PTSD and Suicide

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Posttraumatic Stress Disorder

Case

- Maria was only 15 when she was attacked by a group of men on the way home from school. They took turns screaming abuse at her and then they each raped her. Finally, they tried to stab her to death and would almost certainly have succeeded had the police not arrived on the scene.

- For months after this horrifying event, Maria was not herself.
  - She was unable to keep the memories of the attack out of her mind.
  - At night she would have terrible dreams of rape, and would wake up screaming.
  - She had difficulty walking back from school because the route took her past the site of the attack, so she would have to go the long way home.
  - She felt as though her emotions were numbed, and as though she had no real future.
  - At home she was anxious, tense, and easily startled.
  - She felt “dirty” and somehow shame by the event, and she resolved not to tell close friends about the event, in case they too rejected her.
Posttraumatic Stress Disorder

- PTSD is a condition marked by development of symptoms after exposure to traumatic life events.

- The person reacts to this experience with fear and helplessness, persistently relives the event and tries to avoid being reminded of it.
Posttraumatic Stress Disorder

- **Prevalence:**
  - In the United States, at age 75 years
    - 8.7%
  - 12 month prevalence among US adults is about:
    - 3.5%
  - Lower estimates are seen in Europe and most Asian, African, and Latin American countries, clustering around 0.5%-1.0%.
Rates of PTSD are higher among veterans and others whose vocation increases the risk of traumatic exposure.

- Police
- Firefighters
- Emergency medical personnel
Posttraumatic Stress Disorder

- Highest rates
  - Ranging from 1/3 to half of those exposed are found among survivors of:
    - Rape
    - Military combat
    - Captivity
    - Ethnically or politically motivated internment and genocide
Posttraumatic Stress Disorder

Gender-Related Diagnostic Issues

- More prevalent among females than males across the lifespan
- Females experience PTSD for a longer duration than do males
- Female increased risk is attributed to greater likelihood of exposure to traumatic events such as rape and other forms of interpersonal violence.
Posttraumatic Stress Disorder

- Risk and Prognostic Factors:
  - Risk (and protective) factors are generally divided into:
    - Pre traumatic
    - Peri traumatic
    - Post traumatic factors.
Posttraumatic Stress Disorder
Risk and Prognostic Factors

- Pre traumatic factors:
  - Temperamental:
    - These include childhood emotional problems by age 6 years
      - Prior traumatic exposure
      - Externalizing
      - Anxiety problems
    - And prior mental health disorders
      - Panic disorder
      - Depressive disorder
      - PTSD
      - OCD
Posttraumatic Stress Disorder
Risk and Prognostic Factors

- **Pre traumatic factors:**
  - *Environmental:*
    - These include lower socioeconomic status
    - Lower education
    - Exposure to prior trauma—especially during childhood
    - Childhood adversity—economic deprivation, family dysfunction, parental separation or death
    - Cultural characteristics—fatalistic or self-blaming coping strategies
    - Lower intelligence
    - Minority racial/ethnic status
    - Family psychiatric history
  
  - Social support prior to event exposure is protective
Posttraumatic Stress Disorder
Risk and Prognostic Factors

- **Pre traumatic factors:**

  - **Genetic and physiological:**

    - These include female gender and younger age at the time of trauma exposure (for adults)
    - Certain genotypes may either be protective or increase risk of PTSD after exposure to traumatic events
Posttraumatic Stress Disorder
Risk and Prognostic Factors

- **Peri traumatic factors**
  - **Environmental**:  
    - Severity (dose) of the trauma—*the greater the magnitude of trauma, the greater the likelihood of PTSD*
    - Perceived life threat
    - Personal injury
    - Interpersonal violence—*particularly trauma carried out by a caregiver or involving a witnessed threat to a caregiver in children*
    - Military personnel—*witnessing atrocities, or killing the enemy*

  - Dissociation that occurs during the trauma and persists afterwards is a risk factor
Posttraumatic Stress Disorder
Risk and Prognostic Factors

- **Post traumatic factors:**
  - **Temperamental:**
    - Negative appraisals
    - Inappropriate coping strategies
    - Development of acute stress disorder
  - **Environmental:**
    - Subsequent exposure to repeated upsetting reminders
    - Subsequent adverse life events
    - Financial or other traumatic related loses

- Social support including family stability for children is a protective factor that moderates outcome after trauma
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A:

  - Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
Posttraumatic Stress Disorder
Diagnostic Criterion A

