Module 4:
PSYCHOSOCIAL RESPONSE TO DISASTER

July 2013
Knowledge and Training Resource Center on Climate Change and Disaster Risk Reduction
Cordillera Studies Center
University of the Philippines Baguio
Module 4: Psychosocial Response to Disaster*

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I. Objectives

At the end of the session the participants would be able to acquire adequate knowledge, and appropriate skills and attitudes to effectively deal with the psychological impact of disasters. Specifically, the participants would be able to:

1. Better understand the psychological effects of disasters
2. Develop the ability to deal with the psychological impact of disasters on a personal level.
3. Appreciate the need to become more psychologically resilient in the face of present & future disasters through regular stress management practices/activities

II. Materials needed: DLP, laptop, laser pointer, easel sheets

III. Methodology: Individual reflections, group sharings, lectures, film clips, some stress relieving exercises & other relaxation methods in between sessions

*see Appendix 1

(Note: If the module is handled as a standalone session, then there will be an introduction of what a disaster is, as well as the types of disasters.)

IV. Duration: ___ hours

V. Content

A. Introduction of participants & Leveling Up of Expectations: (if a standalone module)

For the introduction, participants introduce themselves: by stating their names, place of origin.
For the expectations, they can respond to the two questions below:

Q: what do you expect to gain from this activity?
Q: What do you expect from your co-participants?

(Thru this we will be able to clarify the similarities /differences in the expectations of participants and relate this to the objectives of the session. We would also be able to verify the methodology for the sessions.)

Mechanics: Record their individual expectations and classify these. Then, present the objectives & methodology.

B. Activity 1: THE PSYCHOLOGICAL RESPONSE TO DISASTERS

Energizer: Breathing Exercises (See Appendix for a guide.)

Objective of Activity 1: To draw out from the participants their personal experiences in the past disasters, specifically their thoughts, feelings as well as their behavioral & physiological responses.

Questions:

Recall the most recent disaster you experienced.
1. What were your thoughts, feelings, bodily responses?
2. What did you do to deal with your thoughts, feelings and responses?

Instructions:

1. Participants will first answer the questions individually (5 minutes)
2. In groups of four, they will share answers. (20 minutes) , a reporter(determined by the group) will summarize the group answers.
3. Answers will be shared in the bigger group. While the reports are given, facilitator puts the answers in categories: cognitive, affective, behavioral, & physiological responses.

Synthesis: Categorize the answers according to cognitive, affective, behavioral, & physiological responses.
C. Input 1: COMMON RESPONSES TO DISASTERS (Ref: Ehrenreich, 2001, Gauthamadas, 2005, Veneema, 2007)

When people experience any disaster, they exhibit the following physiological responses: (Ehrenreich, 2001)

1. Immediate response
   a. Response to sights and sounds: Hearts pound, mouth dry, muscles tense, nerves go on alert, feel intense anxiety, fear or terror
   b. If little or no warning, we may not understand what is happening: shock, a sense of unreality & fear dominate

2. Long term effects
   a. Long after the event: sights, sounds, smells & feelings of the event persist as indelible images in our memories
   b. These appear as the immediate shock & terror dissipates

3. Disaster challenges our basic assumptions & beliefs: (these are cognitive, information processing aspects)
   a. our personal world is predictable, controllable, manageable, benevolent & meaningful
   b. we can trust in ourselves & others
   c. we can cope with adversity

4. Disaster destroys these beliefs
   a. We become aware of our vulnerability
   b. We feel helpless & hopeless
   c. We despair in our inability to make decisions & to act in ways that would make any difference to our families & ourselves
5. In the wake of the disaster:
   a. We grieve for the death of loved ones
   b. We marvel at our own survival (we may feel unworthy or guilty for having survived)
   c. We grieve for our home, for treasured personal memorabilia, for lost documents, lost familiar neighborhoods

6. If disaster has disrupted our community’s traditional subsistence activities or our community itself: we may feel intense feelings of loss tied to our cultural and social identity

People affected by disasters may be classified into the primary victims, those who directly experience the disaster and secondary victims, those who are related to the direct victims, as well as onlookers, responders, relief workers who come to help the primary victims, journalists etc. The secondary victims may be subjected to “vicarious traumatization” due to their repeated exposure to the impact of the disaster. (Ehrenreich, 2001, CDCP documents)

In the aftermath of the disaster, it is also important as pointed out by Ehrenreich (2001), to be aware of the occurrence of a “second disaster,” which he described as the “effects of the response to the disaster.” This is characterized by:

1. Influx of people (well-meaning helpers, outsiders): who must be fed & sheltered, adds to confusion & competition for scarce resources
2. Relocation to evacuation centers: confront consequences of disaster in an ongoing, unrelenting way
3. Loss of: privacy, community, independence, familiarity with the environment, certainty with respect to the future
4. People who work with the victims may be victims of “vicarious traumatization”: health workers, rescuers, journalists etc.

Gauthamadas (2005), among others, point out that the impact of a disaster differs across individuals according to where they are when the disaster strikes. The table below, as well as the diagram, illustrates the people who may be affected by the disaster.
<table>
<thead>
<tr>
<th>Primary survivors</th>
<th>Those in the front line who have experienced maximum exposure to the catastrophic event;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary survivors</td>
<td>Grieving relatives and friends of the primary survivors;</td>
</tr>
<tr>
<td>Third-level survivors</td>
<td>Rescue and recovery personnel who might need help to maintain their functional efficiency during any operation and to cope with traumatic psychological effects afterwards</td>
</tr>
<tr>
<td>Fourth-level survivors</td>
<td>The community involved in the disaster, including those who converge, who altruistically offer help, who share the grief and loss, or who are in some way responsible.</td>
</tr>
<tr>
<td>Fifth-level survivors</td>
<td>People who even though not directly involved with the disaster, may still experience states of distress or disturbance.</td>
</tr>
<tr>
<td>Sixth-level survivors</td>
<td>Those who, but for chance, would have been primary survivors themselves, who persuaded others to the course that made them survivors, or who are in some way indirectly or vicariously involved.</td>
</tr>
</tbody>
</table>


**D. NEEDS AMONG DISASTER SURVIVORS**


After the disaster, there are basic needs that have to be addressed immediately to ensure that survivors can have some sense of normalcy and regain some degree of control over their disrupted lives. Among these are:
1. Basic survival, personal safety & physical safety of loved ones
2. Grieving over loss of loved ones & loss of valued & meaningful possessions
3. Concerns about relocation & the related isolation or crowded living conditions
4. A need to talk about events & feelings associated with the disaster, often repeatedly
5. A need to feel one is part of the community & its recovery efforts

Awareness about these needs and responding to these in the soonest possible time may reduce or at least contain/ arrest the psychosocial impact of the disaster, especially on the primary victims.

