

CDP



Research Update -- December 15, 2022

What's Here:

- The Heterogeneity of Posttraumatic Stress Disorder in DSM-5.
- Insomnia, depression, and anxiety symptoms interact and individually impact functioning: A network and relative importance analysis in the context of insomnia.
- Gender-based Analysis of the Correlates of Hazardous and Binge Drinking among Canadian Active Duty Military Personnel.
- An Expert and Veteran User Assessment of the Usability of an Alcohol Reduction App for Military Veterans, Drinks:Ration: A Mixed-Methods Pilot Study.
- Presenting Issues of Concern among Active-Duty Service Members with Depression and/or Suicidality.
- Influence of Comorbid Social Anxiety Disorder on Symptomatology and Social Functioning in Female Military Sexual Trauma Survivors with PTSD.
- Pre-deployment threat learning predicts increased risk for post-deployment insomnia: Evidence from the Marine Resiliency Study.
- Does Effectiveness of a Brief Substance Use Treatment Depend on PTSD? An Evaluation of Motivational Enhancement Therapy for Active-Duty Army Personnel.
- Identifying factors associated with elevated suicidal intent among U.S. military veterans.

- Moral injury and chronic pain in veterans.
- Prospective Associations of Military Discharge Characterization with Post-active Duty Suicide Attempts and Homelessness: Results from the Study to Assess Risk and Resilience in Servicemembers—Longitudinal Study (STARRS-LS).
- Suicide Intervention Practices: What Is Being Used by Mental Health Clinicians and Mental Health Allies?
- The Effects of Adverse Childhood Experiences and Warfare Exposure on Military Sexual Trauma Among Veterans.
- Incidences of anxiety disorders among active duty service members between 1999 and 2018.
- The association of polysomnographic sleep on posttraumatic stress disorder symptom clusters in trauma-exposed civilians and veterans.
- Telehealth use and COVID-19: Assessing older veterans' perspectives.
- Observational and experimental studies on sleep duration and aggression: A systematic review and meta-analysis.
- Effects of cognitive behavioral therapy for insomnia (CBT-I) on quality of life: A systematic review and meta-analysis.
- Baseline Characteristics and Their Associations with Body Composition of Active-Duty Service Members Enrolling in a Randomized Controlled Trial of a Weight Management Program.
- Telehealth v. face-to-face provision of care to patients with depression: a systematic review and meta-analysis.
- The Prevalence, Humanistic Burden, and Health Care Impact of Irritable Bowel Syndrome Among United States Veterans.
- Strengths and vulnerabilities: Comparing post-9/11 U.S. veterans' and non-veterans' perceptions of health and broader well-being.
- Links of Interest
- Resource of the Week – Report to Congressional Armed Services Committees: In Response to: Section 756 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283), “Study and Report on Increasing Telehealth Services across Armed Forces”

<https://doi.org/10.1001/jamapsychiatry.2022.4092>

The Heterogeneity of Posttraumatic Stress Disorder in DSM-5.

Bryant, R. A., Galatzer-Levy, I., & Hadzi-Pavlovic, D.

JAMA Psychiatry

Published online December 7, 2022

Posttraumatic stress disorder (PTSD) is defined in DSM-5 as the presence of at least 6 of 20 symptoms across reexperiencing, avoidance, alternations in mood and cognition, and hyperarousal categories. This definition results in 636 120 potential clinical presentations of PTSD,¹ which contrasts with nearly all other diagnoses that have much less heterogeneity. The DSM-5 definition has attracted criticism because its expansion from fear-based symptoms may weaken the relevance of exposure-based treatments for PTSD.² Further, research to identify mechanisms and treatments of PTSD is potentially hampered by this heterogeneity. Although the mathematical possibility exists for substantial heterogeneity of PTSD, it is important to determine actual patterns of PTSD to ascertain if concerns about the diversity of PTSD presentations are justified. Accordingly, to our knowledge, this diagnostic study reports the first large-scale investigation of patterns of DSM-5 PTSD diagnostic presentations.

<https://doi.org/10.1016/j.sleep.2022.12.005>

Insomnia, depression, and anxiety symptoms interact and individually impact functioning: A network and relative importance analysis in the context of insomnia.

H. Ariel Bard, Ciarán O'Driscoll, Christopher B. Miller, Alasdair L. Henry, ... Colin A. Espie

Sleep Medicine

Available online 8 December 2022

Highlights

- First study to use network analysis to investigate insomnia, depression, and anxiety symptom interaction in the context of individuals with insomnia.
- Symptoms cluster into transdiagnostic dimensions, each showing highly variable levels of centrality, bridging influence, and relative contribution to impairment and reduced wellbeing.
- While trouble relaxing was central in the network, low energy and depressive affect symptoms (feelings of failure/guilt; depressed mood/hopelessness; anhedonia) were key predictors across domains of functional impairment.
- Findings could inform further research on and development of clinical screening practices and targets for transdiagnostic intervention.

Abstract

Study objectives.

Insomnia, depression, and anxiety show high rates of comorbidity and functional impairment. Transdiagnostic symptom interactions may be implicated in this comorbidity. This network analysis sought to assess how symptoms of insomnia, depression, and anxiety may interact and individually predict impairment across several domains for individuals with insomnia.

Methods

Baseline psychometric data from a randomised controlled trial were analysed (N = 1711). A regularised partial correlation network was estimated from the symptom data. Centrality (symptom connectivity), community structure (symptom clustering), and bridging (inter-community connectivity) were assessed. The replicability of the network model was assessed via confirmatory analyses in a holdout sample. Separately, Shapley values were estimated to determine the relative importance of each symptom in predicting functioning (i.e., psychological wellbeing, psychosocial functioning, and physical health impairment).

Results

The most connected nodes were uncontrollable worrying; trouble relaxing; and depressed mood/hopelessness. Five communities were identified with trouble relaxing identified as the bridge symptom between communities. The model showed good fit in the holdout sample. Low energy and depressive affect symptoms (feelings of failure/guilt; depressed mood/hopelessness; anhedonia) were key predictors in the relative importance analysis across multiple domains of impairment.

Conclusion

Trouble relaxing may be of clinical and transdiagnostic significance in the context of

insomnia. In terms of how symptoms relate to functioning, it was clear that, while low energy and feelings of failure/guilt were prominent predictors, a range of symptoms are associated with functional impairment. Consideration of both symptoms and functional impairment across domains may be useful in determining targets for treatment.

