

*Wisconsin Bureau of Mental Health and
Substance Abuse Services Teleconference Series*

Returning Veterans: Combat Stress and Substance Abuse in the Wake of War

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Demographics

- 87 % Male, 15 % Female
- More than 180,000 women have served in Iraq and Afghanistan
- At least 450 women have been wounded in Iraq
- 71 women have died
- 52% of the fighting force is between 18 and 24
- 24% between 25 and 30
- Remaining 24% over thirty
- More than 40% is a racial or ethnic minority

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Other Demographics

- Education

HS/GED	45%
Some college	39%
Associate	7%
4 year degree	8%
Graduate degree	1%
- 51% of soldiers are married and 45% have children
- 31% of the fighting force have been deployed more than once

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Coping With Wartime Deployment: Special Issues for Families

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Emotional Cycle of Deployment

- Initial intense fear and worry
- Detachment and withdrawal as deployment nears
- Loneliness and sadness soon after soldier leaves
- Adjustment period
- Reunion – tension may develop as family anticipates changes related to return of service member
- Effect of pre-existing difficulties

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Changes in Family Structure

- Expanded definition of family
- Changes in family structure
- Spouse at home faced with managing unfamiliar tasks
- Impact of mothers being deployed
- Effect of pre-existing difficulties
- Every service member and their family members are affected in some way

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Special Concerns for National Guard and Reservists

- Financial hardship
- Absence of consistent community
- Effect of prolonged deployments
- Suddenly military
- Feelings of isolation
- Employment
- Healthcare

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Homecoming After Deployment

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What Is Normal Reintegration?

- Dearth of scientific research
- Time varies from soldier to soldier
- Behaviors and emotions vary from soldier to soldier
- There is no set process for reintegration

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Post-Deployment Readjustment

*“Normal” Reactions
to
“Abnormal” Events*

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Major Stressors While In Theater

- Fear of loss of life or injury
- Inability to participate in home front issues
- Secrecy around the mission and homecoming
- Poor leadership and command and control
- Compassion fatigue and vicarious psychological trauma
- Austere living conditions

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What are the “Normal” Reactions to these Experiences?

<u>Physical</u>	<u>Thinking/Emotional</u>	<u>Behavior/Emotional</u>
Headache	Questions one's performance	Withdrawal
Tremors	Nightmares	Antisocial acts
Chills	Suspicious	Fear
Fatigue	Intrusive thoughts, images	Guilt
Nausea/vomiting	Decreased memory/concentration	Grief
Thirst	Blaming someone	Panic
Shortness of breath	Poor attention	Anxiety
Visual difficulties	Disorientation	Irritability
	Feel powerless in controlling emotion	Emotional outbursts
	Miss the adrenaline rush/want to return	Inability to rest
		Hyper alert
		Increased AOD use
		Avoid crowds

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Symptomatic and Combat Stress Reactions (1-72 hours)

- Sleep disturbance and nightmares
- Fatigue and exhaustion
- Concentration disturbance
- Somatic complaints
- Subjective anxiety and dysphoria
- Emotional numbing or dissociation
- Appetite changes

Typically respond to rest and reassurance

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Higher Risk for Combat Trauma

- Friendly fire incidents
- “Collateral damage”, especially to children and women
- Handling human remains
- Watching someone die, especially for the person responsible
- “Avoidable” casualties and losses
- Witnessed death/injury of a close friend or valued leader
- Killing unarmed or defenseless enemy

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Risk Factors for Combat-related Post-traumatic Symptoms

- Severity and duration of combat*
- Lack of unit cohesion
- Lack of preparation and training
National Guard/Reservist vs. Active Duty
- Prior Trauma- early, chronic, or single events
- Prior psychiatric diagnosis

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Post Battle Debriefing

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Reintegration

- Happiest day of a soldier's life
- Feelings of detachment, not belonging, the world went on without them.
- The soldier tries to use the same skills that they used in a combat situation to cope with adjustment
- BATTLEMIND
- Large variability between the National Guard/Reserve Component and Active Duty Component

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Society Reintegration

- Simple tasks seem difficult
- Driving is not comfortable and often reckless
- Being irritable over small issues
- Not being comfortable around people
- Denial about the fact that they have changed as a person

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Family Reintegration

- Roles have shifted and have been reestablished
- Couples have learned to live apart and independent and a new relationship needs to be explored
- Losing developmental stages of a child's life
- Not knowing when to "jump in" with child discipline
- Split feeling of being overwhelmed with the responsibility of the family and bored with the mundane part of life
- Life becomes more hectic
- Some male partners experience resentment or misunderstanding towards their returning woman veteran.

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Other Considerations That May Impact Family Reintegration

- Military member suffered a loss of limb or is seriously wounded
- Traumatic brain injury
- Other medical conditions – loss of hearing; orthopedic injuries, cardiovascular, gastrointestinal, and musculoskeletal disorders
- Possible exposure to both sexual assault and combat trauma
- Triggers

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Substance Abuse and Dependence

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Effects of Substance Abuse and Dependence

- Increased emotional withdrawal and numbing
- Increased symptoms of depression
- Increased risk of self destructive actions
- Increased risk of violence toward others, i.e., fighting
- Reckless high speed driving
- Use of firearms
- Domestic violence
- Physiologic dependence on alcohol and/or drugs
- Trigger flashbacks
- Increased irritability and acoustic startle
- Loss of job, family, friends, etc.