E. Impact of the disaster on the bereaved /survivor

1. Experience of terror or horror when one’s own life is threatened or one is exposed to grotesque & disturbing sights
2. Up to 40% of people responsible for body handling and recovery show signs of distress & are at risk of PTSD
3. Traumatic bereavement
4. occurs when beloved friends or family members die as a result of disaster
5. Psychological disturbances maybe higher among bereaved relatives who did not experience the disaster than among those who survived but were not left bereaved
6. Bereaved not directly involved in the disaster maybe more distressed than those who suffer property loss

It is to be emphasized that the above cited reactions:

• Are normal reactions to abnormal events
• Vary according to age, gender, ethnicity, religious background, personality traits, coping skills, previous experience with loss.
**F. COMMON REACTIONS OF DISASTER SURVIVORS** (De Wolfe, 2000 in Veenema, 2007)

<table>
<thead>
<tr>
<th>Emotional</th>
<th>Behavioral</th>
<th>Cognitive</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression, sadness</td>
<td>Sleep problems</td>
<td>Confusion, disorientation</td>
<td>Fatigue, exhaustion</td>
</tr>
<tr>
<td>Irritability, anger,</td>
<td>Crying easily</td>
<td>Recurring dreams or nightmares</td>
<td>Gastrointestinal distress</td>
</tr>
<tr>
<td>resentment</td>
<td>Avoiding reminders</td>
<td>Preoccupation with disaster</td>
<td>Appetite changes</td>
</tr>
<tr>
<td>Anxiety, fear</td>
<td>Excessive activity</td>
<td>Trouble concentrating/</td>
<td>Tightening of throat,</td>
</tr>
<tr>
<td>Despair, hopelessness</td>
<td>level</td>
<td>remembering things</td>
<td>chest or stomach</td>
</tr>
<tr>
<td>Guilt, self doubt</td>
<td>Increased conflicts</td>
<td>Difficulty making decisions</td>
<td>Worsening of chronic conditions</td>
</tr>
<tr>
<td>Unpredictable mood</td>
<td>with family</td>
<td>Questioning spiritual beliefs</td>
<td>Somatic complaints</td>
</tr>
<tr>
<td>swings</td>
<td>Hyper vigilance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Isolation or social</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>withdrawal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Energizer: Progressive Muscle Relaxation** (see Appendix for a guide)

Within the context of the phases of a disaster, emotional recovery, happens when there is sensitivity to the changing psychosocial needs of survivors. Several documents from the American Red Cross, the WHO, the Guidelines for community counselors in India, to cite a few sources state this. (IASC, Ehrenreich, 2001, Gauthamadas, 2005) Amaratunga & Sullivan, (2006) also state that “psychosocial needs change throughout the disaster cycle, particularly as social support deteriorates over time. It is important to anticipate what psychosocial needs of the public, emergency responders, support staff, and volunteers might emerge, before advancing to the next stage of the disaster. Particular consideration needs to be directed toward differential impacts of disasters based on gender, age, and other vulnerabilities. (Amaratunga CA, O'Sullivan TL, 2006)

With that as reminder, let us turn to the four phases of emotional recovery.
G. FOUR PHASES OF EMOTIONAL RECOVERY

(American Red Cross, 1995)

Following the impact of a disaster, emotional recovery goes through phases and emotional reactions are good indicators of the phase (Ehrenreich 2001. Gauthamadas, 2005, CDCP documents). For example, during the Heroic phase: numbness, shock, elation when life is saved is experienced. During the honeymoon phase: survivors are grateful, and the community pulls together to cope with the disaster.

Below are the Phases of a Disaster and common emotional experiences in the different phases: (Also see appendix 3, for a tabular version of this document). Both community and individual responses to a major disaster tend to progress according to phases. An interaction of psychological processes with external events shape these phases. (Gauthamadas, 2005)

1. Warning or threat phase
   a. Feelings of vulnerability, being unsafe & fear of future tragedies
   b. Perception of lack of control
   c. Post-disaster assessment: self blame or a sense of responsibility for what has occurred

2. Impact phase
   a. Constricted, stunned, shock responses, panic or hysteria, confusion, disbelief
   b. Focus on the survival and physical well being of themselves & loved ones
c. Survivors will experience anxiety until they are reunited with loved ones

3. Rescue or Heroic Phase
   a. Survival, rescuing others, promoting priorities, evacuation
   b. Altruism is prominent among survivors & emergency responders
   c. Post-impact disorientation; post trauma reactions
   d. Activity level is high, productivity is low

4. Remedy Phase
   a. Governmental support
   b. Volunteer assistance
   c. Community support
   d. Survivors may experience a short-lived sense that the help they receive will make them whole again

5. Inventory phase
   a. Recognition of the limits of available disaster assistance
   b. Physical exhaustion due to demands & pressures
   c. Stress of relocation or living in a ‘damaged home’
   d. Unrealistic optimism initially experienced give way to discouragement and fatigue

