

# Post Traumatic Stress Disorder

Justin Faden DO  
Assistant Professor of Psychiatry  
Associate Residency Training Director



# Goal and Objectives

Upon completion of this presentation, participants should be able to:

- Describe and identify the diagnostic criteria for Post Traumatic Stress Disorder (PTSD)
- Recognize the PTSD disease development and course
- Formulate a differential diagnosis for PTSD, including common comorbidities
- Identify treatment options that are available for PTSD



# Outline

- I. Diagnosis
- II. Epidemiology
- III. Psychiatric Comorbidity
- IV. Treatment



# Differing Presentations...



# PTSD

- Most people exposed to a traumatic event will not go on to develop PTSD

# Diagnosis-A

- **Exposure to actual or threatened death, serious injury, or sexual violence**
  - Direct experience
  - Witnessing as it occurred to others.
  - Learning that the traumatic event occurred to close family or friend
  - Repeated exposure to aversive details of the traumatic event in others
    - Ie - police officers repeatedly exposed to details of child abuse
  - Exposure does not apply if only observed via TV or the internet, unless that is part of your occupation

# Diagnosis-B

- **Intrusive symptoms – at least 1**
  - Recurrent, involuntary, and intrusive distressing memories of the traumatic event
  - Recurrent distressing dreams
  - Dissociative symptoms, ie - flashbacks
  - Psychological distress at reminders of the event
  - Physiological distress/reactions at reminders of the trauma

# Diagnosis-C

- **Persistent avoidance – Need 1**
- Avoidance, or effort to avoid, distressing memories, thoughts, or feelings about the traumatic event
- Avoidance, or effort to avoid, reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings



# Diagnosis-D

- **Negative alterations in cognitions and mood - Need at least 2**
- Inability to remember an important aspect(s)
- Persistent and exaggerated negative beliefs about oneself, others, or the world
- Persistent, distorted cognitions about the cause or consequences of the traumatic event that lead the individual to blame himself
- Persistent negative emotional state
- Anhedonia
- Feelings of detachment
- Inability to experience positive emotions

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# Diagnosis-E

- **Alterations in arousal and reactivity – 2 or more**
- Irritable behavior and angry outbursts
- Reckless or self-destructive behavior
- Hypervigilance
- Exaggerated startle
- Problems with concentration
- Sleep disturbance

Intrusion	Avoidance	Cognition & Mood Changes	Arousal & Reactivity Changes
<ul style="list-style-type: none"> <li>• Involuntary &amp; recurrent memories</li> <li>• Traumatic nightmares</li> <li>• Flashbacks</li> <li>• Intense or prolonged distress after exposure to reminders</li> </ul>	<p>Avoiding trauma-related</p> <ul style="list-style-type: none"> <li>• Thoughts</li> <li>• Feelings</li> <li>• People</li> <li>• Places</li> <li>• Conversations</li> <li>• Activities</li> <li>• Objects</li> <li>• Situations</li> </ul>	<ul style="list-style-type: none"> <li>• Can't recall key features of event</li> <li>• Negative beliefs about self or world</li> <li>• Distorted blame</li> <li>• Persistent fear, horror, anger, guilt or shame</li> <li>• Diminished interest in activities</li> <li>• Feeling alienated</li> <li>• Inability to feel positive emotions</li> </ul>	<ul style="list-style-type: none"> <li>• Irritable or aggressive</li> <li>• Self-destructive</li> <li>• Hypervigilance</li> <li>• Exaggerated startle response</li> <li>• Problems with concentration</li> <li>• Sleep problems</li> </ul>

<https://www.pinterest.org/resource/stress/post-traumatic-stress-disorder/>



# Screening

- Primary care post-traumatic stress disorder screen (PC-PTSD)
- 'In your life, have you ever had any experience that was so frightening, horrible or upsetting that, in the past month, you:
- have had nightmares about it or thought about it when you did not want to?
- tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- were constantly on guard, watchful, or easily startled?
- felt numb or detached from others, activities or your surroundings?'

