South Central MIRECC

Reducing mental health disparities among rural veterans

Communiqué

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INSIDE THIS ISSUE

The next issue of the *South Central MIRECC Communiqué* will be published May 4, 2009. Deadline for submission of items to the May newsletter is April 24th. Urgent items may be submitted for publication in the *Communiqué Newsflash* at any time. Email items to the Editor, Mary Sue Farmer, at Mary.Farmer2@va.gov

South Central MIRECC Internet site: www.va.gov/scmirecc

National MIRECC Internet site: www.mirecc.va.gov

PSYCHOPHYSIOLOGIC ASSESSMENT AND COMBAT PTSD

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Since October 2001, more than 1.6 million U.S. troops have deployed to the wars in Iraq and Afghanistan, with many exposed to prolonged and/or multiple deployments. The recent RAND Corporation Report [1] summarized 22 prior studies of OIF/OEF veterans, giving a typical range of 5-15% for Veterans meeting post-deployment diagnostic criteria for PTSD, with some studies reporting rates as high as 30%.

There is a long history of examining psychophysiologic reactivity associated with PTSD. Technological advances in delivering combat reminders (e.g. virtual reality) and measuring psychophysiologic reactivity (eye gaze tracking and heart rate variability) provide an opportunity to revisit these issues. A series of projects that include psychophysiologic assessment in patients with combat-related PTSD (two treatment studies and two assessment studies) are described below.

Psychophysiologic Reactivity in Treatment Studies

The treatment studies are being conducted primarily at Navy Medical Center San Diego and are funded by the Office of Naval Research. Both studies used virtual reality (VR) technology to facilitate exposure therapy in active duty military personnel diagnosed with combat-related PTSD.

Physiologic reactivity to trauma reminders was measured as part of the baseline and follow-up assessments for both studies. Physiologic reactivity included heart rate, heart rate variability, and skin conductance measurements. The stimuli used to measure physiologic reactivity included imaginal recall of a trauma event related to their PTSD symptoms in one study and a standardized VR combat scenario in the other. Results from these studies are forthcoming.

Psychophysiologic Reactivity Assessment Studies

The psychophysiologic assessment studies are being conducted at the Central Arkansas Veterans Healthcare System. One study is recruiting subjects post-deployment and the other will be recruiting subjects pre-deployment.

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Psychophysiologic Assessment and Combat PTSD continued…

The aims of the post-deployment study are to: a) compare psychophysiologic reactivity predictors of OIF/OEF combat-related PTSD symptom severity to self-report predictors and b) examine the acceptability of psychophysiologic reactivity measures as screening and outcomes monitoring tools for OIF/OEF combat-related PTSD. We will collect psychophysiologic reactivity, self report, and PTSD symptom severity data from 150 OIF/OEF Veterans (60 PTSD treatment-seeking and 90 OIF/OEF non-treatment-seeking Veterans from the Arkansas National Guard). Physiologic reactivity (heart rate, heart rate variability, skin conductance, eye blink startle) is being measured in response to the following stimuli: auditory (white noise startle and VR) and visual (VR, Stroop, eye gaze tracking). This study is funded by VA.

Acoustic startle has long been recognized as an important symptom of PTSD. Acoustic startle correlates with PTSD include increased eye-blink response, [2] slowed skin conductance habituation, [3] and greater heart rate response.[4] We are examining eye blink startle and skin conductance responses to standard white noise startle and contextually relevant auditory stimuli within VR environments.

The VR environments include a standardized combat and standardized civilian environment. The VR environments are brief (3 minutes each), inserted between rest periods of approximately five minutes each. The VR environments are standardized so that each subject moves through the environment the same way as if on a moving path. We are measuring heart rate variability (HRV) and skin conductance at baseline and in response to with VR stimuli. Diminished HRV in PTSD patients is typically understood as evidence of autonomic dysregulation; however, the interpretation of HRV changes is controversial.[5]

In the modified Stroop task, subjects name the color in which disorder relevant and non-relevant words are written as quickly as they can, while attempting to ignore the actual word content. Slower color naming (increased response latency) is an indicator of attentional bias. Studies examining groups with combat-related PTSD have demonstrated increased response latencies for PTSD threat words compared to control groups. [6] We are measuring Stroop reaction time to name the color of a) neutral, general threat, and combat words and b) angry and neutral facial images.

