The Psychological Cost of Disasters

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What Are the Possible Psychological Costs?

- PTSD
- Depression
- Anxiety
- Grief
- Substance Abuse
- Insomnia
- Worry
- Anger
Posttraumatic Stress Disorder (PTSD)

- Most common psychiatric disorder after trauma
- Includes:
  (a) Reexperiencing the trauma (memories)
  (b) Avoidance
  (c) Arousal

Trajectory of PTSD

![Trajectory of PTSD Graph](image-url)
Course of PTSD

- Most people suffer PTSD symptoms in the initial weeks after trauma exposure
- BUT most recover in the next three months

Prototypical Patterns Over Time
Most of us are

RESILIENT

HOW DO WE UNDERSTAND PTSD RESPONSE?
Fear Conditioning Models

- A prevailing model of trauma is that fear conditioning occurs during and after trauma
- These models arise from earlier animal models of classical conditioning

Classical Conditioning

- Learning that certain environmental stimuli predict harmful events.
Fear Conditioning Models

- Trauma = Unconditioned Stimulus
- Fear = Unconditioned Response
- Reminders = Conditioned Stimuli
- Reexperiencing = Conditioned Response

Extinction Learning

- Refers to new learning that inhibits initial fear conditioning
- Rats learn that the light is safe after repeatedly experiencing it without the shock
Extinction Learning

- For most of us, we undergo extinction learning in the weeks/months after trauma.
- We learn that the threat is over and we have new experiences that inhibit initial fear responses.

PTSD = Failed Extinction
Disasters Responses Can Be Different…

- Disasters rarely finish quickly
- There are typically many long-term consequences
- These can have longer-term effects on survivors
Psychological Adjustment & Katrina: PTSD

Kessler et al., 2008, *Mol Psychiatry*

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Psychological Adjustment & Katrina: Suicidal Ideation

Kessler et al., 2008, *Mol Psychiatry*
Delayed-Onset

- Delayed-onset PTSD formally refers to PTSD onset after 6 months posttrauma
- Accounts for 15% of PTSD cases in civilian samples
- PTSD increase can occur after disasters
- Highlights the need for monitoring of at-risk people months and years after disaster
Five Empirically-Supported Early Intervention Principles

- Hope
- Safety
- Calming
- Connectedness
- Self-Efficacy

Traditional Debriefing

- Much evidence that debriefing (e.g., CISD) does not prevent PTSD
- May facilitate other forms of coping
- Even though it is a commonly used acute intervention, it is NOT recommended
Debriefing May be Toxic

- Some evidence that it may lead to worse outcome in distressed people
- May increase arousal
- No follow-up
- No assessment

### Integrative Model

<table>
<thead>
<tr>
<th>PROBLEM SEVERITY</th>
<th>STRATEGIES</th>
<th>ISSUES</th>
<th>APPROPRIATE CARE PROVIDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild distress</td>
<td>PFA</td>
<td>Informal</td>
<td>Anyone</td>
</tr>
<tr>
<td>Moderate</td>
<td>SPR</td>
<td>Common problems</td>
<td>Primary care and Allied health</td>
</tr>
<tr>
<td>Severe</td>
<td>More extensive treatment</td>
<td>Clinical disorders</td>
<td>Mental Health providers</td>
</tr>
</tbody>
</table>
Psychological First Aid

PFA

- Main alternative to debriefing
- Much overlap with debriefing practices
- Important difference is that it does NOT promote review of the emotional aspects of the trauma
PFA Delivery

- Optimally provided by local people trained in PFA
- Is intended to assist people cope in the acute phase rather than prevent subsequent disorder

Psychological First Aid Core Actions

<table>
<thead>
<tr>
<th></th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Contact and Engagement</td>
</tr>
<tr>
<td>2</td>
<td>Safety and Comfort</td>
</tr>
<tr>
<td>3</td>
<td>Stabilization</td>
</tr>
<tr>
<td>4</td>
<td>Information Gathering</td>
</tr>
<tr>
<td>5</td>
<td>Practical Assistance</td>
</tr>
<tr>
<td>6</td>
<td>Connection with Social Supports</td>
</tr>
<tr>
<td>7</td>
<td>Information on Coping</td>
</tr>
<tr>
<td>8</td>
<td>Linkage with Collaborative Services</td>
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Psychological First Aid Core Actions