6. Disillusionment Phase
   a. Pull out of assistance agencies & volunteer groups
   b. Create feelings of being abandoned & neglected
   c. Assessment of loses & limitations
   d. Health problems & exacerbation of existing ones
   e. Divisiveness & hostility among community members undermine community efforts
      i. depression & hopelessness may be prominent, as the reality of how life becomes more apparent
      ii. Enormous drain of reserves: physical, financial emotional - takes its toll
   f. Adults **physical reactions** may include: headaches, HBP, ulcers, gastrointestinal problems, sleep disorders
   g. **Emotional reactions**: vacillate between emotional numbness & expressions of intense anxiety
   h. Common emotional reactions:
      i. Anxiety & depression
      ii. Anger & frustration – may be displaced to relief workers when anger about the disaster seems "less rational"

7. Reconstruction and Recovery Phase
   a. Survivors assume responsibility for rebuilding their lives
   b. Recognition of losses
   c. Opportunity to recognize personal strengths and reexamine one's life
8. Reconstruction phase
   a. Gradually becomes apparent as intense emotions are replaced by a sense of acceptance
   b. Increasing independence
   c. Emotional investment in relationships & activities of daily life

9. Recovery phase
   a. People come to see meaning, personal growth & opportunity from their disaster experience despite their losses & pain
   b. While disasters may bring profound life changing losses, they also bring the opportunity to recognize personal strengths & to re-examine life priorities

Finally, in ensuring that the psychosocial needs of all concerned are adequately addressed, there are some Guiding Principles when preparing for and responding to disasters that should be remembered. (ref. Center for Disease Control and the PAP ppt, ACT Alliance.)

- No one who sees a disaster is untouched by it
- There are two types of disaster trauma: individual & community
- Most people pull together & function during & after a disaster, but their effectiveness is diminished
- Disaster stress & grief reactions are normal responses to an abnormal situation
- Many emotional reactions of disaster survivors stem from problems of living brought about by the disaster
- Disaster relief assistance may be confusing to disaster survivors: may feel frustration, anger & feelings of helplessness
- Most people do not see themselves needing psychosocial services if a disaster & will not seek such services
- Survivors may reject disaster assistance of all types
- Disaster psychosocial response assistance is more practical than psychological in nature; it must be tailored to the communities they serve
- Use active outreach approach to intervene successfully in disaster
- Survivors respond to active, genuine interest & concern
- Interventions must be appropriate to the phase of the disaster
- Social support systems are crucial to recovery

(Ref: PAP PPT and http://www.bt.cdc.gov/mentalhealth/responders.asp; ACT Alliance, 2011, see also Appendix for other similar guidelines)
Energizer: Creative Visualization (see Appendix for a guide)

Self Assessment Questions:

Answer the following questions.

1. Reactions during and in the aftermath of disasters are “normal”? True False
2. There are different phases in a disaster. True False
3. After a disaster, not all people suffer from traumatic stress True False
4. People not directly affected by the disaster can experience “vicarious trauma”? True False
5. To restore some semblance of normalcy, the basic needs (food, water, shelter) should be addressed. True False
H. Activity 2: Becoming Psychologically Resilient

Objective: Develop the ability to deal with the psychological impact of disasters on a personal level.

Instruction to the Facilitator

Start with a video clip /animation that shows psychological resilience. After the video clip, ask the participants to define/describe psychological resilience.

Lecturette

Definition of Resilience

Resilience is the ability to “exhibit positive outcomes in the face of serious threats...” (Newman and Newman, 2012: p. 100. Another definition of resilience considers it as “the ability to withstand, overcome, and actually thrive after profound adversity (Bonanno, 2004; Norlander, Von Schedvin, & Archer, 2005; Jackson, 2006, in Feldman, R. 2011: p.482).

Q: Who is more likely to have more severe or longer lasting stress reactions following a disaster?

Some factors make individuals vulnerable to longer lasting stress reactions and these include: (Gibbs, M. & Montagnino, K, pp. 11-19.; Amaratunga, C. & Sullivan TL., 2006, pp.149-152)

a. socioeconomic status (SES)

b. available resources- material resources e.g. money and infrastructure; social resources e.g. social support like family and friends

c. previous level of psychopathology

d. age- children, elderly persons, dependent adults

e. gender- pregnant women, role of women in the society

f. social/family factors

g. ethnicity

The extent of stress experienced before, during, and after the disaster seem to be affected by the vulnerability factors mentioned above as well as the resources available to the person to make him deal with it. Gender and ethnicity, for instance were found in some studies to have strong influence on the experience of stress. One of these found that both women (Pulcino, et al., 2003) and minority victims (Perilla, et al., 2002; Quarantelli, 1994) may have experienced more trauma before or during the disaster than white males. Likewise, the importance of resources like money, infrastructure, social networks, and coping style resources cannot be denied. The design of any intervention should not only take into consideration these vulnerability factors but also the risk factors both at the individual and community level. (Gibbs, M. & Montagnino K. P. 19)
Risk factors  (http://www.ptsd.va.gov/professional/pages/effects-disasters-mental-health.asp)

a. Severity of exposure

The amount of exposure to the disaster is highly related to risk of future mental problems. At highest risk are those that go through the disaster themselves. Next are those in close contact with victims. At lower risk of lasting impact are those who only had indirect exposure, such as news of the severe damage. Injury and life threat are the factors that lead most often to mental health problems. Studies have looked at severe natural disasters, such as the Armenian earthquake, mudslides in Mexico, and Hurricane Andrew in the US. The findings show that at least half of these survivors suffer from distress or mental health problems that need clinical care.

b. Gender and family

Almost always, women or girls suffer more negative effects than do men or boys. Disaster recovery is more stressful when children are present in the home. Women with spouses also experience more distress during recovery. Having a family member in the home who is extremely distressed is related to more stress for everyone. Marital stress has been found to increase after disasters. Also, conflicts between family members or lack of support in the home make it harder to recover from disasters.

c. Age

Adults who are in the age range of 40-60 are likely to be more distressed after disasters. The thinking is that if you are in that age range, you have more demands from job and family. Research on how children react to natural disasters is limited. In general, children show more severe distress after disasters than do adults. Higher stress in the parents is related to worse recovery in children.

d. Other factors specific to the survivor:

Several factors related to a survivor's background and resources are important for recovery from disaster. Recovery is worse if you:

- Were not functioning well before the disaster.
- Have had no experience dealing with disasters.
- Must deal with other stressors after the disaster.
- Have poor self-esteem.
- Think you are uncared for by others.
- Think you have little control over what happens to you.
- Lack the capacity to manage stress.

e. Other factors have also been found to predict worse outcomes:

- Bereavement (death of someone close)
- Injury to self or another family member
- Life threat
- Panic, horror, or feelings like that during the disaster
- Being separated from family (especially among youth)
- Great loss of property
- Displacement (being forced to leave home)

f. Developing countries

These risk factors can be made worse if the disaster occurs in a developing country. Disasters in developing countries have more severe mental health impact than do disasters in developed countries. This is true even with less serious disasters. For example, natural disasters are generally thought to be less serious than human-caused. In developing countries, though, natural disasters have more severe effects than do human-caused disasters in developed countries.

g. Low or negative social support

The support of others can be both a risk and a resilience factor. Social support can weaken after disasters. This may be due to stress and the need for members of the support network to get on with their own lives. Sometimes the responses from others you rely on for support are negative. For example, someone may play down your problems, needs, or pain, or expect you to recover more quickly than is realistic. This is strongly linked to long-term distress in trauma survivors.

After a mass trauma, social conflicts, even those that have been resolved, may again be seen. Racial, religious, ethnic, social, and tribal divisions may recur as people try to gain access to much-needed resources. In families, conflicts may arise if family members went through different things in the disaster. This sets up different courses of recovery that are not well understood among family members. Family members may also serve as distressing reminders to each other of the disaster.

Keep in mind that while millions of people have been directly affected by disasters, most of them do recover. Human nature is resilient, and most people have the ability to come back from a disaster. Plus, people sometimes report positive changes after disaster. They may re-think what is truly important and come to appreciate what they value most in life.

**Q: Who are likely to naturally recover from disasters? Factors that increase resilience after disasters**

Resilience factors

Human resilience dictates that a large number of survivors will naturally recover from disasters over time. They will move on without having severe, long-lasting mental health issues. Certain factors increase resilience after disasters:

a. Social support

Social support is one of the keys to recovery after any trauma, including disaster. Social support increases well-being and limits distress after mass trauma. Being connected to others makes it easier to obtain knowledge needed for disaster recovery. Through social support, you can also find:

- Practical help solving problems.
- A sense of being understood and accepted.
- Sharing of trauma experiences.
Some comfort that what you went through and how you responded is not "abnormal."

Shared tips about coping.

b. Coping confidence

Over and over, research has found that coping self-efficacy - "believing that you can do it" - is related to better mental health outcomes for disaster survivors. When you think that you can cope no matter what happens to you, you tend to do better after a disaster. It is not so much feeling like you can handle things in general. Rather, it is believing you can cope with the results of a disaster that has been found to help survivors to recover.

c. Hope

Better outcomes after disasters or mass trauma are likely if you have one or more of the following:

- Optimism (because you can hope for the future)
- Expecting the positive
- Confidence that you can predict your life and yourself
- Belief that it is very likely that things will work out as well as can reasonably be expected
- Belief that outside sources, such as the government, are acting on your behalf with your welfare at heart
- Belief in God
- Positive superstitious belief, such as "I'm always lucky."
- Practical resources, including housing, job, money

**we can draw on the individual's strengths or create the supports needed to ward off lasting symptoms of functional difficulties & avoid interventions that may actually interfere with one's inherent resiliency & therefore impeded recovery.**

**Since every disaster is unique, there are no clear guidelines for how victims or responders can cope or balance their lives for that event. However, knowing the factors that affect psychological well-being (resilience) versus distress can help victims prepare for, and cope with, disasters**

Characteristics of personal resilience

a. healthy detachment—distancing yourself emotionally from distress-provoking circumstances
b. high initiative—taking charge and ownership of your circumstances and problems
c. perspective—the ability to see the short- and long-term implications of challenges and difficulties
d. perseverance—the ability to push ahead even when you don't feel like it
e. accepting that it may take a long time and great effort to recover and feel better
f. resourcefulness—using imagination and creativity in overcoming difficult circumstances
g. insight—accurately identifying problems and challenges
h. moving quickly into the solution
i. willingness to try new things
j. identifying a larger personal meaning that is positive and relevant for you

Assessing Psychological Resilience

a. Insight into oneself and others
b. Supple sense of self-esteem
c. Ability to learn from experience
d. High tolerance for distress
e. Low tolerance for outrageous behavior
f. Open-mindedness
g. Courage
h. Personal discipline
i. Creativity
j. Integrity
k. Keen sense of humor, constructive philosophy of life that gives life meaning
l. Willingness to dream dreams that inspire and give hope

(Adapted from Wolf & Mosnaim, 1990)

I. BUILDING COMMUNITY RESILIENCE

People are naturally able to cope with disasters without intervention. (http://www.ptsd.va.gov/professional/pages/effects-disasters-mental-health.asp).

To facilitate coping, resources must be available and accessible to individuals. While people after a disaster capitalize on their own resources, they also depend on the available resources the community can offer. Planning for a community program that will respond to the aftermath of a disaster should include identification and coordination of “multisectoral responses to protect and improve people’s mental health and psychosocial well-being in the midst of emergency”. (IASC Guidelines on mental Health and Psychosocial Support in Emergency Settings)

Workshop

Instruction to the Facilitator

1. Group the participants according to municipality or barangay. Allow enough time for discussion of the following questions:

What available assets/resources in your community support resilience/psychosocial well-being? Identify the specific resources under each area given below and discuss how each one promote both personal and community resilience.
There are many ways of building resiliency and the strategies employed may vary depending on individual and culture differences. (www.apa.org/print-this.aspx). In general, however, the availability of community resources reflects its resiliency in coping with the aftermath of a disaster. Likewise, personal resiliency is enhanced when people believe that there are programs or sectors in the community that are supportive of its members most especially after a disaster. According to Benard (1991) “communities play a huge role in fostering resilience” and he identifies these communities as having three characteristics: “availability of social organizations that provide an array of resources to residents; consistent expression of social norms so that community members understand what constitutes desirable behavior; opportunities for children and youth to participate in the life of the community as valued members.” Communities should however ensure that these programs are adequately communicated and made accessible to its members.

