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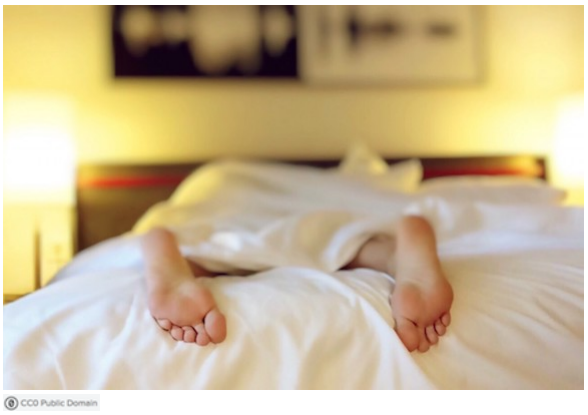
Uniformed Services University

Research Update -- April 5, 2018

What's Here:



Special Section - Sleep

- **Different polysomnographic patterns in military veterans with obstructive sleep apnea in those with and without post-traumatic stress disorder.**
- **Comorbid insomnia symptoms predict lower 6-month adherence to CPAP in US veterans with obstructive sleep apnea.**
- **Sleep Disturbance as a Predictor of Time to Drug and Alcohol Use Treatment in Primary Care.**
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- Roles of religion and spirituality among veterans who manage PTSD and their partners.
- Emotional numbing symptoms partially mediate the association between exposure to potentially morally injurious experiences and sexual anxiety for male service members.
- Symptom Reporting Patterns of US Military Service Members with a History of Concussion According to Duty Status.
- Veteran-centred content in medical education.
- Toward a Cultural-Structural Theory of Suicide: Examining Excessive Regulation and Its Discontents.

- Links of Interest
- Resource of the Week: Evaluation of the Department of Veterans Affairs Mental Health Services (National Academies)

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https://link.springer.com/article/10.1007%2Fs11325-017-1596-0

Different polysomnographic patterns in military veterans with obstructive sleep apnea in those with and without post-traumatic stress disorder.

Fariborz Rezaeitalab, Naghmeh Mokhber, Yalda Ravanshad, Soheila Saberi, Fariba Rezaeetalab

Sleep and Breathing
First Online: 04 January 2018
https://doi.org/10.1007/s11325-017-1596-0

Introduction and objectives
Obstructive sleep apnea (OSA) is a prevalent disorder among military veterans. The goal of this study is to compare the polysomnographic patterns of OSA in military veterans who have a history of post-traumatic stress disorder (PTSD) with those of veterans who have not PTSD.

Materials and methods
Seventy-two Iranian military male veterans were classified into two groups: those with PTSD (40 cases) and those without PTSD (32 cases). Each participant was diagnosed with OSA using an overnight polysomnography, during which sleep-related parameters such as sleep efficiency (SE) and apnea-related events were detected. The body mass index (BMI) and Epworth Sleepiness Scale (ESS) were also assessed.

Results
For the PTSD group, mean age was 53.83 ± 7.3 years, elapsed time since they participated in war was 28.3 ± 3.4 years, apnea-hypopnea index (AHI) was 41.2 ± 27, SE was 77.7 ± 17.55%, ESS was 7.93 ± 2.04, BMI was 26.5 ± 5.7, and PLM index was 12.725 ± 8.64. The above respective parameters for the non-PTSD group were 51.33 ± 5.9 years, 28.3 ± 3.4 years, 30.33 ± 14.7, 82.4 ± 15.65%, 10.08 ± 3.02, 31.5 ± 6.7, and 8.8 ± 3.54. The relationships of AHI with ESS and BMI were not significant in PTSD group.

Conclusion
OSA in military veterans suffering from PTSD presents more often with insomnia than obesity or increased daytime sleepiness. These findings are different from those typically seen in non-PTSD veterans with OSA.

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https://link.springer.com/article/10.1007%2Fs11325-017-1605-3

Comorbid insomnia symptoms predict lower 6-month adherence to CPAP in US veterans with obstructive sleep apnea.

Douglas M. Wallace, A. M. Sawyer, S. Shafazand

Sleep and Breathing
First Online: 04 January 2018
DOI https://doi.org/10.1007/s11325-017-1605-3

Purpose
There is limited information on the association between pre-treatment insomnia symptoms and dysfunctional sleep beliefs with continuous positive airway pressure (CPAP) adherence in veterans with obstructive sleep apnea (OSA). Our aims were to describe demographic and sleep characteristics of veterans with and without comorbid insomnia and determine whether pre-treatment insomnia symptoms and dysfunctional sleep beliefs predict CPAP use after 6 months of therapy.

Methods
Hispanic veterans attending the Miami VA sleep clinic were recruited and completed the insomnia severity index, the dysfunctional sleep belief and attitude scale (DBAS), and other questionnaires. Participants were asked to return after 7 days and 1 and 6 months to repeat questionnaires and for objective CPAP adherence download. Hierarchical regression models were performed to determine adjusted associations of pre-treatment insomnia symptoms and DBAS sub-scores on 6-month mean daily CPAP use.

Results
Fifty-three participants completed the 6-month follow-up visit with a mean CPAP use of 3.4 ± 1.9 h. Veterans with comorbid insomnia had lower mean daily CPAP use (168 ± 125 vs 237 ± 108 min, p = 0.04) and lower percent daily CPAP use ≥ 4 h (32 ± 32 vs 51 ± 32%, p = 0.05) compared to participants without insomnia. In adjusted analyses, pre-treatment insomnia symptoms (early, late, and aggregated nocturnal symptoms) and sleep dissatisfaction were predictive of lower CPAP use at 6 months. Pre-treatment dysfunctional sleep beliefs were not associated with CPAP adherence.

Conclusions
Pre-treatment nocturnal insomnia symptoms and sleep dissatisfaction predicted poorer 6- month CPAP use. Insomnia treatment preceding or concurrent with CPAP initiation may eliminate a barrier to regular use.

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http://linkinghub.elsevier.com/retrieve/pii/S1389945718300030

Sleep Disturbance as a Predictor of Time to Drug and Alcohol Use Treatment in Primary Care.