<https://doi.org/10.1080/21635781.2022.2151531>

Gender-based Analysis of the Correlates of Hazardous and Binge Drinking among Canadian Active Duty Military Personnel.

I. Richer, M. Therrien & Z. Wang

Military Behavioral Health

Published online: 08 Dec 2022

Alcohol misuse is prevalent among military personnel and has been associated with increased risk of psychosocial problems and physical health issues. Research suggests that military men and women exhibit distinct drinking patterns and differ in terms of alcohol-related problems. However, very little information exists on the gender-specific factors related to alcohol misuse. Information on the environment, such as rurality of serving areas, related to risky drinking among military populations is also scarce. This study examined demographic, military, psychosocial, geographical, and health indicators related to alcohol misuse among a representative sample of active-duty Canadian military members who reported drinking alcohol. Logistic regressions were used to assess the correlates of hazardous drinking and binge drinking among women and men separately. Among women, being younger, single, and experiencing mental health issues were related to risky drinking. Among men, being younger, in the Navy, self-reporting symptoms of psychological distress, and having difficulty coping with anger were related to hazardous drinking, whereas, binge drinking was related to younger age, being single, rurality of serving area, anger management, and poor overall health. Results provide support for gender-specific prevention and intervention strategies and highlight the importance of tailoring programs and policies to the needs of at-risk geographical areas.

<https://doi.org/10.1080/21635781.2022.2151532>

An Expert and Veteran User Assessment of the Usability of an Alcohol Reduction App for Military Veterans, Drinks:Ration: A Mixed-Methods Pilot Study.

Charlotte Williamson, Danielle Dryden, Laura Palmer, Roberto Rona, Amos Simms, Nicola T. Fear, Laura Goodwin, Dominic Murphy & Daniel Leightley

Military Behavioral Health

Published online: 06 Dec 2022

The development of mobile health applications (apps) is growing exponentially. Alcohol reduction apps can break down perceived barriers of seeking help for alcohol misuse, potentially making them more appealing than face-to-face methods. App usability is therefore essential in supporting individuals misusing alcohol. Alcohol misuse is common in the UK Armed Forces, therefore smartphone-based alcohol interventions could be valuable for this population. The aim of this pilot study was to assess the usability of Drinks:Ration, an alcohol reduction app for military veterans. Participants downloaded and used Drinks:Ration for 14-days ($n = 16$), completed a usability questionnaire ($n = 14$; 88%) and a semi-structured interview ($n = 12$; 75%). The mean usability score across all measures was 6.09 (SD 1.37), out of 7, indicating good usability. Three core themes were identified: simplicity; appropriateness for veterans; and engagement. Drinks:Ration was a usable app for veterans to monitor their alcohol consumption. Veteran users were more critical than expert users about the usefulness of the app. Feedback was incorporated into the app, where possible, to improve usability. Improvements included adding extra drink options, removing device notification sounds and adding a pop-up to each page which provides information about the features of the app on first use.

<https://doi.org/10.1080/21635781.2022.2151533>

Presenting Issues of Concern among Active-Duty Service Members with Depression and/or Suicidality.

Jayne Larick, Noreen M. Graf & Phyllis L. Thompson

Military Behavioral Health

Published online: 06 Dec 2022

The military continues to have higher rates of suicide than the civilian population. Literature indicates that rates of depression and suicidality are influenced by branch of service, marital status, rank, and deployment. However, the specific issues of concern for service members who seek mental health treatment with depression and/or suicidal ideation when they first present is absent from the literature. This study inspects archived records and counselor notes from 422 outpatient and inpatient mental health records at a US naval hospital to examine presenting issues among service members with documented depression or suicidality. Fourteen presenting issues were identified. The most pervasive presenting issues were work stress (32%) and partner relational stress (28.9%). Statistically significant differences are presented based on gender, inpatient/outpatient status, living status, marital status, suicide attempt, rank, and age.

<https://doi.org/10.1080/21635781.2022.2151534>

Influence of Comorbid Social Anxiety Disorder on Symptomatology and Social Functioning in Female Military Sexual Trauma Survivors with PTSD.

Daniel F. Gros, Danielle L. Taylor, Sara M. Witcraft, Alice E. Coyne & Ron Acierno

Military Behavioral Health

Published online: 06 Dec 2022

Military sexual trauma (MST) is a common experience in veterans and associated with numerous negative outcomes, such as posttraumatic stress disorder (PTSD), diagnostic comorbidity, and impairments in multiple domains, including social functioning. Comorbid social anxiety disorder (SOC) may represent a particularly challenging presentation due to added difficulties with social functioning and treatment response. The present study investigated severity, emotion regulation, and perceived support and functioning of comorbid SOC in female MST survivors with PTSD. Participants were recruited for a randomized clinical trial that compared telehealth and in-person delivery of evidence-based psychotherapy for PTSD. Of the 112 participants with PTSD, 30 participants (27%) also met criteria for comorbid SOC on a diagnostic interview. Participants with comorbid PTSD-SOC endorsed poorer emotion regulation, less positive affect, and greater negative affect compared to participants with PTSD without SOC comorbidity. Participants with comorbid PTSD-SOC also were less likely to be involved in a romantic relationship and evidenced increased difficulties in sharing thoughts and feelings with family members and friends. Together, these findings

suggest that SOC comorbidity in patients with MST-related PTSD is associated with increased impairments in emotion regulation and social functioning.

<https://doi.org/10.1016/j.brat.2022.104223>

Pre-deployment threat learning predicts increased risk for post-deployment insomnia: Evidence from the Marine Resiliency Study.

Hunt, C., Stout, D. M., Tie, Z., Acheson, D., Colvonen, P. J., Nievergelt, C. M., Yurgil, K. A., Baker, D. G., & Risbrough, V. B.

