

# CHAPTER 3

## CONSEQUENCES OF TRAUMA

Both the mind and body react to the experience of crisis. These reactions can be described as:

### Response and Reaction to Trauma

#### Response to Trauma

In this report, response to crisis will be distinguished from reaction to crisis. Response is seen as the reflex-type immediate reply to crisis. Reaction involves the resulting consequences to the body and the psyche.

The most basic categorization of immediate **response** to crisis is that people will respond to crisis either through fight, flight, or freeze reactions. While each of these responses is appropriate in particular situations, the response to crisis may not be the most beneficial to the situation.

In a particular crisis, a person undergoing an assault might react by *fighting* their attacker. In a *flight* reaction, a person who knows a hurricane is headed in their direction might choose to vacate their home in order to seek shelter elsewhere. A *freeze* response might be used by a soldier who has been captured and determines that fighting or fleeing would result in injury or death. All of these immediate reactions to crisis can be appropriate, but what happens when a person freezes at a time when the most effective response would be to fight or flee?

A freeze response to a crisis that is inappropriate might render a person unable to get out of bed or effectively negotiate their environment. An inappropriate fight response to a crisis might lead to emotional or physical abuse or neglect of others. A flight reaction to crisis might lead to leaving a threatening situation in the initial stages of crisis, but maintenance of that response might later lead to the neglect of responsibilities such as children or work.

**The most basic categorization of immediate response to crisis is that people will respond to crisis either through fight, flight, or freeze reactions**

Prolonged or inappropriate trauma responses could therefore result in long-term losses beyond the trauma event.

Since the response to trauma appears to be a reflex-type reply, and not a response based upon carefully considering alternatives, people may spend some time second-guessing their initial response. For example, a sexual assault victim who froze may express an “if only I would have fought off my attacker” type thinking. It is essential that trauma workers offer reassurance.

## Reaction to Trauma

Immediately following the response to trauma there will be reactions to the trauma event, the trauma response, and the resulting consequences of that interaction. As described below, these relatively **short-term reactions** can be categorized as: physical, affective, cognitive, and behavioral (Greenstone & Leviton, 1993). In general the severity of these reactions is understood to increase if the traumatic event is: situational, unpredictable, man-made, repeated, prolonged, intentional, perpetrated by a care-giver or familiar person, or undergone during childhood. Reactions that are considered to be short-term reactions to trauma, are generally resolved or greatly reduced within 8 weeks following a trauma event. When short-term reactions are not effectively ameliorated, prolonged psychological distress may lead to **long-term effects** which may include: adjustment disorders, depression, acute stress reaction, and post-traumatic stress disorder.

## Normal Stress Reactions to Trauma

It is essential to recognize a normal reaction to trauma. Healthy adults who experience traumatic event will experience bad memories that may be intense, emotional distancing or numbing, feelings of unreality, feelings of being isolated in their experience, body distress and tension. Generally recovery is achieved within a few weeks time. These individuals may or may not seek mental health assistance. A good family and social support system may be sufficient for recovery to occur.

Any of the short-term reactions listed below may be experienced.

**Severity of the reaction to traumatic events is likely to increase if the traumatic event is:**

**situational, unpredictable, man-made, repeated, prolonged, intentional, perpetrated by a caregiver or familiar person, or a childhood occurrence.**

## Reactions to Trauma

Both the mind and body react to trauma situations. These reactions can be described as: 1) physical reactions, 2) affective reactions, 3) cognitive reactions, and 4) behavioral reactions.

### Physical Reactions to Trauma

Immediate reactions of the body are attempts to provide the body with increased attention, energy, and strength. The expenditure of the body's resources takes a toll on the body which can lead to physical exhaustion and physical problems.

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vascular changes (increased blood flow)  
cardio-vascular changes (increased heart rate)  
increase in adrenalin  
gastro-intestinal problems (diarrhea, constipation, nausea)  
allergies  
skin rashes  
somatic complaints (headaches, body aches, muscle aches)  
fluctuations in blood pressure

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**The extent, intensity, and longevity of these reactions is in large part due to the effectiveness of coping attempts.**

### Affective Reactions to Trauma

These reactions encompass the emotional responses to trauma. Frequently a sense of shock or numbness is noted as an initial emotional reaction.

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anxiety	shock
denial	fear
helplessness	hopelessness
panic	despair
anger	frustration
numbness	survivor guilt
diminished sense of being	uncertainty
emptiness	overwhelmed
lack of enjoyment	

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## Cognitive Reactions to Trauma

These reactions include the thinking about trauma or the level of capacity to think in an effective manner.

