History and Context of Posttraumatic Stress Disorder: Diagnosis and Treatment

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Posttraumatic Stress Disorder
PTSD

• An anxiety disorder that follows exposure to an external traumatic stressor.
• PTSD as a diagnosis came into existence in 1980 with publication of DSM III.
PTSD - A Diagnosis with a History...

- 1867 - Railway Spine – John Eric Erichsen
- 1871 – Soldier's Heart – Jacob DaCosta
- 1892 - Trauma Neurosis – Hermann Oppenheim
- 1893 - Schreckneurose (fright neurosis) – Kraeplin, Charcot, Janet
PTSD - A Diagnosis with a History...

- Report of anxiety symptoms following trauma even though physical exams often revealed no physiological abnormalities.
- Some argued claimed that all railway spine/trauma symptoms due to physical damage to spine or brain.
- Others argued symptoms occurred even when absent physical damage/organic changes; rather, the traumatic experience itself was seen as the origin of hysterical or dissociative symptoms.
PTSD - A Diagnosis with a History...

• 1915 - Shell Shock – *The Lancet* – Charles Myers
• 1919 - War/Traumatic Neurosis – Sigmund Freud
• 1941 - Combat Fatigue/ Gross Stress Reaction - WWII
The Traumatic Neuroses of War

- Published in 1941 by Abram Kardiner
- Detailed his careful observations of the symptoms of World War I / World War II soldiers.
- Grappled with the question as to whether and how to bring traumatic experiences to conscious memory.
- In addition to the psychological distress that soldiers manifested, he also noticed that they were physiologically altered.
Grinker and Speigel 1945

- Effect of traumatic memories on the psyche “is not like the writing on a slate that can be erased, leaving the slate like it was before. Combat leaves a lasting impression on men’s minds, changing them as radically as any crucial experience through which they live.”
Neurology versus Psychiatry on Etiology of War Trauma Symptoms

• **Neurology** - introduction of intracranial pressure monitoring in the 1950s credited with starting "modern era" of *traumatic brain injury*, seen as source of symptoms.

• **Psychiatry** – new psychotropic medications to treat psychiatric disturbance and anxiety disorders and *post-traumatic neuroses*, seen as source of symptoms.
PTSD and TBI Overlap

PTSD
- Memory
- Decision-making
- Inhibition
- Emotional regulation
- Irritability
- Sleep problems
- Re-experiencing
- Avoidance

TBI
- Headaches
- Dizziness
- Confusion
- Motor Skills
- Coordination
- Guilt
- Memory
- Decision-making
- Inhibition
- Emotional regulation
PTSD - A Diagnosis with a History...

- Between 1895 and 1974 - study of trauma focused on males
- 1974- Burgess and Holstom- Rape Trauma Syndrome
- 1978- Kempes - Battered Children
- 1978-79- Walker, Hilberman, Strauss, and Gelles - Family Violence
- 1981- Herman-Sexual Abuse of Children
PTSD

• Only after it was a recognized diagnosis did significant research begin to establish an evidence base for the disorder and attempt to substantiate the impact of stress at a multitude of levels.

• This research, in turn, suggests possible ways to verify the presence of the disorder as well as how to focus efforts to prevent the disorder.
A diagnosis was created...

As of 1980, PTSD became an official, medically sanctioned, certified psychiatric disorder.
PTSD first presumes that a person has experienced a traumatic event involving actual or threatened death or injury to themselves or others -- and where they felt fear, helplessness, or horror.
Symptom Clusters of PTSD

- **Re-experiencing** - via intrusions, such as flashbacks or nightmares.
- **Avoidance** - when the person tries to reduce exposure to people or things that might bring on their intrusive symptoms or remind them of the event.
- **Hyper arousal** - physiologic signs of increased arousal, such as hyper-vigilance or increased startle response.
DSM-IV TR Diagnostic Criteria

Criterion A: Stressor

The person has been exposed to a traumatic event in which both of the following have been present:

- The person has experienced, witnessed, or been confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others.

- The person's response involved intense fear, helplessness, or horror. Note: in children, it may be expressed instead by disorganized or agitated behavior.
Criterion B: Intrusive Recollection

The traumatic event is persistently re-experienced in at least one of the following ways:

– 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 (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated).
– Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
– Physiologic reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
Criterion C: Persistent Avoidance & Numbing

Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:

– 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
– Feeling of detachment or estrangement from others
– Restricted range of affect (e.g., unable to have loving feelings)
– Sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)
Criterion D: Increased Arousal

Persistent symptoms of increasing arousal (not present before the trauma), indicated by at least two of the following:

– Difficulty falling or staying asleep
– Irritability or outbursts of anger
– Difficulty concentrating
– Hyper-vigilance
– Exaggerated startle response
Criterion E: Duration

Duration of the disturbance (symptoms in B, C, and D) is more than one month.