Measuring eye movements to competing threatening and non-threatening stimuli may provide a more directly observable and 'ecologically valid' measure of attentional bias.[7] Unlike modified Stroop paradigms, which evaluate post-recognition information processing, eye movements can capture initial orientation and are not subject to post-recognition processing or dependent on motor response times. We are measuring eye gaze tracking while the subject is viewing paired combat/neutral and angry/neutral images.

The aims of the pre-deployment study are to: a) develop and test pre-deployment physiologic reactivity and cognitive bias predictors of post-deployment PTSD outcomes and b) test resilience-building interventions targeting physiologic and cognitive responses to combat stress. This study will enroll 500 Army National Guard personnel within the six months before they deploy for OIF/OEF missions. After collecting pre-deployment data, subjects will be randomized to one of three groups: HRV biofeedback training, cognitive bias modification training, or no additional training. This study is funded by Department of Defense.

To our knowledge, no pre-deployment studies have used physiologic reactivity or cognitive bias measures to predict post-deployment PTSD. However, a prospective firefighter study measured physiologic reactivity to acoustic startle during training (pre-trauma exposure) and within 4 weeks after trauma exposure and found that pre-trauma eye blink startle and skin conductance responses to acoustic startle predicted subsequent PTSD symptom severity.[8] The firefighter study also found that pre-trauma cognitive bias predicted subsequent PTSD symptoms.[9]

Pre-deployment physiologic reactivity assessment will include: heart rate, HRV, skin conductance, and eye blink startle in response to white noise startle and VR combat environments. Pre-deployment cognitive bias assessment will include participant responses to ambiguous combat and non-combat scenarios.

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Pre-deployment HRV biofeedback training will include resonant frequency breathing training to increase HRV and increased HRV will be used to improve performance during videogame stress. Cognitive bias training will be accomplished using a computer interface followed by practice with a handheld device to reinforce training.

Psychophysiologic reactivity is not new to combat-related PTSD but there are new technologies that may enhance our ability to assess and understand this aspect of PTSD.

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2009 SOUTH CENTRAL MIRECC RETREAT:

ADDRESSING THE MENTAL HEALTH NEEDS OF RURAL VETERANS

Investigators and leaders of the South Central MIRECC will meet April 22-24, 2009 at the Hotel Derek in Houston, Texas for their annual retreat. The retreat will focus on addressing the mental health needs of rural Veterans, including returning OEF/OIF Veterans.

Retreat attendees will have the opportunity to learn about SCMIRECC priorities, understand definition and priorities for rural mental health, identify current and potential strategies to increase rural mental health research in SCMIRECC, generate new ideas geared toward rural research, and increase their network of SCMIRECC research, education, and clinical colleagues.

There will also be a SCMIRECC Advisory Board Meeting in Houston on Tuesday, April 21-2009. The Advisory Board includes VA and non-VA experts on research and veterans' issues and VA Central Office leadership.

KEEPING UP WITH MIRECC RESEARCH

STRATEGIC APPROACH THERAPY: A MANUALIZED COUPLE-BASED INTERVENTION FOR PTSD

FREDERIC J. SAUTTER, PHD AND SHIRLEY GLYNN, PHD

Frederic J. Sautter, Ph.D. is Director of the Family Mental Health Program in the Southeast Louisiana Veteran's Health Care System and a Core Investigator in the area of Family Research in the South Central MIRECC. Dr. Sautter has focused his recent research efforts on the development of a manualized couple-based intervention for PTSD, called Strategic Approach Therapy (SAT). He collaborates with Shirley Glynn, Ph.D. of UCLA on this research project.

Strategic Approach Therapy (SAT) is designed to help couples to improve their ability to cope with the emotion regulation problems that frequently devastate the relationships of people with PTSD. Interventions have been developed to help couples learn to manage anxiety and other aversive emotional states, and a novel exposure-based intervention has been developed to treat problems with emotional numbing and emotion avoidance. Other interventions focus on the development of emotion problem-solving and communication skills.