Lisa R. Fortuna, Benjamin Cook, Michelle V. Porche, Ye Wang, Ana Maria Amaris, Margarita Alegria

Sleep Medicine
Available online 9 January 2018
https://doi.org/10.1016/j.sleep.2017.12.009

Background
Sleep Disturbances (SDs) are a symptom common to mental health disorders (MHD) and substance use disorders (SUD). We aimed to identify the value of SD as a predictor for subsequent treatment of illicit drug and alcohol use disorders (SUDs) in primary care and relative to the predictive value of mental health disorders (MHDs).

Methods
We used electronic health records data from ambulatory primary care in a safety net Boston area healthcare system from 2013-2015 (n=83,920). SUD (separated into illicit drug use disorder and alcohol use disorder) and MHD were identified through ICD-9 codes and medical record documentation. We estimated Cox proportional hazard models to examine the risk of SUD across four comparison groups (SD only, SD and MHD, MHD only, and neither SD nor MHD).

Results
Compared to patients with no sleep or MHD, patients with SD had a greater risk for subsequent SUD treatment. Approximately one-fifth of patients with SD were treated for an illicit drug use disorder and approximately 12% were treated for alcohol use disorder. Risk for SUD treatment, estimated at over 30% by the end of the study, was greatest for

patients with a MHD, either alone or comorbid with SD. Risk was greater for older patients and men, and lower for minority patients.

Conclusions
SD and MHD, individually and comorbid, significantly predict subsequent treatment of illicit drug and alcohol use disorder in primary care. Screening and evaluation for SD should be a routine practice in primary care to help with identifying SUD risk.

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https://academic.oup.com/sleep/article-abstract/41/1/zsx188/4645417

An Ambulatory Polysomnography Study of the Post-traumatic Nightmares of Post-traumatic Stress Disorder.

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Sleep
Volume 41, Issue 1, 1 January 2018
https://doi.org/10.1093/sleep/zsx188

Study Objectives
This study used ambulatory polysomnography (PSG) to investigate post-traumatic nightmares of post-traumatic stress disorder (PTSD). The key research question was whether post-traumatic nightmares occur in both rapid eye movement (REM) and non-REM sleep, and if so, whether nightmares in each sleep stage differed in content, phenomenology, and heart rate response. Underlying sleep disorders were investigated in an exploratory way.

Methods
Thirty-five treatment-seeking veterans, current serving military members, and emergency service personnel undertook full PSG using the Compumedics (Melbourne, Australia) SomtePSG V1 system, during an inpatient psychiatric admission. The PSG recording included an event button to be pressed when a nightmare occurred, allowing us to determine the stage of sleep, changes in heart rate, and associated sleep events. The content and phenomenological features of participants' nightmares were recorded.

Results
Of the 35 participants, 29 reported a nightmare during their sleep study, but only 21 pressed the event button and could recall the content of one or more nightmare. This yielded sleep and nightmare data for 24 nightmares. Of the 24, 10 nightmares arose from REM sleep and 14 from non-REM (stages N1 and N2). Seven were accurate trauma replays and 17 were non-replay or a mixture of replay and non-replay. Most nightmares were associated with respiratory or leg movement events and increase in heart rate on awakening.

Conclusions
Post-traumatic nightmares of PTSD occur in both REM and non-REM sleep and are commonly associated with other sleep disturbances. These findings have important treatment implications.
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https://link.springer.com/article/10.1007%2Fs11325-018-1628-4

Comorbid insomnia and sleep apnea: a prevalent but overlooked disorder.

Matthew S. Brock, Vincent Mysliwiec

Sleep and Breathing
First Online: 25 January 2018
https://doi.org/10.1007/s11325-018-1628-4

Comorbid insomnia and obstructive sleep apnea (OSA) was first described 45 years ago and was well characterized by Krakow and colleagues in 2001 [1, 2, 3]. Despite the realization that this comorbidity was under-recognized and had implications for disease-related outcomes, little has changed in the ensuing years [4]. In this issue of Sleep and Breathing, there are three articles in veteran populations which substantially further our understanding of this disorder.

Using a modification to the Insomnia Severity Index (ISI), Wallace et al. reported that 47% of US veterans who underwent an initial evaluation for OSA had insomnia. Specifically, they required a score ≥ 6 on the first three questions, which assesses difficulties in falling asleep, staying asleep, or awakening too early and are consistent with moderate insomnia symptoms. Another major finding from their study is that patients with comorbid early and late insomnia symptoms and OSA are less adherent to positive airway pressure (PAP) at 6 months. In the paper by El-Solh et al., the effect of insomnia on US veterans with posttraumatic stress disorder (PTSD) and OSA was

assessed. They also used the ISI with the standard threshold score ≥ 15 to classify patients as having insomnia. In this study, veterans with comorbid insomnia were more likely to have depression, decreased quality of life, and worse sleep quality on polysomnography (PSG). Similar to the findings of Wallace et al., the veterans with comorbid insomnia, OSA, and PTSD were significantly less adherent to PAP and also had no improvements in overall sleep quality. In the third paper, Rezaeitalab et al. found that insomnia, diagnosed by clinical interview, was the most frequent symptom in Iranian veterans with PTSD and OSA; this was despite nearly all patients taking medications for insomnia at the time of their evaluation.

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http://www.tandfonline.com/doi/full/10.1080/15402002.2018.1425869

Examining Insomnia and PTSD Over Time in Veterans in Residential Treatment for Substance Use Disorders and PTSD.

Peter J. Colvonen, Jennifer Ellison, Moira Haller & Sonya B. Norman

Behavioral Sleep Medicine
Published online: 24 Jan 2018
https://doi.org/10.1080/15402002.2018.1425869

Objective/Background:
Insomnia occurs in 66–90% of individuals with posttraumatic stress disorder (PTSD) and 36–72% of individuals with substance use disorder (SUD). Individuals with both PTSD and SUD are more likely to have insomnia than individuals with only one disorder. Insomnia is associated with poorer treatment outcomes for both PTSD and SUD, increased daytime symptomology for PTSD, and increased relapse for SUDs. As such, it is important to understand how sleep affects PTSD treatment among patients dually diagnosed with SUD and how sleep changes over time in a residential unit for SUDs.

