

# CDP



## Research Update -- June 28, 2018

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[https://www.ptsd.va.gov/professional/newsletters/ctu-online/ctu\\_v12n3.pdf](https://www.ptsd.va.gov/professional/newsletters/ctu-online/ctu_v12n3.pdf)

### **Clinician's Trauma Update Online (CTU-Online)**

June 2018 Issue: Vol. 12(3)

The National Center for PTSD tries to keep all professionals up-to-date with the latest in trauma research and how it can be applied.

CTU-Online includes brief updates on the latest clinically relevant research. Content on treatment and assessment is emphasized. Publications on other topics are included if the content has significant clinical implications.

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<https://content.govdelivery.com/accounts/USVHA/bulletins/1fa205e>

### **PTSD Monthly Update -- Help Someone You Love on PTSD Awareness Day**

National Center for PTSD (VA)

June 27, 2018

If someone close to you has been diagnosed with PTSD, it can be hard to know how to support them. At the same time, it's important to remember that PTSD also affects family and friends — and it's normal for you to struggle, too.

Here's the good news: there's a lot you can do to help your loved one heal, strengthen your relationship — and take care of yourself too. Things may not go back to exactly the way they were before, but they can get better — even if your loved one has been struggling for years.

Here are some ways you can support a loved one who has with PTSD — but the strategies and tips may be helpful for supporting anyone who has experienced trauma.

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<https://www.sciencedirect.com/science/article/pii/S1087079217301661>

**A systematic review and meta-analysis of cognitive and behavioral interventions to improve sleep health in adults without sleep disorders.**

Beatrice Murawski, Levi Wade, Ronald C. Plotnikoff, David R. Lubans, Mitch J. Duncan

Sleep Medicine Reviews

Volume 40, August 2018, Pages 160-169

<https://doi.org/10.1016/j.smr.2017.12.003>

Many adults without a diagnosed sleep disorder report poor sleep health, which is defined by dissatisfactory levels of sleep duration, sleep quality, or the timing of sleep. No previous review has summarized and described interventions targeting poor sleep health in this population. This meta-analysis aimed to quantify the efficacy of behavioral and cognitive sleep interventions in adults with poor sleep health, who do not have a sleep disorder. Electronic databases (Medline, Embase, PsycInfo, Cinahl) were searched with restrictions for age (18–64 y) and English language full-text, resulting in 18,009 records being screened and 592 full-texts being assessed. Eleven studies met inclusion criteria, seven of which reported a measure of overall sleep health (Pittsburgh sleep quality index [PSQI]). Following appraisal for risk of bias, extracted data were meta-analyzed using random-effects models. Meta-analyses showed interventions had a medium effect on sleep quality (Hedge's  $g = -0.54$ , [95% confidence interval (CI)]  $-0.90$  to  $-0.19$ ,  $p < 0.01$ ). Baseline sleep health was the only significant effect moderator ( $p = 0.01$ ). The most frequently used intervention components were stress management and relaxation practice, stimulus control, sleep hygiene, and exercise. Interventions targeting cognitive and behavioral self-regulation improve sleep quality in adults without clinical sleep disorder.

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<https://www.sciencedirect.com/science/article/pii/S0165032718301721>

**Specific PTSD Symptom Clusters Mediate the Association of Military Sexual Trauma Severity and Sexual Function and Satisfaction in Female Service Members/Veterans.**

Rebecca K. Blais, Christian Geiser, Rick A. Cruz

### Highlights

- The association of MST and sexual satisfaction/function is vastly understudied.
- Specific PTSD symptom clusters may mediate these associations.
- Anhedonia, dysphoric arousal, mood/cognition mediated MST and sexual satisfaction.
- Anhedonia and dysphoric arousal mediated MST and sexual function.
- Findings underscore the importance of assessing sexual health in MST survivors.

### Abstract

#### Background

Sexual satisfaction and function are vastly understudied in female service members/veterans (SM/Vs). Military sexual trauma (MST) is associated with poorer sexual satisfaction and function, but the mechanism through which MST relates to sexual satisfaction and function is unknown. Posttraumatic stress disorder (PTSD) is one of the most frequent diagnoses following with MST, and those with poorer sexual satisfaction and function experience higher PTSD symptoms, particularly numbing and anhedonia symptom clusters. In this study, we examined which symptom clusters (re-experiencing, avoidance, negative alterations in cognition and mood [NACM], anhedonia, dysphoric and anxious arousal) mediated the relationship between MST and sexual satisfaction and function.

#### Method

Female SM/Vs ( $n = 1,189$ ) completed self-report measures of MST severity (none, harassment only, assault), PTSD, sexual satisfaction, and sexual function, as well as a demographic inventory.

#### Results

Anhedonia and dysphoric arousal fully mediated the association between assault MST and sexual satisfaction and function. NACM fully mediated the association between harassment and assault MST and sexual satisfaction. Finally, dysphoric arousal significantly mediated the association of harassment MST with sexual satisfaction and function.

#### Limitations

Data was cross-sectional and based on self-report.

## Conclusions

The relationship between MST and sexual satisfaction and function may be mediated through specific PTSD symptom clusters. As there are no evidenced-based treatments to improve sexual satisfaction and function in female SM/Vs, additional research is needed to develop and pilot interventions. Among those with a history of MST, targeting NACM, anhedonia, and dysphoric arousal may be most effective in addressing sexual concerns.

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<https://www.sciencedirect.com/science/article/pii/S016503271830065X>

## **Traumatic stress and cellular senescence: The role of war-captivity and homecoming stressors in later life telomere length.**

Jacob Y. Stein, Yafit Levin, Orit Uziel, Heba Abumock, Zahava Solomon

Journal of Affective Disorders

Volume 238, 1 October 2018, Pages 129-135

<https://doi.org/10.1016/j.jad.2018.05.037>

## Highlights

- Some but not all stressors predicted telomere length (TL) in ex-POWs' later life.
- Solitary confinement during captivity but not physical abuse predicted shorter TL.
- Feeling lonely, accused and losing one's place in the family predicted shorter TL.
- Psychosocial stressors at homecoming may implicate TL in ex-POWs' later life.
- The quality of social relations may be crucial for TL in the aftermath of captivity.

