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in the 21st Century



PTSD and Suicide in Veterans and Military Personnel

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- Bridget Bulman has nothing to disclose.

Presentation Overview

- PTSD Overview
- PTSD and Suicide
- PTSD and TBI
- Assessment and Intervention

PTSD – An Overview



Relevance of the Topic



- Operation Enduring Freedom/Operation Iraqi Freedom
- Particular impact of combat
- Impact manifests across the lifespan
- Individualized and personal accounts of trauma
- Each Veteran will have unique set of social, psychological, and psychiatric difficulties

Definition of PTSD

“An anxiety disorder resulting from exposure to an experience involving direct or indirect threat of serious harm or death; may be experienced alone (rape/assault) or in company of others (military combat)”



National Center for Post Traumatic Stress Disorder Statistics

- 7.8% of Americans experience PTSD (Keane et al., 2006)
- Women = 2X risk
- 30% of combat veterans experience PTSD
 - Approximately 50% of Vietnam Veterans experience symptoms
 - Approximately 8% of Gulf War Veterans have demonstrated symptoms

(Duke and Vasterling, 2005)

DSM-IV Criteria

Essential Clusters of PTSD:

1. Re-experiencing symptoms (nightmares, intrusive thoughts)
2. Numbing/detachment from others
3. Hyperarousal (i.e. increased startle, hypervigilance)



Signs and Symptoms

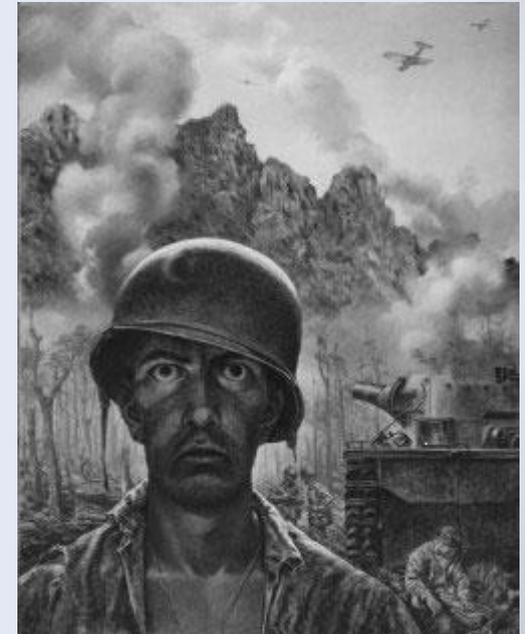


- Immediate
- Acute
- Chronic

★ Depends on a variety of individual, contextual, and cultural factors

“Combat Fatigue”

- Immediate psychological and functional impairment that occurs in war-zone/battle or during other severe stressors during combat
- Caused by stress hormones
- Features of the stress reaction include:
 - ✓ Restlessness
 - ✓ Psychomotor deficiencies
 - ✓ Withdrawal
 - ✓ Stuttering
 - ✓ Confusion
 - ✓ Nausea
 - ✓ Vomiting
 - ✓ Severe suspiciousness and distrust



Acute Stress Disorder



- Anxiety occurring within one month after exposure to extreme traumatic stressor
- Total duration of disturbance is two days to a maximum of four weeks (i.e., occurs and resolves within one month)

Symptoms of ASD include:

- One re-experiencing symptom
- Marked avoidance
- Marked anxiety or increased arousal
- Evidence of significant distress or impairment
- Three dissociative symptoms: a subjective sense of numbing/detachment, reduced awareness of one's surroundings, de-realization, depersonalization, or dissociative amnesia

* ASD is considered a predictor of PTSD, though not a necessary precondition

Post Traumatic Stress Disorder

- Chronic phase of adjustment to stressor across lifespan

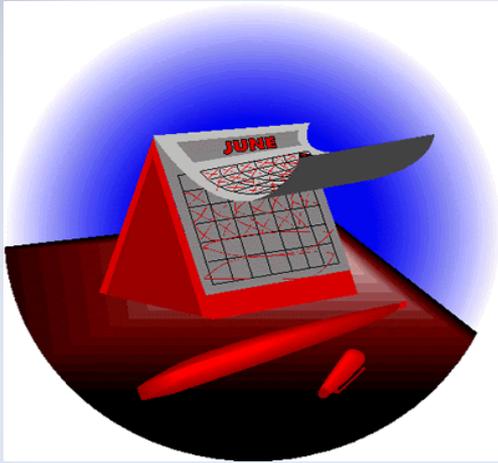


APA, 1994

Symptoms of PTSD

- ✓ Recurrent thoughts of the event
- ✓ Flashbacks/bad dreams
- ✓ Emotional numbness (“it don’t matter”); reduced interest or involvement in work our outside activities
- ✓ Intense guilt or worry/anxiety
- ✓ Angry outbursts and irritability
- ✓ Feeling “on edge,” hyperarousal/ hyper-alertness
- ✓ Avoidance of thoughts/situations that remind person of the trauma
- ✓ Depression