**SELF-ASSESSMENT QUESTIONS:**

True or False

1. One characteristic of personal resilience is the ability to strictly hold on to tried and tested ways.
2. One factor that increases/ contributes to resilience is hope which among others, means believing that one can predict his life.
3. Availability of resources promotes resilience both at the personal and community level.
J. Activity 3:

Objectives of Activity 3:

At the end of the session, the participants will be able to learn some of the benefits of the simple techniques to manage stress that were introduced as energizers in session one. Relaxation techniques including breathing exercises, progressive muscle relaxation (PMR) and creative visualization as well as meditation techniques can be integrated into their daily activities on a regular basis.

Activity: Participants are invited to (again) try relaxation exercises that were introduced as energizers in Session 1. They will be guided (with soft instrumental music in the background) to practice the combination of breathing exercises, PMR and creative visualization.

Activity 3 Input:

It was mentioned in session one that fear and anxiety (emotional responses to disaster) are manifested in physiological responses such as quicker respiration rate, faster heart beat, increased blood pressure, etc. These are also recognized as the immediate physiological responses when we are in a disaster situation.

Muscle tension is commonly associated with stress, anxiety and fear as part of a process that helps our bodies prepare for potentially dangerous situations. Even though some of those situations may not actually be dangerous, our bodies respond in the same way. Sometimes we don’t even notice how our muscles become tense, but perhaps you clench your teeth slightly so your jaw feels tight, or maybe your shoulders become tense. Muscle tension can also be associated with backaches and tension headaches.

An easy, simple but effective way to relax the body and counteract the feeling of breathlessness as a result of fear and anxiety is to consciously control and slow down our breathing by taking deep and long breathes that enables our body to process oxygen intake and carbon dioxide exhalation. By doing deep breathing exercises, we are able to regulate our heart rate and respiration and so feel more calm, cool and relaxed. This is the exact opposite of our body’s automatic response when we are in the fight, flight or freeze mode.

While doing the breathing exercises, we can then proceed to relax major muscle parts through the Progressive Muscle Relaxation (PMR) technique. Introduced by Edmund Jacobson (1929), he
believed that the body responds to anxiety provoking thoughts and events with muscle tension. The tense muscles, in return, increase the feeling of anxiety. Deep muscle relaxation reduces physiological tension, reduces pulse rate and blood pressure, as well as decreasing perspiration and respiration rates. In PMR, each muscle or muscle group is tensed for five seconds and then relaxed for twenty seconds. This procedure is repeated at least once. At first only partial relaxation may occur, but after practice the whole body can relax within a few minutes. *This technique is known to be effective in the treatment of muscular tension, anxiety, insomnia, depression, fatigue, irritable bowel, muscle spasms, neck and back pain, high blood pressure, mild phobias, and stuttering.* Progressive relaxation can be practiced while lying on your back or sitting in a chair with your head supported.

Creative visualization is another technique for relaxation. It involves the visualizing calming sceneries, such as flowing streams, drifting clouds, being in a mountain top and experiencing nature taking away your stress and strains of the day.

(Refer to the Appendix for some samples of the above exercises)

To end the module, participants will prepare an individual action plan to enhance resilience. They will be enjoined to make a commitment to practice relaxation exercises and other indigenous ways of healing and to follow the plan regularly.

**Optional Workshop:** To capture and document culturally related practices of individual and/or community healing, the following workshop may be included. (This can be a stand alone module.)

**Topic:** Indigenous Beliefs/Practices related to disasters.

**Workshop:** Break the group according to ethnic affiliation/locality

**Questions:**

1. What are the common beliefs that my community holds about disasters?
   How do old folks explain the occurrence of disasters?
2. What are traditional practices of coping with the after effects of disasters?
3. What are traditional healing practices to address the impact of disasters?
REFERENCES:


Amaratunga CA, O'Sullivan TL: In the path of disasters: Psychosocial issues for preparedness, response, and recovery. Prehosp Disast Med 2006;21(3):149–155

Margaret Gibbs, Ph.D. And Kim Montagnino, M.A. Disasters, A Psychological Perspective.


Ehrenreich, John and Mcquaide, Sharon. (2001). Coping with Disasters: A guidebook to Psychosocial Intervention


http://www.ptsd.va.gov/professional/pages/effects-disasters-mental-health.asp

http://www.bt.cdc.gov/mentalhealth/responders.asp

http://www.org/print-this.aspx


http://apps.searo.who.int/pds_docs/B0418.pdf


Guterman, Pearl (2001). Psychological Preparedness for Disaster Department of Psychology School of Criminal Justice, York University http://academia.edu/233646/Psychological_preparedness_for_disaster


APPENDIX

Appendix 1. Background: Why Psychosocial Response to Disasters?

The IASC Mental Health & Psychosocial Support (MHPSS) Guidelines, a document that international humanitarian aid agencies have adapted, define the term “psychosocial” to refer to the dynamic relationship or interconnection that exists between psychological and social effects and or processes, each continually inter-acting with and influencing the other. The guideline defines “psychological effects” are those that affect different levels of functioning including cognitive (perception and memory as a basis for thoughts and learning), affective (emotions), and behavioral, while “social effects” pertain to altered relationships, family and community networks, and economic status. (IASC, 2007)

Hutton (2001) states that “psychological distress is better examined within a socio-structural perspective which takes into account not only the individual’s capacity to overcome material and physical losses, but the underlying social, economic and political relationships which determine recovery capacities.” This is certainly a marked departure from the more traditional mental health response to disaster events, where the focus was addressing the experience of psychological distress among affected individuals and communities. The mechanism that is currently adapted, after thorough studies have been done from the more recent disasters in Asia, is to include the psychosocial aspects of disasters in the entire process of Disaster Risk Reduction Management (DRRM), starting from disaster prevention. It also is anchored on the fact that psychological distress can be exacerbated by the many physical and social disruptions that occur during disasters. A psychosocial perspective addressing the impact of disasters also gives attention to the socioeconomic status, age, gender and other social characteristics of the affected communities. Moreover, the premise is that within the context of the phases of a disaster, emotional recovery, happens when there is sensitivity to the changing psychosocial needs of survivors. Several documents agree about this, among which are the Red Cross, the WHO, and the guidelines for community counselors in India, to cite a few sources.