Data showing that SAT is effective in reducing emotional numbing, avoidance, and overall PTSD severity in Vietnam Veterans and their spouses will be included in a manuscript to be published in the July issue of the Journal of Marital and Family Therapy. Recent research efforts have focused on adaptation of SAT for use with OIF/OEF Veterans. Preliminary data from those investigations show that SAT is associated with significant reductions in PTSD severity in OIF/OEF Veterans. These research efforts have been supported by a Clinical Partnership grant from the South Central MIRECC. Drs. Sautter and Glynn have recently received funding through a VA Rehabilitation Research and Development (RR&D) Merit Review grant (direct costs: $750,000) to conduct a randomized clinical trial of SAT. This three-year study will test the hypothesis that SAT will produce significantly greater improvements in PTSD, relationship, and community functioning in OIF/OEF Veterans with PTSD than a couple-based educational intervention.

IMPACT OF HURRICANE KATRINA ON VETERANS WITH AND WITHOUT PRE-EXISTING MENTAL ILLNESS

JOSEPH CONSTANS, PHD, GREER SULLIVAN, MD, JENNIFER J. VASTERLING, PHD, AND ELIZABETH DEITCH, PHD

To help determine how disasters might differentially impact the health status of Veterans with and without pre-disaster mental illness, the South Central MIRECC designed and executed a telephone survey that queried respondents' experiences during and after Katrina, their current health functioning, and factors that might have mediated or moderated their stress response. Investigators identified Veterans between the ages of 18-60 who were residing in parishes or counties that had been impacted by Hurricane Katrina and successfully recruited 253 Veterans with pre-Katrina mental illness diagnoses and 250 Veterans with no pre-storm mental illness to participate in the study. To be eligible for enrollment into the mental illness cohort, the Veteran was required to have at least one visit to a VA mental health clinic between 8/1/04-8/1/05 and have a primary mental health diagnosis of depression, PTSD, or a psychotic disorder. To be eligible for the no prior mental illness cohort, the Veteran was required to have at least one visit to a primary care clinic between 8/1/04-8/1/05 and have no mental illness diagnoses.

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Analysis of the data showed that, as predicted, pre-existing mental illness does appear to predispose Veterans to the development of new mental disorders after a natural disaster. In fact, 71% of participants with a previous mental illness reported developing a new mental disorder following Katrina compared with 31% of participants with no previous mental disorder. The data suggests this mental illness vulnerability effect can partially be explained by group differences in exposure to disaster stressors as those with pre-existing mental illness reported more experiences of traumatic events related to the storm. However, the prior mental illness group did not experience more property and financial loss. Other factors that predicted the onset of a new mental disorder included negative appraisals of the meaning of the disaster and limited perceived social support. In other words, individuals with previous mental illness appeared to make more catastrophic interpretations of the meaning of the trauma and development of stress-related symptoms (e.g., I'm going crazy) and had fewer sources of social support to buffer the stress. Regression analyses suggested that these three variables mediated the relationship between pre-existing mental illness and development of a new mental disorder.

In sum, pre-existing mental illness did result in increased vulnerability for negative mental health responses to a disaster. However, this vulnerability appeared to be due to Veterans with prior mental illness experiencing lower levels of social support and increased negative cognitive appraisals of the meaning of the disaster. This finding might have important implications in management of post-disaster response. That is, although the risk factor of having a pre-existing mental illness is not a modifiable condition, the variables that appear to mediate the relationship between prior mental illness and post-disaster negative mental health (i.e., social support; cognitive bias) are amenable to change.

Joseph Constans, PhD, is the Associate Chief of Staff for Research for the Southeastern Louisiana Veterans Health Care System. Drs. Constans, Sullivan, Vasterling and Deitch are affiliated with the Southeastern Louisiana Veterans Health Care System, South Central MIRECC, and Tulane University. The research is supported by a grant from the South Central MIRECC.

THE VA OFFICE OF MENTAL HEALTH SERVICES AND THE MIRECCS OFFER NEW EDUCATIONAL PRODUCT FOR CLINICIANS:

THE VA BIBLIOTHERAPY RESOURCE GUIDE

This brief guide is designed to provide VA clinicians, as well as administrators, peers, and veterans, with information about bibliotherapy resources that can serve as supplements to treatment. It is intended that this guide will promote the use of such resources both in specialty mental health settings, as well as in primary care, where VA is integrating mental health services nationally.