Duration of PTSD



- To meet criteria for PTSD, symptom duration must be **at least one month**
 - **Acute PTSD:** duration of symptoms is less than 3 months
 - **Chronic PTSD:** duration of symptoms is 3 months or more
- Often, the disorder is more severe and lasts longer when the stress is of human design (i.e., war-related trauma)

Potential Consequences of PTSD

Self-Destructive/Dangerous Behaviors:

- Substance use
- Suicidal attempts
- Risky sexual behavior
- Reckless driving
- Self-injury

Potential Consequences of PTSD

Social and Interpersonal Problems:



- Relationship issues
- Low self-esteem
- Alcohol and substance abuse
- Employment problems
- Homelessness
- Trouble with the law
- Isolation

“Complex PTSD”

Long-term, prolonged (months or years), repeated trauma or total physical or emotional control by another:

- Concentration camps
- Prisoner of war
- Prostitution brothels
- Childhood abuse
- Long-term, severe domestic or physical abuse

“Complex PTSD”

Symptoms include:

- Alterations in emotional regulation
 - Alterations in consciousness
 - Changes in self-perception
 - Alterations in interpersonal relationships
 - Changes in one’s system of meanings
-
- Issues with misdiagnoses (i.e., “Borderline”)
 - Ongoing research regarding its efficacy in categorizing symptoms of prolonged trauma

“What Kind of War-Zone Stressors Did Soldiers in Iraq and Afghanistan Confront?”

- Preparedness (or lack thereof)
- **Combat exposure**
- Aftermath of battle
- Perceived threat
- Difficult living and work environment
- Perceived radiological, biological, and chemical weapons exposure
- Sexual or gender harassment
- Ethnocultural stressor
- **Concerns about life and family disruptions**



PTSD and Suicide

Those with PTSD at Increased Risk for Suicidal Behavior

14.9 times more likely to attempt suicide than those without PTSD
(community sample)

(Davidson et al., 1991)

Over 4 times more likely to endorse suicidal ideation than those without PTSD
(OEF/OIF screened sample)

(Jakupcak et al. 2009)



Why?

- Veteran Population
 - Survivor guilt (Hendin and Haas, 1991)
 - Being an agent of killing (Fontana et al., 1992)
 - Intensity of sustaining a combat injury (Bullman and Kang, 1996)



Self-harm used as a means of regulating overwhelming internal experiences

- Unwanted emotions
- Flashbacks
- Unpleasant thoughts



Post-Traumatic Symptoms and Suicidality

- Avoidance/Numbing
- Hyperarousal
- Re-experiencing*

* Re-experiencing Symptom Cluster
Associated with Suicidal Ideation

“Cohesive organization of traumatic memories may be necessary for the processing and resolution of post-trauma symptoms”

“Disorganized memory structure may be one process that impedes access to and modification of trauma-related schema”

Mental Health Problems Post Deployment

| | OIF (n=222,620) | OEF (n=16,318) |
|---|--|--------------------------------------|
| Combat Experiences (Any) | 144,978 (65.1%) | 7,499 (46.0%) |
| Any MH Concern | 42,506 (19.1%) | 1,843 (11.3%) |
| Suicidal Ideation | Some – 2,411 (1.1%) A lot – 467 (.2%) | Some – 107 (.7%) A lot – 20 (.1%) |
| Psychiatric Hospitalization in the First Year Post Deployment | 1,214 (5.9%) (Distinct Individuals) | 45 (2.9%) (Distinct Individuals) |

Approximately 1/3 of OIF veterans
accessed mental health services in
their first year post-deployment



PTSD and OEF/OIF

- Exposure to combat greater among those deployed to Iraq
- The percentage of study subjects who met **screening** criteria for major depression, generalized anxiety disorder, or PTSD
 - Iraq 15.6%-17.1%
 - Afghanistan 11.2%