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confusion	poor attention span
diminished concentration	flashbacks
difficulty in decision making	nightmares
self-blame	impaired judgement
impaired memory	
sense of powerlessness	
obsessive thoughts or memories	

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## Behavioral Reactions to Trauma

These reactions are related to actions taken or avoided during trauma

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sleep disturbances	withdrawal
anger outbursts	eating disturbances
diminished levels of activity	unresponsiveness
exaggerated startle response	crying
communication change	overprotectiveness
alcohol and/or drug abuse	antisocial acts
excessive use of sick leave	hysterical reactions
disorganization	isolation from others
hyper-arousal	fatigue
change in sexual behavior	irritability
neglect of health and daily activities	
avoidance of situations	

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(Adapted in part from Greenstone &  
Leviton, 1993)

## Early Trauma Intervention

### **Psychological Debriefing**

Psychological debriefing (PD) is still the most common form of early intervention for recently traumatized people. It was developed by the military in World War I and World War II to be used immediately after combat. Its purpose was to increase moral and make soldiers ready for immediate return to battle.

Two applications of PD are presented below. Recently the approach has been criticized for lack of efficacy support. Some studies have suggested that PD may cause harm because it is too much, too soon, and lacks follow-up. Primary criticism revolves around providing emotional processing before victims are sufficiently psychologically defended (before they are ready) and the indiscriminate use of PD regardless of a persons psychological state or extent of symptoms following the traumatic experience. There is indeed little evidence in support of its continued use. While there have been recent revisions to CISD, there has been no controlled empirical study that provides evidence of effect. The following is presented to inform providers, not as a recommendation or in support of use of PD interventions.

### **Critical Incident Stress Debriefing (CISD)**

Developed by Mitchell, CISD is a team-oriented approach that was developed to avert the development of PTSD. The purpose of CISD is to stabilize, utilize resources and restore function. Within days of a traumatic event, victims participate in a 3 to 4 hour session to review the incident, be educated about coping, validate normalcy of responses, emotionally process, and receive information about further intervention (Stebnicki).

### **NOVA Model**

This model was developed by The National Organization for Victims Assistance (NOVA). It is a 3 phase model in which all three phases are completed in one 90-minute session. Phases focus upon: 1) safety and security, 2) ventilation and validation, 3) and prediction and preparation.

**Psychological debriefing (PD) is still the most common form of early intervention for recently traumatized people.**

## Crisis Intervention and Crisis Counseling

**Crisis Intervention** - The actions which are directed toward alleviating or diminishing the immediate physical, psychological, emotional, and cognitive distress caused by the traumatic event or situation.

**Crisis Counseling** - Short-term therapeutic interactions which follow crisis interventions and are directed toward stabilization and a return to pre-crisis functioning or an improvement over pre-crisis functioning.

It is important that only persons trained in crisis intervention provide intervention services. The following models are presented as informative only. They are based upon the general belief that persons in crisis need immediate assistance to define and prioritize problems, establish safety, and find immediate solutions. The primary difference in the PD models and the Crisis Intervention Models are that the emotional processing and ventilation are not a focus of crisis intervention models.

### **Crisis Intervention Models:**

James and Gilliland, six-step model

1. Define problem
2. Ensure safety
3. Provide support
4. Examine Alternatives
5. Make Plans
6. Obtain Commitment

**Crisis Intervention refers to the actions which are directed toward alleviating or diminishing the immediate physical, psychological, emotional, and cognitive distress caused by the traumatic event or situation.**

### Greenstone and Levinton Crisis Model

1. Immediacy - check for potential of harm to self or others. May need to conduct a suicide assessment.
2. Control - Counselor takes control and provides direction.
3. Assessment - assesses what has transpired over last 48 hours to lead client to place of crisis.
4. Disposition - Explore options, decide upon actions.
5. Referral - community agencies and other supports.
6. Follow-up with client.

**It is estimated that 25% to 30% of individuals who experience a traumatic event develop posttraumatic stress disorder (PTSD) and/or other psychiatric disorders (Yehuda, Resnick, Kahana, & Giller, 1993).**

## Integration of Intervention Techniques

In an examination of PD, the National Center for Post-Traumatic Stress Disorder made the following recommendations regarding early intervention:

- 1) Evaluate the need for ongoing treatment
- 2) Provide for immediate needs (psychological first aid)
- 3) Provide education about trauma
- 4) Do not use one-session trauma processing (exposure therapy)

These suggestions appear to remove the controversial, and potentially damaging component of PD and combine the historically beneficial components of crisis counseling with education. Additionally, the component of evaluation is incorporated.

The NCPTSD suggests that follow-up treatment include: education, anxiety management, cognitive restructuring, exposure, and relapse prevention.

