Psychological Effects of the Long War: To the Battlefield and Back Again

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A Brief History of Psychological Reactions to War

- World War I--"shell shock", over evacuation led to chronic psychiatric conditions
- World War II--ineffective pre-screening, "battle fatigue", lessons relearned, 3 hots and a cot
- The Korean War---initial high rates of psychiatric casualties, then dramatic decrease
  Principles of “PIES” (proximity, immediacy, expectancy, simplicity)
- Vietnam
  - Drug and alcohol use, misconduct
  - Post Traumatic Stress Disorder identified later
- Desert Storm/Shield
  - "Persian Gulf illnesses", medically unexplained physical symptoms
- Operations Other than War (OOTW)
  - Combat and Operational Stress Control, routine front line mental health treatment
- 9/11
  - "Therapy by walking around"
  - Increased acceptance by leadership over past seven years
Recent Background

- The Long War
  - Extended and repeated deployments
- Mental Health Advisory Teams (MHATs)
  - MHAT I through V, 2003 through 2007
- DoD Mental Health Task Force
- The Acting Army Surgeon General announced the hiring of 200 more mental health providers via civilian contracts
  - Number of attempted hires is now over 330
  - Inventory currently contains over 2000 mental health providers
- Congress provides supplemental funds to DoD in Summer 07
  - 96 M to Army for “Psychological Health”
  - Defense Center of Excellence
- Elevated suicide rate
- Effects on Families

Range of Deployment-Related Stress Reactions in GWOT

All Wars Produce Psychological Reactions

- Combat Stress and Operational Stress Reactions
- Post-traumatic stress (PTS) or disorder (PTSD)
- Depression
- Alcohol Abuse
- Symptoms such as irritability, bad dreams, sleeplessness
- Family / Relationship / Behavioral difficulties
- Increased risk taking behavior leading to accidents
- “Compassion fatigue” or provider fatigue
- Suicide behaviors, with elevated rate of completions
- Mild Traumatic Brain Injury (mTBI) or Concussion
PTSD Diagnostic Concept

- Traumatic experience
  - Threat of death/serious injury
  - Intense fear, helplessness or horror
- Symptoms (3 main types)
  - Reexperiencing the trauma
  - Numbing & avoidance
  - Physiologic arousal
- Impairment
  - Social or occupational functioning
- Persistence of symptoms

Surveillance

- Land Combat Study (BCT samples)
  - Surveys of infantry BCTs throughout deployment cycle (n>30,000).
  - Anonymous with informed consent
- PDHA / PDHRA (population-based)
  - Brief validated screening survey plus primary care interview
  - Not anonymous, linked to clinical care
- Health Care Utilization Data (population-based)
  - MTFs (ADS / SIDR data from DMSS)
  - VA Facilities
- Mental Health Advisory Teams
- Epidemiological Consultation Teams
- Suicide numbers and cases (Army Suicide Event Report)
- DoD Mental Health Task Force
- President’s Commission on Wounded Warriors “Dole-Shalala Report”
- Rand Study: Invisible Wounds of War
- APA Study
Mental Health Advisory Teams

- MHATs I through V have consistently shown that 14-20% of Soldiers from BCTs in Iraq are experiencing mental health symptoms
- MHAT I (data collection 2003)
  - First ever in theater assessment
  - Identified problems with distribution of behavioral health resources
- MHAT II (data collection 2004)
  - Mission confirmed that many of the recommended changes had been implemented
- MHAT III (data collection 2005)
  - Longer deployments and repeated deployments were associated with higher rates of mental health symptoms
- MHAT IV (data collection 2006)
  - First assessment of battlefield ethics attitudes / behaviors
  - Repeated deployments and longer deployments again confirmed to be associated with higher rates of mental health symptoms
- MHAT V (data collection 2007)
  - See next slides

OIF Behavioral Health Status: Mental Health

- Reports of mental health problems did not statistically differ from 2006 to 2007.
- Rates of mental health problems are comparable to every year except 2004.

![Graph showing mental health status by year and condition](image-url)
OIF Risk Factors: Multiple Deployments

- NCOs on either their second deployment to Iraq or their third/fourth deployment to Iraq report significantly lower morale than NCOs on their first deployment.

- Each deployment to Iraq puts NCOs at significantly more risk of reporting a mental health problem.