Alcohol Problems Post-Deployment

- 11.8% for Active Duty
- 15.0% for Reserve/Guard



Milliken, Auchterloine, & Hoge 2007

OIF and Suicide/Homicide

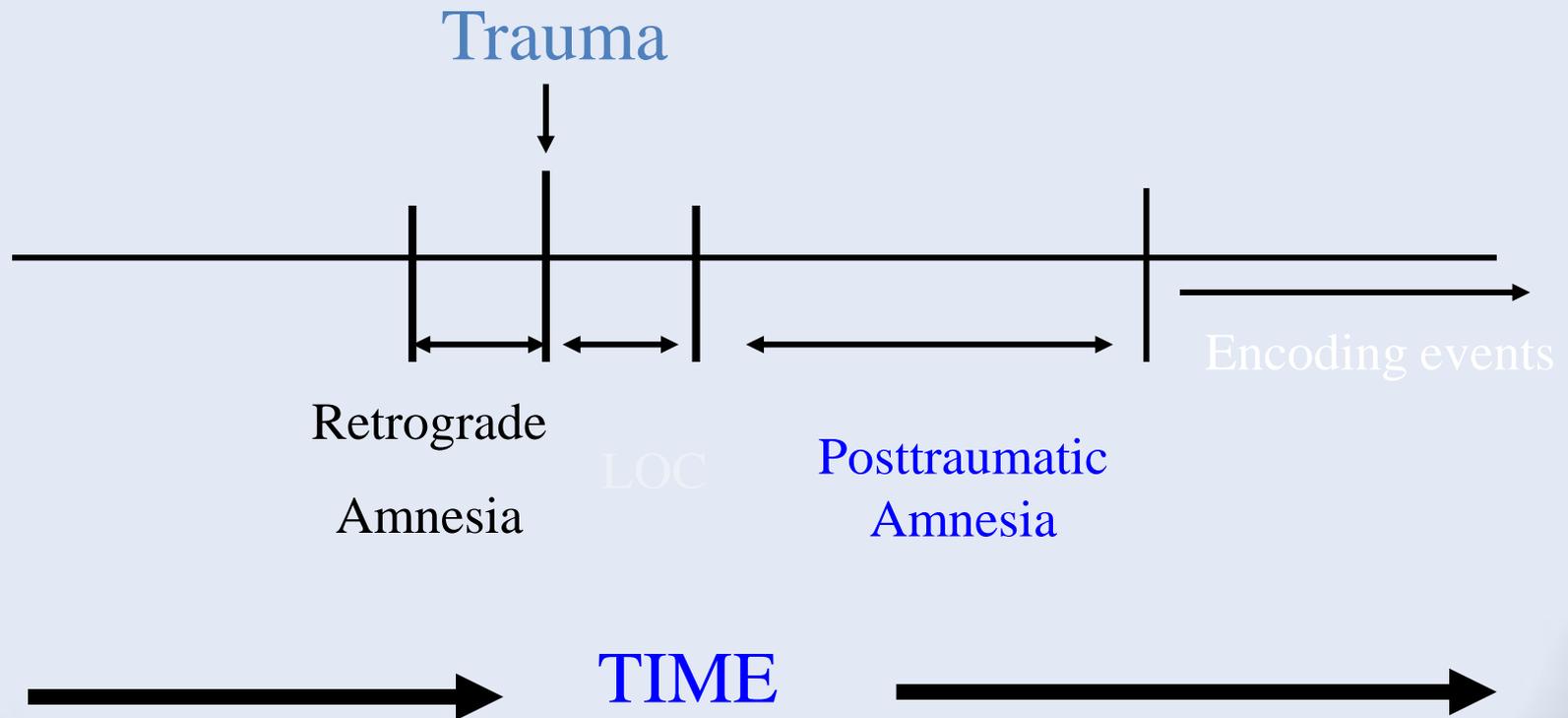
- **425** patients (Feb – Dec, 2004) – Evaluated by the MH Team at Forward Operational Base Speicher
 - 23% Reserves, 76% Active Duty Army, 1% Active Duty AF
 - 19% Combat Units, 81% Support Units
 - 127 had thought of ending life in the past week
 - 81 had a specific suicide plan
 - 26 had acted in a suicidal manner (e.g. placed weapon to their head)
 - 67 had the desire to kill somebody else (not the enemy)
 - 36 had formed a plan to harm someone else
 - 11 had acted on the plan
- **75 of the cases were deemed severe enough to require immediate mental health intervention**
 - Of the 75 soldiers, 70 were treated in theater and returned to duty
 - **5 were evacuated**

PTSD and TBI

Can PTSD and TBI Co-Occur?

PTSD with Amnesia?

Why the controversy?



Thanks John Kirk, Ph.D.

What if PTSD is
pre-existing?