1. Directly experiencing the traumatic events
2. Witnessing, in person, the events as it occurred to others
3. Learning that the traumatic events occurred to a close family member or close friend
   - The events must have been violent or accidental
4. Experiencing repeated or extreme exposure to aversion details of the traumatic events.
   - e.g., first responders collecting human remains
   - Police officers repeatedly exposed to details of child abuse
   - Does NOT apply to exposure through electronic media, television, movies, or pictures unless this exposure is work related
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A include but not limited to:
  - Exposure to war as a combatant or civilian
  - Threatened or actual physical assault
    - Physical attack
    - Robbery
    - Mugging
    - Childhood physical abuse
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A include but not limited to:
  - Threatened or actual sexual violence
    - Forced sexual penetration
    - Alcohol/drug affiliated sexual penetration
    - Abusive sexual contact
    - Noncontact sexual abuse
    - Sexual trafficking
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A include but not limited to:
  - Being kidnapped
  - Being taken hostage
  - Terrorist attack
  - Torture
  - Incarceration as a prisoner of war
  - Natural or human-made disasters
  - Severe motor vehicle accident
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A include but not limited to:
  - Medical incidence that qualify as traumatic events involve sudden, catastrophic events
    - Waking during surgery
    - Anaphylactic shock
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion A include but not limited to:
  - Witnessed events include but are not limited to:
    - Observing threatened or serious injury
    - Unnatural death
    - Physical or sexual abuse of another person due to violent assault
    - Domestic violence
    - Accident
    - War or disaster
    - Medical catastrophe in one’s child
      - Life threatening hemorrhage
Criterion A include but not limited to:

- Indirect exposure through learning about an event is limited to experiences affecting close relatives or friends and experience that are violent or accidental
  - Death due to natural causes does not qualify

- Such events include violent personal assault, suicide, serious accident, and serious injury

- The disorder may be especially severe or long lasting when the stressor is interpersonal and intentional
  - Torture
  - Sexual violence
Posttraumatic Stress Disorder
Diagnostic Criteria

- **Criterion B:**
  - Presence of one (or more) of the following intrusion symptoms associated with traumatic events, beginning after the traumatic events occurred
Posttraumatic Stress Disorder

Diagnostic Criterion B

1. Recurrent, involuntary, and intrusive distressing memories of traumatic events.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic events.
3. Dissociative reactions (flashbacks) in which the individual feels or acts as if the traumatic events were reoccurring.
   - In extreme case: complete loss of awareness of present surroundings

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic events.
5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic events.
Posttraumatic Stress Disorder
Diagnostic Criteria

- **Criterion C:**

  - Persistent avoidance of stimuli associated with the traumatic events, beginning after the traumatic events occurred, as evidenced by one or both of the following
Posttraumatic Stress Disorder
Diagnostic Criterion C

1. Avoidance of or efforts to avoid distressing memories, thoughts or feelings about or closely associated with the traumatic events.

2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts or feelings about or closely associated with the traumatic events.
Posttraumatic Stress Disorder
Diagnostic Criteria

- **Criterion D:**
  - Negative alterations in cognitions and mood associated with the traumatic events beginning or worsening after the traumatic events occurred as evidenced by 2 (or more) of the following:
1. Inability to remember an important aspect of the traumatic events
   - Typically due to dissociative amnesia
   - And not to other factors such as head injury, alcohol or drugs
Posttraumatic Stress Disorder
Diagnostic Criterion D

2. Persistent and exaggerated negative beliefs or expectations about oneself, others or the world
   - “I am bad”
   - “No one can be trusted”
   - “The world is completely dangerous”
   - “My whole nervous system is permanently ruined”
Posttraumatic Stress Disorder
Diagnostic Criterion D

3. Persistent, distorted cognitions about the cause of consequences of the traumatic events that lead the individual to blame himself/herself or others.

