Acute Trauma: Assessment and Intervention
Characteristics of Traumatic Events

- Sudden or Unexpected
- Challenge One’s Competence
- May be Overwhelming
- Perception of Threat / Danger/ Loss
- Negative Outcome Common
- Impacts Belief Systems (e.g. control, safety)
- May Involve Traumatic Sensory Stimuli (exposure to grotesque)
- Fear Inducing
Trauma Impacts:

- Victim
- Family
- Community
- Business / Organizations
- Caregivers
Impact of Trauma on Individuals

- Post Traumatic Stress Disorder
- Grief
- Depression
- Somatic Stress Responses
- Occupational Stressors
- Financial Stressors
- Change In Family Roles
- Impact Of Pain / Injury
- Daily Life Management Challenges
- Growth and Resilience When Managed Effectively
Impact of Trauma on Business and Organizations

- Loss of Productivity
- Workforce Attrition
- Absenteeism
- Presenteeism
- Protracted Medical Course
- Conflicts Between Employees
- Reduced Quality of Services Provided
Posttraumatic Stress Disorder
DSM-IV-TR
(2000)
Exposure Criterion (both required)

- The person experienced, witnessed, or was confronted with an event(s) that involved actual or threatened death, or serious injury, or a threat to the physical integrity of self or others
- The person’s response involved intense fear, helplessness, or horror
Persistent reexperiencing

- Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions
- Recurrent distressing dreams of the event
- Acting or feeling as if the traumatic event were recurring (illusions, hallucinatory experiences, flashbacks)
Persistent reexperiencing

- Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
- Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
Persistent avoidance / Numbing of general responsiveness

- Efforts to avoid thoughts, feelings, or conversations associated with the trauma
- Efforts to avoid activities, places, or people that arouse recollections of the trauma
- Inability to recall an important aspect of the trauma
- Markedly diminished interest or participation in significant activities
Persistent avoidance / Numbing of general responsiveness

- Feelings of detachment or estrangement from others
- Restricted range of affect
- Sense of a foreshortened future
Persistent symptoms of increased arousal

- Difficulty falling or staying asleep
- Irritability or outbursts of anger
- Difficulty concentrating
- Hypervigilance
- Exaggerated startle response
Duration

- More than one month
The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning
PTSD

- ACUTE (less that 3 month duration)
- CHRONIC (more than 3 month duration)
- DELAYED ONSET (onset of symptoms at least 6 months after the stressor)
How common is PTSD?

- Probability of developing PTSD after a traumatic event:
  - men 8 - 13%
  - women 20 - 30%

- Annual prevalence:
  - 1.5 – 3%

Nice Guidelines
What is the natural course of PTSD?

Duration of symptoms for PTSD treated and untreated

- Usual onset of symptoms a few days after the event
- Many recover without treatment within months/years of event (50% natural remission by 2 years), but some may have significant impairment of social and occupational functioning

Treatment means that about 20% more people with PTSD recover

Generally 33% remain symptomatic for 3 years or longer with greater risk of secondary problems

Proportion surviving without recovery

Duration of symptoms (years)
PTSD Is an Impaired Recovery of Early Responses to Traumatic Event

Figure 2. Progression of posttraumatic stress disorder (PTSD) symptoms among trauma survivors with and without PTSD during the first year following trauma. Data from Shalev et al 2000 and Freedman et al 1999. IES, Impact of Events Scale.
PTSD

- 74% of PTSD cases studied by Breslau (1998) lasted more than 6 months.

- Symptoms of distress and PTSD are correlated with exposure to traumatic stressors (Weiss et al., 1995; Corneil, 1993; Wee et al., 1999).
PTSD Comorbidities

- Depression
- Substance Abuse
- Other Anxiety Disorders
- Somatization
- Complicated Grief
Clinical Presentation of Acute PTSD
Sometimes....We Just Get Stressed
Acute Stress Disorder
DSM - IV

- Core PTSD symptoms
- Peri-traumatic dissociation
- 2 days - 4 weeks
PERITRAUMATIC DISSOCIATION
Marmar, Weiss, & Metzler (1998)

- Alteration is sense of time
- Depersonalization
- Derealization
- Amnesia
- Profound feeling of unreality that the event is occurring or that the individual is the victim of the event
- “Tunnel vision”
- Alteration of pain perception
ASD as a Predictor of Posttraumatic Stress Symptoms (Classen, Koopman Hales & Speigel, 1998)

