Research Update -- August 8, 2024

What's Here:

- Gun Carrying Among Military-Connected Youth With Past-Year Suicidal Ideation and Suicide Plans.
- Youth Suicide and Preceding Mental Health Diagnosis.
- Suicide in US Preteens Aged 8 to 12 Years, 2001 to 2022.
- Predictors of Response to Cognitive Behavioral Therapy in Patients With Tinnitus.
- Commentary: A Military Health Care Ethics Framework.
- Development of Chronic Pain Conditions Among Women in the Military Health System.
- Behavioral Health Integrated Support Network (BHISN).
- Associations between PTSD and temporal discounting: The role of future thinking.
- Associations Among Environmental Exposures and Physical and Psychiatric Symptoms in a Care-Seeking Sample of U.S. Military Veterans.
- Prevalence of PTSD in Active Duty Members with Mild Traumatic Brain Injury: Systematic Review and Meta-analysis.
- A brief mindfulness-based intervention for stress, pain, emotion and attention regulation in military service members with mild traumatic brain injury.
- Mild Traumatic Brain Injury in the Maturing Brain: An Investigation of Symptoms and Cognitive Performance in Soldiers Returning From Afghanistan and Iraq.

- Optimism, Sociability, and the Risk of Future Suicide Attempt among U.S. Army Soldiers.
- Why Do Veterans Not Respond as Well as Civilians to Trauma-Focused Therapies for PTSD?
- Internet-Guided Cognitive Behavioral Therapy for Insomnia Among Patients With Traumatic Brain Injury: A Randomized Clinical Trial.
- Enhancing the Utility of the Moral Injury Experience Wheel: Manualized Applications for Diverse Contexts.
- Prevalence and Risk Factors for the Development of Bulimia Nervosa and Binge Eating Disorder in a Large U.S. Military Cohort.
- Risk of Traumatic Brain Injury in Deployment and Nondeployment Settings Among Members of the Millennium Cohort Study.
- Do appraisals of military service indicate current distress in aging Vietnam War combat veterans?
- A systematic review and meta-analysis of predictors of response to trauma-focused psychotherapy for posttraumatic stress disorder.
- Gender Disparities in Neurobehavioral Symptoms and the Role of Post-Traumatic Symptoms in US Service Members Following Mild Traumatic Brain Injury.
- Risk and protective correlates of suicidality in the military health and well-being project.
- Trajectories of moral injury and their associations with posttraumatic stress symptoms among recently discharged Israeli veterans.
- Associations between Chronic Medical Conditions and Persistent Dietary Supplement Use: The US Military Dietary Supplement Use Study.
- Links of Interest
- Resource of the Week – The State of Health and Health Care for LGBTQ+ Veterans: Differences Among Sexual and Gender Minority Veterans, by Identity and State Policy Climate, 2015–2021 (RAND)

-----

https://doi.org/10.1001/jamanetworkopen.2024.24916

Gun Carrying Among Military-Connected Youth With Past-Year Suicidal Ideation and Suicide Plans.

Stanley, I. H., Eisenhauer, I. F., Brooks-Russell, A., & Sigel, E. J.

JAMA Network Open
July 31, 2024

Suicide prevention among military service members and their families, including children, is a key priority of the US Department of Defense. Firearm suicide is a leading cause of death among youth; firearm access broadly, and gun carrying specifically, is associated with an increased risk of suicide. Participation in violence prevention programs may decrease risk. State-level data indicate elevated levels of gun carrying among military-connected youth, perhaps due to greater firearm ownership in military families. Using nationally representative data, we examined differential handgun-carrying practices and participation in violence prevention programs between youths with a parent in the military and those without. Extending prior work, we examined handgun carrying among youth reporting suicidal ideation or suicide plans in the past year because handgun carrying among these individuals may be associated with increased risk for lethal outcomes.

—--

https://doi.org/10.1001/jamanetworkopen.2024.23996

Youth Suicide and Preceding Mental Health Diagnosis.

Chaudhary, S., Hoffmann, J. A., Pulcini, C. D., Zamani, M., Hall, M., Jeffries, K. N., Myers, R., Fein, J., Zima, B. T., Ehrlich, P. F., Alpern, E. R., Hargarten, S., Sheehan, K. M., Fleegler, E. W., Goyal, M. K., & Children's Hospital Association Research in Gun Related Events (CHARGE) Collaborative

JAMA Network Open
July 30, 2024

Importance:
Suicide is a leading cause of death among US youths, and mental health disorders are a known factor associated with increased suicide risk. Knowledge about potential

sociodemographic differences in documented mental health diagnoses may guide prevention efforts.

Objective:
To examine the association of documented mental health diagnosis with (1) sociodemographic and clinical characteristics, (2) precipitating circumstances, and (3) mechanism among youth suicide decedents.

Design, setting, and participants:
This retrospective, cross-sectional study of youth suicide decedents aged 10 to 24 years used data from the Centers for Disease Control and Prevention National Violent Death Reporting System from 2010 to 2021. Data analysis was conducted from January to November 2023.

Exposures:
Sociodemographic characteristics, clinical characteristics, precipitating circumstances, and suicide mechanism.

Main outcomes and measures:
The primary outcome was previously documented presence of a mental health diagnosis. Associations were evaluated by multivariable logistic regression.

Results:
Among 40 618 youth suicide decedents (23 602 aged 20 to 24 years [58.1%]; 32 167 male [79.2%]; 1190 American Indian or Alaska Native [2.9%]; 1680 Asian, Native Hawaiian, or Other Pacific Islander [4.2%]; 5118 Black [12.7%]; 5334 Hispanic [13.2%]; 35 034 non-Hispanic; 30 756 White [76.1%]), 16 426 (40.4%) had a documented mental health diagnosis and 19 027 (46.8%) died by firearms. The adjusted odds of having a mental health diagnosis were lower among youths who were American Indian or Alaska Native (adjusted odds ratio [aOR], 0.45; 95% CI, 0.39-0.51); Asian, Native Hawaiian, or Other Pacific Islander (aOR, 0.58; 95% CI, 0.52-0.64); and Black (aOR, 0.62; 95% CI, 0.58-0.66) compared with White youths; lower among Hispanic youths (aOR, 0.76; 95% CI, 0.72-0.82) compared with non-Hispanic youths; lower among youths aged 10 to 14 years (aOR, 0.70; 95% CI, 0.65-0.76) compared with youths aged 20 to 24 years; and higher for females (aOR, 1.64; 95% CI, 1.56-1.73) than males. A mental health diagnosis was documented for 6308 of 19 027 youths who died by firearms (33.2%); 1691 of 2743 youths who died by poisonings (61.6%); 7017 of 15 331 youths who died by hanging, strangulation, or suffocation (45.8%); and 1407 of 3181 youths who died by other mechanisms (44.2%). Compared with firearm suicides, the adjusted odds of having a documented mental health diagnosis were higher for suicides by poisoning

(aOR, 1.70; 95% CI, 1.62-1.78); hanging, strangulation, and suffocation (aOR, 2.78; 95% CI, 2.55-3.03); and other mechanisms (aOR, 1.59; 95% CI, 1.47-1.72).