Behaviour Research and Therapy
2022 Dec; 159: 104223

Insomnia is a common and impairing consequence of military deployment, but little is known about pre-deployment risk factors for post-deployment insomnia. Abnormal threat learning tendencies are commonly observed in individuals with insomnia and maladaptive responses to stress have been implicated in the development of insomnia, suggesting that threat learning could be an important risk factor for post-deployment insomnia. Here, we examined pre-deployment threat learning as a predictor of post-deployment insomnia and the potential mechanisms underlying this effect. Male servicemembers (N = 814) completed measures of insomnia, psychiatric symptoms, and a threat learning task before and after military deployment. Threat learning indices that differentiated participants with versus without insomnia at post-deployment were tested as pre-deployment predictors of post-deployment insomnia. Post-deployment insomnia was linked to elevations on several threat learning indices at post-deployment, but only higher threat conditioning, as indexed by higher threat expectancy ratings to the danger cue, emerged as a pre-deployment predictor of post-deployment insomnia. This effect was independent of combat exposure levels and partially mediated by greater post-deployment nightmares. The tendency to acquire stronger expectations of aversive events following encounters with danger cues may increase risk for post-deployment insomnia, in part due to the development of more severe nightmares.

Does Effectiveness of a Brief Substance Use Treatment Depend on PTSD? An Evaluation of Motivational Enhancement Therapy for Active-Duty Army Personnel.

Kaysen, D., Jaffe, A. E., Shoenberger, B., Walton, T. O., Pierce, A. R., & Walker, D. D.

Journal of Studies on Alcohol and Drugs
83(6), 924–933 (2022)

Objective:

Posttraumatic stress disorder (PTSD) with comorbid substance use disorders (SUDs) has been associated with poorer treatment outcomes. The present study examined associations between provisional PTSD at baseline and 3 months with 6-month treatment outcomes from either a one-session motivational enhancement therapy (MET) or education intervention addressing substance use.

Method:

Secondary analyses were conducted on a randomized clinical trial comparing a novel MET intervention to an educational intervention for Army personnel with SUD who were not engaged in SUD treatment ($n = 242$; 92.1% male). We compared three groups with complete data on baseline and 3-month provisional PTSD: individuals without provisional PTSD at baseline ($n = 98$), those with provisional PTSD remitted by 3 months ($n = 42$), and those with provisional PTSD unremitted at 3 months ($n = 53$) on alcohol use frequency, quantity, consequences, and related diagnoses.

Results:

Individuals with unremitted provisional PTSD were at increased risk for moderate/severe alcohol use disorder at 6 months relative to those without baseline provisional PTSD (odds ratio = 4.53, $p = .007$). The effect of MET on drinks per week at 6 months (controlling for baseline) differed with a significant effect of MET for individuals with remitted provisional PTSD (count ratio = 0.41, $p = .005$).

Conclusions:

Both interventions were effective in reducing drinking even for those with provisional PTSD, although, compared with education, MET had slightly better effects on reducing drinking quantity for those with remitted PTSD. Findings suggest that PTSD remission may serve as an early prognostic indicator of long-term alcohol use changes, or

alternatively, delivery of MET during heightened transitory distress may be most effective for reducing alcohol use.

<https://doi.org/10.1016/j.jpsychires.2022.08.001>

Identifying factors associated with elevated suicidal intent among U.S. military veterans.

Brandon Nichter, Peter J. Na, Ian H. Stanley, Brian P. Marx, ... Robert H. Pietrzak

Journal of Psychiatric Research

Volume 155, November 2022, Pages 68-74

Objective

Suicidal intent is a risk factor for engagement in suicidal behavior, use of violent means, and suicide mortality. Yet, scarce research has examined factors associated with suicidal intent among U.S. military veterans, a population at high risk for suicide. This study examined vulnerability factors associated with suicidal intent in a population-based sample of U.S. veterans.

Methods

Data were analyzed from the 2019–2020 National Health and Resilience in Veterans Study, which surveyed a representative sample of 4069 U.S. veterans. Analyses estimated the prevalence of current suicidal intent (i.e., veterans' report that they would likely attempt suicide in the future) and examined factors most strongly associated with suicidal intent.

Results

Forty-nine veterans (1.4%; 95% confidence interval = 1.0–1.8%) reported suicidal intent. Recurrent past-year suicidal ideation (≥ 2 times), low dispositional gratitude, current depression, current insomnia, childhood sexual abuse, and a prior suicide attempt were most strongly associated with suicidal intent (7.1–50.1% of the total explained variance). Veterans with several of these co-occurring factors were at highest risk for suicidal intent; of veterans with 0, ≥ 1 , ≥ 2 , ≥ 3 , and ≥ 4 of these factors, 0.1%, 4.4%, 10.8%, 19.5%, and 28.1% reported suicidal intent, respectively.

Discussion

Specific vulnerability factors, particularly when co-occurring, may increase veterans' intention of attempting suicide. Findings underscore the importance for clinicians to

continuously assess suicidal intent when working with this population, particularly as veterans' reports of suicidal thinking increases.

<https://doi.org/10.1016/j.jpsychires.2022.08.009>

Moral injury and chronic pain in veterans.

Rachel M. Ranney, Shira Maguen, Paul A. Bernhard, Nicholas Holder, ... Aaron I. Schneiderman

Journal of Psychiatric Research

Volume 155, November 2022, Pages 104-111

Highlights

- In a national sample of veterans, betrayal was associated with pain intensity.
- In women veterans, betrayal was associated with joint pain and pain intensity.
- In men veterans, betrayal was not associated with any pain outcome.

Abstract

Posttraumatic stress disorder (PTSD) and chronic pain are highly prevalent and co-morbid among veterans. Moral injury (MI), which results from traumatic experiences that conflict with deeply held moral beliefs, is also associated with pain. However, relationships between different types of exposures to potentially morally injurious events (PMIEs) and pain have not yet been investigated. In the current study, we investigated these relationships between exposure to PMIEs (betrayal, witnessing, and perpetration) and different types of pain (joint pain, muscle pain, and overall pain intensity), while controlling for other relevant variables (including PTSD symptoms, combat exposure, adverse childhood experiences, age, gender, and race/ethnicity). We also examined gender differences in these associations. Participants were 11,871 veterans drawn from a nationwide, population-based survey who self-reported exposure to PMIEs, PTSD symptoms, frequency of adverse childhood experiences, combat exposure, sociodemographic information, past six-month joint pain, past six-month muscle pain, and past week overall pain intensity. Population weighted regression models demonstrated that PMIEs were not significantly associated with joint or muscle pain, but that betrayal was associated with past week overall pain intensity, even when controlling for all other variables. Models investigating men and women separately found that for women, betrayal was associated with joint pain and pain intensity, but for men, betrayal was not associated with any pain outcome. These findings suggest that it

may be especially important to assess betrayal when treating patients with a history of trauma and chronic pain.

