Psychotropic Medication
Issues in Military & Veterans: Public Health Implications

Psychotropic Medication and the Law Symposium
The Saks Institute for Mental Health Law, Policy & Ethics
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Kathleen West, DrPH
Center for Innovation and Research on Veterans & Military Families
USC School of Social Work
The nation that makes a great distinction between its scholars and its warriors will have its thinking done by cowards and its fighting done by fools.

- Thucydides
“BLUF”
(Bottom Line Up Front)

- Demographic overview
- Recent and current wars/conflicts mental health context
- Military mental health constructs & psychotropic medication use
- VA health system challenges
- Challenges to reintegration: focus on multiple court and health systems
- Public health concerns
"The Long War" - "GWOT", "OEF", "OIF", "OND"

Operational tempo increased dramatically since 9/11/01

- 10/7/2001: Operation Enduring Freedom

2 million+ US military personnel deployed in 3+ million tours of duty lasting 30+ days since 9/11

About 45% of service members have deployed 2+ times. 2 to 1 “dwell” time is rarely implemented

Army deployments range 12-18 mo; Marines 7-9 mo. Other branches are usually shorter, but Individual Augmentees are common

Ongoing conflicts and deployments of US Armed Forces since 1941

- All volunteer-military since 1973
- Bosnia, Herzegovina, Macedonia, Serbia, Somalia, & Iraq, etc.
Armed Forces Demographics

- Age varies: ave Marine= 25 y/o; Air Force=30 y/o
- Blacks overrepresented compared to general population; Asians & Hispanics underrepresented, though increasing.
- Unprecedented use of Army & Air Force National Guard & all Service Branches’ Reserve units due to steady reduction of troops since early 90’s (about 40% of Army & 30% of Air Force comprised of NG/R components)
- About 14% women (compared to less than 3% in Vietnam) – more than 200,000 – often in dual-military marriages
- About 55% of active component are married; just under 50% of reserve component
Military Families Snapshot

44% military members have children

Less than 1/3 live on installations

Data shows increased:
- Marriage
- Divorce
- Births (more than civilian peers)
- Blended families
- Two (or more) active-duty parents (50,000 +)

Total N=5,276,981

Service Members
43.3%
n=2,284,262

Family Members
56.7%
n=2,992,719

1st Quadrennial Quality of Life Review
DoD, 2004
Rise and Fall of Medicalization in Operational Stress Reaction Conceptions and Labels

(Capt, Ret. William Nash, MD)

Photograph of 3rd Bn, 1st Marines, by Lucian Reed, Fallujah, November 2004
Defense Center of Excellence for Psychological Health & TBI (DCoE) Continuum Model

(Capt, Ret. William Nash, MD)

Resilience Continuum

Strengthen

Assess

Identify

Treat

Leadership

Medical

Mission Ready

Stress Response

Persistent Distress

Diagnosable Condition

Optimal

Reacting

Injured

Ill

- peak performance
- positive outlook
- sense of purpose
- embraces challenge
- irritable
- feeling overwhelmed
- difficulty sleeping & inability to relax
- problems concentrating
- feelings of guilt
- decreased energy
- anxiety
- loss of interest
- social isolation
- depression and anxiety
- anger and aggression
- danger to self or others
- combat ineffective

Reintegration
<table>
<thead>
<tr>
<th>READY</th>
<th>REACTING</th>
<th>INJURED</th>
<th>ILL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEFINITION</strong></td>
<td><strong>DEFINITION</strong></td>
<td><strong>DEFINITION</strong></td>
<td><strong>DEFINITION</strong></td>
</tr>
<tr>
<td>• Adaptive coping</td>
<td>• Mild and transient distress or loss of function</td>
<td>• More severe &amp; persistent distress or loss of function</td>
<td>• Clinical mental disorders</td>
</tr>
<tr>
<td>• Effective functioning</td>
<td></td>
<td></td>
<td>• Unhealed stress injuries</td>
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<tr>
<td>• Well being</td>
<td></td>
<td></td>
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<tr>
<td><strong>FEATURES</strong></td>
<td><strong>FEATURES</strong></td>
<td><strong>TYPES</strong></td>
<td><strong>TYPES</strong></td>
</tr>
<tr>
<td>• In control</td>
<td>• Anxious</td>
<td>• Trauma</td>
<td>• PTSD</td>
</tr>
<tr>
<td>• Calm &amp; steady</td>
<td>• Irritable, angry</td>
<td>• Fatigue</td>
<td>• Depression</td>
</tr>
<tr>
<td>• Getting the job done</td>
<td>• Low mood</td>
<td>• Grief</td>
<td>• Anxiety</td>
</tr>
<tr>
<td>• Playing</td>
<td>• Worrying</td>
<td>• Betrayal</td>
<td>• Substance abuse</td>
</tr>
<tr>
<td>• Sense of humor</td>
<td>• Cutting corners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sleeping enough</td>
<td>• Poor sleep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ethical &amp; moral behavior</td>
<td>• Poor mental focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social isolation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Too loud &amp; hyperactive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Loss of control</td>
<td>• Symptoms persist &gt;60 days after return from deployment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can’t sleep</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Panic or rage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Apathy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shame or guilt</td>
<td></td>
</tr>
</tbody>
</table>