## Acute Stress Disorder

Acute Stress Disorder is similar to Post-Traumatic Stress Disorder (PTSD) but occurs prior to diagnosis of PTSD. It can be diagnosed 2 days to 4 weeks following a traumatic event and is characterized by panic reactions, mental confusion, severe insomnia, and dissociation, suspiciousness, and an inability to function effectively in activities of daily living. **The traumatic event must have involved actual or threatened death or grave injury to the self or another person.** Additionally, the individual also experienced fear, helplessness or horror and has developed some of the following symptomatology.

### Symptoms of ASD include:

- numbing,
- detachment,
- derealization,
- depersonalization or dissociative amnesia.
- intrusive thoughts, dreams, or flashbacks,
- avoids situations or objects that remind them of the stressor.
- anxiety,
- significant impairment in at least one essential area of functioning.

### Treatment of ASD

The following is an intervention protocol for persons experiencing ASD symptoms

- Immediate Crisis Intervention
- Support
- Immediate removal from trauma scene
- Medication for anxiety and insomnia
- Psychotherapy (see description below)

**In addition to ASD, persons who experience trauma have an increased risk for development of other long-term psychiatric disorders including Adjustment disorders, Depression, Dissociative disorders, and PTSD**

## Long-term Reactions to Trauma

It is estimated that about 30% of persons who experience a terrifying trauma in which a life-threatening event or grave physical harm was present or threatened will develop long-term consequences including PTSD and/or other psychiatric disorders. These long-term effects have been categorized as follows:

In addition to ASD, persons who experience trauma have an increased risk for development of other long-term psychiatric disorders including: Adjustment disorders, Depression, Dissociative disorders and Posttraumatic Stress Disorder (PTSD).

- Adjustment Disorder
- Depression
- Dissociative Disorders
- PTSD
- Substance Use Disorders

### Adjustment Disorder

- Person develops emotional or behavioral symptoms in response to an identifiable stressor.
- Stressors can be natural disasters (such as an tornado), events or crisis (such as automobile accidents, or onset of a disability) or interpersonal problems (such as a divorce).
- The person displays evident distress, or impairment in functioning (i.e. unable to work participate in activities).
- Adjustment disorders, by definition, last less than 6 months after the conclusion of the stressful event.
- If the symptoms last more than 6 months, the person likely has another disorder, such as a mood or anxiety disorder.

## Depression

Depression of mood is a common experience. But a clinical depression is distinguished from a depressed mood by its severity and persistence. If feelings of depression persist for nearly every day for two weeks or longer, and interfere with the ability to participate and manage activities at home and at work, then depression may require treatment.

## Dissociative Disorders

Refer to a person's reliance upon dissociating from the current self and patterns of behaviors in order to cope with daily living, circumstances, or situations that present themselves. Dissociative Identity Disorder (DID) is the presence of two or more distinct identities or personality states that have distinct patterns of perceiving and interacting with others, the environment, and the self.

**About 5.2 million have PTSD.**

## PTSD

Posttraumatic Stress Disorder (PTSD) was first recognized as a psychiatric diagnosis in 1980 in the Diagnostic and Statistical Manual of Mental Disorders-Third Edition (DSM-III; APA, 1980). It was categorized as an anxiety disorder due to the conditions of: persistent anxiety, hypervigilance, exaggerated startle response, and phobic-like avoidance behaviors (Meichenbaum, 1994), and traumatic stress.

**The average duration of an episode of PTSD is more than 7 years.**

**Definition:** PTSD is a debilitating psychological condition that is triggered by a major traumatic event. This can include war, terrorism, sexual assaults, natural disasters, the death of a loved one, or other events in which the victim experienced or witnessed a life-threatening event. It is marked by intrusive thoughts or memories, blunted emotions, and increased arousal.

PTSD may occur following any traumatic event, in which the person was a witness or victim. This may include, physical or sexual assaults, accidents, man-made or natural disasters. Generally symptoms begin within 3 months of the event. Symptoms can be severe enough and persist long enough to significantly interfere with one or more of the activities of daily functioning. PTSD is diagnosed when symptoms last more than one month.

## Symptoms of PTSD may include:

- nightmares,
- avoidance of experiences or places that may remind,
- anger,
- emotional numbness,
- hypervigilence.
- flashbacks
- frightening thoughts
- difficulty sleeping
- detachment or dissociation
- depression
- anxiety
- irritability
- feelings of guilt

**Approximately 50% of individuals who develop PTSD continue to suffer from its effects decades later without treatment (Meichenbaum, 1994).**

## Subtypes of PTSD

For treatment sake, it is helpful to think about PTSD in sub-types that, due to their development and etiology, will require treatment adapted or focused accordingly.