Participants:
Participants were 40 veterans with comorbid PTSD and SUD in a 28-day Substance Abuse Residential Rehabilitation Treatment Program (SARRTP) PTSD track. Methods: Analyses used mixed models with Time (baseline, posttreatment, 3-month follow-up) to examine PTSD and insomnia severity over time.

Results:
Results of the longitudinal mixed model showed that PTSD symptoms improved over

time but that insomnia symptoms did not. Although baseline insomnia did not affect follow-up PTSD symptoms, individuals with greater insomnia severity at the start of treatment had more severe baseline PTSD symptomatology. However, there was not an interaction of insomnia and PTSD severity over time such that baseline insomnia did not affect PTSD trajectories.

Conclusions:
These findings are consistent with the PTSD outpatient treatment findings and further adds evidence that insomnia is unremitting without direct intervention. Given the relationship insomnia has with PTSD severity, SUD, and relapse, directly targeting insomnia may further help improve both PTSD and SUD treatment outcomes.

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http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0190022

Patterns of zolpidem use among Iraq and Afghanistan veterans: A retrospective cohort analysis.

Ramona Shayegani, Kangwon Song, Megan E. Amuan, Carlos A. Jaramillo, Blessen C. Eapen, Mary Jo Pugh

PLOS ONE
Published 23 Jan 2018 PLOS ONE
https://doi.org/10.1371/journal.pone.0190022

Background
Although concern exists regarding the adverse effects and rate of zolpidem use, especially long-term use, limited information is available concerning patterns of zolpidem use.

Objective
To examine the prevalence and correlates of zolpidem exposure in Iraq and Afghanistan Veterans (IAVs).

Methods
A retrospective cohort study of zolpidem prescriptions was performed with National Veterans Health Administration (VHA) data. We gathered national VA inpatient, outpatient, and pharmacy data files for IAV's who received VA care between fiscal years (FY) 2013 and 2014. The VA pharmacy database was used to identify the prevalence of

long term (>30 days), high-dose zolpidem exposure (>10mg immediate-release; >12.5mg extended-release) and other medications received in FY14. Baseline characteristics (demographics, diagnoses) were identified in FY13. Bivariate and multivariable analyses were used to examine the demographic, clinical, and medication correlates of zolpidem use.

Results
Of 493,683 IAVs who received VHA care in FY 2013 and 2014, 7.6% (n = 37,422) were prescribed zolpidem in FY 2014. Women had lower odds of high-dose zolpidem exposure than men. The majority (77.3%) of IAVs who received zolpidem prescriptions had long-term use with an average days' supply of 189.3 days and a minority (0.9%) had high-dose exposure. In multivariable analyses, factors associated with long-term zolpidem exposure included age greater than 29 years old, PTSD, insomnia, Selim Index, physical 2–3 conditions, opioids, antidepressants, benzodiazepines, atypical antipsychotics, and stimulants. High dose exposure was associated with PTSD, depression, substance use disorder, insomnia, benzodiazepines, atypical antipsychotics, and stimulant prescriptions.

Conclusion
The current practices of insomnia pharmacotherapy in IAVs fall short of the clinical guidelines and may reflect high-risk zolpidem prescribing practices that put Iraq and Afghanistan Veterans at risk for adverse effects of zolpidem and poor health outcomes.

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https://content.govdelivery.com/accounts/USVHA/bulletins/1e5df62

PTSD Monthly Update - March 2018: Resources for Managing Stress after Trauma

National Center for PTSD

People respond to traumatic events in a number of ways. They may feel concern, anger, fear, or helplessness. These are all typical responses to a traumatic event.

These events can cause a full range of mental and physical reactions. You may also react to problems that occur after the event, as well as to triggers or reminders of the trauma.

Learn what to expect following a traumatic event and how to manage stress reactions on our website.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2182

The influence of psychosocial factors in veteran adjustment to civilian life.

Margaret A. Bowes, Nuno Ferreira, Mike Henderson

Clinical Psychology & Psychotherapy
First published: 25 March 2018
https://doi.org/10.1002/cpp.2182

Aim
Although most veterans have a successful transition to civilian life when they leave the military, some struggle to cope and adjust to the demands and challenges of civilian life. This study explores how a variety of psychosocial factors influence veteran adjustment to civilian life in Scotland, UK, and which of these factors predict a poor adjustment.

Methods
One hundred and fifty- four veterans across Scotland completed a set of questionnaires that measured veteran adjustment difficulty, quality of life, mental health, stigma, self-stigma, attitude towards help- seeking, likelihood of help- seeking, experiential avoidance, reappraisal and suppression.

Results
Veteran adjustment difficulty and quality of life were significantly correlated to a number of psychosocial factors. Mental health, experiential avoidance and cognitive reappraisal were found to be predictors of veteran adjustment difficulty, and experiential avoidance and cognitive reappraisal partially mediated the relationship between mental health and veteran adjustment, with experiential avoidance being the stronger mediator.

Discussion
Our findings suggest that early assessment of experiential avoidance and cognitive reappraisal and the provision of relevant emotion regulation skills training could potentially reduce the veteran's need for more complex (and costly) psychological interventions in the future. Implications for veterans, as well as the services and professionals involved with veteran transition and health care are discussed.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2192

Mental health disclosure amongst clinical psychologists in training: Perfectionism and pragmatism.

Tom Grice, Kat Alcock, Katrina Scior

Clinical Psychology & Psychotherapy
First published: 26 March 2018
https://doi.org/10.1002/cpp.2192

Objectives
This study investigated the incidence of lived experience of mental health problems amongst UK- based trainee clinical psychologists and factors associated with anticipated disclosure for trainees both with and without lived experience.

Methods
A web- based survey comprising the Multidimensional Perfectionism Scale, an adapted version of the Perceived Devaluation and Discrimination Scale, and questions about lived experience and anticipated likelihood of disclosure.

Results
The survey was completed by 348 trainees across 19 UK training institutions. Sixty-seven percent reported lived experience of a mental health problem. For these trainees, there was no difference in anticipated likelihood of disclosing to different recipient types after controlling for maladaptive perfectionism. However, across all participants, anticipated disclosure was associated with maladaptive perfectionism, temporal proximity, anticipated stigma (past), and recipient type. Anticipated stigma (present) was not associated with anticipated disclosure.