Criterion F: Functional Significance

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
PTSD-Some Facts...

- PTSD is a common disorder.
- Second most prevalent anxiety condition in the United States, after Social Anxiety Disorder.
- High rates of co-morbidity, social, and occupational impairment.
- Increased health care costs.
PTSD-More Facts...

- Often associated with stigma or suspected of not being genuine.
- Often co-occurs with other mental health problems (80% have a lifetime history of another psychiatric disorder).
- New traumas can build on previous ones.
- People with PTSD experience more aches, pains and illnesses than their non-PTSD counterparts.
Prevalence of Trauma

The National Comorbidity Study (NCS), Kessler et al. (1995):

- Lifetime history of at least one traumatic event: 61% men and 51% women

Most common types of trauma reported:

- Witnessing someone being injured or killed
- Being involved in a natural disaster
- Being involved in a life threatening accident
PTSD Prevalence

- In the National Comorbidity Survey, Kessler et al. (1995) found an overall lifetime prevalence of PTSD of 7.8%.
- Other studies report 8-9% of the population will be affected by PTSD in their lifetime.
  - Women: 10.4%
  - Men 5.0%
PTSD Risk Factors

• Gender: Women > Men
• Very Young and Old
• Physical Violence (Assaultive Violence 21% rate of PTSD)
• Acute Stress Disorder
• The presence of Criterion C Symptoms (Avoidance) after exposure to a disaster or act of terrorism may predict the development of PTSD as well as co-morbid diagnoses.
• Main burden stems from criminal victimization, sexual assault, motor vehicle accidents, and childhood maltreatment.
Mental Health Needs of Iraq and Afghanistan Veterans

• Over one million currently active military personnel served in Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF)

• Estimates vary, but about 15-20% of troops returning show some symptoms of posttraumatic stress disorder (PTSD)

• 15%-20% of all returning veterans have experienced some type of traumatic brain injury (TBI), often associated with IEDs (improvised explosive devices)

• Up to half of veterans with PTSD also meet criteria for TBI.
Mental Health Needs – Trend of PTSD Diagnoses

Figure 1. Annual Post-Traumatic Stress Disorder Diagnoses in All Services
As of September 7, 2010

Mental Health – Trend of TBI Diagnoses

DoD Numbers for Traumatic Brain Injury

Total TBI Diagnoses

No. of cases

35,000

30,000

25,000

20,000

15,000

10,000

5,000

Calendar year

‘00 ‘01 ‘02 ‘03 ‘04 ‘05 ‘06 ‘07 ‘08 ‘09 ‘10 ‘11

Source: Armed Forces Health Surveillance Center

Updated 10 Feb 2012
Neural Circuits and Emotional Dysregulation in PTSD and TBI

- **Fronto-striate:** Inhibition, working memory, attention

- **Fronto-limbic:** Regulate emotion/motivation processing

![Brain diagram showing neural circuits and emotional dysregulation in PTSD and TBI]
Protective Factors - PTSD

- Presence of Social Support
- Good Premorbid Functioning
- Rapid Onset of Symptoms
- Short Duration of Symptoms
- Absence of other Psychiatric, Medical or Substance Related Disorders
Prognosis - PTSD

• Differs widely depending on a number of factors, including:
  • Trauma Expected?
  • Severity
  • Length of Exposure
  • Individual’s Genetic Makeup and Personality

• When treated, many patients experience significant improvement. However, some individuals never recover fully.

  Ex: Some survivors of the Holocaust, for example, experienced permanent psychological scars as a result of that event.
Treatment of PTSD

• What types of treatment are available?
• How effective is treatment?
• What is the expected course and outcome of treatment?
• What factors complicate PTSD treatment?
• Do most people who need PTSD treatment receive it? If not, why not?
Psychological Treatment for PTSD

• Cognitive behavioral therapy (CBT)
• Group therapy
• Psychodynamic therapy
• Support groups
• Other (hypnosis, couple & family therapy)
Cognitive-Behavioral Therapy

• Recommended as 1st choice treatment
• Initiated after stabilization of crisis
  – Suicidal Ideation
  – Ongoing violence
  – Need of substance abuse detoxification
• Can be as an individual or w/in a group
Cognitive-Behavioral Therapy