*If the patient answers two or more with 'yes', a diagnosis of post-traumatic stress disorder is probable.*



# Development and Course

- Symptoms usually begin within the first 3 months after the trauma
  - Lasts for at least one month
- Complete recovery within 3 months occurs in approximately 50% of adults
  - Others remain symptomatic for longer than 12 months
- Symptom recurrence and intensification may occur in response to reminders of the original trauma, ongoing life stressors, or newly experienced traumatic events

Bryant RA : Posttraumatic stress disorder and traumatic brain injury: can they co-exist? Clin Psychol Rev 21(6):931–948, 2001

# Epidemiology

- In the United States, projected lifetime risk for PTSD using DSM-IV criteria at age 75 years is 8-9%
- Twelve-month prevalence among U.S. adults is about 3.5%

Kessler RC , Berglund P , Demler O , et al: Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 62(6):593–602, 2005

Vieweg WV, Julius DA, et al.: Posttraumatic stress disorder: clinical features, pathophysiology, and treatment. Am J Med. May;119(5):383-90.

# Demographics

- Rates of PTSD are higher among veterans and others whose vocation increases the risk of traumatic exposure
  - police, firefighters, EMT, military
- Highest rates are found among survivors of rape, military combat and captivity, and ethnically or politically motivated internment and genocide.

# Demographics

- Higher rates of PTSD have been reported among U.S. Latinos, African Americans, and Native Americans
- Lower rates have been reported among Asians

Hinton D , Lewis-Fernández R : The cross-cultural validity of posttraumatic stress disorder: implications for DSM-5. *Depress Anxiety* 28(9):783–801, 2011 10.1002/da.20753

Perilla JL , Norris FH , Lavizzo EA : Ethnicity, culture, and disaster response: identifying and explaining ethnic differences in PTSD six months after Hurricane Andrew. *J Soc Clin Psychol* 21:20–45, 200