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Alcohol Abuse Problems in Veterans

- Male Vietnam veterans
 - 39% overall
 - 75% of those with PTSD¹
- Iraq veterans²
 - 24 - 35%



¹From Kulka et al., 1990 NRRS;
²From Hoge et al., 2004

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Millennium Cohort Study

- Examine the association of combat exposures to new-onset or continued alcohol consumption, binge drinking, and alcohol related problems.
- Sample – 77,047
 - Active Duty – 26,613
 - National Guard/Reserve – 21,868
 - 5,510 deployed with combat exposure
 - 5,661 deployed without combat exposure
 - 37,310 did not deploy

Jacobson, et al. (2008). Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA*, 300(6): 663-675.

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Millennium Cohort Study

	Baseline	Follow Up	New Onset
National Guard/Reserve			
Heavy weekly drinking	9.0%	12.5%	8.8%
Binge drinking	53.6%	53.0%	25.6%
Alcohol related problems	15.2%	11.9%	7.1%
Active Duty			
Heavy weekly drinking	9.5%	9.2%	6.0%
Binge drinking	57.6%	56.0%	26.6%
Alcohol related problems	11.0%	7.2%	4.8%

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- ### Millennium Cohort Study
- Reserve and National Guard personnel who deployed and reported combat exposures were significantly more likely to experience new-onset heavy weekly drinking, binge drinking, and alcohol-related problems compared with non-deployed personnel.
 - The youngest members of the cohort were at highest risk for all alcohol-related outcomes.
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- ### OIF/OEF Veterans
- Study recently published in *Military Medicine* examined rate of PTSD among 120 service members returning from Iraq and Afghanistan
 - 6% had PTSD
 - 27% showed dangerous alcohol use
 - 6% had problems with both PTSD and alcohol use
- Erbes et al. (2007). Post-traumatic stress disorder and service utilization in a sample of service members from Iraq and Afghanistan. *Military Medicine*, 172, 359-363.
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- ### Does Alcohol Use Help or Relieve Symptoms?
- High correlation with PTSD
 - May be used to improve sleep
 - Blocks anxiety and panic attacks
 - Stops intensive thinking and memories
 - Stops terrifying nightmares
 - Induces psychic numbing – making it easier to withdraw
 - Survivors guilt
 - Calms anger, irritability, restlessness
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Co-Occurring Disorders

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- ### Frequently Co-occurring Disorders
- Veterans with PTSD have increased likelihood of other psychiatric disorders
 - Substance Abuse and Dependence
 - Depressive Disorders
 - Panic and other anxiety disorders
 - Dissociative disorders
 - Somatization
- Kulka et al. 1990 National Vietnam Veterans Readjustment Study (NVA/R)*
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Co-morbidity

- PTSD is highly co-morbid, 88% of men and 79% of women have at least one additional disorder.
- Among the co-morbid disorders, in 70-90% of patients, PTSD was the earliest psychiatric disorder.
- GAD and alcohol abuse are most commonly the first appearing co-morbid disorders. Followed by depression, phobias and panic disorder.

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Associated Disorders

Life time prevalence

51.9% - 73.8%	Alcohol abuse
35.5%	Drug abuse
47.9 %– 48.5%	Major depression
43.5%	Generalized anxiety disorder
43.3%	Conduct disorder
29.0%	Simple Phobia
28.4%	Social Phobia
10.4%	Obsessive Compulsive Disorder
8.0%	Panic disorder
2.5%	Bipolar mood disorder

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Common Drugs of Abuse for PTSD

- Alcohol
- Narcotics (heroin, morphine)
- Benzodiazepines
- Marijuana

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Suicide

- Veterans with PTSD are at high risk for suicide and attempted suicide
- 2007: 121 Army and active duty National Guard and Reserves committed suicide; 20% increase from 2006
 - Approximately 34 while serving a tour of duty in Iraq
 - Largest number since military started to keep records in 1980
- NG/Reserve members accounted for 53% of veteran suicides from 2001 to 2005
 - More than 50% aged 20 to 29
 - Approximately 75% used a firearm

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Treatment Approaches

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Pharmacological Treatment For PTSD

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Pharmacological Treatment

- Duration of treatment usually longer for PTSD
- Larger doses and combination of medications may be needed
- Symptoms that may respond to meds:

anger	depressed mood
hostility	flashbacks
violent impulses	anxiety
poor concentration	nightmares
sleep disturbances	

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Decrease Arousal First

- Irritability
- Being tense
- Feeling unsafe (hyper-vigilance)
- Difficulty concentrating
- Exaggerated startle response

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Medications for Combat PTSD

Anti-adrenalin – panic, decreased sleep, nightmares, intense anger, irritability, jumpiness

Propranolol (Inderal) 10-60mg

Prazosin (Minipres) 1-5mg hs.