- Exposure-based treatment (systematic desensitization, imaginal, or in vivo exposure)
- Cognitive processing therapy
- Stress inoculation training
- Eye Movement Desensitization and Reprocessing (EMDR)
Medication Treatment

• Selective Serotonin Reuptake Inhibitors (SSRIs; Zoloft, Paxil)
  – 6-8 weeks to work; best if prescribed for at least 12 months
• Atypical antipsychotics (Risperdol, Zyprexa) – agitation, dissociation, hypervigilance, paranoia
• Benzodiazepines – rapid relief of anxiety; dependence and possible worsening of PTSD.
• Recommended as an addition to psychological therapy.
PTSD Treatment Efficacy

- Strong evidence for cognitive-behavioral interventions
  - Particularly exposure-based CBT (imaginal exposure, prolonged exposure)
  - Remission rates 6 months after treatment as high as 50-75%
- Medication Treatments – SSRIs
  - Capable of significantly reducing symptoms, but remission rates much lower than CBT.
  - Improvements not maintained once medication discontinued.
Treatment Expectations

• For many, reduction in symptoms as opposed to cure – decrease in anxiety, nightmares, irritability, and/or overcome avoidance.
• Learn to anticipate and cope with symptoms.
• Symptoms may increase and may need future treatment if additional traumatic experiences.
Complicating factors

- On-going trauma
- Guilt
- Anger
- Substance abuse
- Secondary gain
Barriers to Care

• Internal factors
  – Lack of understanding of the disorder
  – Stigma
  – Avoidance

• External factors
  – lack of providers trained in effective interventions
  – poor detection
PTSD- Controversies...

Social, Political, Clinical and Legal Concerns

- Actually quite common to experience a catastrophic stress during your lifetime.
- Most people are resilient and weather the crisis without developing PTSD.
- Is it normal distress or clinical morbidity?
- Is it the event and the trauma or the interpretation and preexisting factors that cause the resulting picture?
More Controversies...

• Does PTSD serve a litigious rather than a clinical purpose? (as suggested by Friedman, Keane, and Resick)

• Does the diagnosis rely too heavily on self report?
In the words of Alan Stone...

“By giving diagnostic credence and specificity to the concept of psychic harm, PTSD has become a lightening rod for a wide variety of claims of stress-related psychopathology in the civil arena.”

and
“...no diagnosis in the history of American psychiatry has had a more dramatic and pervasive impact on law and social justice than posttraumatic stress disorder.”
PTSD and the Law...

• Courts have been cautious about claims for psychological distress out of fear they can be easily fabricated.

• It is difficult to figure out just compensation.

• It is hard to know what is related to the event versus what is accounted for by individual and cultural issues.
A few other notes...

- The traumatic event does not have to be the sole cause of the psychological injury, but it must be a contributing, material, or proximate cause.
- Workers’ compensation statutes usually provide for mental injuries.
- PTSD also plays a role in the criminal arena and has been put forth in support of insanity and diminished capacity.
As of this year, new DSM-V criteria

- **Criterion D: negative alterations in cognitions and mood.** Negative alterations in cognitions and mood that began or worsened after the traumatic event: *(2 required)*
  - Inability to recall key features of the traumatic event (usually dissociative amnesia; not due to head injury, alcohol or drugs).
  - Persistent (and often distorted) negative beliefs and expectations about oneself or the world (e.g., "I am bad," "The world is completely dangerous.").
  - Persistent distorted blame of self or others for causing the traumatic event or for resulting consequences.
  - Persistent negative trauma-related emotions (e.g., fear, horror, anger, guilt or shame).
  - Markedly diminished interest in (pre-traumatic) significant activities.
  - Feeling alienated from others (e.g., detachment or estrangement).
  - Constricted affect: persistent inability to experience positive emotions.
As of this year, new DSM-V criteria

• **Criterion E: alterations in arousal and reactivity**
  Trauma-related alterations in arousal and reactivity that began or worsened after the traumatic event (*2 required*)
  – Irritable or aggressive behavior.
  – Self-destructive or reckless behavior.
  – Hypervigilance.
  – Exaggerated startle response.
  – Problems in concentration.
  – Sleep disturbance.
Resources for Obtaining PTSD Treatment

- National Center for PTSD (www.ncptsd.org)
- Anxiety Disorders Association America (ADAA) – www.adaa.org
- Association for Behavioral and Cognitive Therapies (ABCT) www.abct.org
- Veterans Health Administration -www.va.gov