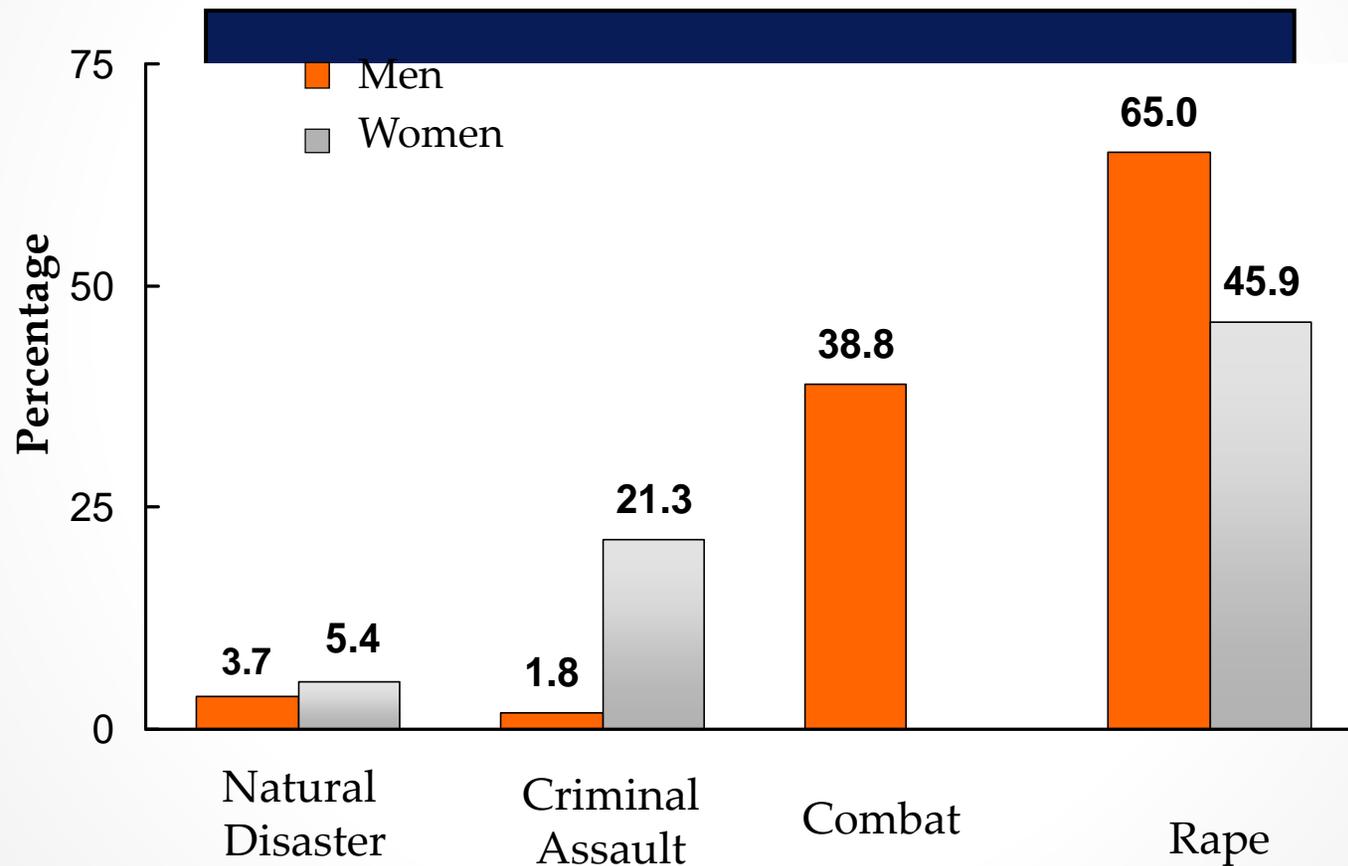
# Gender-Related Diagnostic Issues

- PTSD is more prevalent among females than among males
  - greater likelihood of exposure to traumatic events, such as rape, and other forms of interpersonal violence
- Within populations exposed specifically to such stressors, gender differences in risk for PTSD are non-significant.
- Females experience PTSD for a longer duration than do males

Kessler RC , Sonnega A , Bromet E , et al: PTSD in the National Comorbidity Survey. Arch Gen Psychiatry 52(12):1048–1060, 1995

Kessler RC , Chui WT , Demler O , et al: Prevalence, severity, and comorbidity of 12-months DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 62(6):617–627, 2005

## Rates Related to Specific Traumas



Kessler RC et al. *Arch Gen Psychiatry*. 1995;52:1048-1060.

# Functional Consequences

- PTSD is associated with increased suicidal ideation and suicide attempts
- High levels of social, occupational, and physical disability, as well as considerable economic costs and high levels of medical utilization

Sareen J , Cox BJ , Stein MB , et al: Physical and mental comorbidity, disability, and suicidal behavior associated with posttraumatic stress disorder in a large community sample. *Psychosom Med*69(3):242–248, 2007

Kartha A , Brower V , Saitz R , et al: The impact of trauma exposure and post-traumatic stress disorder on healthcare utilization among primary care patients. *Med Care* 46(4):388–393, 2008

# Associated Behaviors

1. Alcohol/drug problems
2. Aggression/violence
3. Suicidal ideation, intent, attempts
4. Dissociation
5. Distancing
6. Problems at work
7. Marital problem

