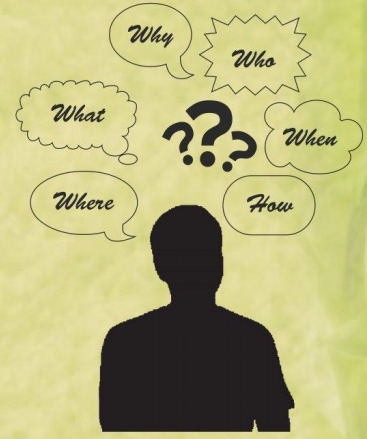| Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Has a feeling of sadness, despair, and worthlessness.	Is excessively preoccupied with one's ideas or thoughts.
Has doubt on his/her ability to recover.	Has a false, firm unshakable belief that the family or someone is going to kill him or harm.
Is overly concerned with minor things, someone or something is after him/her.	
	When there are suicidal ideas.
Denies problems or states he/she can take care of everything by himself/herself.	
Blames his/her problems on others, is vague in planning.	

Emotions

Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Is crying and weeping continuously reiterating about the event.	Unable to be aroused and is completely withdrawn.
Has blunted emotions, hardly reacts correctly to what is going on around him/her.	Is excessively emotional and shows inappropriate emotional reactions.
Shows high spirits, laughs excessively.	Is excessively happy, over familiar, restless, over grooming & over spending.
Is easily irritated and angry over trivial issues.	
Is very quiet, shows no emotions.	

Perception

Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Has all the senses intact and there is no perceptual disturbance.	Hears voices in absence of them.
	Sees things in absence of them.
	Has unverified bodily sensations.

Benefits of Referral

- It hastens the recovery and continuity of the treatment.
- Prevents from worsening of symptoms.
- Helps in better coping.
- Improves the resilience.
- Enhances bio-psychosocial well-being.

IEC-07

Psychosocial Referral

Why Who What When Where How

???

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What is Psychosocial Care Referral?

- Psychosocial referral is a method, which will ensure holistic care for the needy.
- The persons who are in need of other services should be referred to the appropriate agency.
- This is essential to have adequate collaboration and cooperation with other agencies and organizations working in the area of disaster.

Why Psychosocial Care Referral?

- Timely referral will help in preventing from worsening the symptoms.
- It also helps the survivor in receiving holistic care.

Who Can Refer?

Any trained person *(Mental health/Psychosocial care in Disaster management)* who is able to identify the normal and abnormal reactions of the survivor.

When to Refer?

- Interfering with biopsychosocial functioning.
- Not making any progress from the exiting condition.
- Indicator of any distress or any emergency.
- Identification of substance abuse.
- When multidisciplinary attention is required.

Where to Refer?

- To any mental health services or other welfare agencies.

How to Refer?

- Talk to the survivor alone (if required include family members).
- Establish rapport.
- Discuss the problems and be specific.
- Ask for the alternatives.
- Identify resources and referrals.
- Continued follow up in regular intervals.

Issues which require Referral

Medical care · Compensation claims · Paralegal aid · Education related issues · Self- care · Housing aid · Means of livelihood

There are six areas, which you can consider while deciding whether you can help or if you need to refer the person to a professional.

Alertness and Awareness

Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Is aware of who he/she is, where he/she is, and what has happened.	Is unable to give his/her name, or with whom he/she stays or interacts.
Is only slightly confused or dazed, or shows slight difficulty in thinking clearly or concentrating on a particular subject or task. Complains of forgetting names and other things.	Cannot recollect the place he/she is from, where he/she stays, or what he/she does.
	Cannot recall events of past 24 hours.
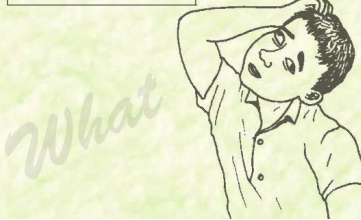
Behaviour

Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Wrings his/her hands or appears still rigid or clenches the fists.	Is apathetic, immobile and unable to move around.
Is restless, mildly agitated and excited.	Is discontented and mutilates himself/ herself
Has difficulty in sleeping.	Violent, causes harm to others.
Has decreased appetite.	Uses alcohol or drugs excessively.
Is sad and shows agitation, restlessness and paces up and down, neglects self-care.	Is unable to care for himself / herself.

