Research Update -- March 18, 2021

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https://doi.org/10.1136/bmjilitary-2020-001770

Family and occupational functioning following military trauma exposure and moral injury.

Williamson, V., Murphy, D., Stevelink, S. A., Jones, E., Allen, S., & Greenberg, N.

BMJ Military Health
2021 Mar 8;bmjmilitary-2020-001770

Introduction:
Evidence is growing regarding the impact of potentially morally injurious events (PMIEs) on mental health; yet how moral injury may affect an individual's occupational and familial functioning remains poorly understood.

Method:
Thirty male veterans who reported exposure to either traumatic or morally injurious events and 15 clinicians were recruited for semi-structured qualitative interviews.

Results:
While many veterans experienced psychological distress postevent, those who experienced PMIEs especially reported social withdrawal and engagement in aggressive, risk-taking behaviours. This was highly distressing for family members and created a tense, volatile home and workplace environment that was difficult for others to navigate. Following PMIEs, employment could be used as a cognitive avoidance strategy or as a means to atone for transgressive acts. In cases of moral injury, clinicians considered that targeted support for spouses and accessible guidance to help children to better understand how their military parent may be feeling would be beneficial.
Conclusions:
This study provides some of the first evidence of the pervasive negative impact of PMIEs on veterans’ familial and occupational functioning. These findings highlight the need to comprehensively screen for the impact of moral injury on daily functioning in future studies that goes beyond just an assessment of psychological symptoms.

https://doi.org/10.1016/j.nurpra.2021.02.004

Options for Veterans Experiencing Sleep Impairment.

Wanda Hilliard, Margit B. Gerardi, Rosalinda R. Jimenez

The Journal for Nurse Practitioners
Available online 9 March 2021

Highlights
● Guidelines have addressed veterans’ preferences for care beyond the traditional medicine-based allopathic approaches.
● Botanicals, such as lavender, chamomile, and valerian may aid in sleep.
● Weighted blankets induce deep pressure stimulation for relaxation.

Abstract
This article provides an overview of methods to evaluate and manage sleep disorders in veterans, in particular, chronic insomnia. Treatment of sleep disorders may present a challenge for nurse practitioners (NPs) caring for veterans. Evidence-based guidance for pharmacotherapy, psychotherapy and some alternative and complementary modalities have shown efficacy in managing sleep disorders. It is suggested NPs consider utilize the Department of Veteran Affairs patient-centered care clinical practice protocols with consideration of a patient-centered approach when evaluating patients and determining modalities for treatment of sleep disorders.

https://doi.org/10.5664/jcsm.9222

Perceived benefits of a brief acupuncture for sleep disturbances in post-deployment military service members.
STUDY OBJECTIVES:
The purpose of this study was to describe the perceived benefits of a manual standardized stress acupuncture (MSSA) for sleep disturbances (SD) in service members with deployment exposure.

METHODS:
This qualitative study was imbedded in a two-arm randomized controlled trial, mixed-methods research that evaluated the effect of weekly MSSA for four weeks as an adjunct treatment with an abbreviated cognitive behavioral therapy for insomnia (CBTi) for SD in service members. Participants were randomized to either the experimental group (CBTi and MSSA) and control group (CBTi only). CBTi consisted of one group psychotherapy for 60 minutes, a follow-up telephone therapy for 30 minutes, and additional four 30-minute follow-up sessions via telephone. Participants provided written journal entries by answering five open-ended questions about their treatment experiences at week five during the posttreatment assessment. Journal log entries were transcribed verbatim in the Dedoose software. A thematic content analysis method was used to code emerging themes.

RESULTS:
Three overarching categories were found from the qualitative data: personal challenges in implementing the CBTi sleep strategies, no perception of improvement from treatment, and perceived benefits of treatment. The CBTi/MSSA group reported greater benefits in sleep and in other life areas including mental, physical, and social functioning using thematic content analysis.