# Differential Diagnosis

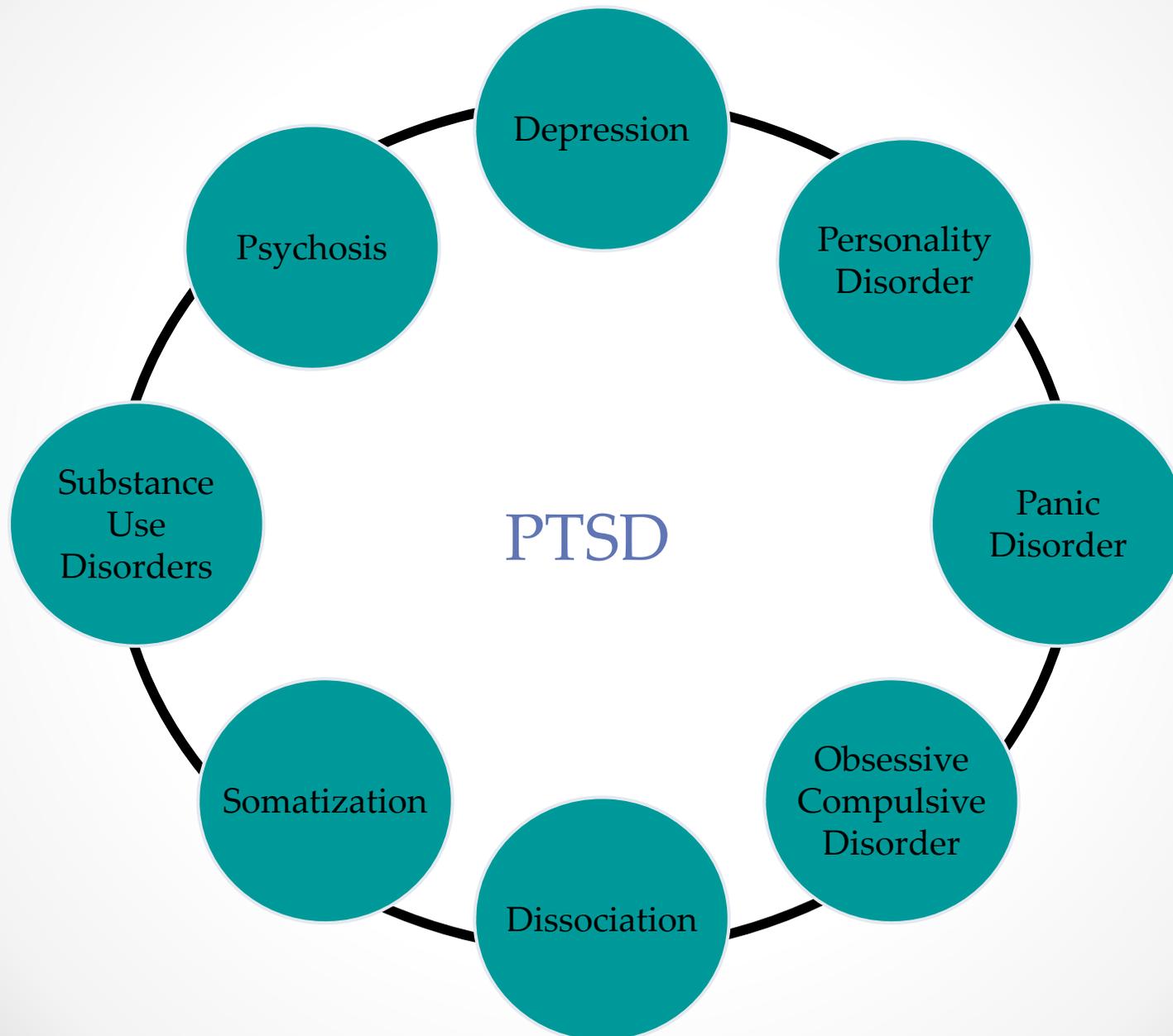
- Adjustment Disorder
  - stressor can be of any severity or type (PTSD Criterion A)
  - criterion A met, but does not meet all other PTSD criteria
- Acute Stress Disorder
  - duration of 3 days to 1 month following exposure to the traumatic event
- Dissociative Disorders
  - may or may not be preceded by exposure to a traumatic event or may or may not have co-occurring PTSD symptoms.

# Differential Diagnosis

- Major Depressive Disorder
  - "I feel depressed...."
- Obsessive Compulsive Disorder/Anxiety Disorders
  - Obsessions, ruminations, intrusive thoughts are not related to an experienced traumatic event
- Psychotic Disorders
  - Flashbacks in PTSD must be distinguished from illusions, hallucinations, and other perceptual disturbances



# Comorbidities



# Comorbid Conditions

- 80% more likely to have symptoms that meet criteria for at least one other mental disorder or substance abuse disorder
  - Depression
  - Anxiety
  - Substance Abuse
  - Neurocognitive Disorders

Kessler RC , Lane MC , Shahly V , Stang PE : Accounting for comorbidity in assessing the burden of epilepsy among US adults: results from the National Comorbidity Survey Replication (NCS-R). *Mol Psychiatry* 17(7):748–758, 2005 10.1038/mp.2011.56

