POSTTRAUMATIC STRESS DISORDER

INTRODUCTION AND HISTORY

- PTSD is a condition marked by the 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.
- PTSD is a disorder driven by pathogenic memories of past danger.

INTRODUCTION AND HISTORY

- They can arise from experiences in war, torture, natural catastrophes, assault, rape, and serious accidents, for example, in cars and in burning buildings.

- Persons re-experience the traumatic event in their dreams and their daily thoughts

INTRODUCTION AND HISTORY

- During World Wars I and II, it was described as stress-related syndromes such as *shell shock* and *battle fatigue syndromes*
- In Vietnam War, concept of PTSD was introduced in late 1980's.
- In Gulf War, the term given to this was Gulf War syndrome.

INTRODUCTION AND HISTORY

- In DSM-III, published in 1980, Criterion A was defined as the “Existence of a recognizable stressor that would evoke significant symptoms of distress in almost everyone.”

- The definition of trauma is much broader in DSM-IV-TR than in DSM-III, and the notion that the stressor must be outside the range of usual human experience was dropped

EPIDEMIOLOGY

- According to the **National Comorbidity Survey Replication**
- 6.8% of Americans develop PTSD at some point in their lives
- lifetime prevalence rate – 9.7% in women & 3.6% in men.
- Lifetime prevalence 8 – 12% of the U.S population will develop PTSD at some point in their lives.

EPIDEMIOLOGY

- It can appear at any age, but most prevalent in young adults
- Lifetime prevalence is higher in women>men

- Most likely to occur in those who are single, divorced, widowed, socially withdrawn, or of low socioeconomic level.
- The most important risk factors are the severity, duration, and proximity of a person's exposure to the actual trauma

INDIAN EPIDEMIOLOGICAL STUDIES

Natural disasters

- 1993 Study conducted a month after the latur earthquake found **psychiatric morbidity in 59%**
- PTSD in 23%
- Major depression in 21%
- Another study conducted Latur earthquake in marathwada revealed that survivors had PTSD 74%
- Major depression 89% generalized anxiety disorder 42%
- Panic disorder 28%

INDIAN EPIDEMIOLOGICAL STUDIES

- Orissa super-cyclone in 1999, a study suggested that 80.4% of the subjects had probable psychiatric disorder.
- PTSD was found in 44.3%
- Anxiety disorder in 57.5%
- Depression in 52.7%.

INDIAN EPIDEMIOLOGICAL STUDIES

- Around one year after the super-cyclone in orissa, a study on adolescents found that the prevalence of PTSD was 26.9%
- Depression 17.6%
- GAD 12.0%

INDIAN EPIDEMIOLOGICAL STUDIES

- The prevalence rates for psychiatric disorders 27.2%
- commonest psychiatric disorder was depression, followed by alcohol use disorders in males and anxiety disorders in females.
- Rate of PTSD, 12.5/1000, was found to be lower than expected.

INDIAN EPIDEMIOLOGICAL STUDIES

- **Industrial disasters**
  A study conducted within three months of the bhopal gas tragedy yielded a 22.6% prevalence of mental disorders.
- Females 81.1% under 45 years of age 74%
  Anxiety neurosis 25%
- Depression 20%
- Adjustment reaction with predominant disturbance of emotions 16%

INDIAN EPIDEMIOLOGICAL STUDIES

- **Manmade disasters**
  Mumbai riots in 1992-93 a study on hospitalized victims found them in a state of shock, fear and helplessness
- 33% expressed anger
- 2% of these (all female who saw the mangled bodies of their husbands) had attempted suicide
- 21% severe anxiety
- 41% had paranoid thinking and obsessional symptoms PTSD features scored very high

INDIAN EPIDEMIOLOGICAL STUDIES

- Communal violence in ahmedabad PTSD was found in 4.7% of children
- Adolescents and 9.4% had major depression.
- PTSD was associated with age older than 12

ETIOLOGY

Traumatic Stressor

- Stressors of human design, such as rape and violent assault, are usually more pathogenic than either accidental trauma or natural disaster
- Sudden, unexpected, and life-threatening events are especially pathogenic

ETIOLOGY

- Family history of mood, anxiety, or substance abuse disorders

- Neurological soft signs (e.g., Nonspecific abnormalities in central nervous function).

ETIOLOGY

Genetics

- Scientists have investigated genetic influence on PTSD symptoms.
- One research group studied 2,092 male monozygotic (MZ) twin pairs who had served in the Vietnam War.
- There were 715 pairs in which one member had served in Vietnam, whereas the other member had served elsewhere.

ETIOLOGY

- The researchers found that the rate of PTSD was 16.8 percent in co twins who had served in Vietnam and 5.0 percent in their co twins who had served elsewhere.

