COMBAT STRESS
&
PTSD
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OEF/OIF OUTREACH TEAM
DEPT. of VETERANS AFFAIRS
COMBAT & DEPLOYMENT
STRESS

- OVERVIEW OF PRESENTATION
  - DEFINITIONS
  - BODY & MIND REACTIONS TO STRESS
  - WHY STRESS IS GOOD (IN THE SHORT RUN)
  - BODY & MIND ADAPTATION TO PROLONGED STRESS
  - WHAT TO DO YOURSELF TO RELIEVE STRESS
  - WHEN TO ASK FOR HELP
DEFINITIONS

- **Combat stress**: A state of mental or emotional strain or tension resulting from adverse or very demanding circumstances related to combat operations.

- **Anxiety**: A feeling of worry, nervousness or unease, generally out of proportion to actual threat.

- **Combat Operational Stress Reaction (COSR)**: A variety of physical and emotional signs related to an overwhelming traumatic event, or a result of ongoing combat and non-combat related stresses.

- **ASR/PTSD**: A clinical condition brought on by a life-threatening event(s) displaying symptoms in three realms. (hyperarousal, re-experience and avoidance) see handout for DSM IV-TR criteria

- **Mild TBI**: A concussion that may lead to problems like PTSD.
“THIS IS YOUR BRAIN ON STRESS”

- Amygdala
  - Initiates Fight or Flight via Nerve Output and Adrenaline

- Pre-Frontal Cortex
  - Integrates Emotional Response to Trauma
  - Major Negative Feedback on the Amygdala
  - Influences Attention, Decision Making and Working Memory

- Hippocampus
  - Shapes Conscious (explicit) Memories
  - With Amygdalar Input, Remembers Emotionally Traumatic Events
WHY ACUTE STRESS RESPONSE IS GOOD

- Central Response: (Adrenaline)
  - Increased HR and B/P (Circulation to Muscles)
  - Increased Attention and Cognition (Reaction Time)
  - Increased Respiration and Opens Airways
  - Blunting of Pain
  - Increased Fear Conditioning (Future Memory)
  - Immediate Release of Glucose from Storage in Liver (Quick Energy)

- Peripheral Response (Cortisol)
  - Mobilization of Energy from Liver and Body Fat
  - Enhanced Immune System (Fight Infection)
“BATTLE MIND”

- “The Soldier’s Inner Strength To Face Fear And Adversity With Courage”

- Encompasses Mental Toughness And Self Confidence

- These Learned Skills Help You Survive In Combat But Cause Problems If Not Adapted When You Get Home

- Subject Of Training Session At All Post Deployment Health Reassessment Briefings (PDHRA)
WHY CHRONIC STRESS IS BAD

- Prolonged Release of Adrenaline:
  - Persistence of increased HR and B/P (Hypertension)
  - Altered Intestinal Motility (Irritable Bowel Syndrome)
  - Hypervigilance/Sleep Disturbances

- Prolonged Release of Stress Hormones (Cortisol):
  - Increased Fat Storage (Obesity/Diabetes Type II)
  - Suppressed Growth and Reproduction
  - Possible Immune System Deregulation (Risk for Infections/Disease)
  - Possible Reduced Neurogenesis (Impaired Memory Formation)

- Changes in the Amygdala

- Changes in the Pre-Frontal Cortex

- Changes in the Hippocampus
Serotonin and PTSD

**Acute Response**
- Fight response
- Aggressive retaliation
- Self defense
- Rage
- Attenuation of fear

**Symptom Sequelae**
- Aggression
- Violence
- Suicide attempts
- Impulsivity
- Depression
- Anxiety/panic
Three Types Of Stress Injuries Observed In Theater

**COMBAT / OPERATIONAL STRESS**

- **TRAUMA**
  - An impact injury
  - Due to events involving terror or horror

- **FATIGUE**
  - A wear-and-tear injury
  - Due to the accumulation of stress over time

- **GRIEF**
  - A loss injury
  - Due to the loss of people important to you
Operational Stress Injuries May Persist as DSM-IV Diagnoses

**COMBAT / OPERATIONAL STRESS**

**TRAUMA**
- ASD
- PTSD

**FATIGUE**
- Adj D/O
- GAD
- MDD
- Panic

**GRIEF**
- V62.82
- MDD
"And down here we keep Fluffy. ... We're afraid he may have gone mad."
OIF/OEF STATS

- Current as of 12/2007 (1st Qtr FY08) *source DVA
- 837,458 Separated Returnees (Vets)
- About an equal number still active duty
- 324,846 (39%) Have seen VA for some reason
- 120,049 (16%) some MH Dx
- 71,595 (9%) are Dx with ASR/PTSD
- Remaining 7% had various other MH Dx including substance use/abuse
- OEF/OIF Vets represent about 6% of VA population
NE/West.IA STATS

- Dx PTSD 40%
- Dx Adj. Disorder 36%
- Dx Substance abuse 13%
- Dx Depression 12%
- Dx Anxiety 5%
- Dx MST 1%
These Are Current Estimates Based On Civilian PTSD DX Without Treatment

*source: Synopsis of Psychiatry 2004 Kaplan et. al.

- Those Who Recover: ~30%
- Those Who Improve But Have Some Mild Symptoms: ~40%
- Those Who Improve But Have Moderate Symptoms: ~20%
- Those Who Stay The Same Or Get Worse: ~10%
THE CASE FOR TREATMENT

- Reduction in symptoms
- Prevent “Drift”
- Increase “Cure Rate”
WHAT CAN I DO MYSELF TO HELP

- Education (Knowledge is Power)
- Battle Buddy
- Peer-To-Peer
- Chaplain/Clergy
- Family
- Relaxation Skills
- Exercise !!!
WHAT CAN I DO TO HURT MYSELF

- Risk Taking Behavior
- Alcohol/Drugs (DUI)
- Isolation
- Carrying Weapons
- Road Rage
WHAT WE (VA) DO

- Evaluation
- Testing
- Counseling
- Medications (Band-Aid Therapy)
- Case Management
- Substance Use Treatment Programs
- Crisis (inpatient) Management
- Claims/Voc Rehab
COMBAT STRESS

- THREE TAKE-HOME MESSAGES!!
  - YOU’RE NOT ALONE (IT’S NORMAL)
  - MOST STRESS IS GOOD
  - ASK FOR HELP WHEN YOU NEED TO
AN INSTANT LATER PROFESSOR WAXMAN AND HIS TIME MACHINE ARE OBLITERATED, LEAVING THE COLD-BLOODED/WARM-BLOODED DINOSAUR DEBATE STILL UNRESOLVED.