PRIMARY CARE ISSUES IN THE OIF/OEF VETERAN

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Most Common Diagnoses in Returning OIF/OEF Veterans*

- Tobacco Use Disorder
- Back Pain
- Dyslipidemia
- Tinnitus &/or Partial Hearing Loss

*Excludes mental health diagnoses

- Other Areas of Concern
  - Sexual Dysfunction
  - Weight Gain
  - Traumatic Brain Injury
Tobacco Use

- 37% of Lincoln OIF/OEF vets use tobacco (National average 23% of males and 19% of females)
  - smoking >> smokeless tobacco use
- Smoking
  - Single most preventable cause of disease and death in the US
  - Smokers lose an average of 13 years of life due to this addiction
    - Causes over 36% of all cardiovascular disease
    - Responsible for 30% of all cancer-related deaths
Cancer and Smoking

- Decades of research show strong association between smoking and cancers of many organ systems
- Causation proven in cancers of lung, bladder, kidney, pancreas, mouth, throat, larynx, esophagus, stomach, uterus and cervix
- Probably linked to breast and colon cancers
Lung Cancer and Smoking

- Second most common type of cancer in US
- Most common cause of cancer-related deaths in US-- **315,350 deaths per year**
- Smoking increases risk of lung cancer by 10-20 fold
Smoking causes fatal lung cancer.
Cardiovascular Disease and Smoking

- CVD: Disease of the heart and blood vessels due to atherosclerosis-plaque in the arteries
  - Kills one in three Americans
  - 400,000 deaths/yr in US from CV disease
- Smoking is a strong risk factor
  - 1 ppd smokers: males 6x more likely, females 3x more likely to suffer heart attack than nonsmokers
Tobacco Cessation

HOW THE VA CAN HELP:

- Smoking Cessation Classes
  - 3-4 pm on Thursdays or help by phone
- Smoking cessation medications
  - Bupropion (Zyban), varenicline (Chantix), nicotine replacement (NR) products
    - Slightly greater efficacy when med is used with NR product
Bupropion (Zyban)

- Works on the craving center of the brain
- Used first line at the VA with or without NR
  - Allow one week on med before attempting to quit
  - Doubles the likelihood of quitting
  - Works slightly better in combination with NR
  - May cause insomnia and dry mouth
  - Usually prescribed for 7-12 weeks
Varenicline (Chantix)

- Studies: More effective than bupropion
- Used at the VA if bupropion & NR fail
- May cause abnormal dreams and nausea
  - Rarely can cause aggressive, erratic & /or suicidal thoughts
    - pt must enroll in smoking cessation program so behavior can be monitored
Back pain

- 38% of new OIF/OEF have back pain
- Most back pain from wearing IBA
  - Very common in convoy units
- Usually soft tissue origin x-rays normal
- Frequently chronic, can be self-managed, not cured
  - physical therapy, home exercises, NSAIDS, steroid inj into the spine; narcotics avoided
- Smoking, obesity increase likelihood of chronic pain
Back pain with sciatica

- Pts with bulging or ruptured (herniated) disks may present with sciatica
  - Pain, tingling, numbness, or weakness of the leg
- Symptoms may come and go
- Usually just one leg
- Surgery may be indicated if leg weakness occurs
MRI lower back injury
Dyslipidemia

- 2nd most common diagnosis in OIF/OEF vets
- Risk factor for cardiovascular disease
  - Most people will die of CV disease
- Dyslipidemia includes
  - High levels of triglycerides and/or
  - High levels of LDL cholesterol and/or
  - Low levels of HDL cholesterol
- Affected by diet, genetics, smoking, exercise levels
Decreased Hearing &/or Tinnitus

- Decreased Hearing
  - Usually high frequency hearing loss
  - Short blast at >120-155 dB can cause hearing loss. Power lawn mower is 90 dB
  - Results from damage to the “hair” cells in the cochlea by loud blasts or prolonged exposure to loud noises
Inner Ear
Healthy vs. Damaged Cells

**Figure 2** – Scanning electron micrograph of “healthy” organ of Corti

**Figure 3** – Scanning electron micrograph of “noise-damaged” organ of Corti.
Tinnitus
(Ringing in the ears)

- Disruption of nerve impulses from ear to the brain similar to phantom limb syndrome
- About 25% of tinnitus will worsen over time
- Chronic and unlikely to go away
- Some people experience tinnitus, other people suffer from it

Disability perceived by the patient does not directly correlated with the loudness or length of time with tinnitus
Tinnitus

- Disabling tinnitus
  - Underlying mood disorders increase the likelihood that tinnitus will be perceived as disabling
  - More bothersome in those with insomnia
    - Lack of distractions makes tinnitus more noticeable
Treatments for tinnitus

- Treating severe hearing loss with hearing aids
- Treat insomnia with sleep aids and sleep hygiene
  - Avoid excessive and late caffeine consumption, get up if can’t sleep, avoid night caps, avoid disturbing TV or reading, etc
- Tinnitus Centers
  - Tinnitus Retraining Therapy
  - Biofeedback
  - Cognitive Behavioral Therapy
Sexual Dysfunction