Conclusions and relevance:
In this cross-sectional study, 3 of 5 youth suicide decedents did not have a documented preceding mental health diagnosis; the odds of having a mental health diagnosis were lower among racially and ethnically minoritized youths than White youths and among firearm suicides compared with other mechanisms. These findings underscore the need for equitable identification of mental health needs and universal lethal means counseling as strategies to prevent youth suicide.

See also: Youth Suicide, Mental Health, and Firearm Access—Time to Focus on Upstream Prevention (Invited Commentary)

—--

https://doi.org/10.1001/jamanetworkopen.2024.24664

Suicide in US Preteens Aged 8 to 12 Years, 2001 to 2022.

Ruch, D. A., Horowitz, L. M., Hughes, J. L., Sarkisian, K., Luby, J. L., Fontanella, C. A., & Bridge, J. A.

JAMA Network Open
July 30, 2024

A total of 2241 preteens died by suicide from 2001 to 2022 (714 [31.9%] female and 1527 [68.1%] male; 162 [7.2%] American Indian or Alaska Native, Asian, or Pacific Islander; 549 [24.5%] Black; 422 [18.8%] Hispanic; and 1530 [68.3%] White). Following a downward trend until 2007, suicide rates significantly increased 8.2% annually from 2008 to 2022, corresponding to a significant increase in the overall rates between 2001 to 2007 and 2008 to 2022 (3.34 to 5.71 per 1 million; IRR, 1.71) (Figure and Table). Analyses revealed significant increases among all subgroups, with the greatest increase in girls (IRR, 3.32), American Indian or Alaska Native, and Asian or Pacific Islander preteens (IRR, 1.99), Hispanic preteens (IRR, 2.06), and firearm suicides (IRR, 2.29).

—--

https://doi.org/10.1001/jamaoto.2024.2264

Predictors of Response to Cognitive Behavioral Therapy in Patients With Tinnitus.

Mueller, L., Kallogjeri, D., Frumkin, M. R., Dizdar, K., Shin, J., Rodebaugh, T., & Piccirillo, J. F.

JAMA Otolaryngology-- Head & Neck Surgery
August 1, 2024

Key Points
Question
Can specific patient and clinical characteristics predict response to cognitive behavioral therapy (CBT) in patients with tinnitus?

Finding
This secondary cohort analysis of a single-arm clinical study including 88 adult patients with tinnitus who underwent CBT found that participants with extreme tinnitus bother and moderate to high anxiety levels experienced the greatest associated reduction of tinnitus severity.

Meaning
These findings suggest that CBT as a treatment for tinnitus may be more effective in select subgroups of patients based on severity of symptoms and clinical psychosocial impact of tinnitus.

Abstract
Importance
Clinical guidelines recommend cognitive behavioral therapy (CBT) as a treatment for tinnitus. However, patient response to CBT is variable, and currently, there are no known predictors of response to CBT treatment for tinnitus.

Objective
To identify the clinical predictors of patient response to CBT for treatment of tinnitus.

Design, Setting, and Participants
This was a secondary cohort analysis of a single-arm clinical study including adults with chronic bothersome tinnitus recruited from Washington University School of Medicine in St Louis (Missouri) from September 2019 to February 2023. Participants completed an

8-week group CBT program with a licensed clinical psychologist. Each week consisted of 2.5 hours of CBT, amounting to 20 hours of total CBT participation, primarily delivered through a virtual platform. Conjunctive consolidation was used to create a predictive classification system for response to CBT based on tinnitus bother and anxiety levels.

Main Outcome and Measure
Response to CBT was predefined as a 13-point or greater decrease in the Tinnitus Functional Index (TFI) survey score.

Results
The study sample included 88 adult patients (median [IQR] age, 59 [49-66] years; 47 [53%] females and 41 [47%] males) with chronic bothersome tinnitus, of whom 53 (60%) had at least 13-point decrease in TFI and were considered to be responders. In univariable and multivariable logistic regression analyses, high to moderate anxiety level and severe tinnitus bother were associated with treatment response (adjusted odds ratio: anxiety, 3.33; 95% CI, 0.90-12.30; tinnitus bother, 12.08; 95% CI, 1.48-98.35). The clinical stratification system showed good predictive and discriminative ability ($\chi 2$ for linear trend = 20.0; C statistic = 0.75; 95% CI, 0.65-0.85).

Conclusions and Relevance
The findings of this study show that assessment of bother and anxiety levels in patients with tinnitus may be useful for identifying those who are more likely to respond to CBT. Before incorporation into clinical practice, future research should externally validate this finding in a separate population.

—--

https://doi.org/10.1093/milmed/usae351

Commentary: A Military Health Care Ethics Framework.

Beardmore, C., Bricknell, M. C. M., Kelly, J., & Lough, F.

Military Medicine
Published: 06 July 2024

Ethical practice within military health care is a significant topic of professional and academic debate. The term “military health care ethics” enfranchises the entire health care team. Military health care professionals are subject to tension between their duties

as military personnel, and their ethical duties as health care professionals, so-called “Dual Loyalty.” Some military health care practitioners have suffered moral injury because of the psychological stress associated with ethical challenges on military operations. It is important to define military health care ethics and also to consider how it should be taught.

—--

https://doi.org/10.1001/jamanetworkopen.2024.20393

Development of Chronic Pain Conditions Among Women in the Military Health System.

Schoenfeld, A. J., Cirillo, M. N., Gong, J., Bryan, M. R., Banaag, A., Weissman, J. S., & Koehlmoos, T. P.

JAMA Network Open
July 5, 2024

Key Points
Question
Did the incidence of chronic pain among active-duty servicewomen (ADSW) and women civilian dependents differ between 2006 to 2013, a period of heightened combat and deployment intensity, and 2014 to 2020, a period of reduced combat intensity?

Findings
This cohort study including 3 473 401 ADSW and dependents identified significant differences in the diagnosis of chronic pain among ADSW and dependents in 2006 to 2013 compared with 2014 to 2020. Chronic pain was documented in 14.8% of ADSW in service during 2006 to 2013 and in 11.3% of dependents from this period, compared with 7.1% in ADSW and 3.7% of dependents from 2014 to 2020.

Meaning
This cohort study found strong and pervasive signals for the association of combat exposure with the subsequent diagnosis of chronic pain.

Abstract
Importance
The incidence of chronic pain has been increasing over the last decades and may be

associated with the stress of deployment in active-duty servicewomen (ADSW) as well as women civilian dependents whose spouse or partner served on active duty.

Objective
To assess incidence of chronic pain among active-duty servicewomen and women civilian dependents with service during 2006 to 2013 compared with incidence among like individuals at a time of reduced combat exposure and deployment intensity (2014-2020).

Design, Setting, and Participants
This cohort study used claims data from the Military Health System data repository to identify ADSW and dependents who were diagnosed with chronic pain. The incidence of chronic pain among individuals associated with service during 2006 to 2013 was compared with 2014 to 2020 incidence. Data were analyzed from September 2023 to April 2024.

Main Outcomes and Measures
The primary outcome was the diagnosis of chronic pain. Multivariable logistic regression analyses were used to adjust for confounding, and secondary analyses were performed to account for interactions between time period and proxies for socioeconomic status and combat exposure.

