THE ATTACK ON THE WORLD TRADE CENTER

PATHWAYS TO HEALING FOR VICTIMS AND THEIR FAMILIES

Monica J. Indart, Psy.D.
Rutgers University
Graduate School of Applied and Professional Psychology

Working with Survivors and Families

- Physical Facts
- Emotional Facts
- Psychosocial Effects
- Pathways to Recovery
  - Adaptation Trajectories
- Implications for Interventions

The Physical Facts

Deaths:

- WTC: 2,752
  - 343 firefighters, 60 police from NYPD and PA
  - 836 responders current count as of June 2009 (NY DOH)
- Pentagon: 184
- Flights: 246 on 4 planes

The Physical Facts

- Number of people who lost a spouse or partner: 1,609
- Estimated number of children who lost a parent: 3,051
- Number of families who received no remains: 1,717
- Percentage of Americans who knew someone hurt or killed: 20%

The Emotional Facts

- The impact of losses across time
- The impact of time across losses
- The "ripple effect" of traumatic loss within families and across communities

PSYCHOSOCIAL EFFECTS

Spheres of Influence

Disaster Research: Summary Points

(Bonanno, Brewin, Kaniasty & Greca, 2010)

- Disasters cause serious psychological harm to a minority of exposed individuals.
- Disasters produce multiple patterns of outcome, including psychological resilience.
- Disaster outcomes depend upon a combination of risk and resilience factors
- Disasters put families and communities at risk.

Early Effects Post 9/11

- 4-8 weeks after WTC attacks: of 988 adults surveyed, 7.5% met diagnostic criteria for PTSD, 9.7% for MDD; 28.8% reported increase in tobacco, alcohol or marijuana use

  Predictors for PTSD were: Hispanic ethnicity, history of 2 or more stressors prior 9/11; experience of panic during or immediately after attacks; residence below Canal Street; loss of possessions/resources
- 4 months after 9/11, rates of PTSD had dropped to 2.9%, and MDD to 4.3%

Continuing Effects

- 12.6% prevalence rate two to three years post 9/11 among sample of 11,037 adults in lower Manhattan, with relationship between SES and PTSD risk (DiGrande, et al., 2008)
- Decrease of probable PTSD in urban primary care sample of 455 patients, assessed 1 and 4 years post-9/11, with rates dropping from 9.6% to 4.1%. Pre-9/11 major depressive disorder strongest predictor of PTSD (Neria, et al., 2010)

Continuing Effects

- Increase in perceived social benefits post-9/11, including increased prosocial behavior, religious and/or political engagement in a sample of 1382 adults.
- Lower rates of distress and post-traumatic stress and greater positive affect and life satisfaction 3 yrs post-9/11 associated with increased religiosity beginning 2 months post-9/11 (Poulin, et al., 2009)

PATHWAYS TO RECOVERY

Adaptation to Traumatic Events

Three Sources of Influence

Person Characteristics

- Gender (female)
- Age (children and older adults)
- Prior psychiatric history
- Prior exposure to trauma
- History of multiple losses
- Prolonged hyperarousal

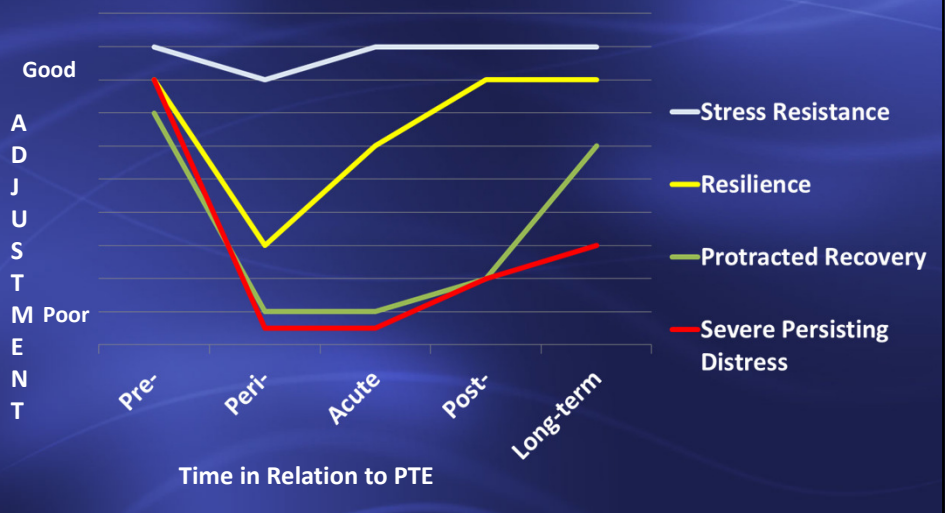
Event Characteristics

- Events of man-made violence and human intention
- Dose-response relationship
  - Proximity
  - Intensity
  - Prolonged exposure
- Exposure to grotesque images
- Inability to flee

Post-Event Environment

- "Secondary assaults" – i.e, unempathic, blaming, nonsupportive response from support systems
- Protection from further stress and trauma
- Social support
- Resource loss

Adaptation Trajectories



(Adapted from Friedman, Keane, Resick (Eds), 2007)

Adaptation

- Most distress-related reactions dissipate over time, typically within a three-month period
  - Severe problems typically seen in less than 30% of adults and youth sampled
- Those that fail to show improvement after approximately 6 months are at risk for more chronic problems, including PTSD
- Kessler (1995) found that 1/3 of people with PTSD fail to recover after many years

IMPLICATIONS FOR INTERVENTIONS

What Are We Preventing? Psychosocial Consequences of Exposure to PTE

- Depression
- Anxiety
- PTSD
- Traumatic grief
- Substance abuse
- Interpersonal conflicts
- Spiritual distress

