Research to Practice: Combat Veterans with Psychiatric Diagnoses and a History of TBI

Summary by Sonora Hudson, MA

Since 9/11, researchers have been focused on how a traumatic brain injury (TBI) relates to Veterans’ service use. A retrospective database study of combat Veterans was recently published in *PLOS One* on this topic. Authors included several SC MIRECC affiliates, including Drs. Shannon Miles, Natalie Hundt, Joseph Mignogna, Karin Thompson and Jeffrey Cully. All authors are VA affiliated.

New Year’s Message from the SC MIRECC Directors

Interview with Drs. Mark Kunik and Michael Kauth

Q. Not only is it a new year but it is also the 20th anniversary of the SC MIRECC! How does it feel to achieve this major milestone?

Gratifying! We thought it was great when we reached our 10th anniversary. It’s even better now.

See PRACTICE on page 2

See MESSAGE on page 4
Little is known about how TBI affects mental health (MH) service use in Veterans with anxiety and depressive disorders. This study examined a national subsample of returning Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) Veterans with at least one of the following new diagnoses in fiscal year 2010: PTSD, depression and/or anxiety.

Since 2001, over 300,000 service members have experienced a TBI, often associated with depressive and anxiety disorders. Comorbid PTSD and TBI are associated with increased severity of PTSD symptoms. Individuals developing anxiety or a depressive disorder after TBI are more functionally impaired and tend to have a more complicated and extended recovery than those with no psychiatric disorder.

TBI diagnoses were extracted from 2001 (beginning of OEF) to six months after an index diagnosis from electronic medical records of Veterans in the VHA National Patient Care Database. Index diagnosis was defined as presence of a new anxiety, depression and/or PTSD diagnosis without any MH diagnosis in the preceding six months. MH diagnoses were based on International Classification of Diseases – 9th edition (ICD-9) Clinician Modification codes, also used to determine presence of TBI. Current Procedural Terminology codes were used to determine type of MH service use. Information was also gathered about demographics.

In this sample of 55,458 Veterans, 38% had a depressive disorder, 22% had an anxiety disorder, 57% had PTSD and 20% had a history of TBI (some had comorbid diagnoses). Investigators found that:

- Veterans with MH+TBI attended, on average, one more individual psychotherapy visit, two more group psychotherapy visits, and 0.28 more medication visits than Veterans without TBI.
- About 10% of the MH group and 16% of the MH+TBI group attended eight or more psychotherapy visits.
Increasing age, being female, being married, and not having a service-connected disability were associated with more psychotherapy and medication visits.

Anxiety and depression diagnoses were not associated with number of psychotherapy visits, unlike TBI history.

In this study, PTSD was the most common index diagnosis, followed by depressive and then anxiety disorders. Veterans with TBI were more likely to be men and have service-connected disability and/or a comorbid substance-use disorder than those without TBI. The strongest association with number of psychotherapy visits was PTSD; depression was most strongly associated with medication visits. TBI was associated with increased MH service use and those with TBI were more likely to receive eight psychotherapy sessions, which was considered a full course of treatment. However, only 46% of the entire sample attended at least one psychotherapy visit.

The authors suggest being mindful of index diagnoses in addition to MH comorbidities, such as personality and substance-use disorders, as they are also related to greater use of services. Additional research should examine whether increased services by Veterans with TBI result in reduced MH symptoms and overall recovery.

This article may be accessed at https://doi.org/10.1371/journal.pone.0184265.

Citation: Miles, S. R., Harik, M. M. Hundt. N. E., Mignogna, J., Pastorek, M. J., Thompson, K.E., ... Cully, J. A., Delivery of mental health treatment to combat Veterans with psychiatric diagnoses and TBI history. PLOS One, 12(9):e0184265.

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**SC MIRECC Funds Additional Clinical Educator Grant for Fiscal Year 2018**

We congratulate Dr. Kristi Crane on receiving funding in the FY2018 Clinical Educator Grant application cycle.

**Cognitive Behavioral Therapy Resource Guide for Clinicians**

Kristi L. Crane, PsyD (Principal Applicant) and Kristy Watters, PsyD
G.V. Sonny Montgomery VA Medical Center, Jackson, Mississippi

This user-friendly resource guide will include evidence-based worksheets for clinicians facilitating cognitive behavioral therapy (CBT) for mood disorders. The guide can be extended for treatment of disorders other than depression as deemed clinically appropriate by the clinician (e.g., panic, anxiety, anger).
we started the SC MIRECC in 1998, the concept of the MIRECCs—blending research, education, and clinical care improvement and working to rapidly to get new research into routine clinical practice—was new. The concept of a VISN-wide Center was new.