## Abstract

### Background

Telomere length (TL) serves as a biomarker of cellular senescence and is a robust predictor of mortality. The association between traumatic stress and TL erosion is rapidly realized, as are the complexities of this relation that include links to posttraumatic stress disorder (PTSD), depression, and psychosocial factors. Nevertheless, the relation between specific stressors in early adulthood and TL in later life, specifically among populations that have undergone extreme stress in early adulthood are largely uninvestigated.

### Method

Examining 99 Israeli former prisoners of war (ex-POWs) 18 and 42 years after

repatriation, the current study investigated the role that specific stressors during captivity (i.e., physical abuse, nourishment deprivation and solitary confinement) and homecoming (i.e., received social-support, loss of place in the family, loneliness and sense of being accused) play in predicting TL 42 years post-repatriation.

Intercorrelations analysis and a hierarchical linear regression were utilized. Variables that have been empirically associated with TL: age, BMI, physical activity, smoking, substance abuse, negative life events since repatriation, depression and PTSD symptoms were controlled for in the regression.

### Results

Solitary confinement during captivity, and loss of place in the family, loneliness and being accused at homecoming predicted shorter telomeres in later life. The remaining stressors did not significantly predict TL.

### Conclusion

These findings suggest that an adequate understanding of TL after trauma must consider the unique contributions of specific types of stressors across the lifespan, and particularly account for interpersonal deficits. The findings may inform preventive interventions aimed at improving ex-POWs' longevity and well-being.

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<https://academic.oup.com/acn/advance-article/doi/10.1093/arclin/acy048/5025416>

### **The Minnesota Multiphasic Personality Inventory-2-RF in Treatment-Seeking Veterans with History of Mild Traumatic Brain Injury.**

S M Jurick L D Crocker A V Keller S N Hoffman J Bomyea M W Jacobson A J Jak

Archives of Clinical Neuropsychology

Published: 30 May 2018

<https://doi.org/10.1093/arclin/acy048>

### Objective

This study examined the Minnesota Multiphasic Personality Inventory—Second Edition-Restructured Form (MMPI-2-RF) to better understand symptom presentation in a sample of treatment-seeking Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) Veterans with self-reported history of mild traumatic brain injury (mTBI).

## Method

Participants underwent a comprehensive clinical neuropsychological battery including performance and symptom validity measures and self-report measures of depressive, posttraumatic, and post-concussive symptomatology. Those with possible symptom exaggeration (SE+) on the MMPI-2-RF were compared with those without (SE-) with regard to injury, psychiatric, validity, and cognitive variables.

## Results

Between 50% and 87% of participants demonstrated possible symptom exaggeration on one or more MMPI-2-RF validity scales, and a large majority were elevated on content scales related to cognitive, somatic, and emotional complaints. The SE+ group reported higher depressive, posttraumatic, and post-concussive symptomatology, had higher scores on symptom validity measures, and performed more poorly on neuropsychological measures compared with the SE- group. There were no group differences with regard to injury variables or performance validity measures. Participants were more likely to exhibit possible symptom exaggeration on cognitive/somatic compared with traditional psychopathological validity scales.

## Conclusions

A sizable portion of treatment-seeking OEF/OIF Veterans demonstrated possible symptom exaggeration on MMPI-2-RF validity scales, which was associated with elevated scores on self-report measures and poorer cognitive performance, but not higher rates of performance validity failure, suggesting symptom and performance validity are distinct concepts. These findings have implications for the interpretation of clinical data in the context of possible symptom exaggeration and treatment in Veterans with persistent post-concussive symptoms.

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<http://jmvh.org/wp-content/uploads/2018/05/AMMA-APRIL-DIGITAL.pdf#page=25>

## **Tobacco Use in a National Sample of United States Service Member and Veteran Students.**

D Albright, K Fletcher, K Thomas, J McDaniel, A Diehr, J Bertram, D Cobb

Journal of Military and Veterans' Health  
Volume 26 Number 2 April 2018



This study explored tobacco use in a national sample of service member and veteran students enrolled in postsecondary institutions with the purpose of informing the development of a tobacco cessation initiative by identifying factors associated with the use of cigarettes, water pipes, cigars and smokeless tobacco. Researchers conducted secondary analysis of data from the fall 2011 National College Health Assessment (NCHA) II, which surveyed 44 postsecondary institutions in the United States (n = 27,774). Three percent of the sample reported United States Armed Services active military or veteran status (n = 706). Of the service member and veteran respondents, 41% reported that they used some form of tobacco within the last 30 days. Tobacco use predicted problematic reactions to stressors and mental health symptoms, and correlated with suicidality in the study sample. Further research is recommended to inform culturally competent programming.

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<http://journals.sagepub.com/doi/abs/10.1177/1074840718773470>

### **Exploration of Factors Related to Depressive Symptomatology in Family Members of Military Veterans With Traumatic Brain Injury.**

Helene Moriarty, PhD, RN, FAAN, Laraine Winter, PhD, Thomas H. Short, PhD, PStat®, and Gala True, PhD

Journal of Family Nursing

Vol 24, Issue 2, pp. 184 - 216

<https://doi.org/10.1177/1074840718773470>

Traumatic brain injury (TBI) is a family affair, affecting those with the injury and their families. Psychological distress, often measured as depression or depressive symptoms, is highly prevalent among family members. Predictors of depression in family members of civilians with TBI have been examined, but predictors of depression in family members of military veterans have received very little research attention and are poorly understood. To address the knowledge gap, this study explored factors related to depressive symptoms in family members of veterans in the United States, using an ecological framework. Baseline data from 83 family members were used. Family members with higher caregiver burden, presence of a veteran with posttraumatic stress disorder (PTSD), and greater financial difficulty experienced significantly more depressive symptoms. Findings suggest that efforts to support family members and decrease their depression should aim to reduce caregiver burden and financial difficulty

and help family members cope with veteran PTSD and TBI. Family-focused interventions are needed.