Mild TBI and PTSD: Overlapping Symptoms and Diagnostic Clarification

- **PTSD**

Insomnia

Impaired memory

Poor concentration

Depression

Anxiety

Irritability

Emotional Numbing

Hypervigilance

Flashbacks/Nightmares

Avoidance

- **Mild TBI**

Insomnia

Impaired memory

Poor concentration

Depression

Anxiety

Irritability

Fatigue

Headache

Dizziness

Noise/Light intolerance

Potential Clinical Presentation

PTSD

TBI

Flashbacks

Nightmares

Attentional
problems

Depression

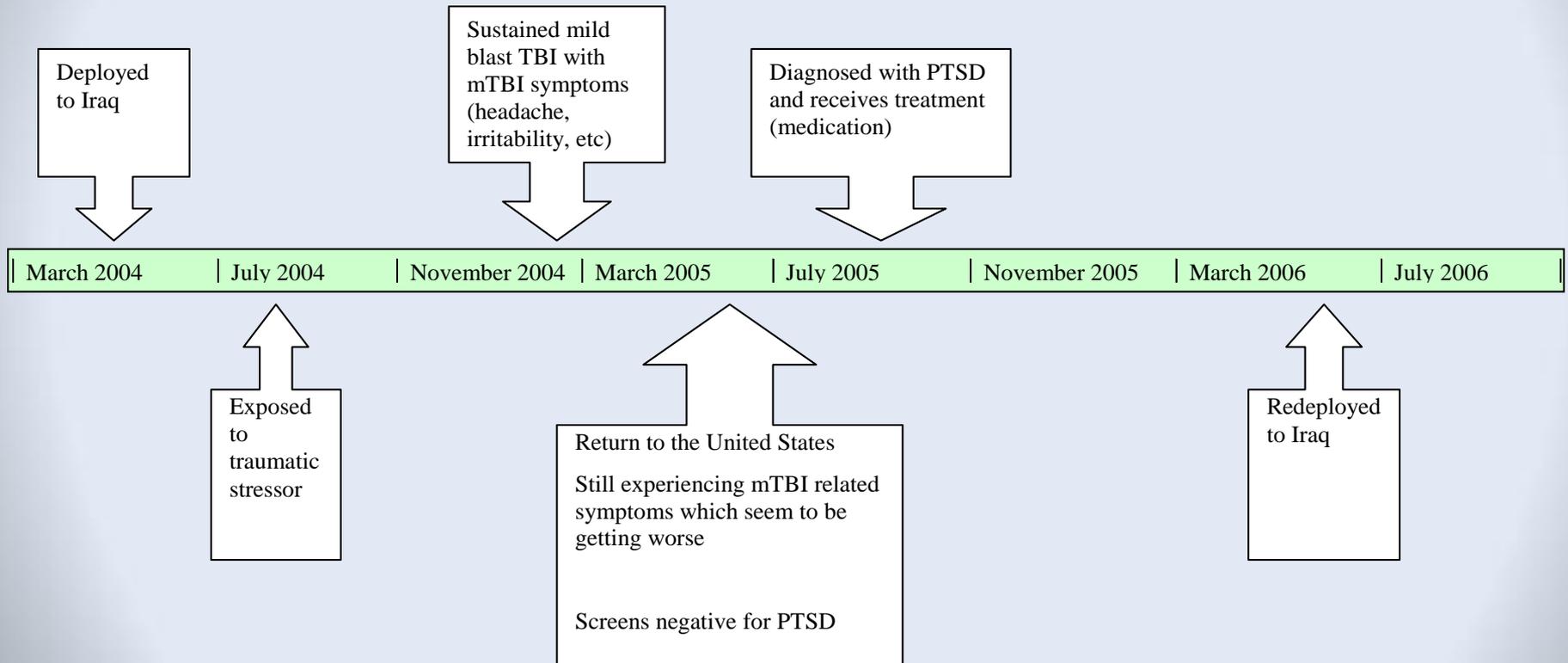
Anxiety

Irritability

Headaches

Dizziness

Case Example: Co-Occurring PTSD and mTBI



Veteran Suicidality, PTSD, & TBI

- A history of PTSD was associated with increased risk for a suicide attempt
- This increased risk was present for Veterans with and without a history of TBI

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Factors that Seem to Matter

- Comorbid Psychological Conditions
- Coping Styles
- Memories for the Traumatic Event
 - Affected by length of Post Traumatic Amnesia; Severity of Injury

Memory after mTBI and PTSD

- Prospective study of the relationship between TBI and PTSD
 - 120 subjects
 - Assessed 4 times
 - 17 subjects found to meet criteria at 6 months

Analysis revealed that memory of the traumatic event within the first 24 hours was a strong predictor of PTSD at 6 months

PTSD after Severe TBI

- Patients with severe TBI (n=96) were assessed for PTSD at 6 months
- 27.1% received PTSD diagnosis