ETIOLOGY

Psychological Factors

- Although the exposure to trauma is the initial etiologic factor in the development of PTSD
- Symptoms typical of PTSD, such as avoidance of the place where the trauma occurred
- The extreme physiological responses that accompany fear of a given traumatic event

ETIOLOGY

- Such as an adolescent who was terrorized by an attack by a group of students near school, who then develops an extreme negative physiologic reaction each time he or she is near the school.

ETIOLOGY

Biological Factors

- Some children who are exposed to significant traumatic events do not develop PTSD
- Investigations have documented that risk factors in children for developing PTSD include pre existing anxiety disorders.
- Suggests that a genetic predisposition for anxiety disorders, as well as a family history with increased risk of depressive disorders, may also predispose a trauma-exposed child to develop

ETIOLOGY

- Children with PTSD have been found to exhibit increased excretion of adrenergic and dopaminergic metabolites
- smaller intracranial volume and corpus callosum, memory deficits, and lower intelligence quotients (IQs) compared with age-matched controls.
- Adults with PTSD have been found to have overactive amygdale regions of the brain and decreased hippocampal volume

ETIOLOGY

HPA Axis

- Hyperactivity
- Low Plasma And Urinary Free Cortisol Concentrations
- Blunted ACTH Response
- Suppression of cortisol with low-dose dexamethasone is enhanced in PTSD.

ETIOLOGY

- **Neurotransmitter hypothesis**
  Nervousness, increased blood pressure and heart rate, palpitations, sweating, flushing, and tremors -symptoms of adrenergic drugs.
- Increased 24-hour urine epinephrine concentrations in veterans

ETIOLOGY

Social Factors

- Family support and reactions to traumatic events in children may play a significant role in the development of PTSD
- Lack of parental support, psychopathology among parentral especially maternal depression has been identified as a risk factor in the development of PTSD after a child has been exposed to a traumatic event

ETIOLOGY

Risk factors of PTSD include

- Being female
- Neuroticism
- Lower social support
- Lower intelligence quotient (IQ)
- Pre-existing psychiatric illness (especially mood and anxiety disorders)

CLINICAL FEATURES

- **People may experience:**
- **Mood:** anger
- Anxiety
- Guilt
- Hopelessness limited range of emotions
- Loneliness
- Loss of interest, or pleasure in activities, panic attack, or emotional distress

CLINICAL FEATURES

- **Behavioural:** aggression
- Agitation
- Hostility
- Hypervigilance
- Irritability
- Screaming
- Self-destructive behaviour
- Self-harm
- Social isolation

CLINICAL FEATURES

- **Sleep:** sleeping difficulty, difficulty falling asleep, insomnia, night terror, nightmares
- **Psychological:** depression, fear, flashback, hallucination, severe anxiety, or mistrust
- **Whole body:** acute stress or blackout

CLINICAL FEATURES

- **Cognitive:** thoughts of suicide or unwanted thoughts
- **Also common:** emotional detachment, feeling detached, headache, lack of emotional response, or nervousness

DIAGNOSIS

DSM-5

- Exposure to actual or threatened death, serious injury or sexual violence in 1 of the following ways-
- Directly experiencing the traumatic events
- Witnessing the event as it occurred to others
- Learning that traumatic event occurred to a close family member or close friend.
- Experiencing repeated and extreme exposure to aversive events of traumatic events.

DIAGNOSIS

- B)presence of 1 or more of the following intrusive symptoms associated with traumatic events, beginning after traumatic event occurred-
- Recurrent, involutary and intrusive distressing memories of the event.
- Recurrent distressing dreams of the event
- Dissociative reactions.

DIAGNOSIS

- 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

DIAGNOSIS

- C) persistent avoidance of stimuli associated with the traumatic event, as evidenced by 1 or both of the following-
- Avoidance of distressing memories, thoughts, feelings about traumatic event.
- Avoidance of external reminders that arouse distressing memories, thoughts, feelings about traumatic event.

DIAGNOSIS

- D)negative alterations in cognition and mood associated with traumatic events,as evidenced by 2 or more of the following-
- Inability to remember an important aspect of event
- Pesistent and exaggerated negative beliefs about oneself, others or the world.
- Pesistent, distorted cognitions about the cause or consequence of event.

DIAGNOSIS

- Persistent negative emotional state
- Markedly diminished interest in significant activities
- Feelings of detachments from others.
- Persistent inability to experience positive emotions

DIAGNOSIS

- E)marked alterations in arousal and reactivity associated with traumatic event, as evidenced by 2 or more of the following-
- Irritable behaviours and anger outburts
- Reckless behaviour
- Hypervigilance
- Exaggerated startle response
- Problems with concentration
- Sleep disturbance

DIAGNOSIS

- F)Duration of the disturbance is more than 1 month
- G)The disturbance causes clinically significant impairment in socio-occupational functioning.
- H)The disturbance is not attributable to the physiological effects of a substance.

ICD 10

- This arises as a delayed response to a stressful event of an exceptionally threatening nature, which is likely to cause pervasive distress in almost everyone.