CONCLUSIONS:
Findings of this study showed greater improvements in participants’ sleep, mood, physical health, and occupational and social functioning after receiving the combination of CBTi and MSSA. Future research that investigates the long-term effects of CBTi and MSSA may be beneficial among post-deployment service members.
The Military Service Sleep Assessment: an instrument to assess factors precipitating sleep disturbances in U.S. military personnel.

Vincent Mysliwiec, MD, Kristi E. Pruiksma, PhD, Matthew S. Brock, MD, Casey Straud, PsyD, Daniel J. Taylor, PhD, Shana Hansen, MD, Shannon N. Foster, DO, Kelsi Gerwell, PhD, Brian A. Moore, PhD, F. Alex Carrizales, BA, Stacey Young-McCaughan, RN, PhD, Robert Vanecek, PhD, Jim Mintz, PhD, Alan L. Peterson, PhD, on behalf of the STRONG STAR Consortium

Journal of Clinical Sleep Medicine
Published Online: March 8, 2021

STUDY OBJECTIVES:
Military personnel frequently experience sleep difficulties, but little is known regarding which military or life events most impact their sleep. The Military Service Sleep Assessment (MSSA) was developed to assess the impact of initial military training, first duty assignment, permanent change of station, deployments, redeployments, and stressful life events on sleep. This study presents an initial psychometric evaluation of the MSSA and descriptive data in a cohort of service members.

METHODS:
The MSSA was administered to 194 service members in a military sleep disorders clinic as part of a larger study.

RESULTS:
Average sleep quality on the MSSA was 2.14 (on a Likert scale, with “1” indicating “low” and “5” indicating “high” sleep quality), and 72.7% (n = 140) rated their sleep quality as “low” to “low average.” The events most reported to negatively impact sleep were stressful life events (41.8%) followed by deployments (40.6%). Military leadership position (24.7%) and birth/adoption of a child (9.7%) were the most frequently reported stressful life events to negatively impact sleep. There were no significant differences in current sleep quality among service members with a history of deployment compared to service members who had not deployed.

CONCLUSIONS:
The MSSA is the first military-specific sleep questionnaire. This instrument provides insights into the events during a service member’s career, beyond deployments, which precipitate and perpetuate sleep disturbances and likely chronic sleep disorders.
Further evaluation of the MSSA in non-treatment-seeking military populations and veterans is required.

https://doi.org/10.1007/s11469-021-00508-z

Military Veterans’ Psychological Distress Associated with Problematic Pornography Viewing.

Borgogna, N.C., Kraus, S.W. & Grubbs, J.B.

International Journal of Mental Health and Addiction
Published 09 March 2021

Problematic pornography use represents a common feature reported by those with compulsive sexual behavior disorder. While prior research suggests US military veterans may experience disproportional rates of problematic pornography use, few comparative studies exist. Moreover, no measurement invariance analyses between veterans and non-veterans exist on measures designed to assess problematic pornography use. The purposes of the present report were to explore whether differences exist between veteran and non-veteran men on indices of problematic pornography use, determine whether veteran status is associated with an exacerbation of psychological distress in conjunction with problematic pornography use, and establish measurement invariance psychometric data between veteran and non-veteran men on the Brief Pornography Screen (Kraus et al., 2020). We analyzed data drawn from a nationally representative panel of men from the USA (N = 658 non-veterans, N = 186 veterans). When adjusting for age, veteran men experienced significantly more problematic pornography use compared to non-veteran men. A substantial moderation effect was also evident, with veterans experiencing significantly more psychological distress associated with their problematic pornography use (β = .65) compared to non-veterans (β = .29), while adjusting for age and pornography use frequency. The Brief Pornography Screen demonstrated residual invariance (i.e., measurement equivalence of factor structure, loadings, intercepts, and errors) between veteran and non-veteran men. Clinicians working with veterans should explore how pornography use is related to their mental health. The Brief Pornography Screen is an effective tool to assess problematic pornography viewing in veteran and non-veteran men.
But how many push-ups can she do? The influence of sexism on peer ratings in a military setting.