- Under diagnosed
  - Younger vets aren’t being asked direct questions
  - Vets unease with discussing sexual issues
- National Health and Social Life Survey in younger men ages 18 to 59--31% with sexual dysfunction
- Massachusetts Male Aging Study
  - 40 % of men age 40 had some level of impaired sexual function, i.e. erectile dysfunction, diminished libido or abnormal ejaculation
Risk Factors for Sexual Dysfunction

● Depression and Stress
  ● Erectile dysfunction and decreased interest in sex are common components of depression in men
  ● Erectile dysfunction leads to performance anxiety
  ● Treating the underlying depression can be a two-edged sword as many of the antidepressants have sexual side effects
Other Risk Factors for Sexual Dysfunction

- Weight Gain
- Dyslipidemia
- Smoking
- Lack of physical activity
- Excessive alcohol use
- HTN
- Advancing age
Treatment for Sexual Dysfunction

- Treating the underlying depression
  - Counseling for depression &/or performance anxiety
- Lifestyle modification
  - Stop smoking, lose wt, increase exercise, decrease alcohol
- Eliminating offending meds
  - Certain BP meds, diuretics, some antidepressants
- Treating HTN, abnormal chol levels
- Use of medications for erectile dysfunction
  - VA can prescribe vardenafil (similar to Viagra)
Weight Gain/Obesity

- Most veterans experience weight gain on return-- average 10-20 lbs
- Overweight: body mass index (BMI) of $>25$
  Obese: BMI of $>30$
- 191,700 veterans in VSN 23 are overweight or obese, nationally 70% of all veterans obese or overweight
Percent of Obese US Adults

1997

CDC

No Data  <10%  10%-14%  15%-19%  20%-24%  25%-29%  ≥30%
Percent of Obese US Adults
Percent of Obese US Adults
Percent of Obese US Adults
Percent of Obese US Adults
Percent of Obese US Adults
Percent of Obese US Adults

2003

CDC

No Data  <10%  10%-14%  15%-19%  20%-24%  25%-29%  ≥30%
Percent of Obese US Adults

2004

CDC

No Data <10% 10%-14% 15%-19% 20%-24% 25%-29% ≥30%

Map showing the percent of obese US adults in various states for the year 2004. The map uses different colors to indicate the percentage of obesity in each state, with blue representing lower percentages and red representing higher percentages.
Percent of Obese US Adults

Map showing the percentage of obese US adults in 2005.
Percent of Obese US Adults
Percent of Obese US Adults
High risk: Overweight & obese

- Type 2 diabetes
- Coronary artery disease
- Stroke
- High blood pressure
- Abnormal cholesterol levels
- Sleep apnea
- Arthritis
- Back pain
- Gallbladder disease
- Some cancers such as uterine, breast, and colon
- Gynecological & sexual problems (abnormal menses, infertility, erectile dysfunction)
MOVE! Program

- BMI of $>30$ or $>25$ with other health risk factors
- Five levels of MOVE! to meet individual needs:
  - Level 1: Meet with counselor and phone calls
  - Level 2: Group Sessions once a week
  - Level 3: Wt loss meds prescribed
    - Orlistat-unpleasant GI side effects if fat intake exceeds 30%
  - Level 4: Optifast Program
  - Level 5: Bariatric Surgery
Traumatic Brain Injury

- Defined as mild, moderate or severe
  - Severity depends on length of loss of consciousness, verbal & motor skills after injury and interval of post-traumatic amnesia

- May result in a lifetime of impairments in behavioral, emotional, cognitive and physical functioning
Mild TBI (MTBI)

- 75-95% of TBI is mild
- MTBI Common among combat soldiers
  - survey of 2525 Army infantry soldiers post 1yr deployment to Iraq: 5% had injuries with LOC, 10% had injuries with altered consciousness
Symptoms of MTBI

- Poor concentration
- Memory difficulty
- Intellectual impairment
- Irritability
- Depression
- Anxiety
- Dizziness
- Blurred Vision
- Light Sensitivity
- Sound Sensitivity
- Headache
- Fatigue

- Many similarities to PTSD symptoms
MILD TBI

- Most patients have complete recovery within 3 months
  - If residual symptoms, most of the recovery (80-85%) occurs within six mo
  - Some improvement may continue for up to 18-36 mo
- Some pts have persistent and disabling symptoms
  - Studies estimate 7-8% of MTBI patients
Treatment for MTBI

- Treat co-morbidities
  - Frequently also have PTSD-makes symptoms of TBI worse
- Treat vestibular dysfunction with PT
  - Eliminates dizziness
- Treat Traumatic Vision Syndrome with OT
  - Scanning and accommodation difficulties lead to headaches, fatigue, irritability
- Treat memory impairment with OT
  - Teach memory improvement skills