In a related study, researchers in Myanmar stated that “The experience of dealing with the tsunami has shown that psychosocial support to the affected community not only reduces its psychological distress but can also facilitate physical rehabilitation. Thus mental health and psychosocial aspects have been included in disaster preparedness and management plans of the MoH.” Int Rev Psychiatry, 2006 Dec; 18(6):579-85. A study conducted in Bangladesh, Choudhary et al. (2006) state a similar observation as follows: “...any disaster will have mental health consequences. Providing
scientific psychological services is essential for real recovery from such a disaster...... To respond properly to a serious type of disaster like a cyclone or a tornado or recurrent devastating flood, the disaster mental health team should be aware of the socio-economic status, local culture, tradition, language and local livelihood patterns.” Int Rev Psychiatry. 2006 Dec; 18(6):529-35.

As articulated by a World Health Organization (WHO) document, “any neglect of psychosocial support could impair efforts at physical rehabilitation. Providing psychosocial support to communities affected by disasters is a key component of whose strategy. Such support is crucial and has to be appropriate and culturally sensitive in order to be effective. WHO’s policy requires that psychosocial support should be community based, culturally sensitive and be provided by competently trained workers who understand the needs of disaster victims. It should also take into account the needs of special groups such as children and women, particularly widows and the elderly. To provide back-up for the community-level action, there is also a need to enhance mental health services in the countries of the South-East Asia Region.”

http://apps.searo.who.int/pds_docs/B0418.pdf

The same document of WHO recommends that: “Mental health and psychosocial relief efforts should be an integral part of disaster preparedness plans. The best levels of disaster preparedness can be achieved by having a strong community mental health system in place which can be rapidly scaled up to meet the needs of the affected people in case of disasters.”

Similarly, Hutton (2001) state that coping and adjustment ... includes not only the manner in which people resolve distress, but their ability to access the financial and material resources needed to recover. As such, the capacity to cope with extreme events is best considered within a larger societal or communal context. Although psychological coping may be an internal process, mediated by such factors as perception, cognition and coping habits, it is also intricately linked to the social, economic, and political relations which determine what people can achieve in their environments.
Appendix 2. Common Responses to Disasters (ref: CDC info sheets)

- Your responses are normal given the abnormal event(s)
- Stress reactions after a disaster look very much like the common reactions seen after any type of trauma. Disasters can cause a full range of mental and physical reactions. You may also react to problems that occur after the event, as well as to triggers or reminders of the trauma.

- What are common reactions to trauma?

  All kinds of trauma survivors commonly experience stress reactions. This is true for veterans, children, and disaster rescue or relief workers. If you understand what is happening when you or someone you know reacts to a traumatic event, you may be less fearful and better able to handle things.

  Reactions to a trauma may include:
  - Feeling hopeless about the future
  - Feeling detached or unconcerned about others
  - Having trouble concentrating or making decisions
  - Feeling jumpy and getting startled easily at sudden noises
  - Feeling on guard and constantly alert
  - Having disturbing dreams and memories or flashbacks
  - Having work or school problems

  You may also experience more physical reactions such as:
  - Stomach upset and trouble eating
  - Trouble sleeping and feeling very tired
  - Pounding heart, rapid breathing, feeling edgy
  - Sweating
  - Severe headache if thinking of the event
  - Failure to engage in exercise, diet, safe sex, regular health care
- Excess smoking, alcohol, drugs, food
- Having your ongoing medical problems get worse

You may have more **emotional troubles** such as:

- Feeling nervous, helpless, fearful, sad
- Feeling shocked, numb, and not able to feel love or joy
- Avoiding people, places, and things related to the event
- Being irritable or having outbursts of anger
- Becoming easily upset or agitated
- Blaming yourself or having negative views of oneself or the world
- Distrust of others, getting into conflicts, being over controlling
- Being withdrawn, feeling rejected or abandoned
- loss of intimacy or feeling detached
### Appendix 3. Phases of a Disaster

<table>
<thead>
<tr>
<th>Warning or threat phase</th>
<th>Impact phase</th>
<th>Rescue or heroic phase</th>
<th>Remedy phase</th>
<th>Disillusionment phase</th>
<th>Reconstructive Phase</th>
<th>Recovery phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of vulnerability, being unsafe &amp; fear of future tragedies</td>
<td>Constricted, stunned, shock responses, panic or hysteria, confusion, disbelief</td>
<td>Survival, rescuing others, promoting priorities, evacuation</td>
<td>Governmental support Volunteer assistance Community support</td>
<td>Pull out of assistance agencies &amp; volunteer groups</td>
<td>– Survivors assume responsibility for rebuilding their lives – Recognition of losses – Opportunity to recognize personal strengths and re-examine one's life</td>
<td>People come to see meaning, personal growth &amp; opportunity from their disaster experience despite their losses &amp; pain While disasters may bring profound life changing losses, they also bring the opportunity to recognize personal strengths &amp; to re-examine life priorities</td>
</tr>
<tr>
<td>Perception of lack of control</td>
<td>Focus on the survival and physical well being of themselves &amp; loved ones</td>
<td>Altruism is prominent among survivors &amp; emergency responders</td>
<td>Post-impact disorientation; post trauma reactions</td>
<td>Assessments of losses &amp; limitations Health problems &amp; exacerbation of existing ones</td>
<td></td>
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</tr>
<tr>
<td>Post-disaster assessment: self blame or a sense of responsibility for what has occurred</td>
<td>Survivors will experience anxiety until they are reunited with loved ones</td>
<td>Activity level is high, productivity is low</td>
<td>Governing recovery of being abandoned &amp; neglected</td>
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**Notice:**
- **Pre-disaster**
  - **Warning**
  - **Threat**
- **Impact**
- **Rescue or heroic phase**
- **Remedy phase**
- **Disillusionment phase**
- **Reconstruction phase**
- **Recovery phase**
efforts; Depression & hopelessness may be prominent, as the reality of how life becomes more apparent; Enormous drain of reserves: physical, financial, emotional - takes its toll