HS Schaefer, KA Bigelman, NH Gist, RM Lerner

Personality and Individual Differences
Volume 177, July 2021

Highlights
● We tested sexism's impact on ratings of gender-linked traits in male cadets.
● Ratings obeyed gender roles and hostile sexism potentiated rating other men higher.
● Different traits predicted scores of men vs. women; female fitness was more important.
● Hostile sexism shifted attention toward women's push-ups and prosocial behavior.
● Spotlighting different traits by gender is a mechanism of confirmation bias.

Abstract
Perceived gender differences remain salient in occupational settings and biases that arise maintain inequalities. We examined rater behavior of male military cadets to test how hostile sexism impacted occupationally-relevant attributions, namely, perception of peers' physical fitness, social skill, and military demeanor, items from a larger rating system and previously linked to gender bias. Linear mixed models determined how ratings were influenced by raters' own beliefs or performance, ratee performance, and whether these relationships differed by ratee gender (N = 2520 raters and 4154 ratees). Men with sexist beliefs rated women lower on military demeanor and physical fitness. Sexism was further associated with rating women's physical fitness, more so than other men's, according to push-up scores, suggesting sexist men “keep track” of women's upper body capabilities. Physical fitness scores were positively related to military demeanor rating for women but unrelated to men's score, regardless of rater's sexism. Overall, ratings were associated with different performance characteristics for men vs. women, especially for physical abilities, suggesting a mechanism for expression of gender bias in a field setting.

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Alcohol misuse among older military veterans: an intersectionality theory perspective.

David L. Albright, Justin McDaniel, Zainab Suntai & Juliane Wallace

Journal of Addictive Diseases
Published online: 12 Mar 2021

Background
Alcohol misuse among older adults is an emerging public health issue. Older veterans are particularly at risk of developing substance use dependency due to the enduring impacts of military service. The purpose of this study was to test the theory of intersectionality on alcohol misuse by veteran status and age, veteran status and sex, and veteran status and race.

Methods
Combined data from the 2016, 2017, and 2018 Brief Risk Factor Resilience Survey (BRFSS) from the Centers for Disease Control and Prevention (CDC) were used in this cross-sectional study. The BRFSS is conducted annually with adults via landline or cellular telephones in all 50 states in the United States, as well as in the District of Columbia, Puerto Rico, and Guam. Alcohol misuse among individuals aged 65+ was examined by veteran status and the interaction between age, race, and sex using survey-weighted logistic regression models.

Results
Results show no interaction between veteran status and age or sex. For the interaction between veteran status and race, significant disparities were found. Black/Other race veterans were significantly more likely to engage in binge drinking and heavy drinking compared to nonveterans of the same race, White veterans, and White nonveterans.

Conclusion
Older veterans who are also Black, Indigenous and/or people of color (BIPOC) are at great risk of engaging in alcohol misuse due to the combined stressors from their intersectional identities. Interventions targeting this population should consider the historical, cultural, and systemic factors that contribute to a disproportionally higher rate of binge drinking and heavy drinking among BIPOC veterans.
Subgroups of Comorbid PTSD and AUD in U.S. Military Veterans Predict Differential Responsiveness to Two Integrated Treatments: A Latent Class Analysis.

KE Panza, AC Kline, GJ Norman, M Pitts, SB Norman

Journal of Psychiatric Research
Available online 13 March 2021

Highlights
- Veterans with PTSD/AUD received integrated coping skills or exposure therapy.
- Latent class analysis explored subgroups of comorbid PTSD/AUD.
- PTSD/AUD subgroups differed based on PTSD severity and AUD-related impairment.
- PTSD/AUD subgroups moderated treatment response to integrated interventions.