Conclusions
Results support an approach to communicating about mental health disclosure that incorporates responsibility, interdependency, and transparency. Suggestions for further research are discussed.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22272

Posttraumatic Stress Disorder and Complex Posttraumatic Stress Disorder in DSM‐5 and ICD‐11: Clinical and Behavioral Correlates.

Philip Hyland, Mark Shevlin, Claire Fyvie, Thanos Karatzias

Journal of Traumatic Stress
First published: 25 March 2018
https://doi.org/10.1002/jts.22272

The American Psychiatric Association and the World Health Organization provide distinct trauma‐based diagnoses in the fifth edition of the Diagnostic and Statistical Manual (DSM‐5), and the forthcoming 11th version of the International Classification of Diseases (ICD‐11), respectively. The DSM‐5 conceptualizes posttraumatic stress disorder (PTSD) as a single, broad diagnosis, whereas the ICD‐11 proposes two "sibling" disorders: PTSD and complex PTSD (CPTSD). The objectives of the current study were to: (a) compare prevalence rates of PTSD/CPTSD based on each diagnostic system; (b) identify clinical and behavioral variables that distinguish ICD‐11 CPTSD and PTSD diagnoses; and (c) examine the diagnostic associations for ICD‐11 CPTSD and DSM‐5 PTSD. Participants in a predominately female clinical sample (N = 106) completed self‐report scales to measure ICD‐11 PTSD and CPTSD, DSM‐5 PTSD, and depression, anxiety, borderline personality disorder, dissociation, destructive behaviors, and suicidal ideation and self‐harm. Significantly more people were diagnosed with PTSD according to the DSM‐5 criteria (90.4%) compared to those diagnosed with PTSD and CPTSD according to the ICD‐11 guidelines (79.8%). An ICD‐11 CPTSD diagnosis was distinguished from an ICD‐11 PTSD diagnosis by higher levels of dissociation (d = 1.01), depression (d = 0.63), and borderline personality disorder (d = 0.55). Diagnostic associations with depression, anxiety, and suicidal ideation and self‐harm were higher for ICD‐11 CPTSD compared to DSM‐5 PTSD (by 10.7%, 4.0%, and 7.0%, respectively). These results have implications for differential diagnosis and for the development of targeted treatments for CPTSD.

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https://academic.oup.com/milmed/advance-article/doi/10.1093/milmed/usy040/4954108

Disability Rating, Age at Death, and Cause of Death in U.S. Veterans with Service-Connected Conditions.

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Military Medicine
Published: 26 March 2018
https://doi.org/10.1093/milmed/usy040

Introduction
The association between disability and cause of death in Veterans with service-connected disabilities has not been studied. The objective of this study was to compare age at death, military service and disability characteristics, including disability rating, and cause of death by year of birth. We also examined cause of death for specific service-connected conditions.

Materials and methods
This study used information from the VETSNET file, which is a snapshot of selected items from the Veterans Benefits Administration corporate database. We also used the National Death Index (NDI) for Veterans which is part of the VA Suicide Data Repository. In VETSNET, there were 758,324 Veterans who had a service-connected condition and died between the years 2004 and 2014. Using the scrambled social security number to link the two files resulted in 605,493 (80%) deceased Veterans. Age at death, sex, and underlying cause of death were obtained from the NDI for Veterans and military service characteristics and types of disability were acquired from VETSNET. We constructed age categories corresponding to period of service; birth years 1938 and earlier corresponded to Korea and World War II (“oldest”), birth years 1939–1957 to the Vietnam era (“middle”), and birth years 1958 and later to post Vietnam, Gulf War, and the more recent conflicts in Iraq and Afghanistan (“youngest”).

Results
Sixty-two percent were in the oldest age category, 34% in the middle group, and 4% in the youngest one. The overall age at death was 75 ± 13 yr. Only 1.6% of decedents were women; among women 25% were in the youngest age group, while among men only 4% were in the youngest group. Most decedents were enlisted personnel, and 60% served in the U.S. Army. Nearly 61% had a disability rating of >50% and for the middle age group 54% had a disability rating of 100%. The most common service-connected conditions were tinnitus, hearing loss, and post-traumatic stress disorder (PTSD). In the oldest group, nearly half of deaths were due to cancer or cardiovascular conditions and <2% were due to external causes. In the youngest group, cardiovascular disease and cancer accounted for about 1/3 of deaths, whereas external causes or deaths due to accidents, suicide, or assault accounted for nearly 33% of deaths. For Veterans with

service-connected PTSD or major depression; 6.5% of deaths were due to external causes whereas for Veterans without these conditions, only 3.1% were due to external causes.

Conclusion
The finding of premature death due to external causes in the youngest age group as well as the finding of higher proportions of external causes in those with PTSD or major depression should be of great concern to those who care for Veterans.

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https://academic.oup.com/milmed/advance-article-abstract/doi/10.1093/milmed/usy038/4954107

Medical Evaluation Board Involvement, Non-Credible Cognitive Testing, and Emotional Response Bias in Concussed Service Members.

Scott R Mooney, PhD, ABPP, DAC Jane Stafford, PhD Elizabeth Seats, MS

Military Medicine
Published: 26 March 2018
https://doi.org/10.1093/milmed/usy038

Introduction
Military Service Members (SMs) with post-concussive symptoms are commonly referred for further evaluation and possible treatment to Department of Defense Traumatic Brain Injury Clinics where neuropsychological screening/evaluations are being conducted. Understudied to date, the base rates of noncredible task engagement/performance validity testing (PVT) during cognitive screening/evaluations in military settings appears to be high. The current study objectives are to: (1) examine the base rates of noncredible PVTs of SMs undergoing routine clinical or Medical Evaluation Board (MEB) related workups using multiple objective performance-based indicators; (2) determine whether involvement in MEB is associated with PVT or symptom exaggeration/symptom validity testing (SVT) results; (3) elucidate which psychiatric symptoms are associated with noncredible PVT performances; and (4) determine whether MEB participation moderates the relationship between psychological symptom exaggeration and whether or not SM goes on to demonstrate PVTs failures – or vice versa.

Materials and Methods
Retrospective study of 71 consecutive military concussion cases drawn from a DoD TBI

Clinic neuropsychology clinic database. As part of neuropsychological evaluations, patients completed several objective performance-based PVTs and SVT.