- Uncomplicated PTSD** (less common type) - generally the persistent re-experiencing of a traumatic event. Requires treatment for PTSD only
- Comorbid PTSD** (more common type) - associated with at least one additional psychiatric disorder including: substance abuse, depression, panic disorders, or anxiety disorders. Having Comorbid PTSD requires additional treatment for associated disorders

- ❑ **Complex PTSD** (exposure to prolonged trauma) - may be a result of childhood sexual abuse and is associated with additional diagnoses such as dissociative identity disorder, depressive disorder, borderline personality disorder, or anti-social personality disorder. In addition, these individuals may have eating disorders, alcohol and drug abuse, self-destructive behaviors, sexual dysfunction or acting out behaviors, compulsivity, rage, memory difficulties. Requires long-term, highly structured program of treatment by a team of trauma specialists.

## Treatment for PTSD

Most basically, treatment for PTSD falls into two categories. Depending upon the subtype of the disorder and the associated complicating factors, treatment will be a selected combination of the available medications and psychotherapeutic choices.

- ❑ **Pharmacological** - aimed at controlling symptoms of PTSD and may allow victims to participate more effectively in psychotherapy.

**Over 33% of the survivors of the Oklahoma City bombing developed PTSD**

### MEDICATION RECOMMENDATIONS:

- ❑ SSRIs are generally the first-line medication for PTSD.
- ❑ Benzodiazepines may worsen patients and are generally ineffective in treating PTSD.
- ❑ Drug therapy is generally continued patients for 12 months or longer.
- ❑ Psychiatric referral for patients who are refractory to initial drug therapy at 3 months and those with complicating comorbid conditions.

*Drug names:* amitriptyline (Elavil and others), carbamazepine (Tegretol and others), desipramine (Norpramin and others), dexamethasone (Decadron and others), lamotrigine (Lamictal), nefazodone (Serzone), phenelzine (Nardil).

## ❑ **Psychotherapy**

- Group Therapy - shares similar experiences, reactions, and emotions. Assists survivors by normalizing responses, providing emotional support, and understanding.
- Cognitive-Behavioral Therapy (CBT) - correcting or adjusting thought patterns that lead to negative emotions and functioning through challenging existing thinking and through the use of relaxation techniques.
- Exposure Therapy- a form of CBT that uses imaging to re-expose the victim to the trauma in order to “desensitize” or lessen the effects of the trauma.
- Eye Movement Desensitization and Reprocessing (EMDR) - combines CBT and Exposure Therapy with specific techniques of eye movement, hand taps, and sounds
- Brief Psychodynamic - examines personal values and the personal effect of the trauma with at aim at resolving current life difficulties.

**The rate of attempted suicide by persons who have PTSD has been reported at 19%. (Hendin & Haas, 1991)**

PTSD treatment is complicated because the disorder frequently occurs in conjunction with other physical or mental health problems such as: depression, substance abuse, problems of memory and cognition, and other problems of physical and mental health.

In addition, PTSD is also associated with impairment of social functioning, occupational instability, marital problems, divorces, family discord, and parenting difficulties.

In a statement released from the International Consensus Group on Depression and Anxiety, the organization provided the following recommendations regarding treatment:

*PTSD is often a chronic and recurring condition associated with an increased risk of developing secondary comorbid disorders, such as depression. Selective serotonin reuptake inhibitors are generally the most appropriate choice of first-line medication for PTSD, and effective therapy should be continued for 12 months or longer. The most appropriate psychotherapy is exposure therapy, and it should be continued for 6 months, with follow-up therapy as needed.*

**About 30% of Vietnam veterans developed PTSD**

In addition, the International Consensus Group on Depression and Anxiety Group made the following **treatment recommendations with regard to immediate response to trauma:**

- First days after trauma, EDUCATION about normal stress responses. DISCUSSION of trauma experience with family and friends is encouraged.
- During first 2 weeks following trauma, COUNSELING related to distress. Develop sense of SAFETY AND observe for necessary interventions.
- Nonbenzodiazepine hypnotic MEDICATION is appropriate for sleep disturbance when it is greater than 4 consecutive days. Avoid benzodiazepines
- DRUG THERAPY is appropriate after 3 weeks if patient remains extremely distressed, non-interactive with support systems or REFERRAL to mental health professional.

**50% of victims who are raped develop PTSD**

**5% of victims of natural disasters develop PTSD**

## Susceptibility to PTSD

It would be impossible to predict who would and would not experience PTSD after exposure to trauma, but there are some conditions which seem to make persons more susceptible to the disorder.

- Women are more likely to develop PTSD than are men.
- People who are raped more so than those who experience other types of assaults
- People who experience a fear of dying in the trauma
- People with other significant life-stressors
- Previous trauma experience that increases negative reactions
- No experience coping with trauma in the past
- Lower economic status
- History of psychiatric disorder
- Living in traumatized community
- Middle aged (40 to 60 years)
- Familial history of psychiatric diagnosis