<https://doi.org/10.1093/milmed/usac232>

Prospective Associations of Military Discharge Characterization with Post-active Duty Suicide Attempts and Homelessness: Results from the Study to Assess Risk and Resilience in Servicemembers—Longitudinal Study (STARRS-LS).

James A Naifeh, PhD, Vincent F Capaldi, II, MD, Carol Chu, PhD, Andrew J King, MS, Katherine A Koh, MD, Brian P Marx, PhD, Ann Elizabeth Montgomery, PhD, Robert W O'Brien, PhD, Nancy A Sampson, BA, Ian H Stanley, PhD, Jack Tsai, PhD, Dawne Vogt, PhD, Robert J Ursano, MD, Murray B Stein, MD, MPH, Ronald C Kessler, PhD

Military Medicine

Published: 09 August 2022

Introduction

Active duty service members transitioning to civilian life can experience significant readjustment stressors. Over the past two decades of the United States' longest sustained conflict, reducing transitioning veterans' suicidal behavior and homelessness became national priorities. However, it remains a significant challenge to identify which service members are at greatest risk of these post-active duty outcomes. Discharge characterization, which indicates the quality of an individual's military service and affects eligibility for benefits and services at the Department of Veterans Affairs, is a potentially important indicator of risk.

Materials and Methods

This study used data from two self-report panel surveys of the Study to Assess Risk and Resilience in Servicemembers-Longitudinal Study (STARRS-LS) (LS1: 2016-2018, n = 14,508; and LS2: 2018-2019, n = 12,156), which were administered to respondents who previously participated while on active duty in one of the three Army STARRS baseline self-report surveys (2011-2014): the New Soldier Study (NSS), a survey of soldiers entering basic training; All Army Study, a survey of active duty soldiers around the world; and the Pre-Post Deployment Study, a survey of soldiers before and after combat deployment. Human Subjects Committees of the participating institutions approved all recruitment, informed consent, and data collection protocols. We used modified Poisson regression models to prospectively examine the association of

discharge characterization (honorable, general, “bad paper” [other than honorable, bad conduct, dishonorable], and uncharacterized [due to separation within the first 180 days of service]) with suicide attempt (subsample of $n = 4334$ observations) and homelessness (subsample of $n = 6837$ observations) among those no longer on active duty (i.e., separated or deactivated). Analyses controlled for other suicide attempt and homelessness risk factors using standardized risk indices that were previously developed using the LS survey data.

Results

Twelve-month prevalence rates of self-reported suicide attempts and homelessness in the total pooled LS sample were 1.0% and 2.9%, respectively. While not associated with suicide attempt risk, discharge characterization was associated with homelessness after controlling for other risk factors. Compared to soldiers with an honorable discharge, those with a bad paper discharge had an increased risk of homelessness in the total sample (relative risk [RR] = 4.4 [95% CI = 2.3-8.4]), as well as within subsamples defined by which baseline survey respondents completed (NSS vs. All Army Study/Pre-Post Deployment Study), whether respondents had been separated (vs. deactivated), and how much time had elapsed since respondents were last on active duty.

Conclusions

There is a robust association between receiving a bad paper discharge and post-separation/deactivation homelessness. Policies that enhance transition assistance and access to mental healthcare for high-risk soldiers may aid in reducing post-separation/deactivation homelessness among those who do not receive an honorable discharge.

<https://doi.org/10.1080/13811118.2022.2106923>

Suicide Intervention Practices: What Is Being Used by Mental Health Clinicians and Mental Health Allies?

David C. Rozek, Hannah Tyler, Brooke A. Fina, Shelby N. Baker, John C. Moring, Noelle B. Smith, Justin C. Baker, Annabelle O. Bryan, Craig J. Bryan & Katherine A. Dondanville

Archives of Suicide Research
Published online: 09 Aug 2022

Objective

Implementation of evidence-based suicide prevention is critical to prevent death by suicide. Contrary to previously held beliefs, interventions including contracting for safety, no-harm contracts, and no-suicide contracts are not best practices and are considered contraindicated. Little is known about the current use of best practices and contraindicated interventions for suicide prevention in community settings.

Methods

Data were collected from 771 individuals enrolled in a suicide prevention training. Both mental health clinicians (n = 613) and mental health allies (e.g., teachers, first responders) (n = 158) reported which best practices (i.e., safety plan, crisis response plan) and contraindicated interventions (i.e., contracting for safety, no-harm contract, no-suicide contract) they use with individuals who presents with risk for suicide.

Results

The majority of both mental health clinicians (89.7%) and mental health allies (67.1%) endorsed using at least one evidence-based practice. However, of those who endorsed using evidence-based interventions, ~40% of both mental health clinicians and allies endorsed using contraindicated interventions as well.

Conclusion

Contraindicated interventions are being used at high rates and suicide prevention trainings for evidence-based interventions should include a focus on de-implementation of contraindicated interventions. This study examined only a snapshot of what clinicians and allies endorsed using. Additional in depth information about each intervention and when it is used would provide helpful information and should be considered in future studies. Future research is needed to ensure only evidence-based interventions are being used to help prevent death by suicide.

Highlights:

- The majority of both mental health clinicians and mental health allies use evidence-based practices for suicide prevention. This indicates good implementation rates of evidence-based interventions for suicide prevention.
- Approximately 40% of both mental health clinicians and mental health allies who endorsed using evidence-based practices for suicide preventions also endorsed using contraindicated interventions.
- A focus on de-implementation of contraindicated suicide interventions is warranted and should be part of the focus on suicide prevention efforts.

<https://doi.org/10.1177/08862605221109494>

The Effects of Adverse Childhood Experiences and Warfare Exposure on Military Sexual Trauma Among Veterans.

Doucette, C. E., Morgan, N. R., Aronson, K. R., Bleser, J. A., McCarthy, K. J., & Perkins, D. F.