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[https://www.archives-pmr.org/article/S0003-9993\(18\)30320-4/abstract](https://www.archives-pmr.org/article/S0003-9993(18)30320-4/abstract)

**Behavioral and Health Outcomes Associated with Deployment and Non-Deployment Acquisition of Traumatic Brain Injury in Iraq and Afghanistan Veterans.**

Sarah L. Martindale, Erica L. Epstein, Katherine H. Taber, Jared A. Rowland, VA Mid-Atlantic MIRECC Workgroup

Archives of Physical Medicine and Rehabilitation

Published online: May 30, 2018

DOI: <https://doi.org/10.1016/j.apmr.2018.04.029>

**Objective**

Characterize behavioral and health outcomes in veterans with TBI acquired in non-deployment and deployment settings.

**Design**

Cross-sectional assessment evaluating TBI acquired during and outside of deployment, mental and behavioral health symptoms, and diagnoses.

**Setting**

Veterans Affairs Medical Centers.

**Participants**

Iraq and Afghanistan Veterans who deployed to a warzone (N = 1399).

**Interventions**

Not applicable.

**Main Outcome Measures**

Comprehensive lifetime TBI interview; Structured Clinical Interview for DSM-IV Disorders; Combat Exposure Scale; behavioral and health measures.

## Results

There was a main effect of deployment TBI on depressive symptoms, posttraumatic stress symptoms, poor sleep quality, substance use, and pain. Veterans with deployment TBI were also more likely to have a diagnosis of bipolar, major depressive, alcohol use, and posttraumatic stress disorders than those who did not have a deployment TBI.

## Conclusions

TBIs acquired during deployment are associated with different behavioral and health outcomes than TBI acquired in non-deployment environments. The presence of TBI during deployment is associated with poorer behavioral outcomes, as well as a greater lifetime prevalence of behavioral and health problems in contrast to veterans without deployment TBI. These results indicate that problems may persist chronically following a deployment TBI and should be considered when providing care for veterans. Veterans with deployment TBI may require treatment alterations to improve engagement and outcomes.

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<http://journals.sagepub.com/doi/abs/10.1177/0886260518777554>

## **Predictors of Unbearability, Unlovability, and Unsolvability in Veterans With Military-Sexual-Trauma-Related Posttraumatic Stress Disorder.**

Jessica Wiblin, BA, Nicholas Holder, BS, Ryan Holliday, MA, PhD, and Alina Surís, PhD, ABPP

Journal of Interpersonal Violence

First Published May 31, 2018

<https://doi.org/10.1177/0886260518777554>

Military sexual trauma (MST) and posttraumatic stress disorder (PTSD) both increase risk for suicidal self-directed violence (SDV). Suicide cognitions (i.e., unbearability, unlovability, and unsolvability) are strong predictors of future suicidal SDV. The present study investigated potential predictors of unbearability, unlovability, and unsolvability in veterans with MST-related PTSD. Suicide cognitions, depression, PTSD, quality of life, trauma-related negative cognitions, physical health functioning, mental health functioning, and childhood sexual assault were assessed in 12 male and 103 female veterans with MST-related PTSD. Higher depression scores, greater trauma-related negative cognitions about self, and poorer physical health functioning predicted

increased unbearability scores. Greater trauma-related negative cognitions about self and self-blame, higher level of education, and higher depression scores predicted increased unlovability scores. Higher depression scores and greater trauma-related negative cognitions about self predicted increased unsolvability scores. In veterans with MST-related PTSD who express unbearability, unlovability, and unsolvability, assessing and addressing depression, trauma-related negative cognitions about self and self-blame, and physical health functioning may be an important step in reducing SDV.

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<https://econtent.hogrefe.com/doi/abs/10.1027/0227-5910/a000519?journalCode=cri>

### **Perceptions of Adjunctive Mindfulness-Based Cognitive Therapy to Prevent Suicidal Behavior Among High Suicide-Risk Outpatient Participants.**

Megan S. Chesin, Beth S. Brodsky, Brandon Beeler, Christopher A. Benjamin-Phillips, Ida Taghavi, and Barbara Stanley

Crisis

Published online May 31, 2018

<https://doi.org/10.1027/0227-5910/a000519>

Background:

Few investigations of patient perceptions of suicide prevention interventions exist, limiting our understanding of the processes and components of treatment that may be engaging and effective for high suicide-risk patients.

Aims:

Building on promising quantitative data that showed that adjunct mindfulness-based cognitive therapy to prevent suicidal behavior (MBCT-S) reduced suicidal thinking and depression among high suicide-risk patients, we subjected MBCT-S to qualitative inspection by patient participants.

Method:

Data were provided by 15 patients who completed MBCT-S during a focus group and/or via a survey. Qualitative data were coded using thematic analysis. Themes were summarized using descriptive analysis.

Results:

Most patients viewed the intervention as acceptable and feasible. Patients attributed

MBCT-S treatment engagement and clinical improvement to improved emotion regulation. A minority of patients indicated that factors related to the group treatment modality were helpful. A small percentage of patients found that aspects of the treatment increased emotional distress and triggered suicidal thinking. These experiences, however, were described as fleeting and were not linked to suicidal behavior.

Limitations:

The sample size was small.

Conclusion:

Information gathered from this study may assist in refining MBCT-S and treatments to prevent suicidal behavior among high suicide-risk patients generally.

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<https://ajp.psychiatryonline.org/doi/pdf/10.1176/appi.ajp-rj.2018.130603>

### **A Closer Look at Substance Use and Suicide.**

Michael Esang, M.B.B.Ch., M.P.H., Saeed Ahmed, M.D.