4. Persistent negative emotional state:
   - Fear
   - Horror
   - Anger
   - Guilt
   - Shame
Posttraumatic Stress Disorder

Diagnostic Criterion D

5. Markedly diminished interest or participation insignificant activities

6. Feelings of detachment or estrangement from others

7. Persistent inability to experience positive emotions
   - Inability to experience happiness, satisfaction or loving feelings
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion E:

Marked alterations in arousal and reactivity associated with the traumatic events, beginning or worsening after the traumatic events occurred as evidence by 2 (or more) of the following:
Posttraumatic Stress Disorder
Diagnostic Criterion E

1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression towards people or objects
2. Reckless or self destructive behavior
3. Hypervigilance
4. Exaggerated startle response
Posttraumatic Stress Disorder
Diagnostic Criterion E

5. Problems with concentration

6. Sleep disturbance
   - Difficulty falling or staying asleep or restless sleep
Posttraumatic Stress Disorder
Diagnostic Criteria

- **Criterion F:**
  - Duration of disturbance is more than 1 month

- **Criterion G:**
  - The disturbance causes clinically significant distress or impairment in social, occupational or other important areas of functioning
Posttraumatic Stress Disorder
Diagnostic Criteria

- Criterion H:
  - The disturbance is not attributable to the physiological effects of a substance or another medical condition
    - Medication
    - Alcohol
Posttraumatic Stress Disorder
Specify whether

- With Dissociative symptoms:
  - In response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:
Posttraumatic Stress Disorder
Specify whether

1. **Depersonalization:**
   - Persistent or recurrent experiences of feeling detached from and feeling as if one were an outside observer of, one’s mental processes or body
     - Feeling as though one were in a dream
     - Feeling a sense of unreality of self or body or of time moving slow
2. **Derealization:**
   - Persistent or recurrent experiences of unreality of surroundings
     - The world around the individual is experienced as unreal, dreamlike, distant or distorted.

   **NOTE:** To use these subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (blackouts, behavior during alcohol intoxication) or another medical condition (complex partial seizures).
Posttraumatic Stress Disorder

Specify if:

- With delayed expression:
  - If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate)
Posttraumatic Stress Disorder

Case

Joe saw a good deal of active combat during his time in the military. Some incidents in particular had never left his mind — like the horrifying sight of Gary, a close comrade and friend, being blown-up by a land-mine.

Even when he returned to civilian life, these images haunted him. Scenes from battle would run repeatedly through his mind and disrupt his focus on work.

Filling up at the gas station, for example, the smell of diesel immediately rekindled certain horrific memories.

At other times, he had difficulty remembering the past — as if some events were too painful to allow back in his mind.

He found himself avoiding socializing with old military buddies, as this would certainly trigger a new round of memories.

His girlfriend complained that he was always pent-up and irritable — as if he were on guard, and Joe noticed that at night he had difficulty relaxing and falling asleep.

When he heard loud noises, such as a truck back-firing he literally jumped, as if he were readying himself for combat. He began to drink heavily.
Posttraumatic Stress Disorder
Development and Course

- PTSD can occur at any age, beginning after the first year of life.

- Symptoms usually begin within the first 3 months after the trauma
  - May be a delay of months or even years before criteria for diagnosis are met
Posttraumatic Stress Disorder
Development and Course

- Duration of symptoms vary
  - Some have complete recovery within 3 months
    - Occurs in approximately one-half of adults
  - Some remain symptomatic for >12 months and sometimes for >50 years
  - Symptom recurrence and intensification may occur in response to reminders of the original trauma, ongoing life stressors, or newly experienced traumatic events
Posttraumatic Stress Disorder
Development and Course

- For older individuals
  - Declining health
  - Worsening cognitive functioning
  - Social isolation
  - Primary care utilization
  - Suicidal ideations

Exacerbate PTSD Symptoms
Posttraumatic Stress Disorder

Functional Consequences

- Individuals with PTSD are associated with:
  - High levels of social, occupational and physical disability
  - High economic costs
  - High levels of medical utilization
Posttraumatic Stress Disorder

Functional Consequences

- Impaired functioning is exhibited across social, interpersonal, developmental, educational, physical health and occupational domains.

- In community and veteran samples, PTSD is associated with:
  - Poor social and family relationships
  - Absenteeism from work
  - Lower income
  - Lower educational and occupational success
Posttraumatic Stress Disorder
Comorbidity

- Individuals with PTSD:
  - 80% more likely to have symptoms of at least one other mental health disorder
    - Depression
    - Bipolar
    - Anxiety
    - Substance use
Comorbid substance use disorder and conduct disorder are more common among males than among females.
Posttraumatic Stress Disorder
Comorbidity

- Among Military personnel and combat veterans, deployed to recent wars in Afghanistan and Iraq
  - Co-occurrence of PTSD and mild TBI is 48%
Posttraumatic Stress Disorder
Suicide

- 22-year-old black male self referred to the ER

- Current stress is recent breakup with his girlfriend
- AND loss of job.
- Has developed depressive symptoms for the last 2 months, including social withdrawal, insomnia, anhedonia, and decreased appetite.
- Patient is an alcoholic who just completed court-ordered chemical dependency treatment lasting 3 weeks.
- He is also on parole for attempted rape.
- There is a history of previous suicide attempts and assaultive behavior, which led to the patient being jailed.
- In the interview, patient is vague regarding recent events and history.
Suicide is derived from the Latin word for “self-murder.”