Journal of Interpersonal Violence
First published online August 12, 2022

Military sexual trauma (MST) is a pervasive problem; this study examined the relationship of the precursory traumas of adverse childhood experiences (ACEs) and warfare exposure with MST. Post-9/11 veterans were surveyed at 3 months and at 24 to 30 months post-military separation. Female veterans who experienced at least 1 ACE but no warfare exposure were significantly more likely to receive unwanted sexual attention. Veterans (males and females) experiencing three or more ACEs but no warfare exposure were significantly more likely to receive unwanted sexual attention and contact. Experiencing only warfare exposure was not related to unwanted sexual attention or contact for females; however, a significant interaction was found between combined warfare exposure, ACEs, and MST for males and females. Veterans who reported warfare exposure and one to two or three or more ACEs were more likely to report unwanted sexual attention and/or contact. Exploration of individual ACEs revealed a significant relationship between childhood sexual abuse and unwanted sexual contact. For females, witnessing domestic violence predicted unwanted sexual contact. There was also a significant interaction between childhood sexual abuse and warfare exposure. Females who experienced both childhood sexual abuse and warfare exposure were significantly more likely to receive unwanted sexual attention and unwanted sexual contact. Albeit a small sample, males who experienced both were also significantly more likely to receive unwanted sexual attention. The findings reveal that precursory traumatic experiences in childhood and the interaction of ACEs and warfare exposure during military service can increase the likelihood of unwanted sexual attention and contact. This research further substantiates the need for screening efforts. It also demonstrates the importance of practitioners engaging in trauma-informed care principles and practices to address the residual effects of previous experiences during sexual trauma or mental health treatment efforts.

<https://doi.org/10.1016/j.janxdis.2022.102608>

Incidences of anxiety disorders among active duty service members between 1999 and 2018.

Patricia D. Russell, Jason L. Judkins, Alexis Blessing, Brian Moore, Sandra B. Morissette

Journal of Anxiety Disorders
Volume 91, October 2022, 102608

Purpose

Anxiety disorders can impact the health, performance, and retention of military service members. To inform prevention initiatives and long-term treatment planning, incidence rates across anxiety disorders were evaluated among U.S. active-duty service members over a 20-year period.

Method

Data were extracted from the Defense Medical Epidemiological Database to examine incidence rates of generalized anxiety disorder (GAD), panic disorder (PD), agoraphobia (AG), social anxiety disorder (SAD), obsessive compulsive disorder (OCD), agoraphobia with panic disorder (AWPD), agoraphobia without history of panic disorder (AWOPD), and unspecified anxiety disorder (UAD) among 151,844 service members between 1999 and 2018 in relation to sex, age, race, marital status, military pay grade, service branch.

Results

Incidence rates of anxiety disorders increased significantly over the 20-year period. Anxiety disorder incidence rates ranged widely from 0.01 to 23.70 (per 1000 service members). There were significant differences in observed versus expected diagnostic rates across all demographic variables examined ($p < 0.001$).

Conclusion

Incidence rates varied considerably across the anxiety disorders, with UAD being the highest. These data highlight the importance of health care professionals attending to anxiety disorders, in order to plan for service member needs, develop preventative interventions, address early detection, and deliver treatments to improve combat readiness.

<https://doi.org/10.1093/sleepadvances/zpac024>

The association of polysomnographic sleep on posttraumatic stress disorder symptom clusters in trauma-exposed civilians and veterans.

Janeese A Brownlow, Katherine E Miller, Richard J Ross, Holly Barilla, Mitchel A Kling, Seema Bhatnagar, Thomas A Mellman, Philip R Gehrman

SLEEP Advances

Volume 3, Issue 1, 2022, zpac024

Study Objectives

Self-reported sleep disturbance has been established as a risk factor and predictor for posttraumatic stress disorder (PTSD); however, less is known about the relationship between objective sleep and PTSD symptom clusters, and the specific role of hyperarousal. The present study examined the relationships between sleep continuity and architecture on PTSD symptom clusters.

Methods

Participants underwent two in-laboratory sleep studies to assess sleep continuity and architecture. They also completed the Clinician-Administered PTSD-IV scale and the Structured Clinical Interview for the DSM-IV to assess for PTSD diagnosis and other psychiatric disorders.

Results

Sleep continuity (i.e. total sleep time, sleep efficiency percent, wake after sleep onset, sleep latency) was significantly related to PTSD Cluster B (reexperiencing) symptom severity ($R^2 = .27$, $p < .001$). Sleep architecture, specifically Stage N1 sleep, was significantly associated with PTSD Cluster B ($t = 2.98$, $p = .004$), C (Avoidance; $t = 3.11$, $p = .003$), and D (Hyperarousal; $t = 3.79$, $p < .001$) symptom severity independently of Stages N2, N3, and REM sleep. REM sleep variables (i.e. REM latency, number of REM periods) significantly predicted Cluster D symptoms ($R^2 = .17$, $p = .002$).

Conclusions

These data provide evidence for a relationship between objective sleep and PTSD clusters, showing that processes active during Stage N1 sleep may contribute to PTSD symptomatology in civilians and veterans. Further, these data suggest that arousal

mechanisms active during REM sleep may also contribute to PTSD hyperarousal symptoms.

This paper is part of the War, Trauma, and Sleep Across the Lifespan Collection. This collection is sponsored by the Sleep Research Society.

<https://doi.org/10.1037/ser0000697>

Telehealth use and COVID-19: Assessing older veterans' perspectives.

Weldon, A. L., & Hagemann, L.

Psychological Services
Advance online publication

Video telehealth (VT) technology has increased mental health treatment access for veterans. Although veterans report high levels of satisfaction with VT, age disparities remain. Older adults in the general population face several barriers to using new technology, reflecting a “digital divide” between age cohorts. This trend continued during the COVID-19 pandemic, as older veterans were less likely to use VT—and more likely to use the telephone—for mental health visits than younger veterans. Although VT use has grown considerably during the pandemic, few studies have investigated older veterans’ VT use relative to telephone services. Older veterans (aged 65 +) who completed at least one telephone or VT visit in an outpatient geriatric mental health clinic during the first 6 months of COVID-19 received a telehealth satisfaction questionnaire via U.S. mail. While respondents (N = 66) reported moderate levels of satisfaction with VT and telephone appointments, there was less interest in using telehealth exclusively postpandemic. Fewer telephone users reported having access to email and internet and greater barriers to using VT. Veteran rurality was not associated with access to internet or email and did not affect telehealth ratings. Analyses of treatment engagement showed that the rate of missed appointments did not change during COVID-19. Post hoc qualitative analysis of open-ended comments revealed themes of barriers and needs, as well as positive and negative telehealth experiences that were consistent with quantitative findings. Despite experiencing barriers to using VT, older veterans identified potential benefits and solutions to enhance participation across the older adult population. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

<https://doi.org/10.1016/j.smr.2022.101661>

Observational and experimental studies on sleep duration and aggression: A systematic review and meta-analysis.