The American Journal of Psychiatry Residents' Journal  
June 2018

Suicide is the tenth leading cause of death in the United States across all age groups. A total of 44,193 suicides occur each year, or 121 suicides per day (1). The Centers for Disease Control and Prevention defines suicide as “death caused by self-inflicted injuries with the intention of dying from the result of such actions” (1). Substance use is a risk factor for both fatal and nonfatal overdoses, suicide attempts, and death by suicide. Compared with the general population, individuals with alcohol dependence and persons who use drugs have a 10–14 times greater risk of death by suicide, respectively (2), and approximately 22% of deaths by suicide have involved alcohol intoxication (2). Furthermore, one study found that opiates were present in 20% of suicide deaths, marijuana in 10.2%, cocaine in 4.6%, and amphetamines in 3.4% (2). Among the reported substances, alcohol and opioids are associated with the greatest risks of suicidal behavior.

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## **Associations Between Suicide Risk Factors and Favorite Songs: Content Analysis and Cross-Sectional Study.**

Benedikt Till, Michael Fraissler, Martin Voracek, Ulrich S. Tran, and Thomas Niederkrotenthaler

Crisis

Published online May 31, 2018

<https://doi.org/10.1027/0227-5910/a000523>

### Background:

For several decades, the question of whether personal suicidality is reflected in individual music preferences has been the subject of debate in suicide research. Despite many studies investigating the relationship between music use and suicidal behavior, it is still unclear whether suicide risk is reflected in individual music preferences. Aims: The present study aimed to assess whether music preferences are reflected in suicide risk factors.

### Method:

We assessed suicidal ideation, depression, and hopelessness among 943 participants in a cross-sectional online survey. Participants provided up to five examples of their favorite music. We conducted a content analysis and coded all reported songs as suicide-related, coping-related, or unrelated to suicide.

### Results:

Multivariate analyses controlling for gender, age, education level, and amount of daily music use indicated associations of preferences for suicide-related songs with suicidal ideation and depression. Limitations: Limitations of the present study include the use of a convenience sample and a cross-sectional design, the small number of participants with preferences for coping-related songs, and the relatively small effect size of the associations found.

### Conclusion:

Music preferences appear to reflect suicide risk factors, with individuals who prefer suicide-related songs scoring higher in terms of suicidal ideation and depression.

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<https://www.sciencedirect.com/science/article/pii/S0883941718300529>

## **Antidepressant Adherence in United States Active Duty Army Soldiers: A Small Descriptive Study.**

Shawn P. Gallagher, Kathleen Insel, Terry A. Badger, Pamela Reed

### Highlights

- There is a gap in the literature about antidepressant adherence and United States active duty Army Soldiers.
- Low antidepressant adherence rates were found in the current study.
- Age (younger) and gender (female) were the only study variables significantly associated with antidepressant adherence rates.

### Abstract

While much is known about depression and antidepressant adherence associations with illness perceptions, medication beliefs, social support, and stigma in the general population, there is a dearth of knowledge among United States active duty Army Soldiers. The study objective was to explore antidepressant adherence and correlations between antidepressant adherence and illness perceptions, medication beliefs, social support, stigma and select demographic variables among Army Soldiers with depression. Results indicated age and gender were significantly correlated with and predictive of adherence. Low adherence was found. Findings suggest Soldiers who are younger and those who are female are more likely to report higher levels of adherence.

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<https://www.hindawi.com/journals/bn/2018/7940832/cta/>

## **Sleep Quality and Emotion Regulation Interact to Predict Anxiety in Veterans with PTSD.**

Janna Mantua, Steven M. Helms, Kris B. Weymann, Vincent F. Capaldi II, and Miranda M. Lim

Behavioural Neurology,  
Vol. 2018, Article ID 7940832, 10 pages, 2018  
<https://doi.org/10.1155/2018/7940832>

Posttraumatic stress disorder (PTSD) is a debilitating and common consequence of military service. PTSD is associated with increased incidence of mood disturbances (e.g., anxiety). Additionally, veterans with PTSD often have poor-quality sleep and poor emotion regulation ability. We sought to assess whether such sleep and emotion regulation deficits contribute to mood disturbances. In 144 veterans, using a double moderation model, we tested the relationship between PTSD and anxiety and examined whether sleep quality and emotion regulation interact to moderate this relationship. We found that PTSD predicts higher anxiety in veterans with poor and average sleep quality who utilize maladaptive emotion regulation strategies. However, there was no relationship between PTSD and anxiety in individuals with good sleep quality, regardless of emotion regulation. Similarly, there was no relationship between PTSD and anxiety in individuals with better emotion regulation, regardless of sleep quality. Results were unchanged when controlling for history of traumatic brain injury (TBI), despite the fact that those with both PTSD and TBI had the poorest emotion regulation overall. Taken together, these results suggest that good-quality sleep may be protective against poor emotion regulation in veterans with PTSD. Sleep may therefore be a target for therapeutic intervention in veterans with PTSD and heightened anxiety.

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<http://psycnet.apa.org/record/2018-25407-001>

### **Correlates of current and heavy smoking among U.S. soldiers returning from combat.**

Lopez, A. A., Toblin, R. L., Riviere, L. A., Lee, J. D., & Adler, A. B.

Experimental and Clinical Psychopharmacology  
2018; 26(3), 215-222.

<http://dx.doi.org/10.1037/pha0000193>

Smoking rates are higher in U.S. soldiers than civilians, with combat-experienced soldiers particularly at risk for heavy smoking ( $\geq 20$  cigarettes/day). While heavy smoking is correlated with mental health symptoms in civilian samples, the extent to which these symptoms, background variables, and unit climate (self-reported assessments of cohesion, organizational support, and leadership) are linked to smoking in at-risk soldiers remains unclear. The present study examines a range of correlates of smoking-related behavior. Cross-sectional, anonymous surveys were collected from 3,380 soldiers following a deployment in 2008–2009. Measures included demographics, combat exposures, unit climate (e.g., unit cohesion, perceived organizational support,



leadership), short sleep duration, and behavioral health variables (e.g., posttraumatic stress disorder, depression, anxiety, alcohol misuse, aggression, adverse childhood experiences [ACEs]). Logistic regression modeled the effects of these variables on two outcome variables: daily smoking and heavy smoking. In the current sample, nearly half (47%) of soldiers reported smoking daily, with 35% of all smokers reporting heavy smoking (17% of the entire sample). Daily smoking was associated with demographic (age, gender, education, rank), behavioral health (ACE, alcohol misuse, sleep duration, aggression), and unit characteristics (unit cohesion); only increased combat exposures and aggression were specifically associated with heavy smoking. Interventions focused on the postdeployment period could incorporate messages about alternatives to smoking as a coping strategy while unit interventions or individual counseling addressing aggression could also address smoking as a negative coping strategy. (PsychINFO Database Record (c) 2018 APA, all rights reserved)