OIF Stigma and Barriers to Care

<table>
<thead>
<tr>
<th>Factors that affect your decision to receive mental health services</th>
<th>Percent Agree or Strongly Agree</th>
<th>MHAT IV (OIF) 2006</th>
<th>MHAT V (OIF) 2007</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be too embarrassing.</td>
<td>36.6%</td>
<td>32.0%</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>It would harm my career.</td>
<td>33.9%</td>
<td>29.1%</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Members of my unit might have less confidence in me.</td>
<td>51.1%</td>
<td>44.8%</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>My unit membership might treat me differently.</td>
<td>57.8%</td>
<td>52.1%</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>My leaders would blame me for the problem.</td>
<td>43.0%</td>
<td>38.5%</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>I would be seen as weak.</td>
<td>53.2%</td>
<td>49.8%</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

- Soldiers who screened positive for mental health problems reported significantly lower stigma about receiving care in 2007 than in 2006.
- Soldiers report higher barriers to care (not shown). The increase is likely due to the high percentage of Soldiers way from the main Forward Operating Bases (FOBs).

NS=Not significant
Suicide Rate

COMPARISON BETWEEN ACTIVE ARMY AND RC ON ACTIVE DUTY SUICIDE RATES (CY01 TO CY07)

CALENDAR YEAR

ACTIVE ARMY SOLDIERS ONLY
RC ON ACTIVE DUTY: INCLUDES ARNG AND USAR SOLDIERS ON ACTIVE DUTY
PENDING AFME CONFIRMATION FOR ACTIVE ARMY AND RC SOLDIERS ON ACTIVE DUTY

POST TRAUMATIC BRAIN DISORDER

Number of Newly Identified PTSD Cases
Army, OIF/OEF

Last Quarter of 2007 projection based on first three Quarters CY07 experience
Current and New Strategies

• Surveillance
  – MHATs
  – PDHA, PDHRA
  – EPICONs
  – Other
• Access to Care
  – Increased number of Behavioral Health Providers
  – Stigma Reduction
• Quality of Care
  – Education of all providers
• Resilience
  – Battlemind
  – Other
• Transition to Care
  – DoD to VA
  – DoD to civilian
  – New Web Portal
Resilience

- Line leaders strengthen personnel and mitigate stressors
  - Tough training and unit cohesion
  - Partner with chaplains, medical and mental health
- Real time assessment improves resiliency, recovery and reintegration
  - Mental Health Advisory Teams (MHATs I-V)
- Organic psychological health delivers robust education and treatment
  - Combat Stress Control (CSC) units

Resiliency Training for Service members and Families
- Battlemind
- Targeted relevant education to 900,000 Soldiers
  - Army Chain Teach on TBI and PTSD 2007 to increase recognition & reduce stigma
- New suicide prevention training and initiatives being implemented

Future Efforts:
- Research into best practices
- Resiliency will be integrated into all Soldier training

Recovery

- Line leaders
  - Recognize reactions, injuries, illnesses and Refer when needed
- Quality of care
  - Internationally recognized evidenced based guidelines for treatment of PTSD
  - Medical Providers receiving updated information
- Access to Care
  - Army has hired 170 more civilian health care providers
  - Increased recruiting and retention efforts for active duty
  - 3,000 mental health more providers have joined TRICARE system
- Behavioral health care delivered via primary care providers
  - Respect-Mil program/integration with primary care
- Sites of treatment; Institutional triad
  - Military: Embedded and Medical Treatment Facilities
  - Veterans Health Administration
  - TRICARE providers
- Tailored and focused interventions for underserved populations
  - Mental health organic in Warrior Transition Units and Guard/Reserve

Future Efforts:
- Research into best treatment practices
**Reintegration**

- Leadership responsibilities
  - Keep with unit if possible
  - Expect return to full duty
  - Fight stigma, harassment
  - Continuously assess fitness
  - Communicate with treating professionals (both ways)
- Family, community critical
- Deployment Cycle Training/Support
- Decompression/Reintegration
- Post Deployment Health Assessment and Post Deployment Health Re-Assessment (PDHA/PDHRA)
  - Upon return and at 3 to 6 months
- Wounded, Ill, and Injured Warriors
  - Close coordination with VA, community
- Continued support from VA, civilian providers
- Military One Source
- Recognition of Post Traumatic Growth
- Future Efforts:
  - Continued training of all Service Members and their Families
  - Increasing outreach to Guard/Reserve Soldiers
  - National outreach and anti-stigma campaign