M.M. Van Veen, M. Lancel, O. Şener, R.J. Verkes, ... F. Rutters

Sleep Medicine Reviews
Volume 64, August 2022, 101661

Short sleep duration has been linked to higher levels of aggression. To synthesize all available research on this association, a systematic review and meta-analysis was performed. We included observational and experimental studies, using various measures of sleep duration and aggression. Eighty eligible papers were identified, describing 82 studies comprising a total number of 76,761 participants. Meta-analysis of results was possible for 60 studies. Pooled observational results on the association between sleep duration and aggression showed a correlation estimate of -0.16 (95%CI $-0.19, -0.12$; $I^2 = 83.9\%$) and an odds ratio estimate of 1.83 (95%CI $1.47, 2.28$; $I^2 = 0.0\%$). For experimental studies, the pooled Standardized Mean Difference after manipulation of sleep duration was -0.37 (95%CI $-0.80, 0.05$; $I^2 = 89.05\%$) for controlled designs and -0.34 (95%CI $-0.54, -0.14$; $I^2 = 89.05\%$) for pre-post designs. Effect estimates were stronger for individuals with psychological vulnerabilities and younger persons. Exclusion of studies with low methodological quality strengthened the effect estimate in experimental but not in observational studies. To conclude, short sleep duration is associated with higher levels of aggression, with observational research strongly supporting the association and experimental studies providing mixed results. More well-designed prospective and experimental studies are needed to establish causality and optimize treatment, especially for individuals with psychological vulnerabilities.

<https://doi.org/10.1016/j.smr.2022.101646>

Effects of cognitive behavioral therapy for insomnia (CBT-I) on quality of life: A systematic review and meta-analysis.

Zainab Alimoradi, Elahe Jafari, Anders Broström, Maurice M. Ohayon, ... Amir H. Pakpour

The effects of cognitive behavioral therapy for insomnia (CBT-I) have consistently been shown to improve insomnia symptoms and other health-related outcomes, but the effects on QoL have been inconsistent. Many factors including the type CBT-I delivery and type of instrument used to assess QoL make the topic complex. The present systematic review and meta-analysis synthesized the evidence of CBT-I efficacy on QoL outcomes across different populations, delivery modes, and methodological aspects.

Following the guidelines on preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), a literature search was conducted through PubMed, Web of Science, Scopus, and PsycINFO using keywords from relevant MeSH terms based on PICOS (Participants, Intervention, Comparison, Outcome and Study) criteria. Clinical trials investigating the effect of CBT-I as an intervention on QoL with any kind of control group were eligible if they reported mean scores and variation of QoL. Meta-analysis using a random-effect model was conducted to calculate the standardized mean differences (SMDs) in a set including all identified studies, as well as in three sub-sets: face-to-face CBT-I using randomized controlled trials (RCTs), online CBT-I using RCTs, and one-group pre- and post-treatment design.

A total of 24 studies comprising 1977 participants (808 in an intervention group) from 12 countries were eligible for meta-analysis. The overall pooled estimate of SMD of QoL when all 24 studies were included was 0.47 (95% CI: 0.22; 0.72; $I^2 = 84.5\%$; $\tau^2 = 0.31$; $p < 0.001$). The overall pooled estimate of SMD of QoL was 0.46 (95% CI: 0.01–0.90; $I^2 = 87.5\%$; $\tau^2 = 0.48$, $p < 0.001$) for intervention groups with face-to-face CBT-I compared to controls; 0.47 (95% CI: 0.02–0.92; $I^2 = 88.3\%$; $\tau^2 = 0.36$; $p = 0.04$) for intervention groups with digital CBT-I compared to controls, and 0.46 (95% CI: 0.12–0.80; $I^2 = 52.9\%$; $\tau^2 = 0.07$; $p = 0.08$) for one-group pre- and post-comparison using CBT-I intervention compared to baseline. Moreover, effects of CBT-I on QoL were different across populations (pooled SMD = 0.59 for patients with insomnia; 0.29 for patients with insomnia comorbid with another major disorder; and 0.48 for other conditions) and types of QoL instruments (pooled SMD = 0.36 for disease-specific QoL instrument not on insomnia, 0.43 for generic QoL instrument, and 0.67 for a single-QoL-item instrument). The probability of publication bias was ruled out in overall and design specific sub-group analysis based on funnel plot and Egger's test.

In conclusion, this meta-analysis confirmed a moderate, overall effect of CBT-I in improving QoL. However, due to small power and heterogeneity, future studies are needed to better explore the impact of moderating factors such as mode of delivery and type of QoL measure for assessment used.

<https://doi.org/10.1093/milmed/usac242>

Baseline Characteristics and Their Associations with Body Composition of Active-Duty Service Members Enrolling in a Randomized Controlled Trial of a Weight Management Program.

Jessica L Morse, PhD, Cara Dochat, MS, Jennalee S Wooldridge, PhD, Matthew S Herbert, PhD, Karla Materna, PhD, Brian H Blanco, LCSW, Jeffrey Hernandez, Niloofer Afari, PhD

Military Medicine

Published: 12 August 2022

Introduction

Increasing rates of overweight and obesity among military service members (SMs) necessitate the implementation of weight management interventions. Evidence for the effectiveness of military weight management interventions is mixed. Effectiveness may be impacted by individual sociodemographic, psychiatric, psychological, and behavioral factors. Baseline data from SMs who were overweight/obese or at risk of failing body composition or physical fitness tests and enrolling in a weight management randomized controlled trial were used to examine (1) individual characteristics of this sample as a whole and by gender and (2) relationships between those characteristics and body composition metrics that are targeted by military weight management interventions. Understanding these relationships may inform intervention approaches.