This guide is provided as an informational resource and is not an endorsement of any specific product.

To download a copy of the guide please visit the national MIRECC web site at http://www.mirecc.va.gov/national-mirecc-products.asp or contact Dr. Michael Kauth at Michael.Kauth@va.gov.

THE SOUTH CENTRAL MIRECC CONSUMER ADVISORY BOARD (CAB) PROFILE: BARBARA WATKINS

Interviewed By Carrie Edlund, MS

To ensure that the SC MIRECC is responsive to consumers of VA mental health services, and in keeping with the direction of the President's New Freedom Commission recommendations, the SC MIRECC and the VISN 16 Mental Health Product Line established the network Consumer Advisory Board. The CAB includes patients, consumer advocates, administrators, public health experts, and clinicians. This month we profile CAB member Barbara C. Watkins, Director of the VA Medical Center in Alexandria, Louisiana.

What is your role on the CAB?

I am the Director of the VAMC in Alexandria, Louisiana and as such am a member of the Executive Leadership Council (ELC) for VISN 16. Each of the Directors on the ELC is assigned to serve as "champion" for one or more of the major committees and/or programs in the VISN. Several years ago Dr. Henderson asked me to serve as the champion for the Mental Health Product Line (MHPL), which includes the CAB. I have served as the MHPL champion for about three years.

What do you like best about your service to the CAB?

As a Medical Center Director, and not a mental health professional, I have enjoyed learning about all the exciting programs this group has become involved in, from education of families, to community outreach, research, etc. At the Alexandria VAMC, we were a little slow in establishing our own CAB and as a result of my involvement I was able to give some much-needed direction to our group based upon what I had learned on the many VISN-wide CAB conference calls I attended.

What has your CAB service taught you about Veterans and/or mental illness?

My involvement has taught me about the multiple programs that are available to Veterans who are in need of mental health service. Mental health treatment is clearly not a "one size fits all" program and the broad span of programs provided by VA is very impressive. I think the concept of involving actual consumers of our mental health services on the CAB brings a whole new perspective to proposals and new programs.

What do you wish the general public knew about Veterans and mental illness?

I believe that the public is misinformed about mental illness in general because of the limited portrayals of mental illness in the media. The general public, and some of our Veterans, aren't aware of the many excellent and progressive programs that are available to Veterans of all ages and periods of service. There will always be missteps along the way, but overall most Veterans receive outstanding mental health services and are pleased with their treatment.

Would you like to tell us about your interests or hobbies?

On a personal note, I have been employed by the Department of Veterans Affairs for almost 42 years and have worked in some capacity at 13 VA Medical centers over this period of time. My early career in VA was as a clinical dietitian and I worked in the area of nutrition for approximately 20 years before changing careers and becoming a part of top management. I like to travel, play a little golf, and visit with friends.

RECOVERY CORNER

FAMILY EDUCATION: A RECOVERY PERSPECTIVE

D. Jeff Johnson, PhD
Psychologist/Local Recovery Coordinator
Jack C. Montgomery VA Medical Center

As discussed previously in the Recovery Corner in August's *Communiqué*, the President's New Freedom Commission on Mental Health identified a need for recovery-oriented approaches when working with the mental health population and provoked the Deputy Under Secretary for Health of the VHA to pull together a comprehensive strategic plan for mental health services throughout the VA system in 2004. In June 2008, the Uniform Mental Health Services Handbook in VA Medical Centers and Clinics was issued to implement that strategic plan. It was revised on September 11, 2008 and outlines how all Veterans will receive mental health services in VA medical centers and CBOC's. Such services are designed to focus on the patient's perspective and meet the individual care needs for each Veteran. Provisions of this handbook will be integrated into the broader Patient Care Services Handbook to be released next year.

