



VA Sierra Pacific Network MIRECC (VISN 21) Mental Illness Research, Education and Clinical Center

Overview

Aging presents intricate complexities in the general population. Among veterans, these complexities are made more severe through unique situations and traumas. Research suggests a substantial overlap in pathologies between Post-Traumatic Stress Disorder (PTSD) and dementia in veterans. Often the same neural structures are implicated in the pathology of both conditions and there are common clinical problems, such as cognitive impairment, sleep disorders and agitation that require similar treatment approaches. It has become clear to us that the overlap between these two patient groups will increase as the veteran population ages and will provide unique challenges for VA clinicians treating their behavioral and neurocognitive problems.

Mission

The mission of the Sierra Pacific Mental Illness Research, Education and Clinical Center (SP-MIRECC) is to build an integrated system of clinical, research, and educational efforts to improve the clinical care for veterans with dementias and PTSD. Dementia and PTSD share common clinical symptoms including cognitive difficulties, sleep disorders and agitation and the SP-MIRECC aims to evaluate current approaches and develop new treatments for these clinical problems.

Research

The Research component focuses on cognitive impairment and complications produced by sleep disorders such as insomnia and sleep apnea, along with the overall impact on PTSD. The efficacy of various treatment plans, including behavioral and pharmaceutical, are evaluated for implementation. Magnetic Resonance Imaging (MRI) is used to look at the structural changes brought on by PTSD, as well as at traumatic brain injury (TBI) in OIF/OEF veterans.

Clinical

The Clinical component looks at both community- and hospital-based care. The SP-MIRECC works with numerous Alzheimer's Disease Centers of California to evaluate various treatments in the community through outpatient monitoring. The SP-MIRECC also established an inpatient clinical treatment unit for veterans suffering from severe PTSD and complications from dementia.

Education

Each year, the SP-MIRECC, in collaboration with Stanford University, hosts the very successful Updates On Dementia conference, now in its 11th year. This all-day educational conference serves both academic and general population audiences and provides a forum for current research and clinical practices centering on dementia. This year saw the introduction of the Updates On PTSD conference which will also be an annual event.

Selected Studies and Projects

- Development of a new Dementia/PTSD Clinical Treatment Unit: SP-MIRECC established an inpatient Dementia/PTSD Clinical Treatment Unit to evaluate older PTSD patients whose behavioral management is clinically challenging. New treatment approaches to these problems are being implemented.
- Multisite investigation of anti-Alzheimer's treatments: SP-MIRECC investigators direct the 10-site Alzheimer's Disease Centers of California collaborative project on evaluating the effects of anti-Alzheimer's treatments in community settings.

- Growing Burden of Mental Disorders among Iraq & Afghanistan Veterans: Trends and Risk Factors for Mental Health Diagnoses in New Users of VA Healthcare, 2002-08: Led by the Associate Director of Research for SP-MIRECC, investigations looked at the trends and risk factors for new mental health diagnoses among Iraq and Afghanistan veterans entering VA healthcare.

Selected Publications

- Cassidy E, Sheikh JI: Pre-Intervention assessment for disruptive behavior problems: A focus on staff needs. *Mental Health and Aging*, 6(2):166-171, 2002
- Du A-T, Schuff N, Zhu X, Jagust W, Miller B, Reed B, Kramer J, Mungas D, Yaffe J, Chui H, Weiner M: Atrophy rates of entorhinal cortex in AD and normal aging. *Neurology*, 60:481-486, 2003
- O'Hara R, Schröder CM, Kraemer HC, Kryla N, Cao C, Miller E, Schatzberg AF, Yesavage JA, Murphy GM: Nocturnal sleep apnea/hypopnea is associated with lower memory performance in APOE ε4 allele carriers only. *Neurology* 65:642-644, 2005.
- Samuelson K, Neylan T, Metzler T, Lenoci M, Marmar C, Weiner, M: Neuropsychological functioning in Posttraumatic stress disorder and alcohol abuse. *Neuropsychology*, 20: 716-726, 2006.
- Seal KH, Bertenthal D, Maguen S, Gima K, Chu A, Marmar CR. Getting beyond 'don't ask, don't tell': an evaluation of VA post-deployment mental health screening of veterans returning from Iraq and Afghanistan. *Am J Public Health*. 98(4): 714-20, Apr 2008.
- Tinklenberg JR, Kraemer HC, Yaffe K, Ross L, Sheikh J, Ashford JW, Yesavage JA, Taylor JL: Donepezil treatment and Alzheimer disease: can the results of randomized clinical trials be applied to Alzheimer disease patients in clinical practice? *American Journal of Geriatric Psychiatry* 15: 953-960, 2007.
- Yesavage J, Hoblyn J, Sheikh J, Tinklenberg J, Noda A, O'Hara R, Fenn C, Mumenthaler M, Friedman L, Kraemer H: Age and disease severity predict choice of atypical neuroleptic: A signal-detection approach to physicians' prescribing decisions. *Journal of Psychiatric Research*, 37:535-538, 2003

Leadership

Director – Jerome Yesavage, MD

Director, MIRECC Fellowship Hub Site – Ruth O'Hara, PhD

Associate Director, Research – Charles Marmar, MD

Administrative Officer – Ed Wakabayashi

Contact

Sierra Pacific MIRECC
 Palo Alto VAHCS 151Y
 3801 Miranda Ave
 Palo Alto, CA 94304
 650-852-3287