Results

Mean (SD) age of SMs was 36.0 (9.5), ranging from 19–59, and 93% of the sample was male. The self-identified ethnicity resulted in the following percentages: 62% Non-Hispanic White, 22.5% African American, and 15.5% Hispanic or Latino. The majority of the sample (97%) was Active Duty Army and 51% were involved in the MEB at the time of evaluation. About one-third (35.9%) of routine clinical patients demonstrated failure on one or more PVT indicators (12.8% failed 2) while PVT failure rates amongst MEB patients ranged from 15.6% to 37.5% (i.e., failed 2 or 1 PVTs, respectively). Base rates of failures on one or more PVT did not differ between routine clinical versus MEB patients ($p = 0.94$). MEB involvement was not associated with increased emotional symptom response bias as compared to routine clinical patients. PVT failures were positively correlated with somatization, anxiety, depressive symptoms, suspicious and hostility, atypical perceptions/alienation/subjective cognitive difficulties, borderline personality traits/features, and penchant for aggression in addition to symptom over-endorsement/exaggeration. No differences between routine clinical and MEB patients across other SVT indicators were found. MEB status did not moderate the relationship between any of the SVTs.

Conclusion

Study results are broadly consistent with the prior published studies that documented low to moderately high base rates of noncredible task engagement during neuropsychological evaluations in military and veteran settings. Results are in contrast to prior studies that have suggested involvement in MEB is associated with increased likelihood of poor PVT performances. This is the first to show that MEB involvement did not enhance/strengthen the association between PVT performances and evidence of SVTs. Consistent with prior studies, these results do highlight that the same SMs who fail PVTs also tend to be the ones who go on to endorse a myriad of psychiatric symptoms and proclivities. Implications of variable or poor task engagement during routine clinical and MEB neuropsychological evaluation in military settings on treatment and disposition planning cannot be overstated.

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https://academic.oup.com/milmed/advance-article-abstract/doi/10.1093/milmed/usy021/4955404

Assessing Psychological Fitness in the Military – Development of an Effective and Economic Screening Instrument.

Ulrich Wesemann, Ph.D Gerd D Willmund, MD Jörn Ungerer, PhD Günter Kreim, MSc Peter L Zimmermann, MD Antje Bühler, PhD Michael Stein, PhD Jakob Kaiser, MSc Jens T Kowalski, PhD

Military Medicine
Published: 27 March 2018
https://doi.org/10.1093/milmed/usy021

Background
There are a high number of soldiers with deployment-related and non-deployment-related mental health problems in the German Armed Forces (Bundeswehr): This has led to an increase in mental disorders and a decrease in quality of life. To tackle these problems and to strengthen resources among the Bundeswehr personnel, this study aims at developing a screening instrument for assessing the psychological fitness of soldiers on the basis of questionnaire scales. In this approach, psychological fitness describes a soldier's ability to integrate and enhance his/her mental and emotional capabilities using resources and trainable skills.

Methods
Bundeswehr combat soldiers (N = 361) answered questionnaires about resilience (RS-11), sense of coherence (SOC-L9), quality of life (WHOQOL-BREF), mental disorders (PHQ-D) and post-traumatic growth (PTG). Additionally, they were interviewed by trained troop psychologists both before and after their deployment in Afghanistan from January to June 2014. The screening model is based on self-report data; the psychological fitness in the standardized interview serves as a validation standard.

Findings
A linear logistic regression model was performed that includes the social relationship and the psychological scale from WHOQOL-BREF and the somatoform and the stress scale from PHQ. This model allows specialists a first assessment between participants who are psychologically fit before and after deployment and those who are less so. The chosen cutoff for sensitivity is between 70% and 79% and for specificity between 70% and 85%.

Discussion
This screening approach is still not applicable to large populations like that of the Bundeswehr, which currently has about 170,000 soldiers but it is limited to deployed combat troops. Classifying psychological fitness allows specialists to differentiate between people in need of special training or additional diagnostic measures and those in need of sustaining their fitness regularly at the earliest possible stage. A follow-up study that is representative of deployed and non-deployed military personnel will examine whether these results can be transferred to the entire Bundeswehr and whether the validity of the interview can be established.

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https://www.ncbi.nlm.nih.gov/pubmed/28880607

J Altern Complement Med. 2018 Feb;24(2):106-114. doi: 10.1089/acm.2017.0176. Epub 2017 Sep 7

Mind-Body Therapy for Military Veterans with Post-Traumatic Stress Disorder: A Systematic Review.

Cushing RE, Braun KL

OBJECTIVE:
About one-third of service members returning from post-9/11 deployment in Afghanistan and Iraq report combat-related mental health conditions, but many do not seek conventional treatment. Mind-body therapies have been offered as alternative approaches to decreasing post-traumatic stress disorder (PTSD), but no review of studies with veterans of post-9/11 operations was found. The objective of this study was to fill that gap.

DESIGN:
A systematic literature review was conducted following the preferred items for systematic reviews and meta-analyses (PRISMA) guidelines. PubMed MeSH terms were used to capture articles reporting on the military population (veteran and veterans) with PTSD who received a portable mind-body intervention (e.g., mindfulness, mind-body therapy, and yoga). PubMed/MEDLINE and PsycINFO were searched. Studies were included if participants were a mixed group of war veterans, as long as some post-9/11 veterans were included. In addition, participants must have had a diagnosis of PTSD or subthreshold PTSD, and the PTSD must have been attributable to combat, rather than another event, such as sexual trauma or natural disaster.

RESULTS:
Of 175 records identified, 15 met inclusion criteria. Studies reported on seated or gentle yoga that included breath work, meditation, mantra repetition, or breathing exercises. For 14 of the 15 studies, study retention was 70% or higher. Overall, studies reported significant improvements in PTSD symptoms in participants in these interventions. Although each study included post-9/11 veterans, about 85% of participants were from other conflicts, predominantly Vietnam.

CONCLUSION:
Although findings were positive, future studies are needed to evaluate the short- and long-term impact of mind-body therapies on larger samples of post-9/11 veterans and to address research questions related to broadening service member and veteran participation in these therapies.

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http://psycnet.apa.org/record/2018-02040-001

A Naturalistic Evaluation of Evidence-Based Treatment for Veterans With PTSD.