Photograph of 3rd Bn, 1st Marines, by Lucian Reed, Fallujah, November 2004
Psychotropic drug use policy in the military: Use in field

• Ritalin/methylphenidate & sometimes Dexedrine/dextroamphetamine were “standard issue” drugs carried by patrols to “enhance performance”. (Mild rebound depression & fatigue were only reported adverse effects)

• “Revolution” in military operational psychiatry in mid-90s with SSRIs; had not been prior practice to treat ongoing mental health disorders during combat operations. Iraq’s “mature theatre” permitted psychiatric practice patterns to be established in combat environment = service members receive treatment for ongoing mental health issues beyond COSR

• 2005 review of 5542 mental health contacts showed 30% psychiatric disorders (top 2: 42% generalized anxiety disorder & 33% major depressive disorder) & 70% combat operational stress reactions (COSR)

• BICEPS is still model: Brevity, immediacy, contact, expectancy, proximity, and simplicity
<table>
<thead>
<tr>
<th>Medications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants/Antianxiety:</td>
<td>Citalopram 20mg, Sertraline 100mg, Prozac 10mg, Paroxetine 20mg, Venlafaxine XR 37.5mg, Venlafaxine XR 150mg, Bupropion XL 150 mg, Bupropion XL 75mg, Mirtazapine 20mg</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>Lorazepam 1 mg tabs, Clonazepam 1 mg tabs, Lorazepam 2 mg injectable</td>
</tr>
<tr>
<td>Antipsychotics/Antimanics</td>
<td>Risperidone 1 mg tabs, Quetiapine 100 mg tabs, Olanzapine 5 mg tabs, Haloperidol injectable</td>
</tr>
<tr>
<td>Sleep Medications</td>
<td>Trazodone 100mg tabs, Zolpidem 10mg tabs</td>
</tr>
<tr>
<td>Adrenergic Agents</td>
<td>Clonidine 0.1mg tabs (for startle, flashbacks in PTSD), Prazosin 1mg tabs (better for nightmares in PTSD), Propranolol 20mg tabs</td>
</tr>
<tr>
<td>ADHD Medications</td>
<td>Atomoxetine 20 mg tabs, Methylphenidate or Dexedrine (may want to combine long-/short acting forms)</td>
</tr>
</tbody>
</table>
Psychotropic drug use in the military


  - Found no reliable mental health data prior to 2008 in Theatre Medical Data Store (TMDS) because of documentation challenges for forward deployed personnel where medications are dispensed until then

  - Commended increase in numbers of behavioral health and psychological personnel, but concerns about education and training

  - Service members on 3rd or 4th deployments reported more acute stress, psychological problems, and marital problems than on 1st or 2nd deployments & reported significantly higher psychotropic medication use than SMs on 1st deployment (Mental Health Advisory Team (MHAT) 2009 survey data)
Psychotropic drug use in the military

• Defense Health Board made 35 recommendations to DOD, ranging from reviewing guidance on off-label meds (citing Seroquel) to ensuring that it tracks & monitors “prescription drug data as well as all sources of untracked drugs” and defines polypharmacy (currently “the use of 4 or more unique prescription drugs including a psychotropic medication”)

• Concern expressed about oversight gaps by Pharmacoeconomic Center (PEC), which review of 6.2 million renewable prescriptions for 1.3 million service members from 2002-10 found that 23% of service members are taking high risk medications (potential for failure & adverse effects if withdrawn)

• Active duty psychotropic utilizers has risen steadily since 2001, with an identified 450,000+ in-theatre narcotic users in 2010, with monthly average of 7.2 to 8.4% of Army service members officially using narcotics
### Most Common Mental Health Encounters in Theatre