- Some have ideas, never act
- Some plan for days/weeks/years before acting
- Some act impulsively, without premeditation
Posttraumatic Stress Disorder
Suicide

- Risk factors:
  - Gender
    - Men commit suicide more than 4X as often as women.
      - This rate is stable over all ages
      - Rate related to method used:
        - Firearm, hanging, or jumping from high places
    - Women are 4X more likely to attempt suicide than men
      - Method:
        - Overdose or poison
    - In states of gun control laws, use of firearms has decreased as a method of suicide
    - Globally, the most common method of suicide is hanging
Posttraumatic Stress Disorder
Suicide

Risk Factors:

Age:
- Rates increase with age
- Among men
  - Suicides peak after age 45 years
- Among women
  - Suicides peak after age 55
- Older persons attempt less often than younger person but are more often successful
- Older persons account for 25% of suicides
  - The rate of 75 years and older is more than 3X
Posttraumatic Stress Disorder

Suicide

- Risk Factors:
  - Age:
    - Suicide rate is rising most rapidly among 15-24 years of age
      - Suicide is the 3rd leading cause of death in those 15-24 years of age.
        - After accident and homicide.
    - Suicide is rare before puberty
16-year-old Native American female

- self-referred following an overdose of 12 aspirins.
- Precipitant: could not tolerate rumors at school that she and another girl are sharing the same boyfriend.
- Denies being suicidal at this time (“I won’t do it again; I learned my lesson”).
- Reports that she has always had difficulty expressing her feelings.
- In the interview, is quiet, guarded, and initially quite reluctant to talk.
Posttraumatic Stress Disorder
Suicide

- Risk Factors:
  - Race:
    - 2 out of 3 suicides are white male
    - Higher among immigrants than native born population
    - Young person living in inner cities and certain native American and Inuit groups
      - Suicide exceeds the national rates
Posttraumatic Stress Disorder

Suicide

Risk Factors:

Religion:
- Historically, Roman Catholic have lower rates than Protestants and Jews

Marital Status:
- Marriage lessens the risk of suicide significantly
  - Especially if there are children in the home
- Single, never married person have 2X the rate
- Divorce increases suicide risk
  - Divorced men are 3X more likely to kill themselves than divorced women
- Widow and widowers have higher risk
- Social isolation increases the rate
30-year-old white male presents to the ER.

- Patient has been thinking of suicide “all the time” because he “can’t cope.”
- Has a knot in his stomach; sleep and appetite are down (sleeps only 3 hours per night);
- Precipitant: constant fighting with his wife leading to a recent breakup (there is a long history of mutual verbal/physical abuse).
- There is a history of a serious suicide attempt: patient jumped off a ledge and fractured both legs; the precipitant for that attempt was a previous divorce.
- There is a history of chemical dependency with two courses of treatment. There is no current problem with alcohol or drugs.
- Patient is tearful, shaking, frightened, feeling hopeless, and at high risk for impulsive acting out. He states that life isn’t worthwhile.
Posttraumatic Stress Disorder

Suicide

- Risk Factors:
  - Occupation:
    - The higher a person’s social status
    - A fall in social status increases the risk
    - Work in general protects against suicide
    - Professionals, particularly physicians
    - Other high risk occupations
      - Law enforcement
      - Dentists
      - Artists
      - Mechanics
      - Lawyers
      - Insurance agents
Posttraumatic Stress Disorder

Suicide

Risk Factors:

- Climate
  - Slight increase in Spring and Fall
  - December and holidays-suicide does NOT increase

- Physical Health
  - Previous medical care is a positive risk indicator
  - 1/3 patients who commit suicide have medical attention within 6 months of death
  - Associated factors with suicide:
    - Loss of mobility
    - Disfigurement
    - Chronic intractable pain
    - On hemodialysis
Posttraumatic Stress Disorder

Suicide

- **Risk Factors:**
  - Drugs producing depression leading to suicide:
    - Reserpine
    - Corticosteroids
    - Antihypertensives
    - Some anticancer agents
  - Alcohol-related illnesses such as cirrhosis are associated with higher suicide rates
Posttraumatic Stress Disorder