Results
A total of 3 473 401 individuals (median [IQR] age, 29.0 [22.0-46.0] years) were included, with 644 478 ADSW (18.6%). Compared with ADSW in 2014 to 2020, ADSW in 2006 to 2013 had significantly increased odds of chronic pain (odds ratio [OR], 1.53; 95% CI, 1.48-1.58). The odds of chronic pain among dependents in 2006 to 2013 was also significantly higher compared with dependents from 2014 to 2020 (OR, 1.96; 95% CI, 1.93-1.99). The proxy for socioeconomic status was significantly associated with an increased odds of chronic pain (2006-2013 junior enlisted ADSWs: OR, 1.95; 95% CI, 1.83-2.09; 2006-2013 junior enlisted dependents: OR, 3.05; 95% CI, 2.87-3.25).

Conclusions and Relevance
This cohort study found significant increases in the diagnosis of chronic pain among ADSW and civilian dependents affiliated with the military during a period of heightened deployment intensity (2006-2013). The effects of disparate support structures, coping strategies, stress regulation, and exposure to military sexual trauma may apply to both women veterans and civilian dependents.

—--

https://doi.org/10.1093/milmed/usad351

Behavioral Health Integrated Support Network (BHISN).

Cain, S. M., Bennetts, S., Riddoch, G., Pratt, D., Stock, A., Isidron, V., Lopez, M., & Orchowsky, M.

Military Medicine
Volume 189, Issue 7-8, July/August 2024, Pages 1696–1701

Introduction
This article reviews process and performance of an innovative effort leveraging virtual health to manage unmet demand for behavioral health and substance use disorder services across a large military region. This effort began in June 2022 and included nearly all of the Defense Health Agency Region—Europe's military behavioral health and substance abuse clinics participating. The two goals of improving access to behavioral health and substance use services for active duty service members and improving utilization of the military clinics were employed. Operational and remote locations with known care gaps could access services as well. Connecting services to the point of need is an established strength of virtual health delivery systems of care.

Materials and Methods
A team consisting of clinical leaders and Virtual Medical Center—Europe staff developed a centralized screening process and simple business rules. When a clinic was unable to meet its access-to-care standard of 28 days, the patient requesting or referral from a remote location, was offered a virtual video option with a provider from another clinic with availability. Centralized screening was created and staffed by three technicians. The Behavioral Health Integrated Support Network (BHISN) screening clinic assessed appropriateness of virtual care using established exclusion criteria. Once screened, the patient was scheduled for an appointment with one of the 31 therapists in 14 participating clinics in a 3- to 5-day window. The military health system's video connect platform was used.

Results
Between June 2022 and November 2023, 131 patients who were unable to find routine care in their home clinic were screened, scheduled, and completed a virtual visit with one of the 31 participating therapists from 14 behavioral health and substance use clinics. Seventy-eight (59%) participants were active duty empaneled to military treatment facilities in Europe and 53 (39%) were active duty enrolled in Tricare Prime

Remote and deployed to remote locations with limited care. Forty-four percent of patients were recommended for continued virtual therapy or counseling kept their first follow-up demonstrating good follow-up care using a virtual option. The overall no-show rate was low at 7%. Care and consultation were successfully delivered using video visits to location in 18 countries in three geographic Europe, the Middle East and, Africa.

Conclusion
The Virtual Medical Center—Europe, Army Europe Behavioral Health, and Substance Use leadership work collaboratively to plan and optimize program performance. For BHISN to function as intended requires key dedicated support staff, such as mental health and social services assistants to screen and coordinate virtual care. Scheduling can be performed by a central cell requiring clinics to relinquish some local control in the interest of meeting patient demand in large and diverse area that covers three continents. BHISN shows promising initial success by providing a process of managing demand and connecting requests for behavioral health and substance use care leveraging capacity from all clinics using a virtual video service in a diverse operating environment.

—--

https://doi.org/10.1016/j.jbtep.2024.101978

Associations between PTSD and temporal discounting: The role of future thinking.

Verfaellie, M., Patt, V., Lafleche, G., & Vasterling, J. J.

Journal of Behavior Therapy and Experimental Psychiatry
Volume 85, December 2024, 101978

Highlights

- Greater severity of PTSD symptoms was associated with steeper temporal discounting.
- Future thinking eliminated PTSD-associated alterations in temporal discounting.
- Primary clinical correlates were avoidance and alterations in cognition and mood.

Abstract
Background and objectives
Despite documented alterations in future thinking in posttraumatic stress disorder (PTSD), our understanding of how individuals with PTSD make future-oriented

decisions is limited. We tested the hypothesis that increased discounting in association with PTSD reflects failure to spontaneously envision future rewarding situations.

Methods
Thirty-seven trauma exposed war-zone veterans completed a standard temporal discounting task as well as a temporal discounting task accompanied by episodic future thinking cues.

Results
Severity of PTSD symptoms was associated with preference for sooner, smaller rewards in the standard task. Consistent with our hypothesis, when participants engaged in future thinking, greater PTSD symptom severity was no longer associated with steeper discounting. Moreover, difficulty anticipating future events, as measured contemporaneously in a separate task (Verfaellie et al., 2024), mediated the relationship between PTSD symptom severity and degree of discounting in the standard task. Among PTSD symptom clusters, the severity of avoidance and negative alterations in cognition and mood was related to steeper discounting. Measures of depression and alcohol use were not associated with discounting.

Limitations
The sample included mostly male, predominantly White veterans who experienced primarily combat-related trauma.

Conclusions
PTSD-associated alterations in temporal discounting reflect failure to spontaneously imagine future positive events. Two common correlates of PTSD, depression and alcohol use, could not account for the observed associations between PTSD and future-oriented decisions.

—--

https://doi.org/10.1093/milmed/usae035

Associations Among Environmental Exposures and Physical and Psychiatric Symptoms in a Care-Seeking Sample of U.S. Military Veterans.

Military Medicine
Volume 189, Issue 7-8, July/August 2024, Pages e1397–e1402

Introduction
Recent research and policy (e.g., the Sergeant First Class (SFC) Heath Robinson Honoring our Promise to Address Comprehensive Toxics (PACT) Act) have highlighted the potential health consequences of toxic environmental exposures. The purpose of the current study was to assess the self-reported prevalence of such exposures among a sample of U.S. military veterans seeking care at a Veterans Affairs facility and to examine associations between exposures and physical and psychiatric symptoms.

Materials and Methods
Participants were 4,647 newly enrolling post-9/11 veterans at the VA San Diego Healthcare System who completed standard clinical screening processes between January 2015 and April 2019. Electronic health screening data, including demographic information, military history, environmental exposures, and physical and psychiatric symptoms, were assessed. t-Tests for continuous variables and chi-square tests for categorical variables were used to compare exposed to unexposed veterans on demographic and military characteristics as well as physical and psychiatric symptoms.

Results
A total of 2,028 veterans (43.6%) reported exposure to environmental toxins during their military service. Analyses revealed a disproportionate burden of exposure on older, male, educated, combat veterans as well as Asian and Native American veterans. Exposure to any type of environmental toxin was associated with more physical symptoms, particularly pain, fatigue, and insomnia, as well as psychiatric symptoms, including moderate depressive symptomology, mild to moderate anxiety, and scores approaching the threshold for likely post-traumatic stress disorder and alcohol misuse.