**Deployment Cycle Support**

- Pre-Deployment Battlemind
  - Leaders
  - Junior Enlisted
  - Helping Professionals
- Spouse/Couples Pre-Deployment Battlemind

**Traumatic Event Management**

- Individual Interventions
  - Psycho pharmacotherapy
  - Cognitive Therapy
  - Stress Inoculation Training
  - Psychodynamic Therapy
  - Patient Education
  - Peer / Buddy Support
  - Spiritual Support

- Group Interventions
  - Event Driven Battlemind Psychological Debrief
  - Time Driven Battlemind Psychological Debrief

**Combat and Operational Stress**

- Army Family BH Services
- Suicide Prevention
- Army Substance Abuse Program
- Spiritual Support
- MilitaryOneSource

**PDHRA Battlemind Brief and DVD**

- Post Deployment Battlemind Psychological Debriefing
- Post-Deployment Battlemind
- Spouse/Couples Post-Deployment Battlemind
- Structured Redeployment and Reintegration
- Warrior Adventure Quest
Resiliency Programs

• **Battlemind**
  - The US Army psychological resiliency building program. This term describes the Soldier’s inner strength to face fear and adversity during combat, with courage and speaks to resiliency skills that are developed to survive. It represents a range of training modules and tools under three categories: Deployment Cycle, Life Cycle and Soldier Support.

• **Suicide Prevention**
• **Provider Resiliency Training**
• **Reunion and Reintegration**
  - Deployment Cycle Support is in process of being upgraded.

• **Other Programs in Development**
  - New resiliency programs are being funded under congressional TBI/PH supplemental dollars
  - Warrior Adventure Quest

Battlemind Training System: Web Page
(www.battlemind.army.mil);
3rd Quarter ’08
**Battlemind Training System: Deployment Cycle**

**Tough Facts about Combat**

and what leaders can do to mitigate risk and build confidence

Pre-Deployment Battlemind
For: Leaders, Junior Enlisted, Helping Professionals

Spouse/Couples Pre-Deployment Battlemind

Preparing for a Military Deployment

**Battlemind AAR**
Psychological Debriefing

**Post-Deployment Battlemind**

**PDHRA**
Battlemind Brief and DVD

**Transitioning from Combat to Home**

**Battlemind Training II**
Continuing the Transition Home

**Battlemind Training I**

**KEY COMPONENTS**

- **Self-confidence**
  - Take calculated risks
  - Handle future challenges

- **Mental toughness**
  - Overcome obstacles or setbacks
  - Maintain positive thoughts during times of adversity and challenge

**OBJECTIVES**

- Prepare the Soldier mentally for the rigors faced in all types of military operations including combat.
- Assist the Soldier in the transition home process.
- Prepare the Soldier as quickly as possible to conduct continued military operations and possibly deploy again in support of all types of military operations including additional combat tours.
- Includes both Soldiers and Families.
- Reduce Stigma associated with behavioral health.
**Battlemind Training**

- **Evidence-based**: Built on findings from military research on Soldier.
- **Experience-based**: Uses examples that Soldiers can relate to.
- **Strengths-based**: Builds on existing Soldier strengths and skills; rejects a deficit or illness model.
- **Training-based**: Focuses on skill development – not education.
- **Explanatory**: Highlights conflicted/ misunderstood reactions.
- **Team-Based**: Self-awareness through helping buddy.
- **Action-Focused**: Discusses specific actions to guide Soldier behavior.

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**2008 Suicide Intervention Strategy**

- raise awareness and build intervention skills,
- provide actionable intelligence;
- improve access to comprehensive care;
- reduce stigma;
- improve life skills.