Materials and Methods

Active duty SMs (N = 178) who enrolled in a randomized clinical trial of the Navy's weight management program "ShipShape" at a large military hospital provided data at their baseline visit. Because of gender differences in average body fat percentage (BF%) and underrepresentation of women SMs in research, independent samples t-tests and chi-square analyses were used to examine differences between male and female SMs across study variables. Multiple regression analyses were used to examine relationships of sociodemographic, psychiatric, psychological, and behavioral variables

with body composition metrics, including weight, body mass index (BMI), BF%, and waist circumference (WC).

Results

Participants (61% female; Mage = 29.66 ± 6.92 years; 59.60% White) had an average BMI in the “obese” range (MBMI = 33.1 ± 3.9 kg/m²). Female participants had significantly higher BF% and significantly lower weight and WC than male participants. Compared to male participants, females reported significantly higher rates of pain and headache diagnoses, lifetime diagnosis of an anxiety disorder, lifetime treatment for a mental health concern, lifetime experiences of sexual trauma/harassment and military sexual trauma, and higher current anxiety and post-traumatic stress disorder symptoms. Across all SMs, body composition metrics were significantly associated with several demographic variables, including gender, age, marital status, Asian race, and Black race. Higher weight-related stigma was significantly associated with higher weight, BMI, BF%, and WC. Additionally, more emotional eating was significantly associated with higher BF%, and higher weight-loss confidence was significantly associated with higher BMI. Sociodemographic, psychiatric, psychological, and behavioral variables predicted the greatest variance in BF% compared to other body composition metrics evaluated.

Conclusions

Participants in this study were more likely to be female, relatively young members of the Navy with overweight/obesity, who endorsed pain-related medical conditions, probable mental health conditions, and traumatic experiences at relatively high rates. Despite high endorsement of anxiety, depression, and post-traumatic stress disorder symptoms in this group, only weight-related stigma consistently emerged as significantly associated with body composition metrics. Regression results varied by body composition metric, with the most variance explained in BF%, suggesting that BF% may relate most strongly to sociodemographic, psychiatric, psychological, and behavioral variables associated with weight management. These results highlight the need for weight management programs that address weight-related stigma and mental health concerns of SMs to maximize the effectiveness of intervention efforts.

<https://doi.org/10.1017/S0033291722002331>

Telehealth v. face-to-face provision of care to patients with depression: a systematic review and meta-analysis.

Scott, A., Clark, J., Greenwood, H., Krzyzaniak, N., Cardona, M., Peiris, R., . . . Glasziou, P. (2022).

Psychological Medicine
(2022); 52(14), 2852-2860

Ensuring continuity of care for patients with major depressive disorders poses multiple challenges. We conducted a systematic review and meta-analysis of randomised controlled trials comparing real-time telehealth to face-to-face therapy for individuals with depression. We searched Medline, Embase, and Cochrane Central (to November 2020), conducted a citation analysis (January 2021), and searched clinical trial registries (March 2021). We included randomised controlled trials comparing similar or identical care, delivered via real-time telehealth (phone, video) to face-to-face. Outcomes included: depression severity, quality of life, therapeutic alliance, and care satisfaction. Where data were sufficient, mean differences were calculated. Nine trials (1268 patients) were included. There were no differences between telehealth and face-to-face care for depression severity at post-treatment (SMD -0.04 , 95% CI -0.21 to 0.13 , $p = 0.67$) or at other time points, except at 9 months post-treatment (SMD -0.39 , 95% CI -0.75 to -0.02 , $p = 0.04$). One trial reported no differences in quality-of-life scores at 3- or 12-months post-treatment. One trial found no differences in therapeutic alliance at weeks 4 and 14 of treatment. There were no differences in treatment satisfaction between telehealth and face-to-face immediately post-treatment (SMD -0.14 , 95% CI -0.56 to 0.28 , $p = 0.51$) or at 3 or 12-months. Evidence suggests that for patients with depression or depression symptoms, the provision of care via telehealth may be a viable alternative to the provision of care face-to-face. However, additional trials are needed with longer follow-up, conducted in a wider range of settings, and with younger patients.

<https://doi.org/10.1016/j.cgh.2022.08.005>

The Prevalence, Humanistic Burden, and Health Care Impact of Irritable Bowel Syndrome Among United States Veterans.

Andrea Shin, Huiping Xu, Thomas F. Imperiale

Clinical Gastroenterology and Hepatology
Available online 11 August 2022

Background & Aims

Irritable bowel syndrome (IBS) in veterans is understudied. This study sought to investigate (1) prevalence of IBS; (2) phenotypic, environmental, and psychosocial factors associated with IBS; and (3) associations of IBS with health-related quality of life and health care use.

Methods

From June 2018 to April 2020, we invited veterans to complete the Rome IV IBS questionnaire; Short Form-12; posttraumatic stress disorder (PTSD) checklist; Hospital Anxiety and Depression Scale; and questionnaires on general health, antibiotic use, infectious enteritis (IE), and health care use.

Results

Among 858 veteran respondents, 244 (28.4%) met Rome IV IBS criteria (47.5% IBS with diarrhea, 16.8% IBS with constipation, 33.6% mixed IBS). IBS was associated with greater anxiety and depression and lower quality of life (all $P < .001$). Provisional PTSD, IE, and bowel problems after antibiotics were more common in IBS (all $P < .001$) as were multiple doctor visits ($P < .01$) and hospitalizations ($P = .04$). Comparisons across non-IBS and IBS subgroups revealed overall associations of psychological comorbidities ($P < .01$), multiple doctor visits ($P < .01$), hospitalizations ($P = .03$), IE ($P < .01$), and bowel problems after IE ($P = .03$) or antibiotics ($P < .01$) with subgroup. Highest anxiety and depression scores, PTSD, multiple doctor visits, hospitalizations, and bowel problems after IE were observed in IBS with constipation. In adjusted analyses, IBS was associated (all $P < .001$) with anxiety (odds ratio [OR], 3.47), depression (OR, 2.88), lower quality of life, PTSD (OR, 3.09), IE (OR, 4.44), bowel problems after antibiotics (OR, 1.84), multiple doctor visits (OR, 2.08), and hospitalizations (OR, 1.78).

Conclusions

IBS is prevalent among veterans and has a measurable impact on individuals and health care resources. Veterans with IBS may experience significant psychological impairment.