(OEF/OIF/OND 5/1/08 -11/30/10)

Source: AFHSC, 2/24/10

<table>
<thead>
<tr>
<th>Condition</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Use Disorder</td>
<td>2368</td>
<td>5132</td>
<td>4421</td>
<td>11921</td>
</tr>
<tr>
<td>Anxiety State Unspecified</td>
<td>1427</td>
<td>2359</td>
<td>2796</td>
<td>6582</td>
</tr>
<tr>
<td>Depressive Disorder Other</td>
<td>1564</td>
<td>2309</td>
<td>2329</td>
<td>6202</td>
</tr>
<tr>
<td>Adjustment Reaction Unspecified</td>
<td>937</td>
<td>1599</td>
<td>1865</td>
<td>4401</td>
</tr>
<tr>
<td>Brief Depressive Reaction</td>
<td>1115</td>
<td>1355</td>
<td>1415</td>
<td>3885</td>
</tr>
<tr>
<td>Disrupted Sleep Wake Cycle</td>
<td>798</td>
<td>1560</td>
<td>1408</td>
<td>3766</td>
</tr>
<tr>
<td>Persistent Insomnia</td>
<td>857</td>
<td>1222</td>
<td>1204</td>
<td>3283</td>
</tr>
<tr>
<td>Adjustment Reaction Anxious Mood</td>
<td>679</td>
<td>994</td>
<td>1153</td>
<td>2826</td>
</tr>
<tr>
<td>Adjustment Reaction Mixed Emotion</td>
<td>605</td>
<td>969</td>
<td>1173</td>
<td>2747</td>
</tr>
<tr>
<td>Prolonged Posttraumatic Stress</td>
<td>795</td>
<td>923</td>
<td>1013</td>
<td>2731</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,145</td>
<td>18,422</td>
<td>18,777</td>
<td>48,344</td>
</tr>
</tbody>
</table>

75,581 mental health encounter records and 779,088 prescription records were noted in same data set and timeframe. It was noted that it’s common for an individual to have more than one encounter and prescription.
DSM-IV Stress Illnesses Possibly Resulting From Unhealed Stress Injuries

(Capt. Ret. William Nash, MD)

Unhealed Operational Stress Injury

- TRAUMA
  - ACUTE STRESS DISORDER
  - PTSD

- FATIGUE
  - DEPRESSIVE DISORDERS
  - ANXIETY DISORDERS

- GRIEF
  - DEPRESSIVE DISORDERS
  - PROLONGED GRIEF D/O

- BETRAYAL
  - DEPRESSIVE DISORDERS
  - MISCONDUCT

ALCOHOL OR DRUG ABUSE OR DEPENDENCE
Combat & Operational Stress First Aid (COSFA)

Three Levels:

1. **Continuous Aid**
   - 1. CHECK
     - Assess, observe and listen
   - 2. COORDINATE
     - Get help, refer as needed
   - 3. COVER
     - Get to safety ASAP
   - 4. CALM
     - Relax, slow down, refocus
   - 5. CONNECT
     - Get support from others
   - 6. COMPETENCE
     - Restore effectiveness
   - 7. CONFIDENCE
     - Restore self-esteem and hope

2. **Primary Aid**

3. **Secondary Aid**
Implication for Families and Communities

- Lack of sleep
- Advancement Barriers
- Relationship problems
- Physical injuries
- Extra Duties
- Peer conflicts
- Boredom
- Money problems
- Family separation
- Conflicts with bosses
- Military Role Challenges
- Civilian Role Demands

Life threat

- Loss
- Moral injury

Wear-and-tear

Yellow Zone
Stress

Orange Zone
Stress
Veterans Mental Health Issues & Veterans Administration Challenges

- There is recognition that the VA and DOD must improve integration of treatment military members “particularly for long periods following deployments and conclusion of active service”

- Veterans Health Administration (VHA) is the largest integrated health care system in US and potentially serves same population served by Military Health. But DOD and VHA have incompatible electronic data systems leading to inadequate communication between systems (increased calls back to active duty threatens Service member returning to DOD)

- VA has discretionary budget process and therefore prioritizes care to veterans with 8 levels of enrollment prioritization – top access based on service-related disabling condition; lowest priority copays with VA means test
Snapshot of Department of Veteran Affairs

- Serves 22.7 million veterans – designed to serve mostly male veterans, limited female-specific and family services