Abstract
Posttraumatic stress disorder (PTSD) and alcohol use disorder (AUD) frequently co-occur. Integrated treatments are effective, but not all patients respond and predicting outcome remains difficult. In this study, latent class analysis (LCA) identified symptom-based subgroups of comorbid PTSD/AUD among 119 veterans with PTSD/AUD from a randomized controlled trial of integrated exposure therapy (I-PE) versus integrated coping skills therapy (I-CS). Multilevel models compared subgroups on PTSD severity and percentage of heavy drinking days at post-treatment and 3- and 6-month follow-up. LCA revealed three subgroups best fit the data: Moderate PTSD/Low AUD Impairment (21%), High PTSD/High AUD Impairment (48%), and Low PTSD/High AUD Impairment (31%). There was a three-way interaction between time, treatment condition, and subgroup in predicting PTSD outcomes (p < .05). For the Moderate PTSD/Low AUD Impairment class, outcomes at post-treatment and 3-months were similar (ds = 0.17, 0.55), however I-PE showed greater reductions at 6-months (d = 1.36). For the High PTSD/High AUD Impairment class, I-PE demonstrated better post-treatment (d = 0.83) but comparable follow-up (ds = -0.18, 0.49) outcomes. For the Low PTSD/High AUD Impairment class, I-PE demonstrated stronger outcomes at every timepoint (ds = 0.82–1.15). Heavy drinking days declined significantly through follow-up, with an effect of subgroup, but not treatment, on timing of response. This was the first study modeling how PTSD and AUD symptoms might cluster together in a treatment sample of veterans.
with PTSD/AUD. Symptom-based subgroups show promise in helping understand variability in treatment response among patients with PTSD/AUD and deserve further study.

https://doi.org/10.1176/appi.ps.202000214

Reconciling Statistical and Clinicians’ Predictions of Suicide Risk.


Psychiatric Services
Published Online:11 Mar 2021

Statistical models, including those based on electronic health records, can accurately identify patients at high risk for a suicide attempt or death, leading to implementation of risk prediction models for population-based suicide prevention in health systems. However, some have questioned whether statistical predictions can really inform clinical decisions. Appropriately reconciling statistical algorithms with traditional clinician assessment depends on whether predictions from these two methods are competing, complementary, or merely duplicative. In June 2019, the National Institute of Mental Health convened a meeting, “Identifying Research Priorities for Risk Algorithms Applications in Healthcare Settings to Improve Suicide Prevention.” Here, participants of this meeting summarize key issues regarding the potential clinical application of suicide prediction models. The authors attempt to clarify the key conceptual and technical differences between traditional risk prediction by clinicians and predictions from statistical models, review the limited evidence regarding both the accuracy of and the concordance between these alternative methods of prediction, present a conceptual framework for understanding agreement and disagreement between statistical and clinician predictions, identify priorities for improving data regarding suicide risk, and propose priority questions for future research. Future suicide risk assessment will likely combine statistical prediction with traditional clinician assessment, but research is needed to determine the optimal combination of these two methods.
Suicide Risk and Addiction: The Impact of Alcohol and Opioid Use Disorders.

MM Rizk, S Herzog, S Dugad, B Stanley

Current Addiction Reports
Published 14 March 2021

Purpose of Review
Suicide is a major public health concern and a leading cause of death in the US. Alcohol and opioid use disorders (AUD/OUD) significantly increase risk for suicidal ideation, attempts, and death, and are the two most frequently implicated substances in suicide risk. We provide a brief overview of shared risk factors and pathways in the pathogenesis of AUD/OUD and suicidal thoughts and behaviors. We also review clinical recommendations on inpatient care, pharmacotherapy, and psychotherapeutic interventions for people with AUD/OUD and co-occurring suicidal ideation and behavior.

Recent Findings
Among people with an underlying vulnerability to risk-taking and impulsive behaviors, chronic alcohol intoxication can increase maladaptive coping behaviors and hinder self-regulation, thereby increasing the risk of suicide. Additionally, chronic opioid use can result in neurobiological changes that lead to increases in negative affective states, jointly contributing to suicide risk and continued opioid use. Despite significantly elevated suicide risk in individuals with AUD/OUD, there is a dearth of research on pharmacological and psychosocial interventions for co-occurring AUD/OUD and suicidal ideation and behavior.

Summary
Further research is needed to understand the effects of alcohol and opioid use on suicide risk, as well as address notable gaps in the literature on psychosocial and pharmacological interventions to lower risk for suicide among individuals with AUD/OUD.
The short-term impact of 3 smoked cannabis preparations versus placebo on PTSD symptoms: A randomized cross-over clinical trial.