Conclusions
The high prevalence and detrimental health correlates of environmental exposures underscore the importance of implementing screening for exposures and providing healthcare services that address the multisystemic nature of exposure-related illness.

—--

https://doi.org/10.1093/milmed/usae272

Prevalence of PTSD in Active Duty Members with Mild Traumatic Brain Injury: Systematic Review and Meta-analysis.

Lai, C., Kostas-Polston, E. A., Engler, M. B., Capple, K. A., & Froelicher, E. S.

Military Medicine
Volume 189, Issue 7-8, July/August 2024, Pages e1454–e1461

Introduction
Traumatic brain injury (TBI), particularly mild TBI (mTBI), is a significant health concern for U.S. active duty service members (ADSMs), with potential implications for psychiatric outcomes including PTSD. Despite recognizing this association, the prevalence of PTSD among ADSMs with mTBI remains unclear.

Materials and Methods
The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. A thorough search in PubMed, CINAHL, Embase, and PsycINFO databases from 2008 to 2024 focused on identifying studies involving ADSMs with PTSD and mTBI. The R software (version 4.3.2) was employed for meta-analysis with the “meta” and “meta prop” packages.

Results
Eight reviewed studies revealed a pooled prevalence estimate of PTSD among ADSMs with mTBI at 36% (95% CI, 30%-41%, $P < .01$, $I2 = 96\%$). Cohort studies indicated a slightly higher prevalence of 38% (95% CI, 19%-59%, $P < .01$, $I2 = 98\%$), whereas cross-sectional studies provided a marginally lower prevalence of 34% (95% CI, 27%-40%, $P < .01$, $I2 = 92\%$).

Conclusion
Methodological differences, including diagnostic criteria variability, contribute to the observed variability in prevalence estimates. Despite methodological challenges, this study provides crucial insights into the pooled prevalence of comorbid PTSD and mTBI within the military, emphasizing the need for standardized methodologies and further research to refine understanding and support strategies for affected individuals.

—--

https://doi.org/10.1002/jclp.23699

A brief mindfulness-based intervention for stress, pain, emotion and attention regulation in military service members with mild traumatic brain injury.

MacNulty, W. K., Uomoto, J. M., & Peterson, S. M.

Journal of Clinical Psychology
First published: 08 May 2024

Aim
The primary aim of this study was to conduct an open pilot clinical trial of a brief mindfulness-based intervention for persistent postconcussion symptoms that occur after mild traumatic brain injury in military service members. For many service members, operational tempo and other time constraints may prevent them from completing a standard mindfulness-based stress reduction course. Thus, this study sought to examine the effectiveness of a five-session intervention called mindfulness-based stress, pain, emotion, and attention regulation (MSPEAR).

Methods
Participants were active duty service members with a history of mild traumatic brain injury (TBI) and persisting postconcussion symptoms, all of whom were recruited from an outpatient TBI rehabilitation program at a military treatment facility. Of the 38 service members that were initially enrolled, 25 completed the 5-session MSPEAR intervention, and 20 returned for a 5-week follow-up evaluation. Questionnaires assessing perceived stress, positive affect, pain interference and catastrophizing, sleep disturbances, perceived behavioral and attention regulation, self-efficacy and satisfaction with life were administered at preintervention, postintervention, and at 5-week follow-up intervals. Neuropsychological testing at preintervention and 5-week follow-up included performance validity measures, attention, working memory, and executive function measures. T-tests were run to compare for questionnaire measures at preintervention (Time 1) to postintervention (Time 2). Repeated analysis of variances were conducted to compare questionnaire and neuropsychological measures at Time 1, Time 2, and at Time 3 which is the 5-week follow-up.

Results
Improvements in perceived stress, positive affect, behavioral regulation, metacognition, sleep disturbance, self-efficacy, and satisfaction with life were found immediately after the MSPEAR intervention and were maintained at the 5-week follow-up. Magnification and helplessness aspects of pain catastrophizing improved when comparing preintervention to the 5-week follow-up. Pain interference was not significantly different across study assessment times. Neuropsychological testing revealed improvements in sustained attention, working memory, cognitive flexibility, and inhibitory control when comparing preintervention to the 5-week follow-up assessment.

Conclusions
The MSPEAR intervention appears to show promise as a brief and effective therapy for

specific postconcussion symptoms after mild traumatic brain injury in military service members. Each of the components of MSPEAR including stress, pain catastrophizing, emotion and attention regulation showed improvements in this study, and bears further investigation in a larger scale, preferably randomized controlled trial in those active duty military service members who experience persisting symptoms after a mild traumatic brain injury.

—--

https://doi.org/10.1097/HTR.0000000000000919

Mild Traumatic Brain Injury in the Maturing Brain: An Investigation of Symptoms and Cognitive Performance in Soldiers Returning From Afghanistan and Iraq.

Ivins, B., Risling, M., Wisén, N., Schwab, K., & Rostami, E.

Journal of Head Trauma Rehabilitation
39(4):p 304-317, July/August 2024

Objective:
The majority of traumatic brain injuries (TBIs) are classified as mild and occur in young individuals. The course of recovery varies but can result in chronic or troubling outcomes. The impact of age on TBI outcomes in young adults before complete brain maturation is not well studied.

Methods:
In this study, we compared the effects of mild TBI on cognitive performance and self-reported TBI symptoms and posttraumatic stress disorder (PTSD) in 903 soldiers in 3 different age groups: 24 years or younger, 25 to 27 years, and 28 to 40 years. The soldiers had returned from war zones in Iraq and were screened for TBI within a few days of return. Cognitive performance was measured with the Automated Neuropsychological Assessment Metrics of Military TBI Version 4 (ANAM4). Symptoms associated with mild TBI were self-reported on the Neurobehavioral Symptom Inventory, and the PTSD Checklist-Civilian Version (PCL-C).

Results:
Soldiers with TBI in every age group had significantly higher prevalence of most symptoms than those with no TBI. Soldiers with TBI also reported more chronic pain sites, regardless of age. Soldiers aged 28 to 40 years with TBI had the lowest cognitive performance scores (ANAM) across several subtests, both unadjusted and adjusted.

The Global Deficit Score was significantly higher for soldiers aged 28 to 40 years and 25 to 27 years with TBI than for soldiers younger than 24 years with no TBI. After adjusting for PTSD symptoms, education, and number of lifetime TBIs, the overall test battery mean for soldiers aged 28 to 40 years with TBI was significantly lower than for soldiers younger than 24 years with no TBI.

Conclusion:
Soldiers with mild TBI in the younger age group show more symptoms associated to frontal lobe function while soldiers in the older group suffer more cognitive impairment. This may warrant further study as it may indicate a propensity to later cognitive decline among soldiers who were older at the time of injury.

Trial registration:
ClinicalTrials.gov NCT01847040.

—--

https://doi.org/10.1093/milmed/usad457

Optimism, Sociability, and the Risk of Future Suicide Attempt among U.S. Army Soldiers.