Clonidine (Catapres) 0.2 – 0.6mg daily

Important: Need to monitor blood pressure

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Benzodiazepines

- The high co-morbidity with substance abuse in veterans with PTSD and the lack of efficacy on core PTSD symptoms keeps the use of Benzodiazepines a controversial issue among clinicians.
- Common Class Side Effects:
 - Sedation
 - Tolerance
 - Memory impairment
 - Interaction with alcohol

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Buspirone

- Buspirone has a limited effect on arousal but is helpful with recurrent and obsessive ideation.
- Buspirone is also commonly used as adjunct to antidepressants to augment their effectiveness.

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Atypical Antipsychotic

- The new generation of atypical antipsychotic medications reopened the controversy whether these drugs can be used more commonly for hyperarousal and sleep management.
- About 22% of PTSD patients have been receiving antipsychotic without the diagnosis of psychosis (from 10% in 1990).

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Sleep Management

PTSD is known for two types of sleep disturbances:
recurrent distressing dreams of the event
difficulty falling or staying asleep

Common medication used in sleep management

- trazodone (monitor blood pressure and sedation)
- nefazodone (Clonazepam)
- tricyclic antidepressants
- antihistamines

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Tricyclic Antidepressants (TCAs)

- Trazodone and nefazodone are serotonergic antidepressants with selective serotonin reuptake inhibitors (SSRI) properties. They also exert strong sedative effects. Trazodone may have the capacity to reverse the insomnia caused by SSRIs.
- Common Class Side Effects:
 - Sedation
 - Dry Mouth
 - Low Blood Pressure
 - Constipation

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Monoamine Oxidase Inhibitors (MAOIs)

- MAOIs produced moderate to good global improvement in 82% of all patients, primarily due to reduction in experiencing symptoms such as intrusive recollections, traumatic nightmares and PTSD flashbacks. Insomnia also improved.
- No improvement was found, however, in PTSD avoidant/numbing, PTSD Hyperarousal, depressive or anxiety/panic symptoms.
- Most published reports show that MAOIs effectively reduce PTSD symptoms. In practice, however, most clinicians appear reluctant to prescribe these agents.

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Selective Serotonin Reuptake Inhibitors (SSRI)

- SSRIs have emerged as the first choice of clinicians treating PTSD patients
- SSRIs are useful in treating co-morbid anxiety and depression.
- Dosages used in treatment of anxiety disorders are typically higher than those used for the treatment of depression.
- Sexual side effects are sometimes a problem with long term compliance.

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Anticonvulsants

- There have been several open trials of anticonvulsant/anti-kindling agents. Carbamazepine (Tegretol) produced reductions in re-experiencing and arousal symptoms, valproic acid (Depakote) produced reductions in avoidant/numbing and arousal (but not re-experiencing) symptoms.
- Anticonvulsants (and lithium) are often used as mood stabilizers in the treatment of mania and have shown to be effective in reduction of impulsivity and aggression.
- Mood Stabilizers
 - Lithium (Lithobid, Eskalith)
 - Carbamazepine (Tegretol)
 - Valproate, Valproic Acid (Depakote, Depakene)

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Opiate Antagonists

- There is growing evidence that the endogenous opioid system is dysregulated in PTSD patients.
- The hypothesis that emotional numbing in PTSD might result from excessive endogenous opioid activity

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Important to Remember.....

- Duration of treatment for PTSD usually longer than other psychiatric disorders
- Increased doses and combination of medications may be needed
- Receptors are located throughout the body not just the brain; “psychiatric” medications can have multiple physical effects

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Important to Remember.....

- Patients should be cautioned regarding changes in medications. Besides sub-therapeutic or toxic doses, can lead to excess serotonin, called “Serotonin Syndrome” (characterized by abdominal pain, diarrhea, swelling, muscle contractions, restlessness, irritability, hostility, and mood changes)
- Discontinuation needs to be gradual; discontinuation syndrome can result if stopped suddenly (dizziness, nausea, fatigue, flu-like aches and chills, sensory and sleep disturbances)

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Psychotherapeutic Interventions

Goal: Break the pattern of self-defeat by re-examining event and patients reaction to it

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Psychotherapy Interventions

Cognitive Behavioral Therapies

Exposure Therapy

Stress Inoculation Training

Cognitive Processing Therapy

Seeking Safety: A Psychotherapy for Trauma/PTSD and Substance Abuse

Acceptance and Commitment Therapy

Dialectical Behavior Therapy

Eye Movement Desensitization and Reprocessing

Motivational Interviewing

Group Therapy

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Which Treatments are Optimal?

Type an issue— Which treatment for whom?

- Most published studies incorporate individual interventions—little significant difference between types
- Some treatments can be done individually or in groups (cpt, exposure, seeking safety); some treatments can only be conducted in a group
- Comparisons of two or more active treatments are rare and usually not conclusive; some data suggest “more” may not be “better” (e.g. Glynn et al, 1999)

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PTSD and the Family

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PTSD and the Family: Common Problems

- Family violence
- Conduct disorder
- Peer relationship problems
- Family attachment difficulties
- Separation or divorce
- Drug and alcohol abuse
- Sleep difficulties
- Health problems

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