Doran, J. M., & DeViva, J.

Traumatology
Advance online publication.
http://dx.doi.org/10.1037/trm0000140

This naturalistic study of evidence-based psychotherapies (EBPs) for posttraumatic stress disorder (PTSD) in U.S. veterans examined treatment utilization and completion rates, the characteristics of EBPs in an ecologically valid sample, and the factors associated with premature termination. The study is an extension of previous work by Deviva and colleagues (2017), and was conducted in a Department of Veterans Affairs PTSD clinic that included 130 veterans. A mixed-methods approach was used that involved both quantitative and qualitative analysis of data in the electronic medical record. Variables of interest included treatment selection, dropout rates, symptom severity, and symptom change. The data revealed adequate engagement in the EBPs, high rates of dropout (49.4%), and decreases in PTSD symptoms for treatment completers. Around half of the completers with symptom data demonstrated clinically significant improvement. However, symptom levels were still fairly high at termination, and a majority of the veterans remained in treatment for PTSD after completing an EBP.

Staying on protocol, veteran agency in choosing an EBP, and veteran feelings about treatment emerged as salient factors in treatment retention. Meaningful symptom decreases were observed for veterans who were willing to engage in EBPs and who completed the treatment. However, dropout rates were high, and many veterans who completed an EBP were still fairly symptomatic and remained in treatment. This suggests that there may be room for improvement in the treatment of veterans with PTSD. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

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https://academic.oup.com/milmed/advance-article/doi/10.1093/milmed/usy045/4954110

Psychological Flexibility and Set-Shifting Among Veterans Participating in a Yoga Program: A Pilot Study.

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Military Medicine
Published: 26 March 2018
https://doi.org/10.1093/milmed/usy045

Introduction
Trauma-focused psychotherapies do not meet the needs of all veterans. Yoga shows some potential in reducing stress and perhaps even PTSD in veterans, although little is understood about the mechanisms of action. This study identifies preliminary correlates of change in PTSD and perceived stress for veterans participating in yoga.

Materials and methods
Nine veterans (seven males and two females) were recruited from an existing clinical yoga program and observed over 16 wk. Severity of PTSD symptoms (PCL-5) and perceived stress (PSS-10) were collected at baseline and weeks 4, 6, 8, and 16. Psychological flexibility (AAQ-II) and set-shifting (ratio of trail making test A to B) were collected at baseline and at week 6. Subjects attended yoga sessions freely, ranging from 1 to 23 classes over the 16 weeks. The Stanford University Institutional Review Board approved this research protocol.

Results
Self-reported PTSD symptoms significantly reduced while perceived stress did not. Lower baseline set-shifting predicted greater improvements in PTSD between baseline and 4 weeks; early improvements in set-shifting predicted overall reduction in PTSD.

Greater psychological flexibility was associated with lower PTSD and perceived stress; more yoga practice, before and during the study, was associated with greater psychological flexibility. Other predictors were not supported.

Conclusions
In a small uncontrolled sample, psychological flexibility and set-shifting predicted changes in PTSD symptoms in veterans participating in a clinical yoga program, which supports findings from prior research. Future research should include an active comparison group and record frequency of yoga practiced outside formal sessions.

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https://academic.oup.com/milmed/advance-article-abstract/doi/10.1093/milmed/usy017/4934229

Screening for Moral Injury: The Moral Injury Symptom Scale – Military Version Short Form.

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Military Medicine
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Introduction
To develop a short form (SF) of the 45-item multidimensional Moral Injury Symptom Scale – Military Version (MISS-M) to use when screening for moral injury and monitoring treatment response in veterans and active duty military with PTSD.

Methods
A total of 427 veterans and active duty military with PTSD symptoms were recruited from VA Medical Centers in Augusta, GA; Los Angeles, CA; Durham, NC; Houston, TX; and San Antonio, TX; and from Liberty University, Lynchburg, Virginia. The sample was randomly split in two. In the first half (n = 214), exploratory factor analysis identified the highest loading item on each of the 10 MISS scales (guilt, shame, moral concerns, loss of meaning, difficulty forgiving, loss of trust, self-condemnation, religious struggle, and loss of religious faith) to form the 10-item MISS-M-SF; confirmatory factor analysis was

then performed to replicate results in the second half of the sample (n = 213). Internal reliability, test–retest reliability, and convergent, discriminant, and concurrent validity were examined in the overall sample. The study was approved by the institutional review boards and the Research & Development (R&D) Committees at Veterans Administration medical centers in Durham, Los Angeles, Augusta, Houston, and San Antonio, and the Liberty University and Duke University Medical Center institutional review boards.

Findings
The 10-item MISS-M-SF had a median of 50 and a range of 12–91 (possible range 10–100). Over 70% scored a 9 or 10 (highest possible) on at least one item. Cronbach's alpha was 0.73 (95% CI 0.69–0.76), and test–retest reliability was 0.87 (95% CI 0.79–0.92). Convergent validity with the 45-item MISS-M was r = 0.92. Discriminant validity was demonstrated by relatively weak correlations with social, religious, and physical health constructs (r = 0.21–0.35), and concurrent validity was indicated by strong correlations with PTSD, depression, and anxiety symptoms (r = 0.54–0.58).

Discussion
The MISS-M-SF is a reliable and valid measure of MI symptoms that can be used to screen for MI and monitor response to treatment in veterans and active duty military with PTSD.

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http://psycnet.apa.org/record/2018-10165-001

Roles of religion and spirituality among veterans who manage PTSD and their partners.

Sherman, M. D., Usset, T., Voecks, C., & Harris, J. I.

Psychology of Religion and Spirituality
Advance online publication.
http://dx.doi.org/10.1037/rel0000159

Traumatic events can have ripple effects on the survivor's intimate relationships and on his or her religious/spirituality (R/S) beliefs and practices. Although both of these outcomes have been examined independently, research has yet to consider the intersection of trauma, its impacts on partners and intimate relationships, and R/S. This exploratory qualitative study involved individual interviews with 20 participants, including

11 male married veterans with posttraumatic stress disorder (PTSD; or subthreshold PTSD) and 9 female married partners of male veterans with PTSD (or subthreshold PTSD). Interviews explored perceptions of the roles of R/S in how participants coped with the veteran's PTSD, both individually and as a couple. Participants described a wide array of responses in their R/S beliefs and activities, ranging from withdrawal and avoidance to deeper engagement and growth. Although many participants described drawing upon their R/S beliefs and practices to support their spouses, a few shared how female partners used R/S against their veterans in a hurtful manner. Couples described their spiritual bond with one another as facilitating communication and strengthening their relational bond. Implications for psychotherapy and future research are discussed.