James A Naifeh, PhD, Robert J Ursano, MD, Murray B Stein, MD, MPH, Holly B. Herberman Mash, PhD, Pablo A Aliaga, MS, Carol S Fullerton, PhD, Rachel Shor, PhD, Tzu-Cheg Kao, PhD, Nancy A Sampson, BA, Ronald C Kessler, PhD

Military Medicine
Volume 189, Issue 7-8, July/August 2024, Pages e1642–e1652,

Introduction
Most research on suicide attempts among U.S. service members has been focused on risk factors that occur during service. There is an important gap in our understanding of premilitary factors, such as personality characteristics, that may be associated with future suicide attempt risk during service. Of particular importance is identifying risk factors for the 1/3 of suicide attempters who never receive a mental health diagnosis (MH-Dx)–and therefore are not identified as having a mental health problem in the military healthcare system–prior to their suicide attempt.

Materials and Methods
Using two components of the Army Study to Assess Risk and Resilience in

Servicemembers, we examined the association of personality facets from the Tailored Adaptive Personality Assessment System, a computerized instrument administered prior to entering service, with medically documented suicide attempts during service. A 2010–2016 sample of historical administrative records from U.S. Regular Army enlisted soldiers with complete data on 11 commonly administered Tailored Adaptive Personality Assessment System facets was examined using a series of logistic regression analyses to identify the facets associated with future suicide attempt. Significant facets were then applied to data from a longitudinal cohort study of 11,288 soldiers surveyed upon entering basic combat training and followed via administrative records for their first 48 months of service. This research was approved by the Institutional Review Boards at the collaborating institutions.

Results

Analysis of the historical administrative data (87.0% male, 61.6% White non-Hispanic), found that low Optimism (odds ratio (OR) = 1.2 [95% CI = 1.0-1.4]) and high/low (vs. moderate) Sociability (OR = 1.3 [95%CI = 1.1-1.6]) were associated with suicide attempt after adjusting for other univariable-significant facets and socio-demographic and service-related variables. When examined in the longitudinal survey cohort, low Optimism (OR = 1.7 [95% CI = 1.1-2.4]) and high/low (vs. moderate) Sociability (OR = 1.7 [95% CI = 1.1-2.5]) were still associated with increased odds of documented suicide attempt during service, even after adjusting for each other, socio-demographic and service-related variables, and medically documented MH-Dx. Mental health diagnosis had a significant two-way interaction with Optimism ($F = 5.27$, $p = 0.0236$) but not Sociability. Stratified analyses indicated that low Optimism was associated with suicide attempt among soldiers without, but not among those with, a MH-Dx. Interactions of Optimism and Sociability with gender were nonsignificant. In the full model, population attributable risk proportions for Optimism and Sociability were 15.0% and 18.9%, respectively. Optimism and Sociability were differentially associated with suicide attempt risk across time in service.

Conclusions

Optimism and Sociability, assessed prior to entering U.S. Army service, are consistently associated with future suicide attempt during service, even after adjusting for other important risk factors. While Sociability is equally associated with suicide attempt among those with and without a MH-Dx, Optimism is specifically associated with suicide attempt among soldiers not identified in the mental healthcare system. Risk differences across time in service suggest that Optimism and Sociability interact with stressors and contextual factors in particular developmental and Army career phases.

—--

https://doi.org/10.1097/HRP.0000000000000400

Why Do Veterans Not Respond as Well as Civilians to Trauma-Focused Therapies for PTSD?

Kitaj, M., & Goff, D. C.

Harvard Review of Psychiatry
32(4):p 160-163, July 2024

This column first reviews evidence that veterans have poorer response to trauma-focused therapies for PTSD compared to civilians. We then consider several explanations for this trend, starting with gender as a possible confounding variable. We also examine other hypotheses, including the effects of the military acculturation process, the unique influences of military traumas, such as combat and military sexual traumas, and the roles of traumatic brain injuries (TBIs) and moral injury. Future research, we conclude, must determine whether gender explains the differences in trauma-focused therapy response. If so, then the underlying reasons must be further explored. If not, then we must determine the unique characteristics of the veteran population that make it more resistant to treatment. Mining these elements will help us adapt our trauma-focused therapies to better help this population and close the response-rate gap.

—--

https://doi.org/10.1001/jamanetworkopen.2024.20090

Internet-Guided Cognitive Behavioral Therapy for Insomnia Among Patients With Traumatic Brain Injury: A Randomized Clinical Trial.

Malarkey, M. E., Fu, A. J., Mannan, N., Shaw, O. M., Haight, T. J., Cota, M. R., Jahed, N. C., Werner, J. K., & Brody, D. L.

JAMA Network Open
July 9, 2024

Key Points
Question
What is the efficacy of fully automated internet-guided cognitive behavioral therapy for

insomnia (eCBT-I) in military service members and veterans with traumatic brain injury (TBI) and moderate to severe insomnia?

Findings
In this randomized clinical trial that included 50 military service members and veterans who completed postintervention evaluation, the Insomnia Severity Index score decreased by 6.0 points in those randomized to eCBT-I vs 2.3 points in those randomized to sleep education. The extent of insomnia improvement correlated with depressive symptom improvement in the eCBT-I group.

Meaning
These findings suggest that when successfully completed, eCBT-I can provide clinical benefits in military service members and veterans with TBI and insomnia.

Abstract
Importance
Many military service members and veterans report insomnia after sustaining traumatic brain injury (TBI). Limitations of first-line treatment, cognitive-behavioral therapy for insomnia (CBT-I), include availability of qualified clinicians, low completion rates, and cost.

Objective
To investigate the feasibility and efficacy of internet-guided CBT-I (eCBT-I) in military service members and veterans with insomnia and a history of TBI.

Design, Setting, and Participants
This randomized clinical trial of fully remote internet-based interventions and evaluations was conducted from September 1, 2020, to June 30, 2021, with 3 months of follow-up. Participants included a volunteer sample of military service members and veterans aged 18 to 64 years with a history of mild TBI/concussion and at least moderately severe insomnia defined as an insomnia severity index (ISI) score of greater than 14 and Pittsburgh Sleep Quality Index of greater than 4. Self-reported race, ethnicity, and educational level were generally representative of the US military. Data were analyzed from October 21, 2021, to April 29, 2024.

Intervention
Internet-based CBT-I delivered over 6 weekly lesson modules with assigned homework activities.

Main Outcomes and Measures
The prespecified primary outcome measure was change in ISI score over time. Prespecified secondary outcome measures included self-reported measures of depression symptoms, posttraumatic stress disorder (PTSD) symptoms, sleep quality, migraine impact, and fatigue.

