



Critical Incident Stress

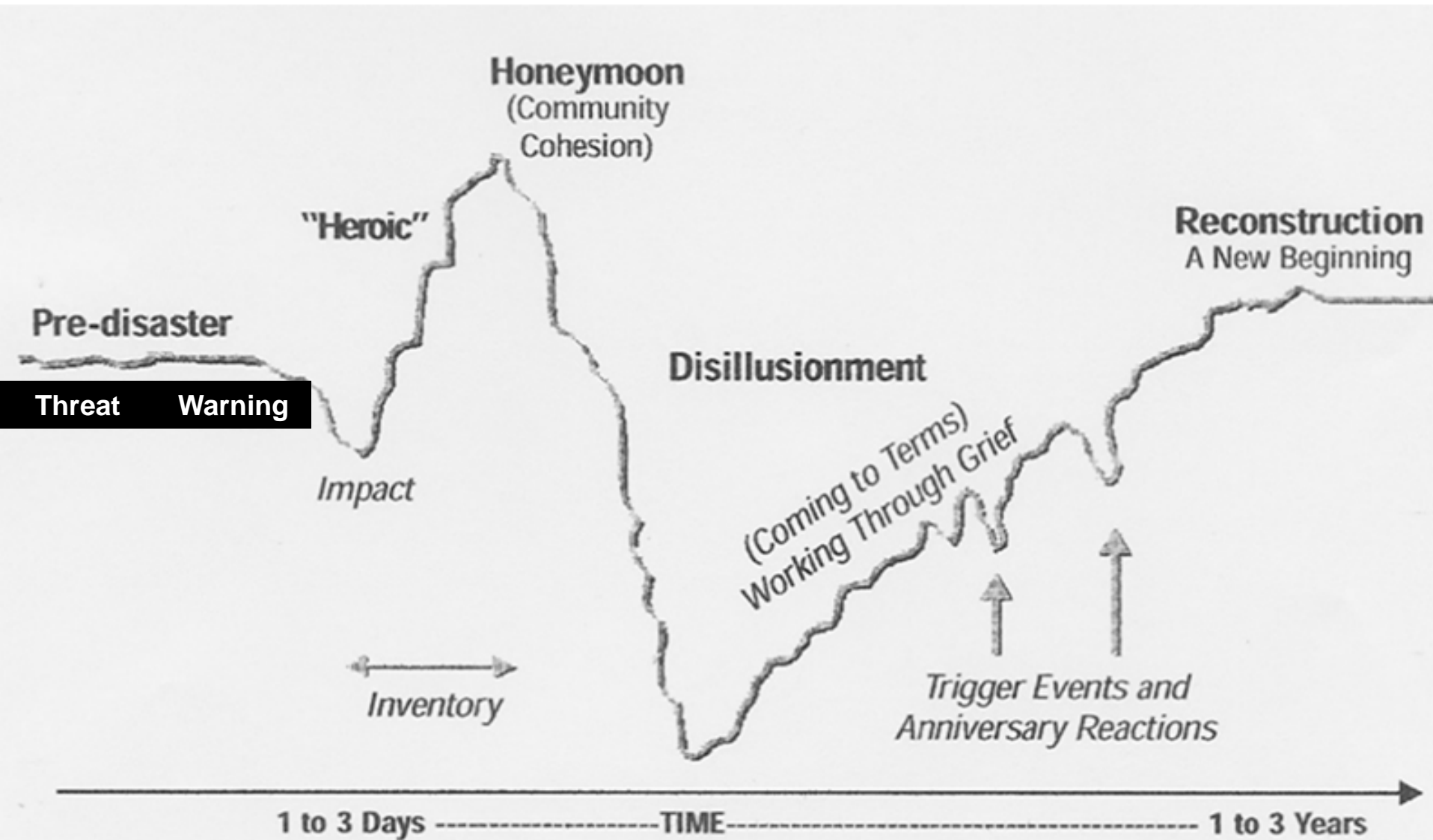
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Phases Of Disaster

Myers and Zunin, 1990



Stages of Psychological Response to Disaster

- **“Rescue” stage**
 - **“Inventory” stage**
 - **“Reconstruction” stage**
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Rescue Stage

1st few hours or days after disaster

- **Psychic numbing: stunned, dazed, confused**
 - **Heightened arousal**
 - **Survivor guilt**
 - **Ambivalence over help**
 - **Affective & cognitive instability**
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Reactions to Crises

- Critical Incidents:
 - unusually **challenging events** that have the potential to create **significant human distress** and can **overwhelm** one's coping mechanism.

 - Psychological crisis:
 - the **significant distress, impairment and dysfunction** in response to critical incidents. There is **destabilization** and **usual coping mechanisms** have failed.
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Critical Incident Stress Symptoms

- Crisis affects people in many ways
 - Individuals who have experienced a traumatic event do suffer psychological stress related to the incident
 - In most instances, these are **normal reactions to abnormal situations**
 - These emotional aftershocks may appear immediately after the traumatic event, or even weeks or months later
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Critical Incident Stress Symptoms

Cognitive

- Confusion
- Hyper-vigilance
- Intrusive thoughts, images, or nightmares about the critical incident
- Preoccupation with the critical incident
- Memory disturbances

Emotional

- Increased tension and inability to relax
- Persistent worry and fear
- Guilt
- Grief reactions
- Irritability or angry outbursts
- Lessened ability to feel joy or happiness
- Sense of helplessness

Critical Incident Stress Symptoms

Behavioural

- Social withdrawal
- Restlessness
- Sleep disturbances
- Increased intake of alcohol or substances

The signs and symptoms of critical incident stress are **normal reactions** to crisis, and usually disappear over 2-3 weeks.