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https://www.tandfonline.com/doi/abs/10.1080/15299732.2018.1451976

Emotional numbing symptoms partially mediate the association between exposure to potentially morally injurious experiences and sexual anxiety for male service members.

Arjun Bhalla, MA, Elizabeth Allen, PhD, Keith Renshaw, PhD, Jessica Kenny, MA & Brett Litz, PhD

Journal of Trauma & Dissociation
Volume 19, 2018 - Issue 4: Pages 417-430
https://doi.org/10.1080/15299732.2018.1451976

Service members (SMs) returning from deployment are at risk of a range of sexual problems, some of which are thought to be related to psychological issues that may arise during deployment or combat. The current study sought to examine whether exposure to potentially morally injurious events (PMIEs) was associated with sexual anxiety (SA) above and beyond combat exposure and whether any such association was mediated by post-traumatic stress disorder (PTSD) symptom clusters. These questions were tested using data from self-report surveys collected from 221 partnered male Army (Active Duty, National Guard, or Reserve) SMs at three separate time points. Findings showed that exposure to PMIEs was significantly related to greater SA, with transgressions by self and perceived betrayal demonstrating unique associations when controlling for all factors of PMIEs. Moreover, total exposure to PMIEs was associated with SA above and beyond general combat exposure. PTSD symptoms partially mediated the association between exposure to PMIEs and SA, with emotional

numbing accounting for significant unique indirect effects after controlling for other PTSD symptom clusters. The findings suggest that exposure to PMIEs is associated with SA, even when accounting for either combat exposure or PTSD symptoms, emphasizing the importance of this issue in understanding post-deployment problems in sexual intimacy.

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https://academic.oup.com/acn/advance-article/doi/10.1093/arclin/acy031/4955767

Symptom Reporting Patterns of US Military Service Members with a History of Concussion According to Duty Status.

Lisa H Lu, Doug B Cooper, Matthew W Reid, Bilal Khokhar,Jennifer E Tsagaratos, Jan E Kennedy

Archives of Clinical Neuropsychology
Published: 28 March 2018
https://doi.org/10.1093/arclin/acy031

Objective
To compare symptom reporting patterns of service members with a history of concussion based on work status: full duty, limited duty, or in the Medical Evaluation Board (MEB)/disability process.

Methods
Retrospective analysis of 181 service members with a history of concussion (MEB n = 56; limited duty n = 62; full duty n = 63). Neurobehavioral Symptom Inventory (NSI) Validity-10 cutoff (>22) and Mild Brain Injury Atypical Symptoms Scale (mBIAS) cutoffs (≥10 and ≥8) were used to evaluate potential over-reporting of symptoms.

Results
The MEB group displayed significantly higher NSI scores and significantly higher proportion scored above the mBIAS ≥10 cutoff (MEB = 15%; limited duty = 3%; full duty = 5%). Validity-10 cutoff did not distinguish between groups.

Conclusions
MEB but not limited duty status was associated with increased risk of over-reporting symptoms in service members with a history of concussion. Results support the use of screening measures for over-reporting in the MEB/disability samples.

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https://onlinelibrary.wiley.com/doi/abs/10.1111/tct.12775

Veteran-centred content in medical education.

Paula T Ross, Monica L Lypson

The Clinical Teacher
First published: 30 March 2018
https://doi.org/10.1111/tct.12775

Background
Veterans have unique experiences that warrant special consideration in health care. Unfortunately, training in veteran- centred care has not been a clear focus of medical education, and only a very small proportion of medical schools include military cultural competency in their curricula.

Methods
We conducted an 80- minute focus group with six US veterans. Open- ended questions were used to elicit their perceptions of the health care that they receive, and how it can be improved. The audio- recording was transcribed verbatim and coded for thematic content. A phenomenological analytic approach was used to analyse the 31- page transcript and arrive at the final themes.

Results
Former service members from various periods of conflict (e.g. World War II, Vietnam, Persian Gulf) offered key insights about how to improve veterans' health care experiences. Veterans suggested that consideration of their previous military service would improve care. They lamented that the lack of military consciousness is a barrier to care. Finally, they suggested that clinicians pay close attention to the transition from service member to civilian, as reintegration to civilian life is a critical life experience.

Discussion
Veteran- centred care ensures optimal health care through ease of access to services, and through positive patient–provider interactions. Being aware of military culture can help providers to contextualise veterans' experiences and beliefs about health care seeking and illness management, particularly for invisible wounds of war, including traumatic brain injury (TBI) and post- traumatic stress disorder (PTSD).

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http://journals.sagepub.com/doi/abs/10.1177/0735275118759150

Toward a Cultural-Structural Theory of Suicide: Examining Excessive Regulation and Its Discontents.

Seth Abrutyn, Anna S. Mueller

Sociological Theory
First Published March 27, 2018
https://doi.org/10.1177/0735275118759150

Despite its enduring insights, Durkheim's theory of suicide fails to account for a significant set of cases because of its overreliance on structural forces to the detriment of other possible factors. In this paper, we develop a new theoretical framework for thinking about the role of culture in vulnerability to suicide. We argue that by focusing on the cultural dynamics of excessive regulation, particularly at the meso level, a more robust sociological model for suicide could be offered that supplements structure-heavy Durkheimian theory. In essence, we argue that the relevance of cultural regulation to suicide rests on the (1) degree to which culture is coherent in sociocultural places, (2) existence of directives related to prescribing or proscribing suicide, (3) degree to which these directives translate into internalized meanings affecting social psychological processes, and (4) degree to which the social space is bounded. We then illustrate how our new theory provides useful insights into three cases of suicide largely neglected within sociology: specifically, suicide clusters in high schools, suicide in the military, and suicides of "despair" among middle-aged white men. We conclude with implications for future sociological research on suicide and suicide prevention.