Speech

Psychosocial caregiver can handle the situation if the person	Consider referral if the person
Talks excessively about the disaster.	Has irrelevant speech.
Refuses to talk much.	Shows extreme pressure of speech like his/her talk is overflowing.
Has rapid or halting speech.	Does not talk at all for days together.
Stammers due to anxiety.	

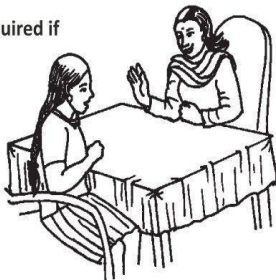# Annexure 5: Addressing Special Population During Disaster

Children in Disaster

REFERRAL REQUIREMENT FOR CHILDREN

- Conduct problems
- Overactive
- Somatization
- Post- traumatic stress disorder
- Depression
- Substance abuse

Referral is required if

- No indication of the reactions becoming less.
- Increase in severity.
- It is distressing to the family or the child.
- Interferes with the daily routine of the child.
- Interferes with interaction with others like friends or relatives.
- Interrupts work or school.

ROLE OF PSYCHOSOCIAL CAREGIVER

- Reassure children that they are safe.
- Provide opportunities for the children to talk about their fears.
- Share how various people are coping and overcoming this event.
- Do not stress too much on academic achievement immediately after the disaster.
- Reassure children that the event was not because of their fault.
- Do not criticize regressive behaviours that children might display.
- Use play, art and other creative mediums along with discussions to reach out to children.
- Encourage children to develop coping and problem-solving skills to handle anxiety.
- Identify children who needs extra help to cope and refer them to a specialist.
- Let them know that it is normal to feel upset after something bad happens and allow them to cry and express their feelings.

CHILDREN IN DISASTER

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CHILDREN IN DISASTER

Children experiences displacement, loss, death and destruction due to disaster that affects the disruption of their relationship and familiar environment. This leads to physical and emotional insecurity among them.

Events that bothers children in disaster

- Familiar environment become suddenly scary and unfamiliar.
- Living with the adults who are equally worried and concerned.
- Struggle to deal with unusual circumstances.
- Loss of own belongings, like toys, books, dresses and pet.
- Loss of loved one, parents, sibling, any other family members and friends.
- Continued threat to the sense of well-being.

IMPACT OF DISASTER ON CHILDREN

Pre-school (1–5 years)

- Temper tantrums
- Crying – whimpering or screaming
- Clinging
- Regressive behavior
- Easily frightened/ angry
- Sleep disturbances

School Age (6–11 years)

- Aggressive
- Bed-wetting
- Change in appetite
- Nightmares
- Sadness and apathy
- Disobedience

Adolescence (12–18 years)

- Isolation/Depression
- Irritability
- Risk-taking behavior
- Substance abuse

MEDIUMS TO WORK WITH CHILDREN

Children can be aided in recovery through the use of various mediums suiting their age group. They are :

- Facial expression cards
- Thematic card
- Clay modelling
- Drawing
- Family of dolls
- Family portrait
- Writing

◆ Children use play to express themselves.
◆ Effective use of the materials can help children to act out feelings.
◆ Children not only express themselves but also learn a lot of new things while playing.
◆ While playing or drawing, they express their frustration, fear, tension, anger and insecurities.

