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The Unseen Injuries:
Mental Health and Cognition Implications for Service Members During and After Their Time in Service

Erik S. Johnson
OTR/L

Disclaimer

Information and opinions expressed in this presentations are not intended/should not be taken as representing the policies and views of the Department of Defense, its component services, or the US Government.
Learner Outcomes

- **Identify** the complex physical, cognitive and psychosocial struggles that combat veterans face as a result of their service.
- **Describe** effective strategies for treating Service Members who have struggled with mental health and cognitive disorders.
- **Identify** opportunities for occupational therapists to expand treatment services outside of the traditional clinical settings to more effectively treat mental health disorders.
The Unseen Injuries
Mild Traumatic Brain Injury

The Acute Injury
### DoD TBI Statistics

#### Table 3. Traumatic Brain Injury (TBI) 2000-2013 Q3 by Classification and Service, Deployed and Not Previously Deployed Combined

(As of January 10, 2014)

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**Notes:**
- Data includes both service members and non-service members.
- Air Force includes both deployed and non-deployed.
- Marine Corps includes both service members and non-service members.
- Navy includes both service members and non-service members.
- Army includes both service members and non-service members.

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### Evaluation Process

- First Line Medics are first to eval. Includes:
  - MACE (Military Acute Concussion Evaluation)
  - Quick Cranial Nerve Screen
- Any red flag means Evac to Level II facility (Where the Concussion Care Centers are located)
MEDEVAC To Level II

- Full Neuro Screen
  - PA, MD, Combat Medic, Nurse, OT team member
- Full eval for any other physical injury
- After eval, we determine if the Soldier is right for the program
  - Red flags?
  - Other physical injury?
  - Behavioral Health?

Evaluation Process

- Red Flags (as per CPG):
  - 2+ blasts w/ 72 hours
  - Unequal Pupils
  - Repeated Vomiting
  - Worsening Headaches
  - Disorientation
  - Double Vision or Loss
- Seizures
- Weakness on one side of the body
- Witnessed LOC/AOC
- Abnormal Speech
- Unusual/Combative behavior
Concussion Care Center

Initial Rules for The Program

- No TV
- No Video Games
- Minimal Internet
  - To check Email
- Limit Reading
- Daily expectations
  including clinic
  maintenance.
- Rest, rest, rest
72 Hours Post Blast

- Our average length of stay was right around 72 hours.
- At this point, we started to get the SM a lot more involved with engaging in ADLs and IADLs.
  - Expectation to engage in facility maintenance
  - Independent trips to dining facility, MWR facilities
- Begin engagement in treatment
  - FORCE mTBI concepts

Traumatic Brain Injury Team

- Level II Team Includes:
  - OTR/L
  - 68L COTA (NCO)
  - 68W
  - RN
  - Physical Therapist
  - PA
  - MD
  - CRNA
  - Psychologist (Combat Stress Team)
Case Study 1

• IED Blast on 6 August 2010
  • Symptoms:
    • Ringing in Ears
    • Headaches
    • Concentration & coordination
  • Treatment:
    • Rest, Structured schedule
    • DJ Hero for sequencing, coordination
    • Chess – Advanced planning, problem solving

Return To Duty

• So how do you know a Soldier is ready to RTD?
  • The first thing is that they’ve at least had 24 rest, even if there was no diagnosed concussion.
  • The Soldier reports no residual symptoms
  • Exit MACE
  • Clear cranial nerve screen
  • Exertional Testing with no signs or reports of lingering symptoms
    • 65% Target Heart Rate (approx 130BPM for most)
    • Push-ups, sit-ups, exercise bike, treadmill, etc.
  • Behavioral Health Screen?
Combat Stress

- Co-morbid Behavioral Health issues
  - Anxiety
  - PTSD
  - Depression
  - Frustration
  - Irritability

Combat and Operational Stress Control
Mental Health
Vs.
Mild Traumatic Brain Injury

Stress

*Defined*: Psychological or physical demands we face on a day-to-day basis

Is all stress bad?

- Good Stress (eustress)
  - Getting Married
  - Having a baby
  - Promotion
- Bad Stress (distress)
  - Divorce
  - Health Problems
  - High OPTEMPO
Combat Stress

- Combat and Operational Stress Control
  - FM 4-02.51
- Combat and Operational Stress Reaction (COSR)
  - Replaces the old terms:
    - Battle Fatigue
    - Shell Shock

Combat Stress Reactions

- Fear
- Anxiety
- Grief/Guilt
- Self Doubt/Loss of skills
- Anger
- Loss of confidence in leadership
- Depressed Mood
- Insomnia
- Fatigue
- Physical Complaints
- Apathy
- Carelessness
- Hyperalertness
Roles and Goals

- Role: Prevention and Intervention measures aimed at minimizing maladaptive behaviors and promoting adaptive behaviors

- Goal: Return to duty with skills required to continue their mission successfully

Prevention

- Unit Needs Assessment:
  - Systematic Approach to determine if any interventions may be needed for a unit
- Consultation and Education:
  - Provided to commanders to reduce stressors in unit and/or build morale
- Reconstitution Support:
  - Aid commanders and Soldiers with rebuilding units
To enhance adaptive stress reactions

To prevent maladaptive stress reactions

To control stress reactions

Identify and manage behavioral disorders

The Key is Education
OT Treatment

FORCE mTBI

Video Games

Army Center for Enhanced Performance
FORCE mTBI

Function Oriented Rehabilitation for Combat Exposed mTBI

Graded Activity
for Enhanced Performance

Freeze Framer

- Provides a glimpse into a patient's in-the-moment physiological, mental, and emotional state.

- Teaches patients to concentrate on appropriate cues that enhance their motivation, persistence, and mood (also applies to stress management)
Concentration Profile

- Consistent waves reflect consistent concentration

- Steadily climbing blue line indicates no distractions

- Ideal profile. Rare without continued training and practice

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The invisible battles
SGT Monte Bernardo

“I can do anything that you can do. Your job is to convince me of that.”
Two Things

- I’m incredibly passionate about my patients and how they identify themselves as a unique individual
- I’m incredibly confident in my treatment planning

Occupy Yourself

To occupy is to engage or employ the mind, energy, or attention of
It is All Mental Health
The invisible battles
SGT Raymond Alcaraz

I hate that I have to remember

SIMON-PETER EBLING

JENNIFER SCHWARTZ
How do I help

How can we prevent

22 Pushup challenge?
I’m am successful in my life now because of individuals.

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