



VISN 6 Mid-Atlantic MIRECC Post Deployment Mental Health

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Vol 1 (5) October 2005



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Educational Opportunities

Continuing Education Archives hosted by
the VISN 22 MIRECC

VA Desert Pacific Health Care Network

<http://www.mirecc.org/education-frames.html>

View the CE presentations on-line and complete
the associated evaluation to obtain credit.

Smoking Cessation and OIF/OEF Veterans

by Jean Beckham PhD

Only about a quarter of OIF/OEF veterans who have separated from the military (about 290,000 to date) are utilizing VHA services. Clearly it is important to identify creative ways to engage veterans in health care so health problems can be treated early, before they become chronic. Tobacco use is among the most important, and most often neglected, public health problems facing OIF/OEF veterans. Nearly half of these veterans use tobacco. Stresses associated with deployment may put OIF/OEF veterans at particular risk for tobacco use. Thus, smoking cessation is a high priority public health problem requiring novel approaches to intervention. There is growing evidence that telephone-based tobacco cessation programs can be effective, and they provide a way to reach out on a population-wide basis. We are in the process of designing telephone-based counseling for smoking cessation. This Telephone Quit Line for returning OIF/OEF veterans will be a partnership between the VA and the National Cancer Institute.

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Recently Approved Grants

Beckham JC and McFall ME *Telephone quit line tobacco cessation for veterans of military service in Operation Iraqi Freedom and Operation Enduring Freedom: A clinical demonstration project.* Public Health Strategic Health Care Group, VHA

Beckham JC *The effect of smoking on startle and prepulse inhibition in posttraumatic stress disorder.* National Institute on Drug Abuse

Morey RA *PTSD Effects on Brain Function.* National Institute of Mental Health Career Development Award

Upcoming Events

Motivational Enhancement Workshop

March 14 & 15, 2006

W.G. 'Bill' Hefner VAMC, Salisbury NC

The Salisbury VA Medical Center will be hosting a two day workshop for all clinicians who work with veterans with Post Traumatic Stress Disorder (PTSD). The workshop is funded by a MIRECC Clinical Education grant, so it is free of charge. This workshop will feature Dr. Ron Murphy, who has conducted extensive research and clinical work related to using motivational enhancement techniques with veterans with PTSD and other disorders. Dr. Murphy's main focus will be how clinicians can better engage returning OEF/OIF veterans with PTSD and other disorders into treatment, and how motivational enhancement techniques can be used to help these veterans in outpatient, inpatient, group and individual settings.

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Smoking Cessation and OIF/OEF Veterans

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More than half of individuals with post traumatic stress disorder (PTSD) smoke, and they are much more likely to be heavy smokers. PTSD is associated with several changes in nervous system function. One difference is impairment of sensorimotor gating, a sensory filtering process. Sensorimotor gating allows you to keep your attention focused on a small part of what is going on around you out of all the available possibilities. The effectiveness of this filtering can be measured experimentally. When something unexpected happens (such as a loud sound) it surprises you and causes a 'startle response'. If you have a warning that the loud sound is about to occur, your startle response will be much smaller. This decrease in startle response is called prepulse inhibition and is a measure of how well your sensorimotor gating is working. In many people with PTSD prepulse inhibition is impaired. For these people, filtering out unwanted information is difficult.

Our preliminary work suggests that nicotine enhances the startle response and improves prepulse inhibition in people with PTSD. This may be one reason why cigarette smoking is very common in this group. We are using measurement of startle and prepulse inhibition to carefully investigate the effect of context and cigarette smoking in this high-risk psychiatric population. The goal is to inform the development of smoking cessation strategies for smokers with PTSD.

Publications

Beckham JC, Feldman ME, Mozley SL, Vrana SR, Erkanli A, Clancy CP, Rose JE. Immediate antecedents of cigarette smoking in smokers with and without posttraumatic stress disorder. *Journal of Experimental and Clinical Psychopharmacology* 2005;13:218-228.

Buckley TC, Mozley SL, Holohan DR, Walsh K, Beckham JC, Kassel J. A psychometric evaluation of the Fagerström Test for nicotine dependence in PTSD smokers. *Addictive Behaviors* 2005;30:1029-1033.

Lapp KG, Bosworth HB, Strauss JL, Stechuchak KM, Horner RD, Calhoun PS, Meador KG, Lipper SL, Butterfield MI. Lifetime Sexual and Physical Victimization among Male Veterans with Combat-Related Post-traumatic Stress Disorder. *Military Medicine* 2005;170: 787-790.

McClernon FJ, Beckham JC, Mozley SL, Feldman ME, Vrana SR, Rose JE. The effects of trauma recall on smoking topography in posttraumatic stress disorder. *Addictive Behaviors* 2005;30:247-257.

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New Projects

Post Deployment Needs Assessment

The Clinical and Evaluation components are collaborating on development of a needs assessment for OIF/OEF veterans and families. The results will be used to guide development of needed services and dissemination of desired information in preferred formats and venues.