- 32 employee witnesses to a fatal shooting
- 33% met ASD criteria within 8 days (questionnaire)
- ASD symptoms highly correlated with posttraumatic stress symptoms
  - $r = .44$ overall symptoms
  - $r = .73$ for intrusion symptoms
  - $r = .67$ for avoidance symptoms
Relationship between ASD and PTSD
Bryant and Harvey (AJP, 1998)

- 79 MVA victims assessed
- ASD diagnosed in 14% of sample by structured interview
- 6 months post MVA:
  - 82% of ASD cohort diagnosed with PTSD
  - 11% of non-ASD cohort diagnosed with PTSD
May have less utility as a predictor of PTSD than originally believed (Bryant, 2004)

- The majority of those who are diagnosed with ASD will develop PTSD
- HOWEVER, the majority of those with PTSD do not meet diagnostic criteria for ASD during the temporal window
“It’s hard to make predictions, especially about the future.”

-Yogi Berra
Disaster Mental Health
It never fails, first we have an earthquake, and then it snows...
Mass Casualty Events

- Public mental health challenge
- Will require ability to anticipate and manage “surge”
- May require a deviation from accepted “standards of care” for practitioners
It is generally believed that mass disasters, but especially terrorism, will create more psychological “casualties” than physical “casualties”

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

- Tokyo, Japan, 1995
- Sarin (nerve agent) attack, subway
- 12 killed
- 900 required medical care
- 4000-9000 psychological casualties (10:1 psychological:physical)

-Obhu et al., 1997
I AM A BOMB TECHNICIAN IF YOU SEE ME RUNNING TRY TO KEEP UP
WORLD TRADE CENTER ATTACKS

- September 11th 2001 attacks on the NYC World Trade Center.
- 5-8 weeks post disaster telephone assessment (1008 adults, Manhattan south of 110th St.) indicated 7.5% PTSD, 9.7% depression, 20% PTSD south of Canal St.
- Exposure predicted PTSD, losses predicted depression.

(Galea, et al., 2002, NEJM)
Terrorism and Traumatic Stress

- Psychometric assessment 1-2 months post 9-11
- 2273 adults (national sample, oversamples in NYC, D.C.)
- 11.2% PTSD NYC
- 2.7% PTSD Wash. DC
- 4% PTSD nationally
- 60% of adults in NYC with children reported 1 or more children were upset by attacks

(Schlenger, et al., 2002, JAMA)
Psychological Impact of 9/11: Data from WTC Health Registry

Most vulnerable to PTSD = most highly exposed:
- Those who started work on or soon after 9/11
- Those who worked longer periods of time
- Those who worked at the site for at least three months (except for police)

Perrin et al., A.J. Psychiatry, Nov. 2007
Preventing PTSD vs. Accelerating Recovery
Interventions to prevent traumatic stress
Fullerton, McCarroll, Ursano, & Wright (1992)

- Training and experience
- Group / organizational leadership
- Management of meaning, exposure, fatigue
- Buddy care
- Natural social supports and caretakers
- Education in disaster stress and strain
- Education of health care providers
- Screening
Prevention vs. Treatment: The debate continues

The Cochrane report

ISTSS “Effective Treatments for PTSD

DOD/ DOJ/ NCPTSD/ NIMH/ ARC/ HEALTH AND HUMAN SERVICES: Consensus development / best practices workshop

(Oct. 30 – Nov. 1, 2001)
Who “Needs” Intervention?

● “Wait and See” or “Ounce of Prevention”
Early Intervention

  - Early intervention – within 4 weeks
  - Expect normal recovery
  - MH integrated within overall disaster response plan
  - Intervention as needed & voluntary
  - Basic needs met first
  - Utilize key elements of crisis intervention
  - Remain sensitive to diversity
  - Research to assess validity of methods needed
  - Services should be provided by trained personnel
  - Post-intervention follow-up
The majority of individuals exposed to a traumatic event will not need formal psychological intervention.
Screening Considerations
High Risk Individuals
(Dod, DoJ, NCPTSD 2002)

- Acute stress disorder or other clinically significant symptoms
- Bereavement
- History of psychiatric disorder
- Physically injured
- Intense exposure to traumatic event
- Children / elderly
Assessment of PTSD