Schell TL , Marshall GN : Survey of individuals previously deployed for OEF/OIF, in *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. Edited by Tanielian T , Jaycox LH . Santa Monica, CA, RAND Corporation, 2008, pp 87–115

# Treatment Options

- Psychotherapy
- Pharmacotherapy



# Psychotherapy

- Evidence supports utilization of therapies that include trauma-focused therapy
  - Cognitive Behavioral Therapy
  - Prolonged Exposure Therapy
  - Cognitive Processing Therapy
  - Eye Movement Processing and Desensitization
  - Group trauma-focused therapy

# Psychotherapy

## Exposure therapy

- Therapists help patients to confront their traumatic memories through written or verbal narrative, detailed recounting of the traumatic experience, and repeated exposure to trauma related situations that were being avoided or evoked fear but are now safe (for example, driving a car where the road traffic incident occurred or walking in the busy park where an assault occurred)

## Cognitive therapy

- Focuses on identifying and modifying misinterpretations that led patients to overestimate the current threat (for example, patients who think assault is almost inevitable if they leave the house)
- Focuses on modifying beliefs and how patients interpret their behavior during the trauma, including problems with guilt and shame

## EMDR

- Standardized, trauma focused procedure. Involves the use of bilateral physical stimulation (eye movements, taps, or tones), hypothesized to stimulate the patient's information processing to help integrate the targeted event as an adaptive contextualized memory

Bisson J, Cosgrove S, et al. Post Traumatic Stress Disorder. BMJ. 2015; 351: h6161.

# Pharmacotherapy

- Tenets to guide treatment
- Identify any comorbid psychiatric conditions
- Ask about sleep disturbances
- Ask about substance abuse
- Avoid benzodiazepines

Greenberg N, Brooks S, Dunn R. Latest Developments on Post Traumatic Stress Disorder. Br Med Bull (2015) 114 (1): 147-155

Veterans Affairs/Department of Defense. Clinical practice guidelines: Management of posttraumatic stress. Washington, DC: U.S. Department of Veterans Affairs and Department of Defense; 2010.

# Pharmacotherapy

- SSRI's and SNRI's are first line treatment
  - Sertraline (zoloft), Fluoxetine (prozac), Paroxetine (paxil), and Venlafaxine (effexor) have the most evidence
  - Sertraline – FDA approved 1999, Paroxetine FDA approved 2001
- Mirtazapine (remeron)
- Atypical antipsychotics for augmentation only
- Little evidence supporting Bupropion (wellbutrin)

Wallace D, Cooper J. Updates on the management of PTSD. Aust Prescr. 2015 Apr; 38(2): 55–59.

# Dosing Recommendations

- Sertraline 50-200mg
  - Start at 25mg for PTSD
- Fluoxetine 20-80mg
- Paroxetine 20-50mg
- Mirtazapine 15-45mg



# Prazosin

- Effective in sleep disturbances associated with PTSD
  - Dream shift from Trauma related nightmares to normal dreams
- Alpha-1 adrenergic receptor antagonist, crosses blood-brain barrier
  - Decrease arousal attributed to norephinerphire
- Norepinephrine contributes to the pathophysiology of PTSD
  - CNS alpha-1 adrenergic receptor stimulation disrupts sleep physiology and enhances sleep stage phenomena associated with emergence of trauma nightmares

Raskind MA, BIOL PSYCHIATRY 2007;61:928 -934

Dierks MR, Ann Pharmacother 2007 Nov;41(11):1917-8

# Prazosin

- Commonly 1-20mg
  - Either QHS or in divided dosages
- Transient dizziness upon standing
- No change in blood pressure

Raskind MA, BIOL PSYCHIATRY 2007;61:928 -934

# Prazosin

- Prazosin shown to reduce:
  - Combat-related nightmares
  - Recurrent distressing dreams
  - Re-experiencing traumatic event in sleep

# Questions...

- [Justin.Faden@tuhs.temple.edu](mailto:Justin.Faden@tuhs.temple.edu)