- PTSD is a ***disorder of non-recovery***

What Are We Promoting? More Than The Absence of Disorder

- Resilience
- Self-efficacy
- Adaptive coping
- Engagement/Connection
- Meaning
- ***Salutogenesis*** – remaining healthy in the face of challenges

Maslow's Hierarchy of Needs

Five Essential Elements of Interventions

- Safety
- Calming
- Self-efficacy
- Connectedness
- Hope

(Hobfoll, et al., 2007)

Models of Intervention: Timeline

("timing is everything" - almost)

* In "Screen and Treat" model, may begin treatment much sooner

PFA – Psychological First Aid
CPT- Cognitive Processing Therapy

Targets for Early Intervention

- Social Support
- Self-efficacy
- Resiliency

Understanding Social Support

- Support Network Resources
  - Depth and breadth of social network
- Supportive Behaviors
  - Specific interactions that promote connection
- Received vs. Perceived Support
  - Moderate correlation between the two types
  - Perceived support may be more critical to longer term recovery

Five Supportive Functions

- Emotional support
- Instrumental support
- Informational support
- Companionship support
- Validation

Peer Support: How Is It Helpful?

- Mechanisms of Action:
  - Stress-Buffering Model
    - Particularly influential during periods of stress because of positive influences on emotions, cognitions and behaviors
  - Main Effect Model
    - Constant influences on distress-related decisions, behaviors and outcomes, independent of the stressful event
      - Social influence
      - Information provided by social networks
      - Provision of tangible services
      - Positive psychological states – belonging, security, sense or purpose, connection, self-worth
    - Positive outcomes are a result of increasing motivation to address (rather than avoid) problems, and improving problem-solving

Promoting Resilience

- Differentiating stress resistance from resilience
- Differentiating resilience from post-traumatic growth
- Shift from resilience-related attributes to more dynamic resilience-related mechanisms
- Involves a multidimensional understanding:
  - Identification of those at increased risk
  - Mitigating the effects of vulnerability factors
  - Increase accessibility of protective factors

Longer-Term Issues

- Shift from intervention to treatment
- The changing nature of grief
  - Shift from pain of remembering to fear of forgetting
- The chronicity of trauma-spectrum disorders
  - PTSD as an inability to forget
  - Development of co-morbid disorders
    - Depression/Mood Disorders
    - Substance Use Disorders

Fostering Humanity: Sustaining Community Engagement

- Build community capacity
- Leverage social capital: Extent to which community members demonstrate:
  - A sense of shared responsibility for the general welfare of community members
  - A collective competence in confronting situations that threaten the integrity of the community

(Lloyd Potter, SAMHSA Summit, New Orleans, LA, May 24, 2006)

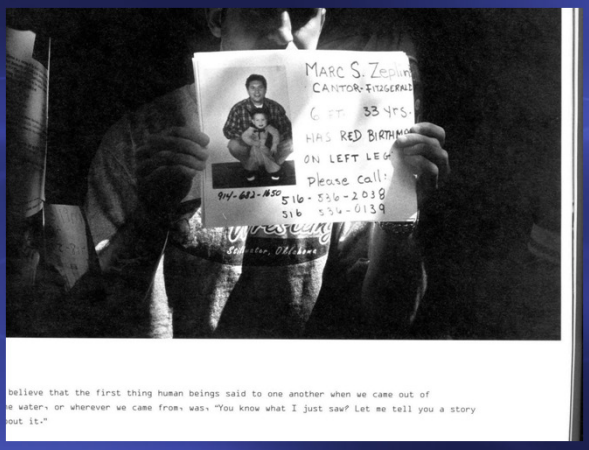
Conclusions

- Despite research contraindicating single session debriefing, CISD remains a common form of immediate psychological intervention (Bonanno, Brewin, Kaniasty & Greca, 2010)
- PFA has emerged as a best practice for immediate intervention
- Most research support for effectiveness of intervention during short-term (1 month) and longer-term (1 year+) recovery periods
- Limited research support for early interventions, largely due to methodological challenges
- Emerging support for "screen and treat" model (Brewin, et al., 2008)

Further Questions/Future Directions

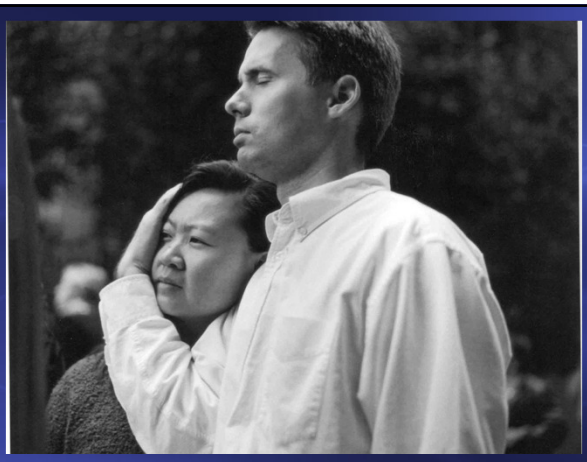
- How can we use emerging science regarding natural recovery from trauma to promote these healing processes in those who are at risk for more complicated traumatic stress reactions?
- What cultural practices can be adapted to serve as more universal interventions?
- How do we assess the "timing" of interventions?
- How can we promote joint communities of practice-based evidence?

LESSON ONE:
We cannot prepare for everything.



LESSON ONE-A:
Not every question has an answer.

LESSON TWO:
There are many paths to recovery.



LESSON THREE:
Faith and family are what we turn to in times of crisis.

LESSON THREE-A:
There are many ways of defining faith and family

LESSON FOUR:
Resilience may be learned as well as earned.


LESSON FIVE:
We may need to improve our ability to learn from lessons learned.


"May we lose no one we love
From the shelter of our hearts."
John O'Donohue
"For Lost Friends"