We started out with anchor sites in Little Rock, Jackson, New Orleans, and Houston. While we had enthusiasm on our side, whether we could make the SC MIRECC work and get renewed was uncertain. But, we did get renewed, again and again and again!

Our success is due to a lot of factors. We could not have been successful without the support of VISN 16 and our facilities and the hard work by our many investigators, the SC MIRECC Leadership team, and our administrative personnel. Our first Director, Greer Sullivan, deserves a lot of credit for getting the SC MIRECC funded, implemented, and firmly-established.

Comparing the SC MIRECCs of today and yesteryear, what have you learned about sustaining and growing a center such as this? Especially considering that MIRECCs were a completely new concept when this Center was funded.

The MIRECC concept has proven to be quite successful. The MIRECCs are doing incredible work by contributing to new mental health treatments, innovative delivery of those treatments, and improved Veteran care. However, an important lesson has been that a successful Center must be adaptive. A Center can’t do the same thing and continue to be successful. We are constantly alert to changing trends and new ideas in the scientific community, the clinical community, and VA leadership.

Even so, you can’t anticipate everything. A major unexpected challenge in 2005 was Hurricane Katrina, which wiped out the New Orleans site, where Michael Kauth was located, and the Gulfport, Mississippi facility. That storm shut down research in New Orleans. Many of our investigators in New Orleans relocated, including Michael, and New Orleans has still not fully recovered. However, Houston has grown dramatically as a SC MIRECC research site during that time.

What are your goals for the Center in 2018?

It is likely that our funding will come from the VISN rather than VA Central Office in the future. Therefore, we will need to ensure that the VISN 16 and 17 Offices know the value we bring to them and the system as a whole by training clinicians, improving access to care, creating educational tools, and discovering new knowledge through research. Our MIRECC will continue to nourish and grow its relationship with VISNs 16 and 17 and look for new initiatives aligned with our missions.

Bonus question: What advice do you have for investigators who are gearing up for another year of grant submissions, manuscripts, projects, and everything that comes along with a research career to help them stay focused, energized, yet also relaxed?

Invest time and effort to strengthen relationships with persons you work with, live with, and play with.
Catching Up with an SC MIRECC Fellow: Dr. Joanna Lamkin

Dr. Joanna Lamkin is a second-year fellow at the SC MIRECC anchor site in Houston, Texas. This month, we catch up with her about her work in the fellowship and plans for the future.

Q. What is the most interesting or important thing you learned about research in the past year?

I've had the opportunity to work with a few qualitative datasets in the fellowship so far. This is quite new for me, since most of my pre-fellowship work was strictly quantitative. I have learned how to approach these kinds of data in a systematic way. From these interviews, I have really enjoyed exploring individual differences in experiences that are not always captured in aggregate data. I also like the challenge of presenting qualitative findings in a concise yet descriptive way.

Q. Have your research interests evolved since starting the fellowship? If so, how? If not, how were your initial interests strengthened?

Yes, my interests have grown from understanding personality theory and how personality plays a role in relationships, to the implications of personality in treatment engagement. I started out in graduate school with a theoretical focus, where I learned to use personality traits as a "common language" for understanding and describing interpersonal behavior.

The fellowship's emphasis on health services has really expanded my focus to consider how personality and interpersonal functioning impact behaviors related to health care. For example, I have been studying treatment engagement and how we can leverage information about someone's personality to increase treatment engagement.

Q. Where do you want to be in five years?

In five years, I hope to be an independent clinical psychology researcher, in either an academic medical or traditional academic setting. I would love to continue several lines of research that have grown during my time as a fellow and to actively collaborate with researchers in other disciplines. I would like to spend most my time engaged in research activity, with other time primarily dedicated to mentoring and teaching.
Publication Highlight

Dialectical Behavior Therapy Training and Desired Resources for Implementation: Results from a National Program Evaluation in the Veterans Health Administration

Landes SJ, Matthieu MM, Smith BN, Trent LR, Rodriguez AL, Kemp J, Thompson, C

Military Medicine, 2016, 181(8), 747-752

Summary by Brandy Smith

Problem Addressed by Study
Suicide is a national public health concern, representing the 10th leading cause of death in the US in 2013. Veterans are estimated to comprise 20% of the overall suicide rate in the US, and the prevalence rate of suicide is estimated to be higher among Veterans than in the general population. Dialectical behavior therapy (DBT) is an evidence-based psychotherapy (EBP) for emotional dysregulation and suicidal behavior and has been shown to be effective in VHA.

