

Psychological Impact of the Tsunami Across the Indian Rim

The massively destructive tsunami that struck across the Indian Rim caused extensive loss of life and injury as well as devastation to property and community resources. The combination of life-threatening personal experiences, loss of loved ones and property, massive disruption of routines and expectations of daily life, pervasive post-disaster adversities, and enormous economic impact on families and entire nations pose an extreme psychological challenge to the recovery of children and families in the affected areas. This brief information sheet provides an overview of expected psychological and physical responses among survivors. The key concepts include:

- Reactions to Danger
- Posttraumatic Stress Reactions
- Grief Reactions
- Traumatic Grief
- Depression
- Physical Symptoms
- Trauma and Loss Reminders
- Post-disaster Adversity/Disruption

Appreciating the psychological implications of such an overwhelming event on the lives of the survivors plays a crucial role in considering specific efforts that will be of greatest help to the affected communities. The following issues may be helpful to consider in efforts to respond to disaster victims:

Reactions to Danger

It is important to recognize the difference between a sense of danger and reactions to traumatic events. Danger refers to the sense that events or activities have the potential to cause harm. In the wake of the recent disaster, people and communities have greater appreciation for the enormous danger of a tsunami and the need for an effective early warning system. There are likely to be widespread fears of recurrence that are increased by misinformation and rumors. Danger always increases the need and desire to be close to others, making separation from family members and friends more difficult.

Posttraumatic Stress Reactions

These reactions are common, understandable, and expectable, but are nevertheless serious and can lead to many difficulties in daily life. There are three types of posttraumatic stress reactions.

Intrusive Reactions are ways the traumatic experience comes back to mind. These include:

- recurrent upsetting thoughts or images that occur while awake or dreaming
- strong emotional or physical reactions to reminders of the tsunami
- feelings and behavior as if something as terrible as the tsunami is happening again

Avoidance and Withdrawal Reactions include:

- avoiding talking, thinking, or having feelings about the tsunami
- avoiding places and people connected to the event
- feeling emotionally numb, detached or estranged from others
- losing interest in usually pleasurable activities

Physical Arousal Reactions are physical changes that make the body react as if danger is still present. These include:

- constantly being “on the lookout” for danger
- being startled easily or being jumpy or nervous
- feeling ongoing irritability or having outbursts of anger
- having difficulty falling or staying asleep or having restless, easily disturbed sleep
- having difficulty concentrating or paying attention

Children may show some of these reactions through their play or drawing. They may have bad dreams that are not specific to the tsunami. In addition to increased irritability, children may also have physical complaints (headaches, stomachaches, vague aches and pains). Sometimes these are difficult to distinguish from true medical concerns.

Grief Reactions

Those who survived the tsunami have suffered many types of losses – including loss of loved ones, home, possessions, and community. Loss may lead to:

- feelings of sadness and anger
- guilt or regret over the loss
- missing or longing for the deceased
- dreams of seeing the person again

These grief reactions are normal, vary from person to person, and can last for many years after the loss. There is no single “correct” course of grieving. Personal, family, religious and cultural factors affect the course of grief. Although grief reactions may be painful to experience, especially at first, they are healthy reactions and reflect the ongoing significance of the loss. Over time, grief reactions tend to include more pleasant thoughts and activities, such as positive reminiscing or finding positive ways to memorialize or remember a loved one. One of the many untoward results of the tsunami is that some family members’ bodies have not been found. This, unfortunately, has prevented the normal use of religious, and cultural burial and mourning rituals, and has put the experience of grief on hold. Whereas trauma is more restricted to personal experience of the tsunami, loss and grief extend well beyond the impacted areas, indeed across the world.

Traumatic Grief

People who have suffered the traumatic loss of a loved one often find grieving more difficult. Their minds stay on the circumstances of the death, including preoccupations with how the loss could have been prevented, what the last moments were like, and issues of accountability. These reactions include:

- intrusive, disturbing images of the manner of death that interfere with positive remembering and reminiscing
- delay in the onset of healthy grief reactions
- retreat from close relationships with family and friends, and avoidance of usual activities because they are reminders of the traumatic loss

Traumatic grief changes the course of mourning, putting individuals on a different time course than is usually expected by other family members, religious rituals, and cultural norms that offer support and comfort.

Depression

Over time, the risk of depression after the tsunami is an additional major concern. Depression is associated with prolonged grief and strongly related to the accumulation of post-tsunami adversities. Symptoms include:

- persistent depressed or irritable mood
- loss of appetite

- sleep disturbance, often early morning awakening
- greatly diminished interest or pleasure in life activities
- fatigue or loss of energy
- feelings of worthlessness or guilt
- feelings of hopelessness, and sometimes thoughts about suicide

Demoralization is a common response to acutely unfulfilled expectations about improvement in post-disaster adversities, and resignation to adverse changes in life circumstances.

Physical Symptoms

Survivors of the tsunami may experience physical symptoms, even in the absence of any underlying physical injury or illness. These symptoms include:

- headaches, dizziness
- stomachaches, muscle aches
- rapid heart beating
- tightness in the chest
- loss of appetite
- bowel problems

In particular, near-drowning experiences can lead to panic reactions, especially in response to reminders. Panic often is expressed by cardiac, respiratory, and other physical symptoms. More general anxiety reactions are also to be expected. Physical symptoms often accompany posttraumatic grief and depressive reactions. More generally, they may signal elevated levels of life stress.