Education Survey

The Education component has recently distributed a survey form. Your enthusiastic response to our previous requests were vital to the success of our MIRECC proposal. One of the advantages in having a MIRECC in VISN 6 is the ability to greatly expand education and training at all levels of staffing and at all sites. We are now ready to prepare lectures for dissemination throughout VISN 6 via VTEL and the MIRECC website. Providing the requested information will help us to identify teachers and courses that are presently available. Your assistance with this work will benefit both our patients and staff greatly.

A Murine Model of Gulf War Syndrome.

Personnel deployed during the first Gulf War may have experienced exposure to acetylcholinesterase inhibitors from several sources. The Neuroscience core is using behavioral, biochemical, and electrophysiological measures to investigate the effects of acetylcholinesterase deficiency. Transgenic "knock-out" mice, who lack acetylcholinesterase, provide a model of neurological dysfunction following repeated low-level exposure to cholinesterase inhibitors.

Screening for Post Traumatic Stress Disorder

The Clinical component and the VISN 2 Center for Integrated Health (CIH) have agreed to jointly conduct a validation study of the widely used PC-PTSD, a

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Invited Lectures

Jean C. Beckham PhD (Durham VAMC) presented *Tobacco Use and PTSD: Exploration of the Association* at the VA Cooperative Studies #519, September 8, 2005 and *Tobacco Use and PTSD: Laboratory and Clinical Research Findings* to the Tobacco Use and Cessation in Psychiatric Disorders NIMH Workgroup. September 19, 2005.

Robin A. Hurley MD (Salisbury VAMC) presented *MIRECC Update* at the Veteran Advisory Council Meeting, September 7, 2005, *Post Deployment Mental Health Clinical Care, Education and Research* at the National Veteran Center Meeting, September 13, 2005, and *Imaging of Traumatic Brain Injury* at the Colorado Brain Injury Association Meeting, October 1, 2005.

Katherine H. Taber PhD (Salisbury VAMC) presented *What is and is not Research* at the Research Lecture Series, Salisbury VAMC, September 15, 2005.

New Projects

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screening instrument for post traumatic stress disorder (PTSD). The goal is to determine its reliability and validity for PTSD detection. This project has been identified as the first formal VISN 6 MIRECC/CIH/DoD collaboration. The results are of high interest to both VA and DoD, as both rely heavily on standardized screening as part of best clinical practices.

Neuroactive Steroids and Nicotine Dependence

The Interventions core is investigating the relevance of neuroactive steroids to the pathophysiology of nicotine dependence. Smoking has an enormous health impact on veteran cohorts. Current treatments for nicotine cessation are limited, and new interventions are needed. Their preliminary data suggest that neuroactive steroids may be altered in smokers and relevant to nicotine dependence severity. Thus, neuroactive steroids may represent novel targets as potential smoking cessation agents.

Health Risk Behaviors and Quality of Life Among OIF/IEF Veterans and Implications for VA Healthcare.

The Clinical component is planning a retrospective study of OIF/OEF veterans using VA healthcare services who completed the national Survey of Health Experiences of Veterans (SHEP). This study will examine prevalence of health risk behaviors (e.g., smoking, alcohol use), quality of life, access to health care and satisfaction with VA health care during 2003-2005.

Family Based Genetic Linkage Study on Bipolar Disease Associated with White Matter Changes

The Genetics core is studying bipolar disorder (BPD), a psychiatric illness characterized by episodes of depression and mania. This is a common condition of significant public health import, affecting approximately 8/1000 individuals. That genetics plays a significant role in this disorder has been well established, with a risk to siblings of affected individuals increased approximately 7-8 fold over the general population risk. Attempts to identify specific genes for BPD have been hampered by significant genetic and phenotypic heterogeneity. Given such heterogeneity underlying bipolar disorder, efforts to identify endophenotypes that may be genetically more homogeneous would be valuable in on-going genetic linkage efforts. Such endophenotypes may represent the pleiotropic effects of an underlying gene or genes and could serve as an important surrogate to increase the power of linkage analysis substantially.

Publications

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Mendez CV, Hurley RA, Lassonde M, Zhang L, Taber KH. Mild Traumatic Brain Injury: Neuroimaging of Sports-Related Concussion. *Journal of Neuropsychiatry and Clinical Neuroscience* 2005; 17(3):297-303.

Mozley SL, Miller MW, Weathers FW, Beckham JC, Feldman, ME. Personality Assessment Inventory (PAI) profiles for veterans with combat-related posttraumatic stress disorder. *Journal of Psychopathology and Behavioral Assessment* 2005;27:179-189.

Wang C, Wilson WA, Moore SD, Mace BE, Maeda N, Schmechel DE, Sullivan PM, Human apoE4 targeted replacement mice display synaptic deficits in the absence of neuropathology. *Neurobiology of Disease* 2005;18:390-398.