VHA program evaluation has shown that DBT has demonstrated effectiveness in reducing suicidal ideation, hopelessness, depression, and anger expression for female Veterans, and is helpful in reducing VHA healthcare costs for male and female Veterans. To better understand the current uptake and spread of DBT in VHA health care settings and identify the history of training and training needs for implementing DBT, a national program evaluation of VHA facilities that have implemented DBT was initiated in 2013 in collaboration with VA’s Office of Suicide Prevention. This article presents results of this national program evaluation.

Results of the Study
Fifty-nine VHA clinical sites implementing DBT completed a web-based survey consisting of measures asking them to describe:

- Their clinic setting
- The context for delivering DBT
- Details about each endorsed primary component of DBT
- Use of DBT strategies
- Types and amount of DBT training providers in their setting had received
- Resources used to implement DBT
- Desired resources to support ongoing use of DBT among other survey questions

The majority of clinical sites (97%) reported having staff who completed self-study using

(continued on page 7)
(continued from page 6)

DBT manuals (low-intensity training), while fewer (33%) reported that staff attended a DBT intensive training (high-intensity training). The highest-ranked desired resources for providing DBT were intensive training, funding for training, and videos on using DBT with Veterans.

Implications and Impact of the Study

The results of this study reveal that VHA sites would like additional DBT training within VHA or the community. Additional training such as intensive training and consultation is likely needed for clinicians to become adherent to DBT. This national program evaluation could be useful to inform national policy makers and VHA clinical managers on preferred training and resources that may affect the design and development of a national DBT implementation plan.

The article may be downloaded at https://academic.oup.com/milmed/article-lookup/doi/10.7205/MILMED-D-15-00267 (VA and some institutions may provide free access; otherwise, it is accessible with a fee).

Clinical Education Product Highlight: Adjusting to Chronic Conditions with Education, Support and Skills (ACCESS) Manual and Workbook

Developed by Jeffrey A. Cully, PhD, Melinda A. Stanley, PhD, Michael R. Kauth, PhD, Aanand Naik, MD, and Mark E. Kunik, MD, MPH; Michael E. DeBakey VA Medical Center, Houston, TX

This therapist guide and patient workbook are products of the ACCESS research study examining the effectiveness and implementation of a psychosocial intervention to address the physical and emotional issues faced by chronically ill patients.

ACCESS involves six active treatment sessions. Content in sessions 3-6 is adjustable, allowing the flexibility to spend more than one session on focused skills, as needed. Follow-up booster telephone sessions are used to help solidify changes over time. The length of the active treatment and boosters is 16 weeks. Download the manuals.
CBOC Mental Health Rounds

Cannabis Use and PTSD: A Review of Current Findings and Clinical Considerations

Kendall Browne, PhD

Wednesday, January 10 at 8:00-9:00 CT
Thursday, January 11 at 11:00-12:00 am CT

Registration: Select the links below to register for this training in TMS. Only register for one day; registering for both days will cause delays when completing the program evaluation for CEU.

Register for Wednesday 1/10
Register for Thursday 1/11

About the Topic: This presentation aims to provide the audience with an overview of what is known about the relationship between cannabis and PTSD, including the prevalence rates of cannabis use and cannabis use disorder among individuals with PTSD, the overlap between PTSD symptoms and cannabis withdrawal, the impact of cannabis on PTSD treatment course and outcomes, and possible intervention options for Veterans with cannabis use disorder. To provide context for this content, information about the cannabis plant, neurobiological findings and known health risks associated with cannabis use will be briefly reviewed.

Audio: Call 1-800-767-1750 and use access code 37009#

Visual: Join Adobe Connect through VA TMS

Contact: Ashley.McDaniel@va.gov

Learn more about SC MIRECC by visiting https://www.mirecc.va.gov/visn16/index.asp