Post CC/Disaster: Action plan – School/ Orphanage visits

Paramedical health staff should visit the schools post CC/Disaster

⬇

Screen the children whose family got affected
Screen the children who lost his parents
Check out the absentees & do home visits
Screen children who have lost their home
Screen children who are living in shelters

⬇

Home visits and screen the family members

⬇

4. Referral for treatment of mental illness, if any

3. Referral for medical support

2. Liaison with authorities for financial support

1. Psychosocial support

Elderly in Disaster:

Elderly in Disaster

Following a natural disaster, elderly is considered as vulnerable population in the same way as children. Like children, the frail elderly is often unable to advocate for their own interests because of physical impairments, cognitive limitations, or a combination of both.

Elderly at high risk because they are

◆ Less mobile .

◆ Separated from families.

◆ Decreased sensory awareness.

◆ Prone to illness and injuries.

◆ Chronic medical conditions.

◆ Having less access to medication.

◆ Cut off from services.

◆ Socioeconomic limitations.

◆ Suffering from psychological distress.

◆ Have specific nutritional and health needs.

◆ Prone to risk, abuse and neglect.

◆ Physical disabilities.

◆ Having weak functional capacity.

◆ Increased dependency.

◆ Social isolation.

How can you help elderly?

◆ Keep a list of medications.

◆ Connect to required resources and services.

◆ If available, keep them with loved ones.

◆ Link with access to health care.

◆ Listen to their experience and leadership roles taken in emergencies.

◆ Consider older people's knowledge and experience in developing coping strategies following disaster.

◆ Create neighbourhood communities of elderly.

◆ Talk to medical provider about an emergency back-up plan.

◆ Create a list of special needs.

◆ Consider them as valuable resources to provide emotional support to other disaster victims.

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Person with Disablity & Elderly in Disaster

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Post CC/Disaster: Action plan – Old age home visits

Paramedical health staff should visit the old age homes in the allocated premises - post CC/Disaster

Screen the people who are already k/c of mental illness
Screen the people who have history of sleep disorders
Screen the people who lost their family members in CC/disaster
Screen them for worsening of medical illnesses (check their BP & Blood sugar)

Home visits and screen the concerned affected family members

4. Referral for treatment of mental illness, if any

3. Referral for medical support

2. Liaison with authorities for Financial support

1. Psychosocial support

Person with disability in disaster:

Person with Disabilities in Disaster

Disasters can have an impact on disability, by disproportionately affecting persons with existing disabilities and by creating a new generation of persons with disabilities.

Consequences of a disaster

Survivors with existing disabilities

- In comparison to a non-disabled peer, they are at more risk.
- Losing of assistive devices.
- Difficulty in accessing basic needs.
- Dependency increases.
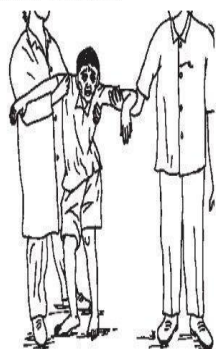
Survivors with newly acquired disabilities

- Loss of livelihood.
- Untreated fractures & infected wounds leading to long lasting disabilities.
- Referral to appropriate health facilities gets delayed.
- Scarcity of rehabilitation personnel & infrastructure to cater the needs.

The types of disabilities as per the Rights of Persons with Disabilities Act, 2016

1. Blindness
2. Low-vision
3. Leprosy Cured persons
4. Hearing Impairment
5. Locomotor Disability
6. Dwarfism
7. Intellectual Disability
8. Mental Illness
9. Autism Spectrum Disorder
10. Cerebral Palsy
11. Muscular Dystrophy
12. Chronic Neurological conditions
13. Specific Learning Disabilities
14. Multiple Sclerosis
15. Speech and Language disability
16. Thalassemia
17. Hemophilia
18. Sickle Cell disease
19. Multiple Disabilities including deaf-blindness
20. Acid Attack victim
21. Parkinson's disease

What responses should be taken after a disaster?

The acute phase

- Identify persons with existing disabilities and connect them with temporary shelters.
- Referral to specific health care needs.
- Identify the people with injuries and provide trauma care services.
- Implement curative and therapeutic interventions.
- Connect with service agencies.
- Provide multidisciplinary care.