- **Ask your buddy**
  - Have the courage to ask the question, but stay calm
  - Ask the question directly, e.g. Are you thinking of killing yourself?
- **Care for your buddy**
  - Remove any means that could be used for self-injury
  - Clearly explain the situation; do not use force
  - Actively listen to produce relief
- **Escort your buddy**
  - Never leave your buddy alone
  - Escort to the chain of command, a Chaplain, a Behavioral Health Professional, or a primary care provider

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**Foot Locker Session**

*Under the Oak Tree*
**DoD Definition for TBI**

Traumatic brain injury (TBI) is a traumatically-induced structural injury and/or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least one of the following clinical signs, immediately following the event:

1. Any period of loss, or a decreased level, of consciousness.
2. Any loss of memory for events immediately before or after the injury.
3. Any alteration in mental state at the time of the injury (confusion, disorientation, slowed thinking, etc.).
4. Neurological deficits (weakness, loss of balance, change in vision, praxis, paresis/plegia, sensory loss, aphasia, etc.) that may or may not be transient.
5. Intracranial lesion.

External forces may include any of the following events: the head being struck by an object, the head striking an object, the brain undergoing an acceleration/deceleration movement without direct external trauma to the head, a foreign body penetrating the brain, forces generated from events such as a blast or explosion, or other force yet to be defined.

Adopted by DoD 1 Oct 07

**Concussion / Mild TBI**

- **Concussion is a clinical diagnosis**
  - There is no singular objective test for the Dx of Concussion
  - Based upon a definition
    - Requires an injury event AND an alteration of mental status
    - Definition in HA policy 1 OCT 07
    - IAW major medical academic definitions
  - Requires clinical judgment
  - May require self-report
  - Symptoms such as headache, dizziness, irritability, fatigue or poor concentration, when identified soon after injury, can be used to support the diagnosis of mild TBI, but cannot be used to make the diagnosis, symptoms are not definitional.
Ideally, all TBI is identified and documented at the point of injury. As a safety net, TBI is assessed at post-deployment.

Clinical Management Guidance

- In Theater Guidelines
- Non-deployed Acute
- Non-deployed Sub-acute
- Clinical Practice Guideline in development
Automated Neuropsychological Assessment Metrics (ANAM)

Pre-deployment Pre-SRP, SRP/PDP

• Current Solution

**Ultimate Solution

Deployment

Medical Eval & Management

Repeat

ANAM +

- ANAM +

PHA** – Annual Exam

+ ANAM -

+ MACE -

+ (24 hrs) ANAM -

Medical Eval & Management (repeated ANAM tests)

BLAST

+ ANAM +

All Results recorded in AHLTA / AHLTA-T

Pre-deployment Pre-SRP, SRP/PDP

Repeat

ANAM +

- ANAM +

Medical Eval & Management

Re-deployment PDHA / PDHRA

Repeat

ANAM +

- ANAM +

Medical Eval & Management

Repeat

ANAM +

- ANAM +

MACE +

All Results recorded in AHLTA / AHLTA-T

Medical Eval & Management (repeated ANAM tests)

Automated Neurocognitive Assessment Metric (ANAM) Pre-Deployment Testing

• Testing conducted as part of SRP / pre-SRP
  – Pilot tested process – 460 Soldiers (11 June / 20 June / 6 July)
  – Rapid expansion to test deploying Soldiers
  – To Date: ~40,000 Soldiers tested
  – Interim guidance - DoD wide Pre-deployment testing begin NLT 1 Apr 08
• Administration Team: U of OK
  – Train local team – sustainment
  – Standardized testing protocol
• Testing Equipment: Laptops (40-60) – brought by the Team
• Installation Support Required
  – Space and electrical power
  – Personnel data – pre-populate demographic information
Symptoms of Post Traumatic Stress Disorder
- Diagnosed: 30,000
- Estimated: 80,000

Continuing Challenges
- Array of services
- Stigma
- Increasing number of Soldiers with mTBI and PTSD
- Shortage of Providers
- Remote locations
- High OPTEMPO
- Public Perceptions
- Suicide rate
- Lack of providers who accept TRICARE
- Provider fatigue
- Warrior Transition Office Soldiers
- Reintegration
- Guard/Reserve Soldiers

Way Ahead
- Integration of services
- Policy changes, education
- Integration with primary care, other portals of care
- Grow number of providers
- Tele-Behavioral Health
- Optimal Reintegration
- Strategic communication
- Re-engineered suicide prevention
- Actively recruit providers to TRICARE
- Provider resiliency training
- Mental health organic in WTUs
- Enhanced reintegration strategies
- Mental health organic in Guard/Reserve