- Structured Clinical Interview- DSM-IV (SCID)
  - Clinician Administered PTSD Scale (CAPS)
  - Anxiety Disorder Interview Schedule (ADIS)
  - PTSD Symptom Scale-Interview
- Self-report measures
  - PTSD Checklist
  - Impact of Event Scale
  - Mississippi Scale for Combat-related PTSD
  - Keane PTSD Scale of the MMPI-2
  - PTSD Symptom Scale
- Self-monitoring
  - Triggers, exposure
“Best Practice”

- Utilize phase-sensitive, integrated multi-component psychological intervention system tailored to needs of target population

Consider:
- Psychological assessment/ triage
- 1:1 psychological “first aid”
- Group intervention
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LESSONS LEARNED FROM THE WORKPLACE (Boscarino, et al, IJEMH, 2005; Cohen’s d reported by Everly, et al., J Workplace Behavioral Hlth, in press).

A prospective, random sample of 1,681 New York adults interviewed by telephone at 1 year and 2 years after 9/11. Post disaster (WTC) crisis intervention (described as CISM) was associated with reduced risk for:

- alcohol dependence (.92),
- PTSD symptoms (.56),
- major depression (.81),
- anxiety disorder (.98), and
- binge drinking (d=.74),
- global impairment (.66),

compared with comparable individuals who did not receive this intervention.
Boscarino, et al., NY Academy of Medicine, (IJEMH, 2005): Active Mechanisms

- Education about symptoms
- Talking about experiences
- Relaxation
- Stress management/ coping
- Cognitive reframing
- Social support:
  - PTS (.38)
  - Depression (.19)
  - Global impairment (.34)
LESSONS LEARNED FROM CONSULTATION PSYCHOLOGY/PSYCHIATRY IN MEDICAL SETTINGS
(Stapleton, et al., Psychiatric Quarterly, in press)

- 11 (10/11 RCT) studies of individual crisis intervention in medical settings
- 16 outcomes
- 2124 subjects
- Overall effectiveness: Cohen’s d = .44 (anxiety, .52; depression, .24; PTS, .57)
1. Crisis Intervention may reduce distress in medical and surgical patients (d=.44)
2. Crisis Intervention is improved by increased training (.57 vs. .29)
3. Crisis Intervention outcome is enhanced via multiple sessions (.60 vs. .33)
4. Crisis Intervention is enhanced via the use of multiple interventions on PTS (.62 vs .55)
Flannery’s ASAP

- The Assaulted Staff Action Program (ASAP) was originally designed to reduce stress associated with assaults upon staff members by psychiatric patients.
- Consistent reductions in assaults upon psychiatric healthcare staff was one outcome associated with ASAP.
- Mean effect size = 3.6
Assaulted Staff
(Flannery, et.al.2004)

- ASAP in psychiatric hospitals and outpatient clinics
- Multi-site
- Reduced sick leave and accident claims
- Reduced staff turnover ($268,000 /2 YR)
- Reduced assaults
Group Interventions

- CISM: A Multicomponent System
GO ABOUT YOUR BUSINESS. ACT NORMAL.
Psychological First Aid: 5 Essential Elements

- Empirically Supported
- Based on Expert Consensus
Psychological First Aid: 5 Essential Elements

- Promote Sense of Safety
- Promote Calming
- Promote Sense of Self and Community Efficacy
- Promote Connectedness
- Promote Hope
Debriefing
“Hard to tell from here. Could be buzzards. Could be grief counsellors.”
Debriefing cautions

Reviews which have been critical of small group “debriefing” cite 2 primary concerns:

– traumatic story-telling may traumatize other participants (Watson, et al., 2003, in Trauma & Disaster; Stokes, 2002, Cautions & Contraindications for Debriefings)

– probing into affective domain with those who experience numbing & avoidance may trigger pathognomonic re-traumatization (North, 2003, in Trauma & Disaster; Stokes, 2002)
Debriefing cautions

- To address concerns related to group “debriefing”
  - maintain an educational and story-telling format (Shalev, et al., 2003, Terrorism & Disaster)
  - utilize homogeneous groups so as to prevent traumatization from “new” information
  - avoid delving into the affective aspects with groups that are experiencing heightened arousal, avoidance, numbing (North, 2003; Stokes, 2002)
Horowitz, 1997
Phase Oriented Treatment