Results
Of 204 people screened, 125 were randomized 3:1 to eCBT-I vs online sleep education, and 106 completed baseline evaluations (83 men [78.3%]; mean [SD] age, 42 [12] years). Of these, 22 participants (20.8%) were Hispanic or Latino and 78 (73.6%) were White. Fifty participants completed postintervention evaluations, and 41 completed the 3-month follow-up. Baseline mean (SD) ISI scores were 19.7 (4.0) in those randomized to eCBT-I and 18.9 (5.0) in those randomized to sleep education. After intervention, mean (SD) ISI scores were 13.7 (5.6) in those randomized to eCBT-I and 16.6 (5.7) in those randomized to sleep education. The difference in the extent of reduction in ISI scores between groups was 3.5 (95% CI,−6.5 to −0.4 [$P = .03$]; Cohen d, −0.32 [95% CI, −0.70 to −0.04]). In the eCBT-I group, the extent of insomnia improvement correlated with the extent of depressive symptom improvement (Spearman $\rho = 0.68$ [$P < .001$]), PTSD symptoms ($\rho = 0.36$ [$P = .04$]), sleep quality ($\rho = 0.54$ [$P = .001$]), and fatigue impact ($\rho = -0.58$ [$P < .001$]) but not migraine-related disability.

Conclusions and Relevance
The findings of this randomized clinical trial suggest that fully remote eCBT-I was moderately feasible and effective for self-reported insomnia and depression symptoms in military service members and veterans with a history of TBI. There is great potential benefit for eCBT-I due to low availability and cost of qualified CBT-I clinicians, although optimization of completion rates remains a challenge. Future studies may use home-based objective sleep assessments and should increase study retention.

Trial Registration
ClinicalTrials.gov Identifier: NCT04377009

—--

https://doi.org/10.1007/s10943-024-02082-9

Enhancing the Utility of the Moral Injury Experience Wheel: Manualized Applications for Diverse Contexts.

Fleming, W. H., & Smigelsky, M. A.

Journal of Religion and Health
July 12, 2024

Moral injury has emerged as an important construct for understanding the distress experienced in the aftermath of a moral violation, initially among combat veterans and increasingly among other populations, such as healthcare workers and first responders. While numerous measures have been validated to assess for exposure to potentially morally injurious events and/or sequelae, additional tools are needed to facilitate nuanced discussion of the experience of moral injury in therapeutic encounters. The Moral Injury Experience Wheel (MIEW; Fleming, 2023) is an infographic instrument that is designed to elicit precise language and help differentiate feelings in an effort to process morally perplexing circumstances. This paper describes the contents and potential clinical applications of a newly developed manual to guide the use of the MIEW. The MIEW and manual are designed to be used independently or alongside existing moral injury interventions. A case study featuring the use of the MIEW and manual demonstrates how the tools can be used in a professional healthcare setting. Recommendations for moral injury care practitioners are provided.

—--

https://doi.org/10.1093/aje/kwae204

Prevalence and Risk Factors for the Development of Bulimia Nervosa and Binge Eating Disorder in a Large U.S. Military Cohort.

Jacobson, I. G., Geronimo-Hara, T. R., Sharifian, N., McMaster, H. S., Mehlman, H., Rull, R. P., Maguen, S., & Millennium Cohort Study Team

American Journal of Epidemiology
Published: 18 July 2024

While bulimia nervosa (BN) and binge eating disorder (BED) are prevalent in military populations, an understanding of risk and protective factors is limited by a lack of longitudinal population-based epidemiological research. This study examined the prevalence of BN and BED among active duty service members and identified military and psychosocial factors associated with their development. Millennium Cohort Study participants were followed for up to 15 years and prevalence was ascertained using survey and electronic medical record data. Longitudinal multivariable logistic regression models evaluated risk factors associated with the development of bulimia nervosa

(n=96,245) or binge eating disorder (n=113,733). Weighted prevalence estimates from survey data (range, 0.80%-4.80%) were higher than those from medical records (0.04%-0.14%). Military factors significantly associated with increased risk for BN and BED included active duty component (vs Reserve/Guard); serving in the Army, Marines, or Navy/Coast Guard (vs Air Force); and combat deployment (vs deployment without combat). Associated psychosocial factors included lack of social support, experiencing at least one life stressor, and screening positive for posttraumatic stress disorder or problem drinking. Findings highlight the critical need for disordered eating screening and prevention efforts that bolster coping skills, which can ultimately improve service member functioning and readiness.

—--

https://doi.org/10.1097/HTR.0000000000000970

Risk of Traumatic Brain Injury in Deployment and Nondeployment Settings Among Members of the Millennium Cohort Study.

Jannace, K. C., Pompeii, L., de Porras, D. G. R., Perkison, W. B., Yamal, J. M., Trone, D. W., & Rull, R. P.

Journal of Head Trauma Rehabilitation
June 27, 2024

Objective:
To describe and quantify the prevalence and risk of deployment and nondeployment service-related traumatic brain injury (TBI) among participants of the Millennium Cohort Study.

Setting:
Survey data.

Participants:
28 759 Millennium Cohort Study participants who were active duty, Reserves, or National Guard at the time of the survey.

Design:
Cross-sectional secondary data analysis.

Main measures:
Estimates of prevalence and rates of TBI were calculated. Multivariable Poisson regression estimated rate ratios of TBI overall and stratified by deployment and nondeployment settings.

Results:
The rate of TBI over the 362 535 person-years (PY) was 2.95 p/100 PY. The nondeployment rate was 2.15 p/100 PY, with a significantly higher rate (11.38 p/100 PY) in deployment settings. Bullets/blasts were the most common TBI mechanisms in deployed settings, while sports/physical training and military training were common in nondeployed settings.

Conclusions:
The risk of TBI as well as its mechanism varies by deployment and nondeployment, suggesting that targeted prevention strategies are needed to reduce the risk for TBI among military personnel based on their deployment status.

—--

https://doi.org/10.1037/tra0001738

Do appraisals of military service indicate current distress in aging Vietnam War combat veterans?

Pless Kaiser, A., Brady, C. B., & Spiro, A.

Psychological Trauma: Research, Practice, and Policy
Advance online publication

Objective:
Appraisals of military service, both desirable and undesirable, assessed via Elder and Clipp’s (1989) scale, are associated with psychological distress in veterans. Aging combat veterans (CV) are at increased risk for posttraumatic stress disorder and other psychological disorders yet may underreport symptoms and not seek treatment that could be beneficial. It is unknown whether desirable and undesirable appraisals of military service are associated with mental health outcomes above and beyond typical risk and protective factors, such as age, education, and combat exposure. Therefore, we examined associations between appraisals of military service and assessments of psychological distress in Vietnam War CV, currently the largest cohort of aging veterans.

Method:
Male Vietnam War CV aged 60 and older (n = 134) were selected from a larger study. Regression analyses examined the associations between appraisals of military service and measures of physical and psychological well-being and distress.

Results:
Both desirable and undesirable appraisals of military service exhibited associations with measures of psychological distress, with undesirable appraisals being more strongly associated with distress than desirable appraisals. In regression analyses, appraisals were related to mental health outcomes over and above covariates. In addition, appraisals were more strongly related to psychological versus physical well-being measures, with undesirable appraisals more strongly related to mental health and well-being measures than desirable appraisals.

Conclusion:
Assessing appraisals of military service may identify veterans experiencing psychological distress who may benefit from referral for psychological interventions.
(PsycInfo Database Record (c) 2024 APA, all rights reserved)

—--

https://doi.org/10.1037/bul0000438

A systematic review and meta-analysis of predictors of response to trauma-focused psychotherapy for posttraumatic stress disorder.