<https://doi.org/10.1016/j.ssmph.2022.101201>

Strengths and vulnerabilities: Comparing post-9/11 U.S. veterans' and non-veterans' perceptions of health and broader well-being.

Dawne Vogt, Shelby Borowski, Shira Maguen, John R. Blosnich, ... Aaron Schneiderman

SSM - Population Health

Volume 19, September 2022, 101201

Highlights

- Results revealed unique strengths for post-9/11 U.S. veterans compared to non-veterans.
- Veterans reported poorer health status but more positive health behaviors.
- Veterans endorsed better social well-being on some outcomes.
- Results highlight the value of assessing multiple aspects of veterans' health and well-being.
- Findings can be used to correct inaccurate stereotypes about U.S. veterans.

Abstract

Background

Prior research has examined how the post-military health and well-being of both the larger veteran population and earlier veteran cohorts differs from non-veterans. However, no study has yet to provide a holistic examination of how the health, vocational, financial, and social well-being of the newest generation of post-9/11 U.S. military veterans compares with their non-veteran peers. This is a significant oversight, as accurate knowledge of the strengths and vulnerabilities of post-9/11 veterans is required to ensure that the needs of this population are adequately addressed, as well as to counter inaccurate veteran stereotypes.

Methods

Post-9/11 U.S. veterans' (N = 15,160) and non-veterans' (N = 4,533) reported on their health and broader well-being as part of a confidential web-based survey in 2018. Participants were drawn from probability-based sampling frames, and sex-stratified weighted logistic regressions were conducted to examine differences in veterans' and non-veterans' reports of health, vocational, financial, and social outcomes.

Results

Although both men and women post-9/11 veterans endorsed poorer health status than non-veterans, they reported greater engagement in a number of positive health behaviors (healthy eating and exercise) and were more likely to indicate having access to health care. Veterans also endorsed greater social well-being than non-veterans on several outcomes, whereas few differences were observed in vocational and financial well-being.

Conclusion

Despite their greater vulnerability to experiencing health conditions, the newest generation of post-9/11 U.S. veterans report experiencing similar or better outcomes than non-veterans in many aspects of their lives. Findings underscore the value of examining a wider range of health and well-being outcomes in veteran research and highlight a number of important directions for intervention, public health education, policy, and research related to the reintegration of military veterans within broader civilian society.

Links of Interest

Army creates new legal office for murder, rape and other serious crime

<https://www.militarytimes.com/news/your-army/2022/12/05/army-creates-new-legal-office-for-murder-rape-and-other-serious-crime/>

Canada to end military involvement in sexual misconduct probes

<https://www.aljazeera.com/news/2022/12/13/canada-ends-military-involvement-in-probes-into-sexual-misconduct>

Study recruits troops to see how sleep deprivation affects the brain

<https://www.militarytimes.com/news/your-military/2022/12/06/study-recruits-troops-to-see-how-sleep-deprivation-affects-the-brain/>

How does military life affect teens? Landmark study aims to find out.

<https://www.militarytimes.com/news/your-military/2022/12/06/how-does-military-life-affect-teens-landmark-study-aims-to-find-out/>

In saving a Peruvian wildcat, this soldier learned how to save himself

<https://www.militarytimes.com/off-duty/military-culture/2022/12/06/in-saving-a-peruvian-wildcat-this-soldier-learned-how-to-save-himself/>

Too many service members leave the military without career counseling, GAO finds

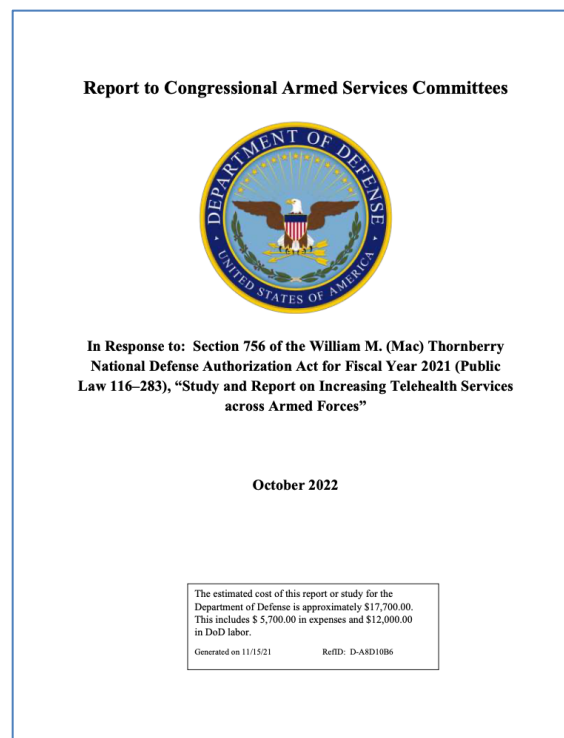
<https://www.stripes.com/theaters/us/2022-12-13/military-separation-report-8404000.html>

- [Servicemembers Transitioning to Civilian Life: DOD Can Better Leverage Performance Information to Improve Participation in Counseling Pathways](#)

Resource of the Week – [Report to Congressional Armed Services Committees: In Response to: Section 756 of the William M. \(Mac\) Thornberry National Defense Authorization Act for Fiscal Year 2021 \(Public Law 116–283\), “Study and Report on Increasing Telehealth Services across Armed Forces”](#)

From cover letter:

The report provides required information on the vulnerabilities and limitations of telehealth, the essential supporting technologies, a technology roadmap for operational telehealth usage, and an analysis of telehealth capabilities that support medical readiness. The first study in the report features an analysis of telehealth capabilities in the Military Health System (MHS), including essential supporting technologies and limitations or vulnerabilities for each. The second study in the report outlines the technology roadmap, which breaks capabilities down into use cases, process flow, and operational technology requirements. This report also provides an analysis of telehealth policies, programs, and the concept of operations, strategic plans, policy limitations and challenges such as funding and ethics. The MHS will further expand and support the use of virtual health capabilities, fully integrated into the overall healthcare delivery model, in support of MHS goals and priorities.



Shirl Kennedy, BS, MA

Research Editor

Henry M. Jackson Foundation employee collaborating with Center for Deployment
Psychology

Office: (727) 537-6160

Email: shirley.kennedy.ctr@usuhs.edu