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<https://journals.lww.com/journaladdictionmedicine/Abstract/publishahead/Posttraumatic-Stress-Disorder-Symptom-Association.99465.aspx>

### **Posttraumatic Stress Disorder Symptom Association With Subsequent Risky and Problem Drinking Initiation.**

Bensley, Kara M., PhD, MSc; Seelig, Amber D., MPH; Armenta, Richard F., PhD, MPH; Rivera, Anna C., MPH; Peterson, Arthur V., PhD; Jacobson, Isabel G., MPH; Littman, Alyson J., PhD; Maynard, Charles, PhD; Bricker, Jonathan B., PhD; Boyko, Edward J., MD, MPH; Rull, Rudolph P., PhD, MPH; Williams, Emily C., PhD, MPH

Journal of Addiction Medicine

June 4, 2018 - Volume Publish Ahead of Print

doi: 10.1097/ADM.0000000000000420

#### **Objectives:**

Posttraumatic stress disorder (PTSD) and unhealthy alcohol use are commonly associated conditions. It is unknown whether specific symptoms of PTSD are associated with subsequent initiation of unhealthy alcohol use.

#### **Methods:**

Data from the first 3 enrollment panels (n = 151,567) of the longitudinal Millennium Cohort Study of military personnel were analyzed (2001–2012). Complementary log-log models were fit to estimate whether specific PTSD symptoms and symptom clusters

were associated with subsequent initiation of 2 domains of unhealthy alcohol use: risky and problem drinking (experience of 1 or more alcohol-related consequences). Models were adjusted for other PTSD symptoms and demographic, service, and health-related characteristics.

#### Results:

Eligible study populations included those without risky (n = 31,026) and problem drinking (n = 67,087) at baseline. In adjusted analyses, only 1 PTSD symptom—irritability/anger—was associated with subsequent increased initiation of risky drinking (relative risk [RR] 1.05, 95% confidence interval [CI] 1.00–1.09) at least 3 years later. Two symptom clusters (dysphoric arousal [RR 1.17, 95% CI 1.11–1.23] and emotional numbing [RR 1.30, 95% CI 1.22–1.40]) and 5 symptoms (restricted affect [RR 1.13, 95% CI 1.08–1.19], sense of foreshortened future [RR 1.12, 95% CI 1.06–1.18], exaggerated startle response [RR 1.07, 95% CI 1.01–1.13], sleep disturbance [RR 1.11, 95% CI 1.07–1.15], and irritability/anger [RR 1.12, 95% CI 1.07–1.17]) were associated with subsequent initiation of problem drinking.

#### Conclusions:

Findings suggest that specific PTSD symptoms and symptom clusters are associated with subsequent initiation of unhealthy alcohol use.

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<https://implementationscience.biomedcentral.com/articles/10.1186/s13012-018-0768-z>

#### **“I had to somehow still be flexible”: exploring adaptations during implementation of brief cognitive behavioral therapy in primary care.**

Joseph Mignogna, Lindsey Ann Martin, Juliette Harik, Natalie E. Hundt, Michael Kauth, Aanand D. Naik, Kristen Sorocco, Justin Benzer and Jeffrey Cully

Implementation Science

2018; 13:76

<https://doi.org/10.1186/s13012-018-0768-z>

## Background

Primary care clinics present challenges to implementing evidence-based psychotherapies (EBPs) for depression and anxiety, and frontline providers infrequently adopt these treatments. The current study explored providers' perspectives on fidelity to a manualized brief cognitive behavioral therapy (CBT) as delivered in primary care clinics as part of a pragmatic randomized trial. Data from the primary study demonstrated the clinical effectiveness of the treatment and indicated that providers delivered brief CBT with high fidelity, as evaluated by experts using a standardized rating form. Data presented here explore challenges providers faced during implementation and how they adapted nonessential intervention components to make the protocol "fit" into their clinical practice.

## Methods

A multiprofessional group of providers (n = 18) completed a one-time semi-structured interview documenting their experiences using brief CBT in the primary care setting. Data were analyzed via directed content analysis, followed by inductive sorting of interview excerpts to identify key themes agreed upon by consensus. The Dynamic Adaptation Process model provided an overarching framework to allow better understanding and contextualization of emergent themes.

## Results

Providers described a variety of adaptations to the brief CBT to better enable its implementation. Adaptations were driven by provider skills and abilities (i.e., using flexible content and delivery options to promote treatment engagement), patient-emergent issues (i.e., addressing patients' broader life and clinical concerns), and system-level resources (i.e., maximizing the time available to provide treatment).

## Conclusions

The therapeutic relationship, individual patient factors, and system-level factors were critical drivers guiding how providers adapted EBP delivery to improve the "fit" into their clinical practice. Adaptations were generally informed by tensions between the EBP protocol and patient and system needs and were largely not addressed in the EBP protocol itself. Adaptations were generally viewed as acceptable by study fidelity experts and helped to more clearly define delivery procedures to improve future implementation efforts. It is recommended that future EBP implementation efforts examine the concept of fidelity on a continuum rather than dichotomized as adherent/not adherent with focused efforts to understand the context of EBP delivery.