- It should not generally be diagnosed unless there is evidence that it arose within 6 months of a traumatic event.

ICD 10

- A “probable” diagnosis might still be possible if the delay between the event and the onset was longer than 6 months.

- In addition to evidence of trauma, there must be a repetitive, intrusive recollection of the event memories, daytime imagery or dreams.

Differential Diagnosis

Adjustment disorder

adjustment disorder is diagnosed either when:

- The stessor is not extreme (i.e, Not life-threatening) or
- The stressor is extreme but the reaction to it does not meet criteria for PTSD.

Differential Diagnosis

- **Acute stress disorder** Acute Stress Disorder is diagnosed if the PTSD-like symptoms occur within 4 weeks of the trauma and resolve within that same period.
- If the symptoms carry on for more than a month after the event and meet PTSD criteria, the diagnosis is changed to PTSD.

Differential Diagnosis

- OCD-
- There are recurrent, intrusive thoughts.
- These are not related to an experienced traumatic event.
- Compulsions are usually present and other symptoms of PTSD are absent.

Differential Diagnosis

- **Major depressive disorder** may or may not be preceded by a traumatic event and should be diagnosed if other PTSD symptoms are absent. Specifically, major depressive disorder does not include beginning of symptoms after traumatic event occurred-
- Recurrent, involutary and intrusive distressing memories of the event.
- Recurrent distressing dreams of the event
- Dissociative reactions

Differential Diagnosis

- **Personality disorder**-Interpersonal difficulties that had onset , or were greatly exacerbated after exposure to a traumatic event indicates PTSD. In PD, such difficulties would be expected independently of any traumatic event.

Differential Diagnosis

- **Dissociative disorder-** it may or may not be preceded by exposure to traumatic stressor or may or may not have co-occurring PTSD symptoms
- When full PTSD criteria are also met, however, the PTSD with dissociative symptoms subtype is considered.

Differential Diagnosis

- **Psychotic disorders** Flashbacks in PTSD must be distinguished from illusions, hallucinations and other perceptual disturbances that may occur in Psychotic disorders.

Differential Diagnosis

- **Traumatic brain injury-** It is characterized by the neuro cognitive symptoms (persistent disorientation and confusion) develop after a traumatic brain injury(traumatic accident, bomb blast).
- Re experiencing and avoidance are characteristic of PTSD.

COURSE AND PROGNOSIS

- Usually develops some time after the trauma.
- The delay can be as short as 1 week or as long as 30 years.
- Untreated- about 30% recover completely,
- 40% continue to have mild symptoms,
- 20%continue to have moderate symptoms, and
- 10% remain unchanged or become worse

COURSE AND PROGNOSIS

- Good prognostic factors-
- Rapid onset of the symptoms
- Short duration of the symptoms (less than 6 months)
- Good pre morbid functioning
- Strong social supports and the absence of other psychiatric, medical, or substance-related disorders or other risk factors.

TREATMENT

- The major approaches are support, encouragement to discuss the event, and education about a variety of coping mechanisms (e.g., relaxation).

- The use of sedatives and hypnotics can also be helpful

TREATMENT

Pharmacotherapy

- First line of treatment- SSRI'S such as **Sertraline and Paroxitene**
- 2 TCA drugs are also found to be efficacious- **imipramine and amitryptiline**
- Doses for both these should be same as for depressive disorders and an adequate trial should last at least 8 weeks.

TREATMENT

- If pt responded, continue for 1 year
- **MAOI' S** -phenelzine ,trazodone are effective in reducing re experiencing symptoms and insomnia.,
- **Anticonvulsants** :carbamazepine , valproate
- **Benzodiazepines**-Benzodiazepines do not appear to be effective although they may show some effects on insomnia, irritability, and general anxiety and arousal symptoms

TREATMENT

PSYCHOTHERAPY

- **Cognitive therapy** For anxiety disorder focus on identification and modification of misinterpretations that lead to overestimation of threat and under estimation of their coping abilities
- But in PTSD the perceived threat arise from the interpretation of trauma and its consequences
- The patient is encouraged to drop behaviour and cognitive strategies that leads to negative interpretation.

Treatment

- **Eye-movement desensitization reprocessing**
  New and controversial treatment

- Patient is instructed to focus on a trauma-related image and its accompanying feelings, sensations, and thoughts, while visually tracking the therapist's fingers as they move back and forth in front of the patient's eyes.

TREATMENT

- After a set of approximately 24 eye movements, cognitive and emotional reactions are discussed with the therapist.
- Once the distress to traumatic image is reduced coping statements are also introduced while the scene is being imagined

TREATMENT

Psychodynamic therapy

- The goal of the treatment is to work through and resolve an unconscious conflict which the traumatic event is thought to have provoked.

Treatment

Hypnotherapy

- The goal of this treatment is to enhance control over trauma-related emotional distress and hyperarousal symptoms and to facilitate the recollection of details of the traumatic event

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THANK YOU