The reconstruction phase

- Identification of the exiting capacities and skills.
- Assessing the immediate and long-term needs.
- Mobilise community resources.
- Initiate community-based rehabilitation services.
- Provide medical services & therapies if required.
- Attending to the social needs.

Dealing with Marginalized Groups:

MIGRANTS

Migrants may be less familiar with the new environment in which they live. They may not speak the dominant language causing a barrier in the interaction with others. This may further increase their vulnerability in seeking help when a disaster strike.

They can be helped in the following ways:-

- Their skills and capacities should be recognised and utilised, including their social networks and experiences in dealing with disasters.
- Awareness programmes about the hazard, risk and vulnerability should be prepared and designed specifically for non-native speakers, through community outreach, written and oral translation.
- Positive communication should be promoted to improve the inter-community relationships.

SEXUAL MINORITY

This group differs from the other on their sexual identity, orientation or practices from the majority of the surrounding society. The needs of lesbian, gay, bisexual, transgender and intersex (LGBTI) people following disasters, exacerbate existing vulnerabilities especially in places where equal rights and protections for LGBTI people are absent.

They can be helped in the following ways:-

- Make sure that same sex couples are sent to evacuation zones and their rights are being protected.
- LGBTI people with children should be given special attention as there are high chance of exclusion.
- Facilitate government and other forms of aid and recovery assistance.

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IEC-11

Dealing with Marginalised Groups

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Marginalised groups are those who are socially and economically disadvantaged and excluded from the mainstream. Due to their disadvantaged condition these groups often face difficulties in accessing resources and timely assistance in a disaster. This in turn is exacerbated in the aftermath of disaster. It is important to understand their situation in order to ensure their safety and security.

CHILDREN

Children are most vulnerable in disaster and are unaware of the changes that take place around them. Orphaned children, children whose parents have remarried, single parent children, children who have been disabled or injured, children who have been abused, children who are challenged are the special group of children who needs more attention. Children of different age groups react in different ways to the disasters.
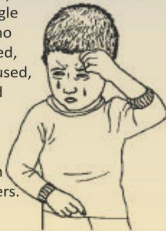
They can be helped in the following ways:-

- Allow the child to be with known adults like mother, siblings, neighbours.
- Engage the child in play and recreational activities like drawing, storytelling, singing, clay modelling etc.,
- Getting the children back to their earlier routine of eating, sleeping, play and going to school.

WOMEN

Women are more vulnerable to disaster due to their biological and socio- economic factors. Unmarried or divorced women and single parent are observed to experience more stress as compared others.

They can be helped in the following ways:-

- Women need to be together with family.
- Encourage sharing their feelings about their loss and suffering in groups.
- Involve them in routine activities.

PERSONS WITH DISABILITY

It is important to understand that disaster not only disable people but also put those who are differently abled at risk. In a disaster situation, the needs of the disabled should be given special attention as they are also equally affected as

They can be helped in the following ways:-

- Mobilizing social support.
- Keeping them updated about the situation as it gives them a sense of being involved.
- Shifting them to a place which is safer for them to recover.

ELDERLY

Elderly are considered equally vulnerable as children in times of disaster. They face challenges like lack of access to - regular income, work and health care; declining physical and mental capacities; and dependency within the household.

They can be helped in the following ways:-

- Attend to their immediate medical needs.
- Facilitating social pensions.
- Convey to them positive news repeatedly.

SCHEDULED CASTES & SCHEDULED TRIBES

Due to lack of money and socio-economic condition, non-availability of rescue services and lack of transportation facilities often adds the disaster burden in this group.

They can be helped in the following ways:-

- Facilitating the provision for early warning system.
- Implementing programs and policies to ensure the livelihood, education, health, decent living of these group.
- Mobilizing the available resources.

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Learning:

Learning:

Indian subcontinent is vulnerable to climate events and disasters with history of significant impact on humans.

There is emerging evidence of impact of climate change on mental health and sleep

Need to focus on early warning and response systems

Nodal officers to play key role in the implementation

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