- Outcry
- Denial
- Intrusion
- Working Through
- Completion
Outcry

- Focus on relief from immediate dangers of the event
  - Medical intervention if indicated
- Here and now therapeutic focus
- Help to use available social supports
- Postponing of non essential decisions
- Step by step planning to reduce emotional flooding
Denial

- Focus attention on topics postponed in outcry phase
- Focus on the immediate implications of the event in terms of self organization, goals, beliefs
- Inhibitions may require confrontation if prolonged
Intrusion

- Restructuring of meanings and sequences of events (differentiation of reality from fantasy)
- Counteract magical thinking about causation of events
- Anxiety management techniques
- Address most conflicted self schemas
Working through

- Exploration of common themes
  - Fear of repetition
  - Shame over vulnerability
  - Anger at the source of the event
  - Anger at those exempted
  - Anger at caretakers
  - Survival guilt
  - Sadness r/t losses
Working through

- Juxtapose dysfunctional and functional beliefs to differentiate rational from irrational conclusions
- Focus on increasing capacity to tolerate emotions
- Facilitate the repetition of new meanings
BRIEF RECOVERY PROGRAM (BRP) FOR TRAUMA SURVIVORS (FOA & RIGGS, 2001)

- Designed to evaluate the survivors difficulties and to provide skills to cope with post trauma reactions
- 4 weekly two-hour sessions
Meeting 1

- Program overview
- Trauma interview and symptom scale
- Education re: common reactions to trauma
- Training in “calm breathing” with audio taped instructions for home practice
Meeting 2

- Discussion of post trauma rxns
- Rationale for recounting the trauma
- Rationale for approaching safe (but avoided) situations
- Explain SUDS scale
- Recounting the trauma (audio taped)
- Cognitive restructuring
- Homework (listening to tape/ telling the story)
Meetings 3 and 4

- Monitor progress
- Continued recounting of trauma
- Continued work on avoidance
- Continued cognitive restructuring
- Homework
- Symptom measures
- Plan for follow up evaluation
Contraindications for Exposure based CBT

- Extreme Anxiety & Panic
- Marked Dissociation
- Psychosis
- Severe Depression
- Suicidal Risk, Homicidal Risk
- Excessive Anger
- Unresolved Prior Trauma
- Ongoing Stressors
- Acute Bereavement (Bryant & Harvey, 2000)
Preferred Psychological treatments

- Interventions need to be focused on the trauma and structured:
  - Trauma-focused CBT - therapist helps the PTSD sufferer to:
    - Confront traumatic memories with less fear
    - Modify misinterpretations which overestimate threat
    - Develop skills to cope with stress

Nice Guidelines
Components of CBT for PTSD

- Psychoeducation
- Relaxation
- Exposure
- Cognitive restructuring
Psychoeducation

- Impact of trauma
- PTSD symptoms
  - Development and maintenance
- Associated problems
- Normalization – adaptive nature of sxs
- Coping strategies
- Role of avoidance
Relaxation

- Progressive muscle relaxation
- Breathing retraining
Exposure

- **Trauma Memories**
  - Prolonged exposure
    - In vivo, imaginal
  - Writing
    - Cognitive Processing Therapy

- **Avoided trauma cues**
  - Systematic desensitization
  - Flooding
Cognitive Restructuring

- Themes
  - Safety, trust, intimacy, power, esteem

- Over-assimilation
  - Distorting trauma
    - e.g., “I should have prevented this…”

- Over-accommodation
  - Drastically changing existing beliefs
    - e.g., “It is never safe...can’t trust anyone”
An Integrative Approach
Assumptions of an integrative model

- Based on pragmatic and empirically derived principles
- Grounded in thorough and ongoing biopsychosocial assessment
- Culturally relevant and sensitive
- Uses a “single subject” approach to evaluation
Integrative Therapeutic Principles

- Primary role of the therapeutic alliance
- Stage oriented goals
- Initial symptom reduction and establishment of safety
- Reframing symptoms associated with trauma as adaptations
- Psychoeducation
- Address disrupted emotional processing
- Address interpersonal impact
Integrative Therapeutic Principles

- Address the meaning of the event(s) to the individual (including the cognitive impact)
  - Janoff-Bulman (1992) shattered assumptions
  - Spiritual dimensions can be incorporated
- Address behavioral avoidance
- Address hyperarousal
Discussion