- Comprised of 171 medical centers; more than 350 outpatient, community, and outreach clinics; 126 nursing home-care units; and 35 domiciliary

- Provides a broad spectrum of medical, surgical, rehabilitative care and specialized veteran care

- Total 2010 expenditure in US & CA respectively: $108,634,092,000 and $9,124,285,000
Overall Veterans’ Mental Health & Sub-population Special Concerns

Record review of 206,000+ veterans entering care from 2000-07 found diagnostic rates of:

- 33% at least one mental health disorder
- 41% mental health or behavioral health adjustment disorder
- 20% PTSD
- 14% depression (other studies suggest underdiagnosis at VHA)

Military Sexual Trauma reported by 22-49% of women veterans

Both attempted and completed suicide rates among OEF/OIF veterans appear to be higher than previous conflict veterans, with indications that female veterans are at greater risk; data is preliminary

Increased incidence of hazardous drinking, dangerous driving practices, substance abuse (prescribed and illicit drugs) are yet inconclusive
Public Health Challenge: Families Impacted by Military Service as New At-Risk Population

- An estimated 2+ million children have been affected by a parent’s recent wartime deployments - usually multiple absences
- Specific high risk groups include families with a member with symptoms or diagnosis of PTSD or other mental or physical health injuries
- High rates of community-based physician-prescribed medications for pain and psychotropics for military-related mental injuries,
- Increased law enforcement records of veteran self-medication, primarily with alcohol – and concurrent court involvement in DUIs, assaults, & accidents
- Increasing rates of child maltreatment and IPV/DV among military & veteran families – and concurrent court involvement in family and dependency settings
Dependency, Abuse and Neglect of Children

• Problems regarding family support
• Increased use of psychotropic medications among military/veterans can result in unfavorable child custody determinations
• Problems with the Interstate Compact for the Placement of Children/Expedited ICPC Reports
• Need for Visitation Centers & Programs
Military-Identified High Risk Populations

- Physically-injured service members and their families; multiple surgeries and prosthetics present evolving challenge over time
- Psychiatrically ill patients
- Families of the deceased; growing numbers of children have lost parents
- Growing numbers of military children are prescribed psychotropics: in 2009 more than 300,000 children under 18 y/o receiving TRICARE received psychotropic medications; rate somewhat higher than comparable civilian population
• Medical staff and other highly-exposed personnel (eg chaplains, mortuary affairs, casualty assistance officers, psychologists/behavioral health personnel)

• Medical Hold/patients; reports of discrimination for PTSD-boarded

• Isolated Reserve/Guard component & Individual Augmentees (IAs)
Courts context

- SYSTEM CONTEXT: multiple types of Courts (juvenile, dependency, family, criminal, mental health) and associated systems of care (child welfare, juvenile investigation, prosecution, JAG), are reporting an increase in complex cases involving military service members and their families. Cases involving veterans are also increasing.

- Forensic Psychiatry is increasingly involved and medical records are subpoenaed.

- FAMILY CONTEXT: military families are experiencing multiple problems in at least two systems – in civilian court settings (sometimes multiple) and on installations. Problems are often exacerbated by families being in transition - often in multiple arenas: PCS, reintegration, redeployment, jurisdictions, etc.

- Families of veterans are civilians, but often have some military-related challenges.
Indicated Public Health Interventions

Institute of Medicine (IOM) Taxonomy for Mental Health Interventions
(Mrazek & Haggerty, 1994)

**Prevention Interventions:**
Target populations with no or subclinical symptoms

**Universal**
Everyone in a population (before or after exposure)

**Selective**
Subgroups of the population at heightened risk (e.g., deployed units)

**Indicated**
Individuals identified to be suffering subclinical distress or impairment

**Best bang for the buck**

*Feldner, Monson, & Friedman, 2007; Adapted by Nash & Westphal*
Challenges for Legal System with Military & Veterans & their Families

1) **Awareness**
   - identification of population and issues: especially of veterans --particularly acute due to fewer resources for family members

2) **Understanding/Sensitivity**
   - of warrior culture/ethos, military rules and regulations, hierarchy/rank, turnover, family dynamics,

3) **Willingness to learn & resources to go “out of their way”**
   - eg: locally maintaining awareness of new Commands within jurisdiction; proactive judiciary and social services to reach out to rotating military personnel, and veteran supports
Questions & Comments?

Please contact Kathleen West at kathleenmwest3@gmail.com