Keyan, D., Garland, N., Choi-Christou, J., Tran, J., O'Donnell, M., & Bryant, R. A.

Psychological Bulletin
2024; 150(7), 767–797

Although trauma-focused psychotherapy (T-F psychotherapy) is the treatment of choice for posttraumatic stress disorder (PTSD), up to one half of patients do not respond to this treatment. Attempts to improve response to T-F psychotherapy have focused on augmenting fear extinction-based factors. Here, a systematic and meta-analytic review of predictors of T-F psychotherapy outcome was conducted with the goal of using an aggregate data-driven approach to elucidate baseline factors associated with treatment outcome. There were 114 studies that met inclusion criteria (N = 61, 970; Mage = 40.1 years; 40.1% female). There were 237 effect sizes across 24 meta-analytic categories.

Poorer treatment response is associated with lower pretreatment levels of activation of fear-related brain regions, psychophysiological reactivity to fear provocation, trauma-related cognitions, anger, depression, high-risk alleles of genes linked to fear, lower levels of executive control, and social support. A range of other factors also predicted poorer responses including being male, non-Caucasian, older in age, early trauma occurrence, more trauma experience, history of combat trauma, as well as comorbid sleep, pain, poor quality life, and alcohol abuse difficulties. This review provides one potential explanation for the limited success of T-F psychotherapy augmentation strategies that have focused only on fear circuity mechanisms at the exclusion of other factors. Here, poor response relating to predictors of early trauma onset and comorbidity are consistent with clinical presentations of complex PTSD, which may suggest T-F psychotherapy is less effective for this condition. This collective evidence suggests that clinicians should consider a tailored approach that targets potential barriers to successful treatment response.

—--

https://doi.org/10.1089/neu.2022.0462

Gender Disparities in Neurobehavioral Symptoms and the Role of Post-Traumatic Symptoms in US Service Members Following Mild Traumatic Brain Injury.

Babakhanyan, I., Brickell, T. A., Bailie, J. M., Hungerford, L., Lippa, S. M., French, L. M., & Lange, R. T.

Journal of Neurotrauma
Published Online: 17 July 2024

Women are more directly involved in combat operations today than ever before, currently making up 18.6% of officers and 16.8% of enlisted personnel in the United States military. However, women continue to be under-represented in military research. Studies that do consider gender differences in traumatic brain injury (TBI) outcomes have shown that women report significantly more post-concussive symptoms than men. Conclusions for true gender differences related to TBI are hard to make without controlling for non-TBI factors. The effects previously identified in the literature may be an artifact of how men and women differ in their response to injury, unrelated to the neurological recovery process associated with TBI. The objective of this study was to examine the effects of gender specifics on mild TBI (mTBI) sequelae on injured and uninjured control groups, and to investigate the role of post-traumatic stress disorder (PTSD) on symptom reporting. It should be noted that the terms “gender” and

“men/women” are used in this article in place of “sex” or “males/females” given that we are not discussing biological attributes. A total of 966 United States military service members and veterans were included in the study. Of the total sample, 455 men and 46 women were in the mTBI group, 285 men and 31 women were in the injured controls group (IC), and 111 men and 38 women in the non-injured controls group (NIC). Post-concussive and quality of life symptoms were compared for men and women while controlling for combat exposure. MTBI and IC groups were also stratified by PTSD presentation. Measures used included the Neurobehavioral Symptom Inventory (NSI), PTSD Checklist (PCL-C), Traumatic Brain Injury Quality of Life (TBI-QOL), and Combat Exposure Scale. In the mTBI group, women had worse scores on NSI total, NSI Somatosensory and Affective clusters, and the TBI-QOL Anxiety, Fatigue, and Headache scales ($n2 = 0.018–0.032$, small to small-medium effect sizes). When PTSD was present, women had worse scores on the NSI Somatosensory cluster only ($n2 = 0.029$, small-medium effect size). In contrast, when PTSD was absent, women had worse scores than men on the NSI Somatosensory and Affective clusters, and the TBI-QOL Anxiety and Headache scales ($n2 = 0.032–0.063$, small to medium effect sizes). In the IC group, women had worse scores on the NSI Cognitive cluster and the TBI-QOL Fatigue and Pain Interference scales ($n2 = 0.024–0.042$, small to small-medium effect sizes). However, group differences were no longer found when stratified by PTSD sub-groups. In the NIC group, there were no significant group differences for any analyses. We were able to identify symptoms unique to women recovering from mTBI that were not present following other forms of physical injury or in healthy controls. However, the impact of PTSD exacerbates the symptom profile and its comorbidity with mTBI equates to most of the noted gender differences.

—--

https://doi.org/10.1016/j.jad.2024.07.141

Risk and protective correlates of suicidality in the military health and well-being project.

Schafer, K. M., Melia, R., & Joiner, T.

Journal of Affective Disorders
Volume 363, 15 October 2024, Pages 258-268

Highlights

- Suicidality disproportionately affects Veterans.
- We studied the risk and protective constructs for suicidality in Veterans.

- Social contribution was associated with the lowest experience of suicidality.
- Moral injury was associated with the greatest experience of suicidality.

Abstract
Suicidality disproportionately affects Veterans, and in 2020 the Military Health and Well-Being Project was conducted in part to study the link between risk and protective constructs with suicidality among Veterans. In the present study, we investigate the relative contribution of risk (i.e., military self-stigma, daily stress, combat exposure, substance use, traumatic brain injury, and moral injury) and protective constructs (i.e., social integration, social contribution, public service motivation, purpose and meaning, and help-seeking) with suicidality. Using cross-sectional Pearson correlation and linear regression models, we studied the independent and relative contribution of risk and protective correlates in a sample of 1469 Veterans (male: n = 985, 67.1 %; female: n = 476, 32.4 %; transgender, non-binary, prefer not to say: n = 8, 0.5 %). When we investigated protective constructs individually as well as simultaneously, social contribution ($\beta = -0.39$, $t = -15.59$, $p < 0.001$) was the strongest protective construct against suicidality. Social integration ($\beta = -0.13$, $t = -4.88$, $p < 0.001$) additionally accounted for significant reduction in suicidality when all protective constructs were considered together. When we investigated the contribution of risk constructs towards suicidality, moral injury was most strongly associated with suicidality ($r = 0.519$, $p < 0.001$), yet when studied simultaneously for their relative contribution none of the constructs accounted for a significant amount of the variance in suicidality ($|t|s \leq 1.98$, $ps \geq 0.07$). These findings suggest that among Veterans it is possible that social contribution is protective against suicidality and could be a possible treatment target for the prevention or reduction of suicidality among Veterans.

—--

https://doi.org/10.1016/j.jpsychires.2024.07.025

Trajectories of moral injury and their associations with posttraumatic stress symptoms among recently discharged Israeli veterans.

Levinstein, Y., Zerach, G., Levi-Belz, Y., & Bonanno, G. A.

Journal of Psychiatric Research
Volume 177, September 2024, Pages 321-329

Background
While it is already known that potentially morally injurious events (PMIEs) have a

deleterious effect on veterans, little is known about the changes in PMIEs subjective appraisals over time, as well as its contribution to changes in psychiatric symptoms. In the current study, we longitudinally assessed subjective appraisals of PMIEs experienced during combat military service and their associations with posttraumatic stress symptoms (PTSS) among recently discharged combat veterans.