Rates of PTSD Symptoms in Patients With and Without PTSD 6 Months After Severe Traumatic Brain Injury

| Symptom | PTSD | | | | Predictive Power | |
|-------------------------------|----------------------|------|-------------------------|------|-----------------------|-----------------------|
| | Patients With (N=26) | | Patients Without (N=70) | | Positive ^a | Negative ^b |
| | N | % | N | % | | |
| Intrusive memories | 5 | 19.2 | 0 | 0.0 | 1.00 | 0.77 |
| Nightmares | 6 | 23.1 | 0 | 0.0 | 1.00 | 0.78 |
| Sense of reliving trauma | 8 | 30.8 | 3 | 4.3 | 0.73 | 0.79 |
| Emotional reactivity | 25 | 96.2 | 4 | 5.7 | 0.86 | 0.98 |
| Physiological reactivity | 13 | 50.0 | 6 | 8.6 | 0.68 | 0.83 |
| Avoidance of thoughts | 17 | 65.4 | 15 | 21.4 | 0.53 | 0.86 |
| Avoidance of places | 17 | 65.4 | 14 | 20.0 | 0.55 | 0.86 |
| Diminished interest | 19 | 73.1 | 23 | 32.9 | 0.45 | 0.87 |
| Detachment | 19 | 73.1 | 24 | 34.3 | 0.44 | 0.91 |
| Restricted affect | 17 | 65.4 | 19 | 27.1 | 0.47 | 0.85 |
| Sense of foreshortened future | 19 | 73.1 | 23 | 32.9 | 0.45 | 0.87 |
| Insomnia | 18 | 69.2 | 17 | 24.3 | 0.51 | 0.87 |
| Irritability | 22 | 84.6 | 22 | 31.4 | 0.50 | 0.92 |
| Concentration deficits | 24 | 92.3 | 32 | 45.7 | 0.43 | 0.95 |
| Hypervigilance | 19 | 73.1 | 19 | 27.1 | 0.50 | 0.88 |
| Startle response | 19 | 73.1 | 11 | 15.7 | 0.63 | 0.89 |

^a Probability of PTSD when symptom is present.

^b Probability of absence of PTSD when symptom is absent.

Mild TBI and PTSD

- It is possible to acquire PTSD after a brain injury, but that the simultaneous acquisition of a mild brain injury seems to “alter the course and nature of PTSD”

→ A Unique Syndrome?

Moderate/Severe TBI and PTSD

- Differences in findings seem to be related to differences in measures used to assess PTSD
- Although individuals may not meet full criteria for PTSD (i.e., **less re-experiencing**) they report a clustering of symptoms related to this diagnosis

Assessment and Intervention

Comprehensive Assessment of New Veterans

- Occupational functioning
- Interpersonal functioning
- Recreation and self-care
- Physical function
- Psychological symptoms
- Past distress and coping
- Previous traumatic events
- Deployment-related experiences

Primary Care PTSD screen (PC-PTSD)*

“In your life, have you had any experiences that were so frightening, horrible, or upsetting that in the past month you..”

- a) Have had nightmares about it or think about it when you did not want to?
- b) Tried hard not to think about it or went out of your way to avoid situations that remind you of it?
- c) Were constantly on guard, watchful, or easily startled?
- d) Felt numb or detached from others, activities, or your surroundings?

* Endorsement of three items suggests that PTSD follow-up is warranted for a formal diagnosis

Identifying PTSD consultants/specialists



- Expert therapists
 - Psychiatrists (MD/DO)
 - Clinical Psychologists (Ph.D./Psy.D.)
 - Social Workers (LCSW/MSW)
 - Psychiatric Nurse
 - VA Medical Centers
 - VA PTSD programs
 - VA Community Based Outpatient Clinics (CBOCs)
 - Vet Centers
- Phone Book
- Hospital/Medical Clinic Affiliation
- Local and National Psychological Association

Therapeutic Approaches/Techniques

- Recovery plan and process
- Empirically Supported Psychotherapies:
 - Exposure Therapies
 - Anxiety Management Training
- Medications: SSRIs
- Connecting and Networking

Specific procedures to follow if a patient demonstrates PTSD symptoms during your meeting:

- Display calmness
- Provide reassurance
- Orient to place
- Make periodic “check-ins” with the client
- Take a break
- Guide
- Implement an appropriate referral

Dealing with anger/irritability

- Anger is often the most troublesome problem
- Attempt to understand anger from the individual's perspective
- Intervene
 - Recognition
 - Establish boundaries/ "rules"
 - Use "time outs"
 - Follow emergency procedures if necessary



Thank you!

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