Trial registration  
ClinicalTrials.gov, NCT01149772

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<https://www.ncbi.nlm.nih.gov/pubmed/29931192>

Mil Med. 2018 Jun 19. doi: 10.1093/milmed/usy147. [Epub ahead of print]

## **Deployed Military Medical Personnel: Impact of Combat and Healthcare Trauma Exposure.**

Peterson AL, Baker MT, Moore CBA, Hale WJ, Joseph JS, Straud CL, Lancaster CL, McNally RJ, Isler WC, Litz BT, Mintz J1

### **INTRODUCTION:**

Limited research has been conducted on the impact of deployment-related trauma exposure on post-traumatic stress symptoms in military medical personnel. This study evaluated the association between exposure to both combat experiences and medical duty stressors and post-traumatic stress symptoms in deployed military medical personnel.

### **MATERIALS AND METHODS:**

U.S. military medical personnel (N = 1,138; 51% male) deployed to Iraq between 2004 and 2011 were surveyed about their exposure to combat stressors, healthcare stressors, and symptoms of post-traumatic stress disorder (PTSD). All participants were volunteers, and the surveys were completed anonymously approximately halfway into their deployment. The Combat Experiences Scale was used as a measure of exposure to and impact of various combat-related stressors such as being attacked or ambushed, being shot at, and knowing someone seriously injured or killed. The Military Healthcare Stressor Scale (MHSS) was modeled after the Combat Experiences Scale and developed for this study to assess the impact of combat-related healthcare stressors such as exposure to patients with traumatic amputations, gaping wounds, and severe burns. The Post-traumatic Stress Disorder Checklist-Military Version (PCL-M) was used to measure the symptoms of PTSD.

### **RESULTS:**

Eighteen percent of the military medical personnel reported exposure to combat experiences that had a significant impact on them. In contrast, more than three times as many medical personnel (67%) reported exposure to medical-specific stressors that had

a significant impact on them. Statistically significant differences were found in self-reported exposure to healthcare stressors based on military grade, education level, and gender. Approximately 10% of the deployed medical personnel screened positive for PTSD. Approximately 5% of the sample were positive for PTSD according to a stringent definition of caseness (at least moderate scores on requisite Diagnostic and Statistical Manual for Mental Disorders criteria and a total PCL-M score  $\geq 50$ ). Both the MHSS scores ( $r(1,127) = 0.49, p < 0.0001$ ) and the Combat Experiences Scale scores ( $r(1,127) = 0.34, p < 0.0001$ ) were significantly associated with PCL-M scores. However, the MHSS scores had statistically larger associations with PCL-M scores than the Combat Experiences Scale scores ( $z = 5.57, p < 0.0001$ ). The same was true for both the minimum criteria for scoring positive for PTSD ( $z = 3.83, p < 0.0001$ ) and the strict criteria PTSD ( $z = 1.95, p = 0.05$ ).

#### CONCLUSIONS:

The U.S. military has provided significant investments for the funding of research on the prevention and treatment of combat-related PTSD, and military medical personnel may benefit from many of these treatment programs. Although exposure to combat stressors places all service members at risk of developing PTSD, military medical personnel are also exposed to many significant, high-magnitude medical stressors. The present study shows that medical stressors appear to be more impactful on military medical personnel than combat stressors, with approximately 5-10% of deployed medical personnel appearing to be at risk for clinically significant levels of PTSD.

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<https://academic.oup.com/milmed/advance-article-abstract/doi/10.1093/milmed/usy131/5036721>

#### **Veterans Caregiving for Others: Caregiving as a Factor in the Health of America's Military Veterans.**

Natalie A Manley, MD, MPH Bret L Hicken, PhD, MSPH Randall W Rupper, MD, MPH

Military Medicine

Published: 13 June 2018

<https://doi.org/10.1093/milmed/usy131>

#### Introduction

Caregiving has become an important world-wide concern due to the increasing number of people living to old age who need day to day functional support. Many caregivers

report moderate to high levels of caregiver burden, which has been associated with increased morbidity and mortality for both the caregiver and care recipient. There are numerous research publications on people who are caregivers for military veterans. However, there is little information on military veterans who are themselves caregivers. This study proposed to determine if there are differences in health and health behaviors between veterans who are caregiving for others (VCOs) and veterans who are not caregiving for others (VNCOs).

### Materials and Methods

Data were analyzed from a population-based observational cross-section involving persons who identified as veterans in the 2009 Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) national telephone survey. Those identifying as veterans were then grouped by those who also identified as caregivers and those who did not identify as caregivers. Data were weighted using the CDC's weighting equation. Group differences were analyzed using Chi-square and t-tests. We used multinomial logistic regression with a 95% confidence interval (1 = VCO; 0 = VNCO) to determine if caregiving status among veterans was independently correlated with clinically relevant and explanatory variables.

### Results

Of 432,607 BRFSS participants, 12,629 were VCOs (23.4% of veterans; 10.7% of caregivers) and 44,356 were VNCOs (76.6% of veterans). Veterans who were caregivers reported similar proportions of hypertension, diabetes, coronary heart disease, history of stroke, and cancer compared with VNCOs, even though VCOs were younger than the VNCOs (57 vs. 59 yr,  $p < 0.01$ ). Additionally, VCOs more often report current smoking (35% vs. 28%,  $p < 0.01$ ), frequent insufficient sleep (29% vs. 21%,  $p < 0.01$ ), and frequent mental distress (12% vs. 8%,  $p < 0.01$ ).

### Conclusion

Veterans who are caregiving for others (VCOs) despite being younger, have similar amounts of chronic health problems and more modifiable health factors (i.e., smoking) than veterans who are not caregiving for others (VNCOs). These characteristics have important implications for health management of veterans who are caregivers.

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[https://calhoun.nps.edu/bitstream/handle/10945/58369/18Mar\\_Siwiek\\_Wolf.pdf](https://calhoun.nps.edu/bitstream/handle/10945/58369/18Mar_Siwiek_Wolf.pdf)

**The identification of gender bias in the U.S. military.**

Siwek, Luke T.