**-Adults physical reactions** may include: headaches, HBP, ulcers, gastrointestinal problems, sleep disorders

**-Emotional reactions:** vacillate between emotional numbness & expressions of intense anxiety

<table>
<thead>
<tr>
<th>Common emotional reactions:</th>
<th>independence</th>
<th>Emotional investment in relationships &amp; activities of daily life</th>
</tr>
</thead>
</table>

Emotional investment in relationships & activities of daily life
Anxiety & depression
Anger & frustration – may be displaced to relief workers when anger about the disaster seems “less rational”
Appendix 4. Deep Breathing

Introduction: By concentrating on our breathing, this allows the rest of our body to relax itself. Deep breathing is a great way to relax the body and get everything into synchrony.

Some Reminders:
Put any soothing instrumental music as background.
Fill the upper part of your chest first, then the middle and lower part of your chest and lungs. Be sure to do this slowly, over 8 to 10 seconds.

Hold your breath for a second or two.

Then quietly and easily relax and let the air out.

Wait a few seconds and repeat this cycle.

If you find yourself getting dizzy, then you are overdoing it. Slow down.

Instructions:
Sit comfortably on your chair, with your eyes slightly closed.

Begin to inhale slowly through your nose. Allow the air to move to your abdomen, filling it like a balloon.....then slowly breathe out through your mouth and feel the abdomen slowly being emptied of air.

Take another deep breathe, as if taking in the sweet scent of roses (at the count of 5) , hold your breathe for 2 – 3 counts, then slowly breath out through your mouth. (repeat this process twice).

Take another deep breathe and now feel as if the fresh air is filling every single cell of your lungs with clean oxygen and your body cells are re-invigorated. As you breathe out, all the toxins are also being purged out.

You can continue this breathing technique for as long as you like.
Appendix 5: Progressive Muscle Relaxation

Each muscle or muscle group is tensed for five seconds and then relaxed for twenty seconds. This procedure is repeated at least once. At first only partial relaxation may occur, but after practice the whole body can relax within a few minutes. (Caution: Do not tense the neck, back, toes, and feet excessively tight. Tensing these may result in muscle cramping.) Progressive relaxation can be practiced while lying on your back or sitting in a chair with your head supported.

Preparing for relaxation
When you are beginning to practice progressive muscle relaxation exercises keep in mind the following points.

- Physical injuries. If you have any injuries, or a history of physical problems that may cause muscle pain, always consult your doctor before you start.
- Select your surroundings. Minimize the distraction to your five senses, turn off the TV and radio and use soft lighting.
- Make yourself comfortable. Use a chair that comfortably seats your body, including your head. Wear loose clothing, and take off your shoes.
- Do not practice after big, heavy meals, and do not practice after consuming any intoxicants, such as alcohol.

General procedure
1. Once you’ve set aside the time and place for relaxation, slow down your breathing and give yourself permission to relax.
2. When you are ready to begin, tense the muscle group described. Make sure you can feel the tension, but not so much that you feel a great deal of pain. Keep the muscle tensed for approximately 5 seconds.
3. Relax the muscles and keep it relaxed for approximately 20 seconds. It may be helpful to say something like “Relax” as you relax the muscle.
4. When you have finished the relaxation procedure, remain seated for a few moments allowing yourself to become alert.
Practice means progress. Only through practice can you become more aware of your muscles, how they respond with tension, and how you can relax them. Training your body to respond differently to stress is like any training – practising consistently is the key.

Note: This technique is often most useful when you tape the instructions beforehand. You can tape these instructions, reading them slowly and leaving a short pause after each one.

1. Lie on your back with your eyes closed, feet slightly apart, arms slightly away from sides, and palms upward.

2. Allow your breathe to slow down. Put your entire attention on your breathing, as you breath in and breath out. (Pause 20 counts.)

3. Tense the muscles of your feet. (Pause 5 counts and gently let the tension go, relax. Pause 20 counts. REPEAT.)

4. Tense the muscles of your calves. (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.)

5. Tense the muscles of your abdomen & stomach. (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.)

6. Tense the muscles of your chest. (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.)

7. Clench your fists tightly. (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.)

8. Tense your biceps. Hold them tight. (Pause 5 counts. Relax and straighten arms. Pause 20 counts. REPEAT.)

9. Tense the muscles of your neck and shoulders. (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.)

10. Tense the muscles of your face. (Imagine taking a sip of vinegar). (Pause 5 counts. Relax. Let the tension go. Pause 20 counts. REPEAT.) Now smile on yourself

11. Finally, visualize a tiny point of light shining on your forehead. (Pause with this thought/image for 5 counts)

You now feel more relaxed...
Appendix 6: Creative Visualization

Visualization is a technique which can be used as a part of progressive relaxation or by itself. If used as a part of progressive relaxation, go into visualization after the body is relaxed.

If used by itself, take 3 deep breaths to help slow the body down before using the visualization. In creating the images, use the words as focus. Use as many senses as you can: your seeing, hearing, tasting, smelling, and touching senses. Using the senses allows the experience to be as "ful" as possible. Soft, soothing music played in the background can add to this experience.

Below Are Two Examples Of Visualization:

- Notice clouds drifting across the sky. Now it’s gone. See another and imagine that you are on it, drifting up over the city. As you drift and float, you come to a wooded area where you can hear birds chirping and see animals scurrying about. (Pause) You see a stream of water nearby. As you approach the stream, you notice how gentle the flow and movement of the water is. It makes you feel so peaceful and tranquil. (Pause) Now move away to a large meadow, and in the meadow you can see wildflowers. Look at the lovely colors. (Pause) And now begin to drift away from this place, back to the room you are in. (Pause) Take in a slow, deep breath, and let it go. (Repeat breathing 3 times.) Open your eyes and stretch.