Suicide

- Risk Factors:
  - Mental Illness:
    - 95% diagnosed with mental disorder
      - Depressive disorder account for 80% of this figure
      - Schizophrenia accounts for 10%
      - Dementia or delirium accounts for 5%
    - Among all patients with mental disorder:
      - 25% Alcohol dependent and have dual diagnosis
    - Patients with delusional depression – higher risk
Risk Factor:

- Psychiatric patients:
  - 3-12 times higher than non-patients
  - 5-10 times higher risk if they have had a history of inpatient psychiatric treatment

- The psychiatric diagnosis with greatest risk of suicide in both sexes is a mood disorder

- Patients who make repeated visits to the emergency room
Posttraumatic Stress Disorder

Suicide

- Individuals with PTSD have been shown to be at higher risk of attempting suicide (Tidemalm et al., 2008)

- And a strong risk factor for attempting suicide is a prior attempt
Posttraumatic Stress Disorder
Suicide

- A study by Sareen et al. (2005):
  - examined the relationship of individual anxiety disorders with both suicidal ideation and suicide attempts in a nationally representative sample.
  - It was found that PTSD was the only anxiety disorder that was independently associated with both suicidal ideation and suicide attempts.
Posttraumatic Stress Disorder

Suicide

- A study by Nepon et al. (2010)
  - Adjusted for all 10 DSM-IV personality disorders, as well as Axis I disorders
    - found that both PTSD and panic disorder were significantly associated with lifetime suicide attempts.

- A study by Bell and Nye (2007)
  - Examined a sample of 50 Vietnam combat veterans
    - found that the re-experiencing symptom cluster was more strongly associated with suicidal ideation, whereas the hyperarousal and avoidance symptoms were not.
  - This study, however, did not examine suicide attempts as an outcome.
A study by Ben-Ya’acov and Amir (2004) examined the relationship between PTSD symptoms and suicide risk, finding that in a community sample of 103 men with no known psychopathology, high levels of arousal symptoms may increase suicide risk.
Posttraumatic Stress Disorder

Suicide

- A study by Selamen et al. 2014

- among the three PTSD symptom clusters, symptoms of re-experiencing were significantly associated with suicide attempts.

- avoidance symptoms were also significantly associated with suicide attempts.

- This was true even after adjusting for socio-demographics, any mood, any substance, any personality, and any anxiety disorder (excluding PTSD).
Posttraumatic Stress Disorder
Suicide

- A study by Selamen et al. 2014-continued

- Specific symptoms such as:
  - “get physical reactions by reminder”
  - “unable to recall some part of it [the traumatic event]”
  - “sense of a foreshortened future”

- Individuals with PTSD were found to be significantly associated with suicide attempts following or in the same year as a PTSD diagnosis
Posttraumatic Stress Disorder

Suicide

- In a study by Johnson et al. (2008)
  - The perception of defeat and entrapment has been shown to be a key psychological mechanism leading to suicidal behavior

- Panagioti, Gooding, Taylor, and Tarrier (2012) and (2013) also reported:
  - The association between defeat and entrapment and suicidal behavior was also shown to be strongly positive even after controlling for comorbid depression.
Posttraumatic Stress Disorder

Treatment

- Early Intervention:
  - Screen, watch and wait policy
  - Conduct a brief symptom survey:
    - To identify people who are unlikely to recover from the acute effects of trauma
Posttraumatic Stress Disorder

Treatment

- Psychological treatment
  - Cognitive Behavioral Therapy (CBT) involving exposure to traumatic memories, exposure to avoided stimuli associated with those memories, or both
Posttraumatic Stress Disorder

Treatment

- Psychopharmacology:

  - Selective Serotonin Reuptake Inhibitors (SSRI)
    
    - First line treatment
    
    - Due to their efficacy, tolerability and safety ratings
      
      - Sertraline
      - Fluoxetine
      - Citalopram
Posttraumatic Stress Disorder

Treatment

- Pharmacotherapy:
  - Trazodone: help with sleep
  - Anticonvulsants: help with mood regulation
  - Clonidine and Propranolol
    - Help with hyperactivity
  - Prazosin: nightmares
  - Haldol: reserved for short term control of severe aggression and agitation
Any Questions?

cognitive processing *therapy*
prolonged exposure *therapy*
medication **designed for PTSD**

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