Thesis and Dissertation Collection  
Naval Postgraduate School  
March 2018

Although females represent almost half of the U.S. civilian labor force, they account for less than 15 percent of the officers in the U.S. military. To account for this discrepancy, this thesis tests for gender bias within the U.S. military by analyzing unique datasets derived from Naval Postgraduate School. We first conduct a randomized control trial by means of a survey (n=234). One group responds to scenarios relating to one gender; the second group responds to the same scenarios but relating to the opposite gender. We then use statistical analysis and ordinary least squares models to compare responses between genders. Second, using NPS student evaluations of teaching (n=175,093), we conduct t tests, examine the correlation of evaluation questions on instructor effectiveness, and employ ordinary least squares models using student and course fixed effects, and instructor and course fixed effects while controlling for student, instructor, class and school characteristics to analyze how gender influences evaluations. Our results identify that students favor matched gender pairs, with the effect largest among male pairs. We found this effect to be of marginal economic significance. These findings may indicate the effectiveness of gender equality training, or may reflect the current social climate concerning gender bias.

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<https://www.liebertpub.com/doi/abs/10.1089/neu.2017.5243>

**Sleep, sleep disorders, and circadian health following mild traumatic brain injury: Review and research agenda.**

Dr. Emerson Wickwire, Dr. David M. Schnyer, Dr. Anne Germain, Dr. Scott Williams, Dr. Christopher Lettieri, Dr. Ashlee McKeon, Dr. Steven Scharf, Dr. Ryan Stocker, Dr. Jennifer S Albrecht, Dr. Neeraj Badjatia, Ms. Amy Markowitz, and Dr. Geoffrey Manley

Journal of Neurotrauma

Online Ahead of Editing: June 7, 2018

<http://doi.org/10.1089/neu.2017.5243>

A rapidly expanding scientific literature supports the frequent co-occurrence of sleep and circadian disturbances following mild traumatic brain injury (mTBI). Although many

questions remain unanswered, the preponderance of evidence suggests that sleep and circadian disorders can result from mTBI. Among those with mTBI, sleep disturbances and clinical sleep and circadian disorders contribute to the morbidity and long-term sequelae across domains of functional outcomes and quality of life. Specifically, along with deterioration of neurocognitive performance, insufficient and disturbed sleep can precede, exacerbate, or perpetuate many of the other common sequelae of mTBI, including depression, post-traumatic stress disorder, and chronic pain. Further, sleep and mTBI share neurophysiologic and neuroanatomic mechanisms that likely bear directly on success of rehabilitation following mTBI. For these reasons, focus on disturbed sleep as a modifiable treatment target has high likelihood of improving outcomes in mTBI. Here, we review relevant literature and present a research agenda to 1) advance understanding of the reciprocal relationships between sleep and circadian factors and mTBI sequelae and 2) advance rapidly the development of sleep-related treatments in this population.

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<https://onlinelibrary.wiley.com/doi/abs/10.1002/smi.2822>

### **Savouring as a moderator of the combat exposure–mental health symptoms relationship.**

Anton I. Sytine, Thomas W. Britt, Cynthia L.S. Pury, Patrick J. Rosopa

Stress and Health

2018;1–7

<https://doi.org/10.1002/smi.2822>

Engaging in firefights or witnessing death and other types of combat experiences are occupational hazards associated with Post Traumatic Stress Disorder (PTSD) and depression in military personnel returning from combat deployments. The present study examined savouring beliefs as a moderator of the relationship between combat exposure and mental health symptoms among U.S. Army soldiers deployed to Operation Iraqi Freedom and Operation Enduring Freedom. Soldiers (N = 885) completed measures of combat exposure, savouring beliefs, PTSD, and depression. Savouring was negatively related to symptoms of PTSD and depression and moderated the relationship between combat exposure and PTSD and depression among military personnel. These findings demonstrate that savouring positive life experiences may be beneficial to overall positive mental health and potentially buffer negative mental health



symptoms related to traumatic experiences. Discussion focuses on the possibility of training individuals exposed to trauma in savouring techniques.

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<http://psycnet.apa.org/record/2018-26104-003>

**Predicting treatment response to cognitive rehabilitation in military service members with mild traumatic brain injury.**

Vanderploeg, R. D., Cooper, D. B., Curtiss, G., Kennedy, J. E., Tate, D. F., & Bowles, A. O.

Rehabilitation Psychology

63(2), 194-204

<http://dx.doi.org/10.1037/rep0000215>

**Objective:**

Determine factors that affect responsiveness to cognitive rehabilitation (CR) interventions in service members (SMs) who sustained mild traumatic brain injury (mTBI).

**Method:**

126 SMs with a history of mTBI 3 to 24 months postinjury participated in a randomized clinical trial of one of four, 6-week treatment arms: (a) psychoeducation, (b) computer-based CR, (c) therapist-directed manualized CR, and (d) therapist-directed CR integrated with cognitive-behavioral psychotherapy. Practice-adjusted reliable change scores (RCS) were calculated for the three primary outcome measures: Paced Auditory Serial Addition Test (PASAT), Symptom Checklist-90 Revised (SCL-90-R) Global Severity Index (GSI), and Key Behaviors Change Inventory (KBCI). Hierarchical logistic regression was used to predict RCS. Variables considered were: (a) demographic, (b) injury characteristics, (c) comorbid mental health conditions, (d) nonspecific treatment variables (i.e., team vs. no-team milieu), and (e) specific treatment elements.

**Results:**

No predictor variables were associated with RCS improvements on the PASAT or the SCL-90-R. Comorbid depression ( $p < .02$ ) and team-treatment milieu ( $p < .02$ ) were associated with RCS improvement on the KBCI. Specific CR ( $ps > .65$ ) and psychotherapy treatments ( $p > .26$ ) were not associated with improvements on any

outcome. There was evidence that self-administered computer CR was not only not beneficial, but negatively associated with cognitive and neurobehavioral improvement.

#### Conclusions:

Although reliable improvements were found on the PASAT and KBCI, no specific treatment intervention effects were found. Rather, comorbid depression and team-milieu treatment environment were associated with improvement, but only on the KBCI. Comorbid depression was associated with higher rates of improvement. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

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<https://link.springer.com/article/10.1007/s00127-018-1542-x>

### **Longitudinal patterns of PTSD symptom classes among US National Guard service members during reintegration.**

Kipling M. Bohnert, Rebecca K. Sripada, Dara Ganoczy, Heather Walters, Marcia Valenstein

Social Psychiatry and Psychiatric Epidemiology

First Online: 09 June 2018

<https://doi.org/10.1007/s00127-018-1542-x>

#### Purpose

The purpose of this study was to identify posttraumatic stress disorder (PTSD) symptom groups and assess their longitudinal progression during their first year of reintegration among United States (US) National Guard (NG) service members.