Among the provisions of the Uniform Mental Health Services Handbook in VA Medical Centers and Clinics are guidelines emphasizing the importance of family intervention in Veterans' mental health care. These provisions appear as early as Paragraph 4 of the Handbook which states the importance of coordination among the Veteran, the Principal Mental Health Provider, and the Veteran's family or surrogate decision-maker in developing a comprehensive recovery/treatment plan. Paragraph 17c specifically delineates the required provision of family consultation, family education, or family psycho-education within all services delivered to Veterans with severe mental illness (SMI). Other provisions are integrated through most other paragraphs of the Handbook and emphasize the value of the family in Veterans' recovery.

The need for family involvement is well documented. It has been noted that 40 to 65% of adults with serious mental illness live with their families and 75% of patients with schizophrenia have contact with their families (Lehman et al., 1998). The PORT Study (Lehman et al., 1998) found that only 10 % of families of outpatients with schizophrenia receive education and support.

While many clinicians and programs throughout the VA system have worked with families over the years, recent initiatives strive to expand and enhance those efforts. The most recent development is the creation of the Local Recovery Coordinator (LRC) Network Family Education Consultant role to support the implementation of the Uniform Handbook. This new position provides a point of contact for at least one LRC in each VISN to serve as a conduit for each medical center and CBOC to tap into family education expertise. Three LRCs from VISN 16 recently completed the V22 Rollout of Mental Health Services Package: Family Education for Local Recovery Coordinators training program on September 22nd to 24th, 2008 in Long Beach, CA. Leigh Ann Johnson, MSW, from Biloxi is the VISN designee and D. Jeff Johnson, PhD, from Muskogee is the alternate.

Training was provided in three types of family-based intervention: family consultation, family psycho-education, and family education. Family consultation is typically offered individually by a Veteran's therapist or case manager to the family or significant other. It is typically brief, time-limited, and designed to develop partnerships to best enhance recovery. This collaboration offers brief education and referrals to appropriate VA and community resources. Family psycho-education is distinguished by virtue of being intense, evidence-based and lasting at least nine months to have optimal effect on relapse. VA is promoting both behavioral family therapy and multiple family group therapy as family psycho-education modalities.

Training and consultation can be requested through the office of Susan J. McCutcheon, RN, EdD**,** Director, Family Services, Women's Mental Health and Military Sexual Trauma, Office of Mental Health Services.

VACO is using the services of The Family Institute for Education at the University of Rochester as consultants for this effort.

Family education is a set of techniques to provide families with the information necessary to partner with the provider or treatment team and support the Veterans' recovery. Two specific initiatives include Support and Family Education (SAFE), a clinician-led program developed by Michelle Sherman, PhD at the Oklahoma City VAMC and Family to Family, a family-led program sponsored by the National Alliance for the Mentally Ill (NAMI). SAFE is the most widely-adopted family education program in the VA and is poised to be offered to an expanding number of facilities in upcoming months. It consists of 18 structured sessions (bi-weekly or monthly) provided by a trained clinician to the families of Veterans with serious mental illness. Information on SAFE is available at http://www.ouhsc.edu/Safeprogram/.

Family to Family comes to the VA through a recent memorandum of understanding with NAMI. At least one VA site in each state will offer this program in the next year. Family to Family is a 12-week course for families of individuals with severe brain disorders and is taught by trained family members. The course discusses the clinical treatment of mental illness and teaches the knowledge and skills that family members need to cope more effectively. Information on NAMI is available at http://www.nami.org and with each site's LRC.

The recent priority placed on expanding services to greater numbers of Veteran families is expected to significantly enhance the treatment options and recovery efforts of our Veterans. Whether in individual contacts, family meetings, or multi-family groups, leveraging the efforts of all involved in caring for Veterans will maximize the resources we can help to bring to bear on the challenges involved with those who seek our services.

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APRIL CONFERENCE CALLS

CALL-IN NUMBER: 1-800-767-1750

		ACCESS CODE
14	MIRECC Leadership Council, 3:30 PM CT	19356#
15	MIRECC Program Assistants, 2PM Central	43593#
21	VISN 16 Mental Disaster Team, 11AM CT	76670#
23	National MIRECC & COE Education Implementation Science Group, 1:00 PM CT	28791#
27	MIRECC Education Core, 3:00 PM CT--CANCELLED	16821#
28	MIRECC Leadership Council, 3:30 PM CT	19356#