Core Action #1: Contact and Engagement

- Establish a connection with survivors in a non-intrusive and compassionate manner
  - Introduce yourself and describe your role
  - Ask for permission to talk
  - Explain objectives
  - Ask about immediate needs
Psychological First Aid Core Actions

2 Safety and Comfort

Core Action #2: Safety and Comfort

Safety and Comfort

- Ensure immediate physical safety
- Provide information about disaster response activities and/or services
- Offer physical comforts
- Offer social comforts and link to other survivors
- Protect from additional trauma and potential trauma reminders
- Discuss media viewing
Core Action #3: Stabilization

The goal is to calm and orient emotionally-overwhelmed and distraught survivors.
Core Action #4: Information Gathering

The goal is to identify immediate needs and concerns, gather additional information, and tailor PFA interventions.

It is used to:

- Determine the need for immediate referral
- Determine the need for any additional available ancillary services
- Determine which components of PFA may be helpful
Psychological First Aid Core Actions

5 Practical Assistance

Core Action #5: Practical Assistance

Offer practical help to survivors in addressing immediate needs and concerns

- Identify the most immediate need(s)
- Clarify the need
- Discuss an action response
- Act to address the need
Core Action #6: Connection with Social Support

The goal is to help establish brief or ongoing contacts with primary support persons, such as family members and friends, and to seek out other sources of support.
Psychological First Aid Core Actions

Core Action #7: Information on Coping

- Provide information about stress reactions and coping to reduce distress and promote adaptive functioning
  - Explain what is currently known about the event
  - Inform survivors of available resources
  - Identify the post-disaster reactions and how to manage them
  - Promote and support self-care and family care practices
Psychological First Aid Core Actions

Core Action #8: Linkage with Collaborative Services

The goal is to link survivors with available services needed immediately or in the future.
Skills for Psychological Recovery (SPR)

- Empirically-derived skill sets
- 1-5 sessions, each “stand alone”
  - But encouraging multiple visits
- Build skills, between-session tasks
- Flexible, tailored approach
- Targeted at survivors with ongoing needs

Goals of SPR

- Acceleration of recovery
- Secondary prevention of mental health problems
- Support for post-disaster role functioning
- Prevention of maladaptive behaviors
- Flexible delivery suited to needs of survivors
- Referral to more intensive mental health interventions
SPR Interventions

- Assessment
- Problem-Solving
- Activities Scheduling
- Helpful Thinking
- Social Support
- Managing Distress

Components of SPR

- **Assessment** - obtain important information about needs and concerns
- **Problem-solving** - increases self-mastery and enhances ability to reduce current stresses and problems
- **Activity scheduling** - reduces stresses, increases social interaction, reduces depression
- **Managing Reactions** - minimizes arousal and distress
- **Helpful thinking** - reduces maladaptive appraisals
- **Healthy Connections** - engages networks, activity levels, prevents depressive/withdrawal reactions
Advantages of SPR

1) Evidence informed
2) Resilience building model vs. pathology treatment model
3) Modular format
4) Rationale provided for core actions
5) Helps survivors to identify and prioritize needs
6) Utilizes simple techniques
7) Provides handouts
8) *BUT* not yet empirically evaluated

Treating Clinical Disorders

1) Targeted at people who have persistent problems
2) Typically presenting with clinical disorders
3) Often involve posttraumatic conditions and/or conditions related to ongoing stressors
4) Often Cognitive Behavior Therapy
5) Based on exposure and cognitive restructuring
## Adapting Treatments

1. Targeted at people with clinical disorders
2. Often involve posttraumatic conditions and/or conditions related to ongoing stressors
3. Often Cognitive Behavior Therapy
4. Often based on exposure and cognitive restructuring
5. Exposure needs to recognize the capacity of survivor to undertake therapy if many ongoing stressors present
6. Cognitive restructuring needs to recognize that actual risks can apply after disaster and ‘relative risk appraisal’ should be taught

## Contacts For Further Details

- National Child Traumatic Stress Network:  
  - [www.NCTSN.org](http://www.NCTSN.org)
- National Center for PTSD:  
  - [www.ncptsd.va.gov](http://www.ncptsd.va.gov)