2. Imagine the sun up above you. With your imagination, pick a beam of sunlight and direct it to move down to your body. Feel the warm glow as the sun's energy helps growth and healing. Take special note to direct this energy to any particular part of the body which feels uncomfortable or ill at ease. (Pause) Now select an area of your life that you would like to see grow. Isolate that area, and see it as a seed. (Pause) Direct the sunbeam towards this seed with the knowledge that the sun's energy can help its growth and expansion. Let the sun surround and fill the seed with warmth and light. (Pause) After a few moments, let the image go. Take a deep breath, and let it go. Repeat breathing 3 times. Open your eyes and stretch.
4. Push the ceiling

Imagine that the ceiling is falling down...

Straighten your hands with palm facing upward, fingers pointing towards the centre and imagine pushing the ceiling...

Arch your body a bit towards the back and feel the muscle tension around the hands, neck and chest...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the wave of relaxation...
Repeat this 2x

The next three postures are for relaxing the facial muscles. They may not be cosmetically appropriate but are certainly effective for facial relaxation.

5. Aaaahhh!

Open your mouth as wide as possible and imagine making the sound, “Aaaahhh!”...

Feel the muscle tension around the mouth...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the wave of relaxation...
Repeat this 2x

6. Eeeeeeehhh!

Clench your teeth and imagine making the sound, “Eeeeeeehhh!”...

Feel the muscle tension around the jaw...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the wave of relaxation...
Repeat this 2x
PROGRESSIVE MUSCLE RELAXATION (PMR)

When we are stressed up, one of the changes in the body is the tightening of muscles especially those around the face, neck and shoulders. The same goes for the intercostals respiratory muscles that are involved in breathing. That’s why we often feel breathless during stressful periods. This interferes with the oxygenation of our brain and worsens the stress reaction. In brief, when the body is tensed, the mind too becomes easily tensed. PMR was first introduced by an American physician, Dr. Edmund Jacobson. It can help us to effectively relax the muscles in our body, and in turn calms the mind. There are many versions of PMR. This version consists of 10 postures and each posture involves tensing and relaxing a different group of muscles in the body. The figures and instructions below will guide you in doing PMR. Try to do this twice a day.

1. Squeeze the orange

   Clench your fists…
   Imagine squeezing oranges for juice…
   Feel the tension around the fists…

   Count 1 – 10 slowly…
   Open your fists and let go the tension…
   Feel the waves of relaxation…
   Repeat this 2x

2. Superman

   Push you hands behind to squeeze the shoulder blades together…and extend your stomach forward…

   Feel the muscle tension around the area between shoulder blades and stomach…

   Count 1 – 10 slowly…
   Let go and return to neutral position…
   Feel the waves of relaxation…
   Repeat this 2x

3. Tortoise

   Imagine that you are a tortoise, push your head inside the shell and shrug your shoulders…

   Feel the muscle tension around the neck and shoulders…

   Count 1 – 10 slowly…
   Let go and return to neutral position…
   Feel the waves of relaxation…
   Repeat this 2x
7. Oohhhhhh!

Pull your nose longitudinally and imagine making the sound, “Oohhhhhh!”...

Feel the muscle tension around the nose...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the waves of relaxation...
Repeat this 2x

The next three postures are for relaxing the legs and can be very helpful after standing or walking for a long time.

8. Grab tissue paper with toes

Imagine trying to grab a tissue paper with your toes on both legs...

Feel the muscle tension around the toes...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the waves of relaxation...
Repeat this 2x

9. Flex ankle towards body

Try to flex your ankle towards the body...

Feel the muscle tension around the calves...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the waves of relaxation...
Repeat this 2x

10. Touch the wall with toes

Imagine touching an imaginary wall in front of you with your toes...

Feel the muscle tension around the upper part of the feet...

Count 1 – 10 slowly...
Let go and return to neutral position...
Feel the waves of relaxation...
Repeat this 2x
Appendix 7:

General principles of psychosocial disaster intervention:

(1) Assessment of disaster, extant service systems and incoming resources.
(2) Assessment of help-seeking pathways and cultural models of illness.
(3) Facilitation and support for family reunion, identification of the dead and cultural and religious practices to address death and grief.
(4) Foster and bolster community group activities where possible.
(5) Psychosocial training of community, aid and health workers using a train the trainer model to promote case identification, psychoeducation and intervention, with specific emphasis on vulnerable groups, especially children.
(6) Promote general community psychoeducation.
(7) Train medical and health staff in basic psychiatric and psychological assessment and intervention for post-traumatic stress, mood and anxiety disorders.
(8) Minimize risk factors for psychiatric morbidity such as displacement and loss of gainful activity.
(9) Reshape mental health systems recognizing the long-term psychiatric sequelae of disaster. The collective learnt experience from Asian natural disasters may be constructively used to plan strategies to respond appropriately to the psychosocial consequences of disaster both within Asia and in the rest of the world.

Ref: Suresh Sundaram. Psychosocial responses to disaster, An Asian Perspective (online August 2011)

Themes from the psychosocial literature on disasters and emergency management:

(1) Differential impacts of disasters according to gender and age;
(2) Prevention efforts to reduce racial discrimination, rape, and other forms of abuse;
(3) Readiness for cultural change toward prevention and preparedness; and
(4) The need to involve aid beneficiaries as active partners in relief strategies, particularly during reconstruction of communities and critical systems.

Psychosocial needs change throughout the disaster cycle, particularly as social support deteriorates over time. It is important to anticipate what psychosocial needs of the public, emergency responders, support staff, and volunteers might emerge, before advancing to the next stage of the disaster. Particular consideration needs to be directed toward differential impacts of disasters based on gender, age, and other vulnerabilities. (Amaratunga CA, O'Sullivan TL, 2006)

Ref: Amaratunga CA, O'Sullivan TL: In the path of disasters: Psychosocial issues for preparedness, response, and recovery. Prehosp Disast Med 2006;21(3):149–155