#### Methods

A cohort of NG service members (n = 886) completed surveys at 6 and 12 months following their return from deployment to Iraq or Afghanistan. Latent class analysis (LCA) and latent transition analysis (LTA) were used to empirically derive groups based on their PTSD symptoms and examine their longitudinal course, respectively.

#### Results

The best fitting model at both assessments was the four-class model, comprising an asymptomatic class (6 months = 54%; 12 months = 55%), a mild symptom class with elevated hyperarousal symptoms (6 months = 22%; 12 months = 17%), a moderate symptom class (6 months = 15%; 12 months = 15%), and a severe symptom class (6

months = 10%; 12 months = 13%). Based on LTA, stability of class membership at the two assessments was 0.797 for the asymptomatic class, 0.453 for the mild class, 0.560 for the moderate class, and 0.580 for the severe class. Estimated transition probabilities were greater with respect to transitioning to less severe, rather than more severe, classes over time.

## Conclusions

The four latent PTSD classes were distinguished primarily by severity; however, the mild symptom class was characterized by higher levels of hyperarousal than other symptoms. Although the absolute number of individuals within classes remained fairly constant between 6 and 12 months, there was movement between severity classes. Most NG service members without symptoms continued to do well during the first year, with only an estimated 7% moving to the moderate or severe class.

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## Links of Interest

New Navy parental leave policy gives new parents additional flexibility

<https://www.navytimes.com/news/your-navy/2018/06/22/new-navy-parental-leave-policy-gives-new-parents-additional-flexibility/>

Military making headway on opioid epidemic among servicemembers, vets, officials say

<https://www.stripes.com/news/military-making-headway-on-opioid-epidemic-among-servicemembers-vets-officials-say-1.534110>

Colorado vet's death offers glimpse into suicidal mind

<https://www.stripes.com/news/colorado-vet-s-death-offers-glimpse-into-suicidal-mind-1.534146>

Crisis in counseling: How VA leadership is driving combat veteran counselors to burnout

<https://www.militarytimes.com/news/your-military/2018/06/21/crisis-in-counseling-how-va-leadership-is-driving-combat-veteran-counselors-to-burnout/>

Marine ground combat arms unit gets its first woman commander

<https://www.marinecorpstimes.com/news/your-marine-corps/2018/06/25/marine-ground-combat-arms-unit-gets-its-first-woman-commander/>

Why are they moving up faster? Women in the Corps are doing better than you think  
<https://www.marinecorpstimes.com/news/your-marine-corps/2018/06/27/why-are-they-moving-up-faster-women-in-the-corps-are-doing-better-than-you-think/>

VA backs off suicide study that indicated thousands of unreported military deaths  
<https://www.militarytimes.com/veterans/2018/06/25/va-backs-off-suicide-study-which-indicated-thousands-of-unreported-military-deaths/>

LGBTQ Vets, Uncomfortable With VA, Look To Each Other For Mental Health Care  
<https://taskandpurpose.com/lgbtq-veterans-strive-military-health-care/>

Reducing Self-stigma: Mental Health is as Important as Physical Health  
<http://pdhealth.mil/news/blog/reducing-self-stigma-mental-health-important-physical-health>

Top stories to read for PTSD Awareness Month  
<https://www.healio.com/psychiatry/ptsd/news/online/{6d802ae3-60e2-4cb0-b259-aa131d3e98c3}/top-stories-to-read-for-ptsd-awareness-month>

Progress in preventing opioid abuse, more needs to be done  
<https://health.mil/News/Articles/2018/06/26/Progress-in-preventing-opioid-abuse-more-needs-to-be-done>

Veteran sets himself on fire in protest outside Georgia Capitol  
<https://www.militarytimes.com/news/your-military/2018/06/26/veteran-sets-himself-on-fire-in-protest-outside-georgia-capitol/>

How one military wife is making a difference for military child victims of sexual harassment  
<https://www.militarytimes.com/pay-benefits/2018/06/26/how-one-military-wife-is-making-a-difference-for-military-child-victims-of-sexual-harassment/>

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**Resource of the Week:** [2015 Department of Defense Health Related Behaviors Survey](#)

From the RAND Corporation:

The Health Related Behaviors Survey (HRBS) is the U.S. Department of Defense's flagship survey for understanding the health, health-related behaviors, and well-being of service members. In 2014, the Defense Health Agency asked the RAND Corporation to review previous iterations of the HRBS, update survey content, administer a revised version of the survey, and analyze data from the resulting 2015 HRBS of active-duty personnel, including those in the U.S. Air Force, Army, Marine Corps, Navy, and Coast Guard. This report details the methodology, sample demographics, and results from that survey in the following domains: health promotion and disease prevention; substance use; mental and emotional health; physical health and functional limitations; sexual behavior and health; sexual orientation, transgender identity, and health; and deployment experiences and health. The results presented here are intended to supplement data already collected by the Department of Defense and to inform policy initiatives to help improve the readiness, health, and well-being of the force.

## 2015 Department of Defense Health Related Behaviors Survey (HRBS)

Sarah O. Meadows • Charles C. Engel •  
Rebecca L. Collins • Robin Beckman •  
Matthew Cefalu • Jennifer Hawes-Dawson •  
Molly Doyle • Amil M. Kress •  
Lisa Sontag-Padilla • Rajeev Ramchand •  
Kayla M. Williams



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Shirl Kennedy  
Research Editor  
Center for Deployment Psychology  
[www.deploymentpsych.org](http://www.deploymentpsych.org)  
[skennedy@deploymentpsych.org](mailto:skennedy@deploymentpsych.org)  
240-535-3901