Marcel O. Bonn-Miller, Sue Sisley, Paula Riggs, Berra Yazar-Klosinski, Julie B. Wang, Mallory J. E. Loflin, Benjamin Shechet, Colin Hennigan, Rebecca Matthews, Amy Emerson, Rick Doblin

PLoS ONE
Published: March 17, 2021

Importance
There is a pressing need for development of novel pharmacology for the treatment of Posttraumatic Stress Disorder (PTSD). Given increasing use of medical cannabis among US military veterans to self-treat PTSD, there is strong public interest in whether cannabis may be a safe and effective treatment for PTSD.

Objective
The aim of the present study was to collect preliminary data on the safety and potential efficacy of three active concentrations of smoked cannabis (i.e., High THC = approximately 12% THC and < 0.05% CBD; High CBD = 11% CBD and 0.50% THC; THC+CBD = approximately 7.9% THC and 8.1% CBD, and placebo = < 0.03% THC and < 0.01% CBD) compared to placebo in the treatment of PTSD among military veterans.

Methods
The study used a double-blind, cross-over design, where participants were randomly assigned to receive three weeks of either active treatment or placebo in Stage 1 (N = 80), and then were re-randomized after a 2-week washout period to receive one of the other three active treatments in Stage 2 (N = 74). The primary outcome measure was change in PTSD symptom severity from baseline to end of treatment in Stage 1.

Results
The study did not find a significant difference in change in PTSD symptom severity between the active cannabis concentrations and placebo by the end of Stage 1. All three active concentrations of smoked cannabis were generally well tolerated.

Conclusions and relevance
The present study is the first randomized placebo-controlled trial of smoked cannabis
for PTSD. All treatment groups, including placebo, showed good tolerability and significant improvements in PTSD symptoms during three weeks of treatment, but no active treatment statistically outperformed placebo in this brief, preliminary trial. Additional well-controlled and adequately powered studies with cannabis suitable for FDA drug development are needed to determine whether smoked cannabis improves symptoms of PTSD.

Trial registration
Identifier: NCT02759185; ClinicalTrials.gov.

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Links of Interest

Retired Two-Star Opens Up About Mental Health Crisis That Ended His Career

Removed from command: A two-star general's mental health disaster and fight to recover
https://taskandpurpose.com/opinion/bipolar-disorder-gregg-martin-military-veterans/

Wounded women veterans face higher levels of loneliness, isolation: report
https://www.militarytimes.com/education-transition/2021/03/12/wounded-women-veterans-face-higher-levels-of-loneliness-isolation-report/

From Citizen Soldier to Secular Saint: The Societal Implications of Military Exceptionalism

Addressing gun suicide should be a top priority for the new VA secretary (commentary)

This soldier almost died by suicide. Now he’s telling his story in hopes of saving someone else
New solutions are needed to help with the military suicide stigma (commentary)

Distinguishing between TBIs, psychological conditions key to treatment
https://health.mil/News/Articles/2021/03/10/Distinguishing-between-TBIs-psychological-conditions-key-to-treatment

Military researchers gain new insights into brain injuries
https://health.mil/News/Articles/2021/03/16/Military-researchers-gain-new-insights-into-brain-injuries

Study: Male troops more reluctant to share unisex bathrooms than women

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RAND Corporation report commissioned by the Center for Deployment Psychology:

The behavioral health demands stemming from the longstanding wars in Iraq and Afghanistan led to significant changes in the provision and delivery of behavioral health care in the U.S. military. The focus in this report is on the 2003–2013 period. The authors reviewed publicly available material to identify the events and circumstances that prompted the changes. This review informed the selection of candidates for a series of interviews to capture lessons they had learned that could help prepare future military behavioral health providers. This report highlights selected events and the insights of the 17 experts the authors interviewed. One overall lesson seems to have been the need for a pipeline for hiring providers and appropriate incentives, particularly when demand surges, as it did in this period.

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