Method
Participants were 374 veterans who participated in a one-year longitudinal study with three measurement points: T1-one month before discharge from army service, and then again six months and twelve months following discharge (T2 and T3, respectively).

Results
Latent Growth Mixture Modeling (LGMM) indicated heterogenic patterns of changes in PMIEs across measurements. The 'resilient' (low and stable PMIEs) trajectory best represented PMIE, followed by 'recovery' and 'chronic' fluctuating trajectories. Moreover, the 'resilient' PMIEs trajectory was found to be consistently associated with lower PTSS scores compared to 'chronic' or 'worsening' trajectories.

Conclusions
Our findings are the first to identify longitudinal trajectories of PMIEs subjective appraisals and to provide evidence of their association with PTSS, which might serve as potential assessment and intervention targets among recently discharged traumatized veterans.

—--

https://doi.org/10.3390/nu16142253

Associations between Chronic Medical Conditions and Persistent Dietary Supplement Use: The US Military Dietary Supplement Use Study.

Knapik, J. J., Trone, D. W., Steelman, R. A., & Lieberman, H. R.

Nutrients
2024, 16(14), 2253

This longitudinal study examined associations between chronic medical conditions (CMCs) and persistent dietary supplement (DS) use. On two separate occasions, 1.3 ± 0.2 years apart, military service members (SMs) (n = 5778) completed identical questionnaires concerning their DS use in the past 6 months and their demographic and

lifestyle characteristics. Medical conditions were obtained from a medical surveillance system six months before the first questionnaire and during the period between questionnaires. Diagnoses were grouped into 19 major (largely systemic) and 9 specific CMCs. Conditions diagnosed in both periods (CMCs) were examined in relation to DS use reported on both questionnaires (persistent DS use). After adjustment for demographic and lifestyle factors, higher odds of persistent DS use were found in 7 of the 19 major CMCs and 5 of the 9 specific CMCs. SMs with a CMC had 1.25 (95% confidence interval [95%CI] = 1.10–1.41) higher adjusted odds of persistent DS use. The three specific CMCs with the highest adjusted odds of persistent DS use were anxiety (odds ratio [OR] = 2.30, 95%CI = 1.36–3.89), depression (OR = 2.12, 95%CI = 1.20–3.73), and gastroesophageal reflux disease (OR = 2.02, 95%CI = 1.02–4.04). Among DS categories, participants with a CMC had higher adjusted odds of persistent vitamins or mineral use (OR = 1.31, 95% CI = 1.12–1.53). Participants with CMCs had a higher prevalence of persistent DS use, especially individual vitamin and mineral use.

Links of Interest

Five questions for the outgoing chief of the National Guard Bureau
https://www.militarytimes.com/news/your-army/2024/08/02/five-questions-for-the-outgoing-chief-of-the-national-guard-bureau/

Veterans, lawmakers urge FDA chief to approve ecstasy-assisted therapy
https://www.stripes.com/veterans/2024-08-05/veterans-ecstasy-psychedelic-therapy-fda-ptsd-14751510.html

Ask the Doc: What Are the Best Treatments For PTSD?
https://www.health.mil/News/Dvids-Articles/2024/07/19/news476528

USS Curtis Wilbur Sleep Study Detects Fatigue Risks
https://www.navy.mil/Press-Office/News-Stories/Article/3821763/naval-health-research-center-to-participate-in-experimentation-sector-of-rimpac/

Army researchers explore electrical pulses to improve soldiers' sleep
https://www.militarytimes.com/news/your-army/2024/08/01/army-researchers-explore-electrical-pulses-to-improve-soldiers-sleep/

Opioids and Injuries in U.S. Service Members
https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/Opioids-and-Injuries-in-U-S-Service-Members

Prevalence of Mental Health Conditions in Active Duty Service Members
https://www.health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/Prevalence-of-Mental-Health-Conditions-in-Active-Duty-Service-Members

Military households better prepared overall for retirement, study finds
https://www.stripes.com/theaters/us/2024-07-31/military-retirement-savings-finance-14686999.html

Pentagon report shows what military jobs have highest suicide rates
https://www.militarytimes.com/news/your-military/2024/07/31/pentagon-report-shows-what-military-jobs-have-highest-suicide-rates/

- Report on Incidence of Military Suicides by Military Job Code

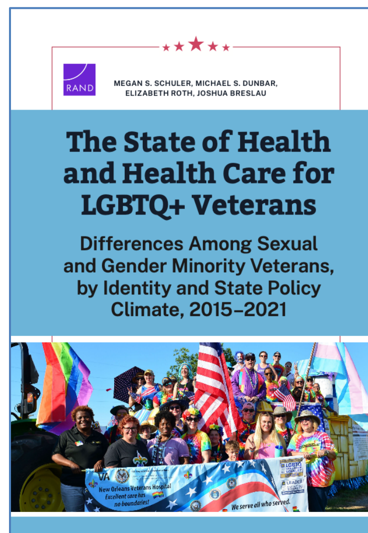
-----

Resource of the Week – The State of Health and Health Care for LGBTQ+ Veterans: Differences Among Sexual and Gender Minority Veterans, by Identity and State Policy Climate, 2015–2021

From the RAND Corporation:

> The U.S. government has affirmed commitments to improving health and well-being for lesbian, gay, bisexual, transgender, queer, and other sexual and gender minority (LGBTQ+) veterans, who may have distinct needs and challenges when accessing timely and appropriate health care. To date, there are limited data about potential health disparities among LGBTQ+ veterans that examine differences by both sexual identity and gender identity. Understanding the nature and magnitude of disparities among LGBTQ+ veterans is critical for targeted efforts to improve their health and well-being.
>
> The authors of this report use nationally representative data from 2015–2021 from the Behavioral Risk Factor Surveillance System to compare the age-adjusted prevalence of health-related outcomes across multiple domains (health care access and affordability, general health, substance use, and chronic

conditions) for sexual and gender minority veterans with that of their heterosexual and cisgender veteran peers. LGBTQ+ veterans showed poorer health-related outcomes in multiple domains than their heterosexual and cisgender peers, including in terms of healthcare affordability, mental health, chronic cardiovascular conditions, and chronic respiratory conditions. The authors also examine associations between state LGBTQ+ policy climates and health-related outcomes among LGBTQ+ veterans. Among LGBTQ+ veterans, living in a state with a more favorable (versus negative) LGBTQ+ policy climate was associated with several health indicators (e.g., having health insurance, lower smoking rates). The authors then discuss implications for ongoing efforts to improve health and well-being for LGBTQ+ veterans, including sustained actions to ensure that all LGBTQ+ veterans are able to access necessary care and use the full scope of benefits for which they are eligible.



Shirl Kennedy
Research Editor
HJF employee collaborating with Center for Deployment Psychology
DoD and Uniformed Service Contractor
Phone: (727) 537-6160
Email: shirley.kennedy.ctr@usuhs.edu

Henry M. Jackson Foundation for the Advancement of Military Medicine