Links of Interest

BYU researcher: Insomniacs likely get more sleep than they let on
https://www.deseretnews.com/article/900014549/byu-researcher-insomniacs-likely-get-more-sleep-than-they-let-on.html

Orthosomnia is a real sleep condition, warns scientists
https://www.standard.co.uk/lifestyle/health/what-is-orthosomnia-a3802066.html

PTSD in Late Life: Special Issues
http://www.psychiatrictimes.com/ptsd/ptsd-late-life-special-issues

Treating Service Members Reporting Sexual Assault 101: A Primer for Providers
http://pdhealth.mil/news/blog/treating-service-members-reporting-sexual-assault-101-primer-providers

They sought help when their Army dad deployed. Now they're barred from joining the military.
https://www.militarytimes.com/pay-benefits/military-benefits/health-care-benefits/2018/03/29/they-sought-help-when-their-army-dad-deployed-now-theyre-barred-from-joining-the-military/

Former Navy Sailor Convicted of Distributing Video of Drowning Puppies
https://www.military.com/daily-news/2018/03/29/former-navy-sailor-convicted-distributing-video-drowning-puppies.html

Commandant wants Marines to have more time at home before deployments
https://www.marinecorpstimes.com/news/your-marine-corps/2018/03/29/commandant-wants-marines-to-have-more-time-at-home-before-deployments/

Ex-soldier faked combat trauma for veteran's benefits
https://www.armytimes.com/veterans/2018/03/29/ex-soldier-faked-combat-trauma-for-veterans-benefits/

The ethics of internet- based and other self- help therapies for mental health problems: Still not solved after 50 years
https://onlinelibrary.wiley.com/doi/full/10.1111/cpsp.12238

As many as 11,800 military families face deportation issues, group says
https://www.militarytimes.com/news/your-military/2018/04/01/as-many-as-11800-military-families-face-deportation-issues-group-says/

It's Always 1700 Somewhere: Jimmy Buffett Presented Navy Civilian Award
https://news.usni.org/2018/03/30/always-1700-somewhere-secnav-spencer-presents-navys-top-civilian-award-jimmy-buffett

From boots to flight suits, the Air Force is working to improve gear for female pilots
https://www.airforcetimes.com/news/your-air-force/2018/03/30/from-boots-to-flight-suits-the-air-force-is-working-to-improve-gear-for-female-pilots/

Wisconsin becomes first state with ‘Green Alerts’ for vulnerable vets
https://www.militarytimes.com/veterans/2018/03/31/wisconsin-becomes-first-state-with-green-alerts-for-vulnerable-vets/

Mental health experts question claims in Defense Secretary Jim Mattis’ transgender study
https://www.washingtonexaminer.com/policy/defense-national-security/mental-health-experts-question-claims-in-defense-secretary-jim-mattis-transgender-study

After explicit photo scandal, Marine Corps grapples with culture of disrespect for women
https://www.pbs.org/newshour/show/after-explicit-photo-scandal-marine-corps-grapples-with-culture-of-disrespect-for-women

To Treat Pain, PTSD And Other Ills, Some Vets Try Tai Chi
https://www.npr.org/sections/health-shots/2018/04/02/594914429/to-treat-pain-ptsd-and-other-ills-some-vets-try-tai-chi

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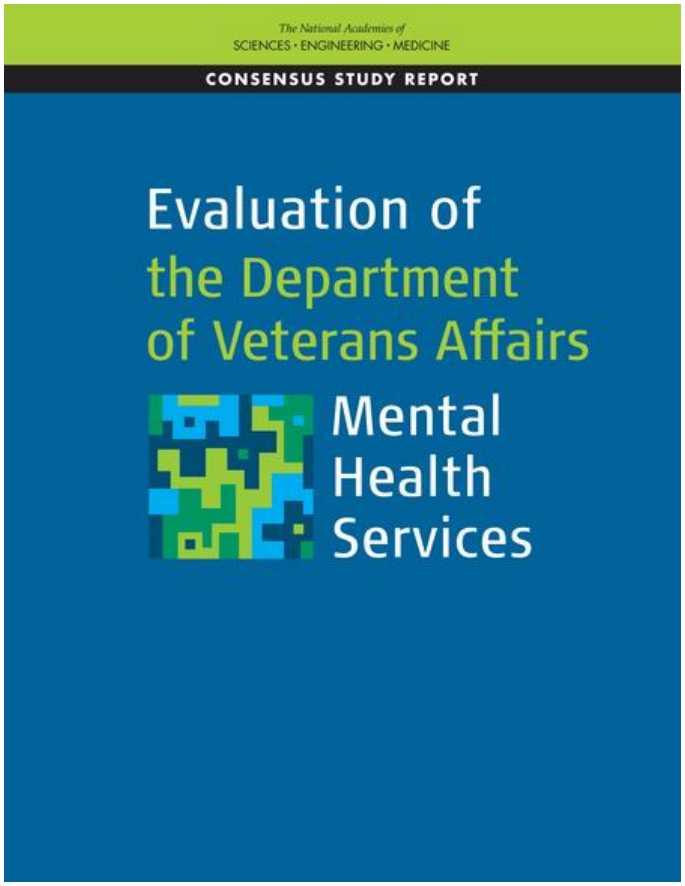
Resource of the Week: Evaluation of the Department of Veterans Affairs Mental Health Services

From:
National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Committee to Evaluate the Department of Veterans Affairs Mental Health Services

> Approximately 4 million U.S. service members took part in the wars in Afghanistan and Iraq. Shortly after troops started returning from their deployments, some active-duty service members and veterans began experiencing mental health problems. Given the stressors associated with war, it is not surprising that some service members developed such mental health conditions as posttraumatic stress disorder, depression, and substance use disorder. Subsequent epidemiologic studies conducted on military and veteran populations that served in the operations in Afghanistan and Iraq provided scientific evidence that those who fought were in fact being diagnosed with mental illnesses and experiencing mental health–related outcomes—in particular, suicide—at a higher rate than the general population.

This report provides a comprehensive assessment of the quality, capacity, and access to mental health care services for veterans who served in the Armed Forces in Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn. It includes an analysis of not only the quality and capacity of mental health care services within the Department of Veterans Affairs, but also barriers faced by patients in utilizing those services.



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