Symptoms lasting more than a month leads to a likely diagnosis of
Post Traumatic Stress Disorder

Inventory Stage

Weeks to about 12 months after disaster

- **Initial “honeymoon” phase of having survived and being safe is over**
 - **Gradual realization of true impact or lasting consequences of disaster**
 - **Disillusionment sets in: slowness of reconstruction, corruption etc**
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Inventory Stage

- **“second” disaster effects**
 - **Rapid influx of well-meaning helpers & poor people from outside of disaster area: impact on already limited resources**
 - **Refuge in relief shelters for extended period of time: personal & material losses, loss of privacy/independence/familiar environment, disruption of family roles & work, issues of sanitation, personal assaults on vulnerable groups**

Possible Psychiatric Complications

- Depression
 - Anxiety disorders
 - Alcohol and substance abuse
 - Post Traumatic Stress Disorder (PTSD)
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Differentiating Distress and Dysfunction

- Critical Incident Stress Reactions or Post Traumatic Stress (PTS), is a normal survival response
- Post Traumatic Stress Disorder (PTSD) is pathological, leading to difficulty in functioning.

Signs of Dysfunction

- Panic attacks
 - Suicidal/Homicidal Ideation
 - Dissociation
 - Severe exaggerated startle response
 - Violence
 - Addiction
 - Self-neglect
 - Inability to speak/understand speech
 - Recurrent dizziness & headaches
 - Persistent cognitive difficulties
 - Persistent hopelessness and helplessness
 - Persistent sleep disturbances
 - Persistent irregular heartbeats
 - Seizures
 - Loss of consciousness
 - Numbness/paralysis
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Crisis Intervention

Research Findings

The Need

- Disasters may create significant impairment in 40-50% of those exposed (Norris, 2001, SAMHSA)
- About **50%** of disaster workers likely to develop significant distress (Myers & Wee, 2005)
- Terrorism likely to adversely impact majority of population (IOM, 2003);
Ranges from ~ 40 - 90% (JHU, 2005)

The Need: Singapore Statistics

- Study of healthcare workers during SARS: 35% doctors & 25% nurses were suffering from psychiatric disorders; 20% suffered from PTSD. (Chan & Chan, 2004)
 - Study on rehab staff in a General Hospital: 23.4% had psychiatric symptoms; 12.5% suffered from PTSD. (Sim & Chan, 2004)
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The Need: Singapore Statistics

- Study on media workers during Asian Tsunami: 25% suffered from psychiatric disorders; 33% suffered from severe posttraumatic stress symptoms. (Sim et. al., 2006)
 - Study on medical relief workers: 10 % suffered from severe posttraumatic stress symptoms. (Chan & Chan, 2006)
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In the case of terrorism,

THE ICEBERG EFFECT OF
TERRORISM (and disasters)...
more psychological casualties than
physical casualties...80/20 Effect?

(Holloway, et al., 1997, JAMA; DiGiovanni, 1999, Am. J. Psychiatry)

CRISIS INTERVENTION

- In response to the acute mental health needs of those in crisis, the field of **CRISIS INTERVENTION** was born
 - It is a form of **EARLY INTERVENTION**
 - It is also known as **PSYCHOLOGICAL FIRST AID**
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CRISIS INTERVENTION

To foster natural resiliency through:

Goals:

1. Stabilization
2. Symptom reduction
3. Return to adaptive functioning, or
4. Facilitation of access to continued care

(adapted from Caplan, 1964, *Preventive Psychiatry*)

LESSONS LEARNED FROM COMMUNITY MENTAL HEALTH

- Early Psychological Intervention may reduce the need for more intensive psychiatric services.
(Langsley, Machotka, & Flomenhaft, 1971, Am J Psyc; Decker, & Stubblebine, 1972, Am J Psyc)
 - Early Psychological Intervention may mitigate acute distress . (Bordow & Porritt, 1979, Soc Sci & Med; Bunn & Clarke, 1979, Br. J Med. Psychol; Campfield & Hills, 2001, JTS; Everly, et al., 1999, Stress Med; Flannery & Everly, 2004, Aggression & Violent Beh.)
 - Early Psychological Intervention may reduce alcohol use. (Deahl, et al, 2000, Br J Med Psychol; Boscarino, et al., 2005)
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LESSONS LEARNED FROM CONSULTATION MENTAL HEALTH

(Stapleton, Medical Crisis Intervention, 2004)

- Early Psychological Intervention is improved by **increased training** (Cohen's $d = .57$ vs. $.29$)
 - Early Psychological Intervention outcome is enhanced via **multiple sessions** ($.60$ vs $.33$) (plateau at 2-3 sessions, Boscarino, et al., 2005)
 - Early Psychological Intervention is enhanced via the use of **multiple interventions on PTS** ($.62$ vs $.55$)
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LESSONS LEARNED FROM THE WORKPLACE

- Post disaster crisis intervention (CISM) was associated with reduced risk for
 - binge drinking ($d=.74$),
 - alcohol dependence (.92),
 - PTSD symptoms (.56),
 - major depression (.81),
 - anxiety disorder (.98)
 - global impairment (.66),
- compared with comparable individuals who did not receive this intervention (Boscarino, et al, IJEMH, 2005).
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Crisis Intervention Promotes

- Resistance
 - Resiliency
 - Recovery
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