Trauma and Loss Reminders

Posttraumatic stress reactions are often evoked by trauma reminders. Many people continue to encounter places, people, sights, sounds, smells, and inner feelings that remind them of the tsunami experience. The ocean has become a powerful reminder. Additionally, the tide simply going out or even the wave in a bathtub while bathing a child can act as a disturbing reminder. Because the tsunami was accompanied by a loud roar and the crashing of waves, loud noises can be strong reminders. Reminders can happen unexpectedly, and it can take quite a while to calm down afterward. Adults and children are often not aware that they are responding to a reminder, and the reason for their change in mood or behavior may go unrecognized. The day of the week, the time of day, and the anniversary date are common reminders. Television and radio news coverage can easily serve as unwelcome reminders. It is particularly difficult when family members have been together during a traumatic experience, because afterward they can serve as trauma reminders to each other, leading to unrecognized disturbances in family relationships.

Grief reactions are often evoked by loss reminders. Those who have lost loved ones continue to encounter situations and circumstances that remind them of the absence of their loved one. These reminders can bring on feelings of sadness, emptiness in the survivor's life, and missing or longing for the loved one's presence. There are several types of loss reminders: Empty situations occur when one would be used to being with a loved one and they are no longer there, for example at the dinner table, during activities usually done together, and on special occasions, like birthdays and holidays. Children, adolescents, and adults also are reminded by the everyday changes in their lives, especially hardships that result from the loss. Examples include temporary or changed caretakers, decreases in family income, depression and grief reactions in other family members, disruptions in family functioning, increased family responsibilities, lost opportunities (for example, sports, education, and other activities), and the loss of a sense of protection and security.

Post-disaster Adversities/Disruption

Successfully addressing the multitude of post-disaster adversities not only saves lives, protects health, and restores community function, but constitutes an important mental health intervention. Contending with adversities such as lack of shelter, food and other resources, and disruption of daily routines can significantly

deplete coping and emotional resources and, in turn, interfere with recovery from posttraumatic stress, traumatic grief, and depressive reactions. Post-disaster medical treatment and ongoing physical rehabilitation can be another source of post-disaster stress. New or additional traumatic experiences and losses after the initial experience are known to exacerbate distress and interfere with recovery. Likewise, distress associated with prior traumatic experiences or losses can be renewed by the experience of the tsunami. Children's recovery is put in jeopardy without proper caretaking, reunification with family members, and restoration of normal daily routines – for example, schooling. Some adversities require large-scale responses, while others can be addressed, in part, by personal and family problem solving.

What Are the Consequences of These Reactions?

Post-disaster reactions can be extremely distressing and may significantly interfere with daily activities. For adults, posttraumatic stress, grief, and depressive reactions can impair effective decision-making, so vital in adapting to the recovery environment. They also compromise parenting. For children and adolescents, intrusive images and reactivity to reminders can seriously interfere with learning and school performance. Worries and fears may make it difficult for young children to return to school or to venture any distance from parents or caregivers. Avoidance of reminders can lead adolescents to place restrictions on important activities, relationships, interests and plans for the future. Irritability can interfere with getting along with family members and friends. Trauma-related sleep disturbance is often overlooked, but can be especially persistent and affect daytime functioning. Adolescents and adults may respond to a sense of emotional numbness or estrangement by using alcohol or drugs. They may engage in reckless behavior. Adolescents may become inconsistent in their behavior, as they respond to reminders with withdrawal and avoidance or overly aggressive behavior. Over time, there may be increases in marital discord and domestic violence.

Depressive reactions can become quite serious, leading to a major decline in school or occupational performance and learning, social isolation, loss of interest in normal activities, self-medication with alcohol or drugs, acting-out behavior to try to mask the depression, and, most seriously, attempts at suicide. Traumatic grief can lead to the inability to mourn, reminisce and remember, fear a similar fate or the sudden loss of other loved ones, and to difficulties in establishing or maintaining new relationships. Adolescents may respond to traumatic losses by trying to become too self-sufficient and independent from parents and other adults, or by becoming more dependent and taking less initiative.

Coping after Disaster

In addition to meeting people's basic needs for food, water, shelter, clothing and medicine, there are several ways to enhance people's coping. **Physical:** Stress can be reduced with proper nutrition, exercise and sleep. People may need to be reminded that they should take care of themselves physically to be of help to families and communities. **Emotional:** People need to be reminded that their emotional reactions are normal and expected, and will decrease over time. However, if their reactions are too extreme or do not diminish over time, there are professionals who can be of help. **Social:** Communication with, and support from, family members, friends, religious institutions and the community are very helpful in coping after a disaster. People should be encouraged to communicate with others, and to seek and use this support where available. **Daily Routines:** For children especially, it is important to restore normal routines, including mealtimes, bedtime) as much as possible. Children feel more safe and secure with structure and routine.

Meeting basic survival needs, restoring a sense of safety and security, and providing opportunities for normal development within the social, family and community context are important steps to the recovery of children and adolescents.

This project was funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), US Department of Health and Human Services (HHS). The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS.