

CDP



Research Update -- October 20, 2022

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<https://doi.org/10.1001/jamapsychiatry.2022.2990>

Association Between Folic Acid Prescription Fills and Suicide Attempts and Intentional Self-harm Among Privately Insured US Adults.

Gibbons, R. D., Hur, K., Lavigne, J. E., & Mann, J. J.

JAMA Psychiatry
September 28, 2022

Key Points

Question

Is folic acid associated with decreased suicide attempts and intentional self-harm?

Findings

In this cohort study, a within-person pharmacoepidemiologic study that included 866 586 adults, folic acid treatment was associated with a significantly reduced rate of suicidal events. This large-scale observational study confirmed results of an earlier signal-generation study.

Meaning

Folic acid may be an inexpensive and widely available suicide prevention tool; a large-scale randomized clinical trial is warranted.

Abstract

Importance

Suicide is a leading cause of death in the United States, having increased more than 30% from 2000 to 2018. An inexpensive, safe, widely available treatment for preventing suicidal behavior could reverse this trend.

Objective

To confirm a previous signal for decreased risk of suicide attempt following prescription fills for folic acid in a national pharmacoepidemiologic study of patients treated with folic acid.

Design, Setting, and Participants

A within-person exposure-only cohort design was used to study the dynamic association between folic acid (vitamin B9) prescription fills over a 24-month period and suicide attempts and intentional self-harm. Data were collected from a pharmacoepidemiologic database of US medical claims (MarketScan) for patients with private health insurance

who filled a folic acid prescription between 2012 and 2017. The same analysis was repeated with a control supplement (cyanocobalamin, vitamin B12). Data were analyzed from August 2021 to June 2022.

Exposure

Folic acid prescription fills.

Main Outcome and Measure

Suicide attempt or intentional self-harm resulting in an outpatient visit or inpatient admission as identified by codes from the International Statistical Classification of Diseases, Ninth and Tenth Revisions, Clinical Modification.

Results

Data on 866 586 patients were collected; 704 514 (81.30%) were female, and 90 296 (10.42%) were 60 years and older. Overall, there were 261 suicidal events during months covered by a folic acid prescription (5 521 597 person-months) for a rate of 4.73 per 100 000 person-months, compared with 895 suicidal events during months without folic acid (8 432 340) for a rate of 10.61 per 100 000 person-months. Adjusting for age and sex, diagnoses related to suicidal behavior, diagnoses related to folic acid deficiency, folate-reducing medications, history of folate-reducing medications, and history of suicidal events, the hazard ratio (HR) for folic acid for suicide events was 0.56 (95% CI, 0.48-0.65), with similar results for the modal dosage of 1 mg of folic acid per day (HR, 0.57; 95% CI, 0.48-0.69) and women of childbearing age (HR, 0.60; 95% CI, 0.50-0.73). A duration-response analysis (1-mg dosage) revealed a 5% decrease in suicidal events per month of additional treatment (HR, 0.95; 95% CI, 0.93-0.97). The same analysis for the negative control, cyanocobalamin, found no association with suicide attempt (HR, 1.01; 95% CI, 0.80-1.27).

Conclusions and Relevance

This large-scale pharmacoepidemiologic study of folic acid found a beneficial association in terms of lower rates of suicide attempts. The results warrant the conduct of a randomized clinical trial with suicidal ideation and behavior as outcomes of interest. If confirmed, folic acid may be a safe, inexpensive, and widely available treatment for suicidal ideation and behavior.

<https://doi.org/10.1002/jts.22883>

Baseline executive functioning moderates treatment-related changes in quality of life in veterans with posttraumatic stress disorder and comorbid traumatic brain injury.

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Journal of Traumatic Stress

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Posttraumatic stress disorder (PTSD) treatment has been associated with improvement in quality of life (QOL); however, little is known about factors that moderate treatment-related changes in QOL, particularly cognitive factors. Executive functioning (EF) is important for success across all aspects of everyday life and predicts better psychological and physical health. EF is important to QOL, but more work is needed to better understand the association between EF and QOL improvements following interventions. We hypothesized that poorer baseline EF would be associated with less improvement in overall life satisfaction and satisfaction with health following PTSD treatment. U.S. veterans who served after the September 11, 2001 terrorist attacks (post 9–11; N = 80) with PTSD and a history of mild-to-moderate traumatic brain injury were randomized to standard cognitive processing therapy (CPT) or CPT combined with cognitive rehabilitation (SMART-CPT). Multilevel modeling was used to examine whether baseline EF performance was associated with changes in QOL scores from pretreatment to follow-up across both groups. Results indicated that poorer baseline performance on EF tests of working memory and inhibition were associated with less treatment-related improvements in general life satisfaction and satisfaction with health, $r_s = .26-.36$. Treatment condition did not moderate any results. Future research should examine whether implementing EF-focused techniques before and/or concurrently with CPT for individuals with poorer baseline working memory and inhibition enhances QOL treatment gains, particularly in terms of general life and health-related satisfaction.

<https://doi.org/10.1002/jts.22881>

The role of time since trauma on treatment outcomes of veterans in two intensive posttraumatic stress disorder treatment programs.

Cailan Splaine, Dale L. Smith, Philip Held

Journal of Traumatic Stress

<https://doi.org/10.1002/jts.22881>

Research on the impact of time since trauma (TST) on posttraumatic stress disorder (PTSD) treatment outcomes lacks consensus and has not been examined in cognitive processing therapy (CPT)–based intensive PTSD treatment programs (ITPs). Furthermore, little is known about how TST impacts other trauma-related outcomes, such as depressive symptoms and negative posttrauma cognitions. We examined whether TST predicted severity and changes in PTSD and depressive symptoms and negative posttrauma cognitions, controlling for trauma type (combat or military sexual trauma), age, sex, and race, in two separate samples of veterans with PTSD who completed 2-week ($n = 132$) or 3-week ($n = 407$) CPT-based ITPs. In the 3-week sample, PTSD symptom reduction differed based on TST; however, these differences lacked clinical significance, $TST \times Time R^2_b = .002$, and were not replicated in the 2-week sample, $R^2_b < .001$. TST did not significantly predict depressive symptoms, $R^2_b = .005$, or negative posttrauma cognition severity or changes, $R^2_b = .002$, in the 3-week sample. In the 2-week sample, linear mixed-effects models indicated that TST also did not significantly predict PTSD or depressive symptoms, $R^2_b < .001$, or negative posttrauma cognition severity or changes, $R^2_b = .002$. These findings suggest that TST is not a clinically relevant predictor of PTSD symptoms, depressive symptoms, or negative posttrauma cognitions among individuals engaged in CPT-based ITPs. Future research should investigate the association between TST and trauma-related outcomes in more trauma type– and age-diverse samples within different intensive treatment settings.

<https://doi.org/10.1080/08995605.2022.2085957>

A bidirectional examination of mental health symptoms and perceptions of leader support: Which comes first?

Alexxa F. Bessey, Kristen Jennings Blackn & Thomas W. Britt

Military Psychology

Published online: 11 Jul 2022

Leader support for psychological health (LSPH) has been identified as an important factor in the prediction of mental health symptoms among warfighters. Although research has examined the relationship between LSPH and mental health symptoms, the extent to which this relationship is bidirectional has been underexplored. Consequently, the present study examined the longitudinal relationships between perceived LSPH and mental health symptoms (depression and PTSD) among military personnel over a 5-month period. We found that perceived LSPH at Time 1 (T1) was associated with fewer mental health symptoms at Time 2 (T2); however, mental health symptoms at T1 were also associated with lower perceptions of LSPH at T2. The results differed slightly based on the type of symptoms experienced, but the relationships between perceived LSPH and symptoms did not vary based on whether soldiers had been exposed to combat. However, it is important to note that the overall sample had low combat experience. Despite this, these findings may suggest that the assumption that leader support can enhance soldier mental health may fail to consider that the symptoms themselves may also affect how leaders are perceived. Therefore, organizations such as the military should consider both directions to optimally understand the relationship between leaders and subordinate mental health.

<https://doi.org/10.1016/j.addbeh.2022.107424>

Prospective associations between sleep disturbances and cannabis use among Veterans: A behavioral economic approach.

Benjamin L. Berey, Elizabeth R. Aston, Nathan T. Kearns, John E. McGeary, ... Jane Metrik

Addictive Behaviors

Volume 134, November 2022, 107424

Highlights

- Veterans reported on sleep disturbances, cannabis demand, and cannabis use indices.
- Sleep disturbances were prospectively linked to cannabis use frequency and quantity.
- Intensity and Omax mediated relations between sleep disturbances and cannabis use frequency, quantity, and problems.

- Sleep disturbances remained indirectly associated with cannabis use quantity and problems via Omax even after controlling for baseline levels of each 12-month cannabis use outcome.

Abstract

Background

Veterans often use cannabis for sleep despite limited evidence of its efficacy. Moreover, how sleep disturbances impact cannabis use longitudinally is unclear. We applied a behavioral economic framework to examine whether sleep disturbances and cannabis demand (i.e., relative value) were related risk-factors for future cannabis use and problems.

Methods

Veterans deployed post-9/11/2001 who reported past 6-month cannabis use at baseline (n = 126) completed surveys on their sleep disturbances, demand via the Marijuana Purchase Task (MPT), and cannabis use. Mediation analyses using Hayes' PROCESS Macro and zero-inflated negative binomial models tested indirect effects of baseline sleep disturbances on 12-month cannabis use frequency, quantity, and problems via 6-month cannabis demand (i.e., intensity, Omax, Pmax, and breakpoint).

Results

Only Omax (i.e., maximum expenditure for cannabis) was a significant mediator for 12-month cannabis use quantity and problems when examined concurrently with other demand indices after controlling for covariates. Intensity (i.e., purchase at zero cost) was a significant mediator for 12-month cannabis use frequency when examined concurrently with other demand indices in models controlling for lifetime cannabis use, but not past 30-day use at baseline.

Conclusion

Cannabis demand, specifically intensity and Omax, may help to identify Veterans with sleep disturbances who are at increased risk for escalating their cannabis use. Subsequent research should assess the extent that sleep disturbances impact cannabis demand in the context of withdrawal, which will inform novel prevention and intervention strategies geared toward reducing negative cannabis-related outcomes among Veterans.

<https://doi.org/10.1016/j.addbeh.2022.107418>

Age, sex, and race-varying rates of alcohol use, cannabis use, and alcohol and cannabis co-use in veterans vs. non-veterans.

Jack T. Waddell, Jenna.L. Gress-Smith, Jessica D. Hartman, Neal Doran, Brandon Reed

Addictive Behaviors

Volume 134, November 2022, 107418

Highlights

- Non-Veterans reported heavier substance use.
- However, being a veteran was a risk factor for heavier use in women.
- Being a veteran was also a risk factor for heavier use in ethnic/racial minorities.
- Several age-related differences were also observed for alcohol use.
- Preventive interventions should target women and ethnic/racial minority veterans.

Abstract

Background

Military veterans are a high-risk group for health risk behaviors, including alcohol and cannabis use. However, research on veteran vs. non-veteran rates of alcohol/cannabis use are inconsistent across studies. Further, no research has investigated veteran vs. non-veteran rates of alcohol and cannabis co-use, and few studies have tested whether demographic variables, particularly race/ethnicity, moderate group differences. Therefore, the current study tested whether 1) veteran vs. non-veterans differed in rates of alcohol use, cannabis use, and alcohol and cannabis co-use, and 2) whether demographic covariates (age, sex, race/ethnicity) moderated associations.

Methods

Data on adults (N = 706,897; 53.4% female) were derived from the 2002–2019 National Study on Drug Use and Health. Participant demographics, alcohol use frequency, drinking quantity, and cannabis use frequency were self-reported.

Results

Non-veterans reported higher drinking quantity, cannabis frequency, and co-use. However, being a veteran was a risk factor for heavier drinking for women, ethnic/racial minoritized participants, and adults under the age of 50. Additionally, veteran status was a risk factor for cannabis use frequency in racial/ethnic minoritized participants and women. Similarly, being a veteran was a risk factor for alcohol and cannabis co-use for

racial/ethnic minoritized participants, and the buffering effect of being a Veteran on co-use was reduced for older participants and women.

Conclusions

Results suggest that, at the population level, non-veterans may be heavier alcohol/cannabis users. However, moderating analyses suggested that being a veteran is a risk factor for women, racial/ethnic minoritized individuals, and younger individuals. Findings are discussed in terms of public health implications.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9242554/>

Trends in Department of Defense Disability Evaluation System Ratings and Awards for Posttraumatic Stress Disorder and Traumatic Brain Injury, 2002–2017.

Heather Krull, Carrie M. Farmer, Stephanie Rennane, Evan Goldstein, Philip Armour, and Teague Ruder

Rand Health Quarterly
2022 Jun; 9(3): 22

Since 2001, more than 3 million service members have deployed in support of multiple combat operations in Afghanistan, Iraq, and other theaters. Many have been diagnosed with the “signature wounds” of these conflicts: posttraumatic stress disorder (PTSD) and/or traumatic brain injury (TBI). During the intervening years, the process by which service members are evaluated for disability has evolved significantly, including a complete overhaul of the Disability Evaluation System (DES) beginning in 2007. Meanwhile, the Department of Defense (DoD) and the services made policy changes and initiated other efforts to improve screening for PTSD and TBI, encourage service members to seek treatment, improve quality of care, and reduce the stigma associated with treatment for these conditions.

To explore these changes, as well as their potential effects on the numbers and characteristics of service members who are evaluated through DES, the authors identify and assess trends in DES outcomes for PTSD and TBI between 2002 and 2017.

<https://doi.org/10.1080/23279095.2022.2096452>

Disentangling subjective symptom complaints and objective cognitive performance in veterans: Impact of posttraumatic stress disorder and lifetime traumatic brain injury burden.

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Applied Neuropsychology: Adult

Published online: 12 Jul 2022

Self-reported histories of mild traumatic brain injury (mTBI) and posttraumatic stress disorder (PTSD) symptoms are prevalent among post-9/11 veterans. Both are associated with subjective and often overlapping symptom complaints, but variably with objective neuropsychological test performances. These outcomes are seldom explored in relation to lifetime mTBI burden. This cross-sectional study examined associations of PTSD and lifetime mTBI with subjective (persistent symptoms after concussion and cognitive complaints) and objective (performances across five cognitive domains) measures among 46 veterans. Within this sample, 20 veterans had Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) confirmed PTSD (PTSD+), whereas 26 demographically-similar participants did not meet criteria (PTSD-). The Boston Assessment of Traumatic Brain Injury-Lifetime (BAT-L) yielded total mTBI scores ranging from 0 to 8. Regressions showed PTSD was associated with increased subjective symptoms/cognitive complaints, along with reduced verbal fluency, visuospatial memory, and processing speed performances. Lifetime mTBI burden was associated with subjective symptoms, but not with objective cognitive test performance, after controlling for PTSD. No significant interactions were observed. Exploratory correlations suggested that all PTSD symptom clusters were generally associated with the subjective and objective measures. However, fewer significant associations emerged within the PTSD+/- groups separately, with each group yielding somewhat different patterns of relationships. PTSD and increasing mTBI burden are consistently associated with negative subjective symptoms, including cognitive complaints. Each condition likely explains some degree of unique variance in symptom reporting. PTSD is associated with poorer objective cognition on some tasks, including processing speed, executive functioning, and learning/memory. Implications are explored.

<https://doi.org/10.1080/13811118.2022.2096520>

Exploring the Safety of a General Digital Mental Health Intervention to Effect Symptom Reduction among Individuals with and without Suicidal Ideation: A Secondary Analysis.

Jonah Meyerhoff, Kaylee P. Kruzan, Kwang-Youn A. Kim, Kimberly Van Orden & David C. Mohr

Archives of Suicide Research
Published online: 12 Jul 2022

Trials of digital mental health interventions (DMHIs) often exclude individuals with suicide-related thoughts and behaviors precluding an understanding of whether DMHIs for affective disorders are safe for, and perform similarly within, this high-risk group. We explore the safety and performance of a DMHI for depression in participants with and without suicidal ideation (SI) at baseline. Three hundred and one participants were included in this secondary data analysis from a trial of an 8-week DMHI comprising 14 smartphone apps. We found that SI decreased across the study among participants with baseline SI and that baseline SI status did not attenuate depression treatment effects. Through a case study of the IntelliCare platform, we find that DMHIs for general affective disorders can be safe.

<https://doi.org/10.1001/jamanetworkopen.2022.21041>

Machine Learning Analysis of Handgun Transactions to Predict Firearm Suicide Risk.

Laqueur, H. S., Smirniotis, C., McCort, C., & Wintemute, G. J.

JAMA Network Open
2022 Jul 1; 5(7): e2221041

Key Points

Question

Can handgun purchasing records, coupled with machine learning techniques, be used to forecast firearm suicide risk?

Findings

In this prognostic study of nearly 2 million individuals with handgun transaction records, among transactions classified in the riskiest 5%, close to 40% were associated with a purchaser who died by firearm suicide within 1 year. Among the small number of transactions with a random forest score of 0.95 and above, more than two-thirds were affiliated with a purchaser who died by firearm suicide within 1 year (24 of 35).

Meaning

This study suggests that passively collected administrative data on handgun transactions may be used to inform targeted interventions based on risk stratification.

Abstract

Importance

Evidence suggests that limiting access to firearms among individuals at high risk of suicide can be an effective means of suicide prevention, yet accurately identifying those at risk to intervene remains a key challenge. Firearm purchasing records may offer a large-scale and objective data source for the development of tools to predict firearm suicide risk.

Objective

To test whether a statewide database of handgun transaction records, coupled with machine learning techniques, can be used to forecast firearm suicide risk.

Design, Setting, and Participants

This prognostic study used the California database of 4 976 391 handgun transaction records from 1 951 006 individuals from January 1, 1996, to October 6, 2015.

Transaction-level random forest classification was implemented to predict firearm suicide risk, and the relative predictive power of features in the algorithm was estimated via permutation importance. Analyses were performed from December 1, 2020, to May 19, 2022.

Main Outcomes and Measures

The main outcome was firearm suicide within 1 year of a firearm transaction, derived from California death records (1996-2016). With the use of California's Dealer's Records of Sale (1996-2015), 41 handgun, transaction, purchaser, and community-level predictor variables were generated.

Results

There are a total of 4 976 391 transactions in the California's Dealer's Record of Sale database representing 1 951 006 individuals (1 525 754 men [78.2% of individuals];

mean [SD] age, 43.4 [13.9] years). Firearm suicide within 1 year occurred in 0.07% of handgun transactions (3278 transactions among 2614 individuals). A total of 38.6% of observed firearm suicides were among transactions classified in the highest-risk ventile (379 of 983 transactions), with 95% specificity. Among the small number of transactions with a random forest score above 0.95, more than two-thirds (24 of 35 [68.6%]) were associated with a purchaser who died by firearm suicide within 1 year. Important features included known risk factors, such as older age at first purchase, and previously unreported predictors, including distance to firearms dealer and month of purchase.

Conclusions and Relevance

This prognostic study presented the first large-scale machine learning analysis of individual-level handgun transaction records. The results suggested the potential utility of such records in identifying high-risk individuals to aid suicide prevention efforts. It also identified handgun, individual, and community characteristics that have strong predictive relationships with firearm suicide and may warrant further study.

<https://doi.org/10.1080/13811118.2022.2096521>

Examining the Interrelationships Among Suicide Cognitions, Suicidal Ideation, and Theoretically Derived Protective Factors.

Nicolas Oakey-Frost, Tovah Cowan, Emma H. Moscardini, Sarah Pardue-Bourgeois, Derek de Beurs, Alex Cohen, Craig J. Bryan & Raymond P. Tucker

Archives of Suicide Research
Published online: 11 Jul 2022

Introduction

Several protective factors for mitigating suicidal ideation (SI) such as positive affect, reasons for living, purpose in life, meaning in life, gratitude, grit, optimism, social support, and hope have been identified and received empirical support. However, few studies have examined the interrelationships of these protective factors and the identification of protective factors most closely linked to lower levels of SI may be useful for both theory-building initiatives and improvement of suicide-specific interventions. Network analysis offers an approach for testing the relation among these constructs, SI, and suicide risk factors.

Methods

A sample N = 557 undergraduate students oversampled for lifetime SI completed a cross-sectional, online survey. The data was used to estimate an undirected, cross-sectional network of the aforementioned protective factors.

Results

The resulting inferred network implicates strong negative influence of suicide cognitions, but not recent SI, and the strong positive influence of presence of meaning in life, trait hope, and low negative affect.

Conclusions

Implications for dimensionality of SI versus suicide cognitions, targeting presence of meaning in life, trait hope, and negative affect in treatment, and cross-cultural variations in reasons for living are discussed. The study is limited by the cross-sectional and convenience sampling methodology.

Highlights

- Protective factors may have less direct influence on suicidal ideation
- Suicide cognitions and the suicidal mode may be of phenomenological importance
- Presence of meaning and trait hope may be primary targets for suicide interventions

<https://doi.org/10.1001/jamanetworkopen.2022.35984>

Evaluation of Safe Firearm Storage Messaging in a Sample of Firearm-Owning US Military Service Members.

Anestis, M. D., Bryan, C. J., Capron, D. W., & Bryan, A. O.

JAMA Network Open
2022 Oct 3; 5(10): e2235984

Importance:

Nearly two-thirds of military suicides involve firearms, and safe firearm storage is rare.

Objective:

To examine whether US military service members endorse greater openness to safe

firearm storage depending on the content of the visual message they are randomly assigned to view.

Design, setting, and participants:

This comparative effectiveness study used a $3 \times 2 \times 2$ factorial design to randomize US military service members to view 1 of 12 visual messages on safe firearm storage. Willingness to use safe firearm storage practices was assessed immediately before and after exposure to the message. Participants were recruited using the KnowledgePanel Calibration approach. Inclusion criteria included current membership in the US military and current firearm ownership. The KnowledgePanel sample was fielded from December 3 to 27, 2021, with a 76% completion rate and 45 individuals determined to be qualified (28% qualification rate). The opt-in sample was fielded December 7, 2021, through January 4, 2022, with 699 individuals (3%) qualified and 674 included in the final data set.

Exposures:

Messages shared the same image and text on safe firearm storage but varied in messenger occupation (eg, primary care physician, security forces, or combat controller), the presence of text validating the perspective of firearm owners, and the presence of text validating the drive for home protection.

Main outcomes and measures:

Outcomes included changes in willingness to use 4 at-home (unloaded, separate from ammunition, in a locked location, and with a locking device) and 3 away-from-home (with family or friend, at a firearm retailer, or at a law enforcement agency) firearm storage practices. All analyses, including sample descriptives, are based on weighted data.

Results:

Of the 719 individuals in the data set, 367 (median [range] age, 33.64 [18-86] years; 80.4% male; 71.4% White) who endorsed not currently storing firearms using the methods assessed were included in analyses. In a multivariate analysis of variance, a significant interaction was found among time, messenger profession, gun-friendly text, and home protection text across all outcomes (Wilks' λ $F = 2.09$; $P = .01$; $\eta^2 = 0.040$); however, in a post hoc repeated-measures analysis of variance, the interaction was statistically significant only for storing firearms away from home with a trusted family member or friend ($F = 5.42$; $P = .005$; $\eta^2 = 0.030$). The profession of the messenger was more consistently associated with shifts in willingness than was the message content, although this varied across storage options.

Conclusions and relevance:

The findings of this comparative effectiveness study suggest that several combinations of messenger and content may be associated with willingness to endorse safe firearm storing practices, with particularly consistent positive findings for messages featuring security forces. The scalability and dosage potential of this intervention may render visual messaging valuable for promoting safe firearm storage at the population level.

<https://doi.org/10.1002/jts.22860>

Network analysis of mild traumatic brain injury, persistent neurobehavioral and psychiatric symptoms, and functional disability among recent-era United States veterans.

Fonda, J. R., Crowe, M. L., Levin, L. K., Jagger-Rickels, A., Marx, B. P., Milberg, W. P., McGlinchey, R. E., & Fortier, C. B.

Journal of Traumatic Stress
2022 Oct; 35(5): 1546-1558

Recent-era U.S. veterans are clinically complex, with a high prevalence of co-occurring mild traumatic brain injury (mTBI), psychiatric conditions, and behavioral dysfunction. The current study examined the direct and indirect associations between mTBI and persistent neurobehavioral, psychiatric, and functional disability symptoms among recent-era U.S. veterans and service members (n = 648). We evaluated the postconcussive syndrome (PCS) potential causal model with two network analysis modeling approaches. Separate analyses were conducted for military mTBI and lifetime mTBI. An exploratory factor analysis was conducted to limit topological overlap in the network analysis. The most influential symptoms (i.e., the unique variables most strongly associated with the rest of the network) in the military mTBI network were behavioral disengagement, expected influence (EI) = 1.10; cognitive difficulties, EI = 1.08; agitation/irritability, EI = 1.05; and PTSD-related reexperiencing and avoidance symptoms, EI = 0.98. After accounting for other symptoms, mTBI was only minimally informative, EI = 0.34. Additionally, military mTBI did not moderate the association between symptoms or the overall connectivity of the network. The results for lifetime mTBI were consistent with those for military mTBI. The present analyses identified a variety of behavioral, cognitive, and emotional symptoms that play an important role in understanding comorbidity and daily functioning among recent-era U.S. veterans. Associations between cumulative mTBI that occurred in civilian or military settings were

indirect and relatively small in magnitude. The current results add to a growing literature raising doubts about the PCS model.

<https://doi.org/10.1037/lhb0000497>

Criminal legal involvement among recently separated veterans: Findings from the LIMBIC study.

Elbogen, E. B., Amuan, M., Kennedy, E., Blakey, S. M., Graziano, R. C., Hooshyar, D., Tsai, J., Nelson, R. E., Vanneman, M. E., Jones, A. L., & Pugh, M. J.

Law and Human Behavior
2022 Oct; 46(5): 385-394

Objective:

This study investigated individual-level and neighborhood-level predictors of criminal legal involvement of veterans during the critical transition period from military to civilian life.

Hypotheses:

We hypothesized that substance use, mental health, and personality disorders will increase the incidence of criminal legal involvement, which will be highest among veterans living in socioeconomically disadvantaged neighborhoods after military discharge.

Method:

We analyzed data from a longitudinal cohort study of 418,624 veterans who entered Department of Veterans Affairs (VA) health care after leaving the military. Department of Defense (DoD) data on clinical diagnoses, demographics, and military history were linked to VA data on neighborhood of residence and criminal legal involvement.

Results:

Criminal legal involvement in the 2 years following military discharge was most strongly predicted by younger age, substance use disorder, and being male. Other predictors included the military branch in which veterans served, deployment history, traumatic brain injury, serious mental illness, personality disorder, having fewer physical health conditions, and living in socioeconomically disadvantaged neighborhoods. These factors combined in multivariable analysis yielded a very large effect size for predicting

criminal legal involvement after military separation (area under the curve = .82). The incidence of criminal legal involvement was 10 times higher among veterans with co-occurring substance use disorder, serious mental illness, and personality disorder than among veterans with none of these diagnoses, and these rates were highest among veterans residing in more socioeconomically disadvantaged neighborhoods.

Conclusions:

To our knowledge, this is the largest longitudinal study of risk factors for criminal legal involvement in veterans following military discharge. The findings supported the hypothesis that veterans with co-occurring mental disorders living in socioeconomically disadvantaged neighborhoods were at higher risk of criminal legal involvement, underscoring the complex interplay of individual-level and neighborhood-level risk factors for criminal legal involvement after veterans leave the military. These results can inform policy and programs, such as the DoD Transition Assistance Program (TAP) and the VA Military to Civilian Readiness Pathway program (M2C Ready), to enhance community reintegration and prevent criminal legal involvement among veterans transitioning from military to civilian life. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

<https://doi.org/10.1080/09638237.2020.1766666>

Combat exposure and co-occurring mental health problems in UK Armed Forces personnel.

Chui, Z., Fear, N. T., Greenberg, N., Jones, N., Jones, E., & Goodwin, L.

Journal of Mental Health
2022 Oct; 31(5): 624-633

Background:

Mental disorders and alcohol misuse are often comorbid, and this comorbidity is more common in those who develop mental disorders following exposure to traumatic events.

Aims:

To investigate the relationship between combat exposure and operational role (support versus combat) with mental disorders and associated comorbidity in a UK military cohort.

Methods:

4896 participants from a UK military cohort reported their operational role and frequency of exposure to combat events during deployment. Outcome measures included self-reported post-traumatic stress disorder, common mental disorder and alcohol misuse.

Results:

Personnel reporting higher levels of combat exposure were more likely to meet criteria for two or more co-occurring mental disorders (odds ratio [OR] 3.90, 95% confidence interval [CI] 2.73-5.58). While having a combat role increased the risk of developing co-occurring disorders compared to having a support role (OR 1.67, 95% CI 1.26-2.23), this effect diminished following adjustment for variables including combat exposure (OR 0.89, 95% CI 0.62-1.27).

Conclusions:

Combat exposure may play a greater role in the development of comorbid mental disorders than operational role, i.e. job title. Clinicians treating military personnel should be alert to the increased risk of comorbid mental disorders and alcohol misuse among those with a history of combat exposure.

<https://doi.org/10.1037/tra0001356>

Exploring the health and well-being of a national sample of U.K. treatment-seeking veterans.

Williamson, C., Baumann, J., & Murphy, D.

Psychological Trauma : Theory, Research, Practice and Policy
2022 Oct 10

Objective:

Military veterans experience a higher prevalence of mental health difficulties compared with the general population. Research has highlighted veterans who experience mental health difficulties have poorer treatment outcomes. Understanding veteran needs may help improve veteran mental health services and treatment outcomes. The aim of this study was to explore the complexity of health and well-being needs among a national clinical sample of veterans.

Method:

In total, 989 veterans from a U.K. veterans mental health charity were invited to complete a questionnaire about their sociodemographic characteristics, military experiences, physical and mental health, and well-being.

Results:

Of the invitees, 428 veterans (43.3%) completed the questionnaire. Common mental disorders, such as anxiety and depression, were the most frequently reported mental health difficulty (80.7%), followed by loneliness (79.1%) and perceived low social support (72.2%). Rates of PTSD were also high (68.7% any PTSD), with most participants experiencing complex PTSD (CPTSD; 62.5%) compared with PTSD (6.2%). Veterans with co-occurring CPTSD symptoms have poorer health due to a higher number of comorbidities, for instance between CPTSD and moral injury.

Conclusions:

Comorbidity appeared to be the norm rather than the exception within treatment-seeking veterans. As such, it seems important for veteran mental health services to take a holistic approach when supporting veterans. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

<https://doi.org/10.1016/j.sxmr.2022.06.002>

Male Sexual Health Related Complications Among Combat Veterans.

Castillo, O., Jr, Chen, I. K., Amini, E., Yafi, F. A., & Barham, D. W.

Sexual Medicine Reviews

2022 Oct; 10(4): 691-697

Introduction:

With improved armor and combat trauma care, more male service members in the 21st century are surviving devastating injuries to their genitourinary (GU) system. The impact of these injuries can have long lasting effect on their sexual function and fertility status.

Objectives:

To review the current literature on sexual health-related complications and fertility implications among male service members sustaining combat related injuries.

Methods:

We performed a literature search that included male sexual health complications and combat injuries using PubMed and Google Scholar. We reviewed the impact of traumatic injuries to the pelvis and perineum on sexual function and fertility, and we also discuss sexual dysfunction from posttraumatic stress disorder (PTSD) and traumatic brain injuries (TBI).

Results:

Injuries sustained during combat are usually polytraumatic, especially in recent conflicts with improvised explosive devices. The majority of GU combat injuries involve the scrotum, testes, and penis resulting in lasting structural dysfunction. PTSD is associated with higher levels of erectile dysfunction, hypoactive sexual desire, and premature ejaculation. Overall, veterans diagnosed with PTSD had a higher risk of developing sexual dysfunction. Veterans with TBI experience sexual health complications, such as decreased libido, difficulties with arousal maintenance, and the ability to achieve orgasm. Combat related injuries can have significant fertility implications on service members as they typically serve in their peak fertility years.

Conclusions:

Traumatic GU injuries, PTSD, TBI, and associated endocrine dysfunction can all contribute to sexual dysfunction among combat veterans. Given the complex nature of sexual dysfunction in this population, these patients are best managed by a multidisciplinary team.

<https://doi.org/10.1002/da.23274>

The effect of war injury and combat deployment on military wives' mental health symptoms.

Cozza, S. J., Ogle, C. M., Fisher, J. E., Zhou, J., Zuleta, R. F., Fullerton, C. S., & Ursano, R. J.

Depression and Anxiety
2022 Oct; 39(10-11): 686-694

Background:

Although much has been learned about the physical and psychological impacts of

deployment and combat injury on military service members, less is known about the effects of these experiences on military spouses.

Methods:

The present study examined self-reported mental health symptoms (using the Brief Symptom Inventory [BSI]-18 and the posttraumatic stress disorder [PTSD] Checklist [PCL-C]) in wives of service members who were combat-injured (CI; n = 60); noninjured with cumulative deployment longer than 11 months (NI-High; n = 51); and noninjured with cumulative deployment less than 11 months (NI-Low; n = 53).

Results:

36.7% and 11.7% of CI wives endorsed above threshold symptoms on the PCL-C and overall BSI-18, respectively. Multivariate linear regressions revealed that being a CI wife was associated with higher PCL-C, overall BSI-18, and BSI-18 anxiety subscale scores compared to NI-Low wives in models adjusted for individual and family characteristics, as well as prior trauma and childhood adversities. Compared with the NI-High group, the CI group was associated with higher overall BSI-18 scores.

Conclusions:

While CI wives evidenced fewer mental symptoms than expected, these findings suggest a negative impact of service member's combat injury on wives' mental health above that attributable to deployment, highlighting the need for trauma-informed interventions designed to support the needs of military wives affected by combat injury.

<https://doi.org/10.3389/fpsy.2022.910414>

Conceptualizing in Acceptance and Commitment Therapy for Moral Injury: An Active and Ongoing Approach to Understanding and Intervening on Moral Injury.

Borges, L. M., Barnes, S. M., Farnsworth, J. K., Drescher, K. D., & Walser, R. D.

Frontiers in Psychiatry

Published online 2022 Jun 30

Acceptance and Commitment Therapy for Moral Injury (ACT-MI; 10–11), is an application of Acceptance and Commitment Therapy principles designed to help individuals live their values, even in the presence of moral pain. ACT-MI differs from other emerging treatments for moral injury in that ACT-MI is not based on a traditional

syndromal approach to conceptualizing moral injury, which treats moral injury as a collection of signs and symptoms to be reduced. Rather than assuming moral injury causes suffering through a constellation of symptoms that a person has, in ACT-MI, moral injury is defined by what a person does in response to moral pain. Consistent with this framework, we present a unique approach to moral injury case conceptualization that emphasizes function over form, providing clients the opportunity to break free from the patterns of behavior that cause moral injury-related suffering to persist. Rooted in approaches to conceptualizing that have demonstrated utility in extant interventions (e.g., ACT), ACT-MI clinicians conduct ongoing functional analyses to inform case conceptualization and intervention. Functional analysis is used to disrupt the processes maintaining moral injury, as the client and therapist work to identify and intervene on the behaviors reinforcing avoidance and control of painful internal experiences causing moral injury. In the current article, we guide the reader through a framework for applying functional analysis to the conceptualization of moral injury where the reinforcers driving moral injury are explored. We also provide examples of questions that can be used to help uncover the functions of moral injury consistent behavior. Case examples based on our experiences treating moral injury are presented to demonstrate how various types of morally injurious events can evoke different features of moral pain which in turn motivate different repertoires of avoidance and control. These inflexible patterns of avoidance and control create suffering by engaging in behavior designed to escape moral pain, such as social isolation, spiritual disconnection, reduced self-care, suicidal ideation, and substance use. We discuss how to target this suffering using functional analysis to guide treatment decisions, matching interventional processes within ACT-MI to the specific functions that moral injury-related behavior is serving for an individual. We suggest that the use of functional analytic case formulation procedures described herein can assist clients in disrupting behavioral patterns maintaining moral injury and thereby free them to pursue lives of greater meaning and purpose.

<https://doi.org/10.1016/j.cbpra.2022.06.005>

Clinical and Administrative Insights From Delivering Massed Trauma-Focused Therapy to Service Members and Veterans.

Wright, E. C., Wachen, J. S., Yamokoski, C., Galovski, T., Morris, K., Goetter, E. M., ... & Rauch, S. A.

Cognitive and Behavioral Practice
Available online 16 July 2022

Highlights

- Massed, evidence-based psychotherapies for PTSD have proliferated since 2010.
- A variety of massed formats show low dropout and significant symptom improvements.
- There are unique advantages for both patients and providers to condensing treatment.
- The time-limited nature of massed treatment creates specific challenges as well.

Abstract

Despite strong evidence of their effectiveness in reducing symptoms of posttraumatic stress disorder (PTSD), prolonged exposure therapy (PE) and cognitive processing therapy (CPT) remain challenging for some service members and veterans to access and complete. Delivering PE and CPT in time-condensed or “massed” formats may reduce barriers to receiving care. PE and CPT have now been implemented across a range of tempos (e.g., multiple sessions per day across 1 week, one session per day for 3 weeks) and to multiple target populations, in a variety of contexts from individual therapy alone to full intensive outpatient programs. A massed format of treatment delivery has advantages for both patients and providers, including quicker time to recovery, less opportunity for avoidance, and improved treatment completion rates. The time-limited nature of massed treatment also creates accompanying challenges, such as less time to practice homework and greater impact when factors delay or disrupt progress. This paper discusses lessons learned from providers across diverse settings who are experienced in both delivering massed PE and CPT and managing such programs, primarily with military populations.

<https://doi.org/10.1080/08995605.2022.2093599>

Identifying and mitigating moral injury risks in military behavioral health providers.

Erika L. King & Lataya E. Hawkins

Military Psychology

Published online: 15 Jul 2022

The term “moral injury” was initially used to describe the multifaceted pain that service members feel after perpetrating, witnessing, or failing to prevent acts that conflict with their moral codes. More recently the term has been used to describe healthcare providers’ pain stemming from their experiences serving on the frontlines of the healthcare system when: a medical error causes serious harm to patients, systems continuously impede their abilities to provide proper care, or providers assess that they have acted in ways that conflict with their professional ethics or oaths to “do no harm.” This article explores moral injury risk at the intersection of military service and healthcare by examining challenges that military behavioral healthcare providers face. Leveraging moral injury definitions previously applied to service members (personal or witnessed transgressions) and in two healthcare contexts (“second victim” to adverse client outcomes and system-driven moral distress), as well as literature on ethical challenges in military behavioral health, this paper uncovers situations that may amplify military behavioral health providers’ risks for moral injury. It concludes by offering policy and practice recommendations germane to military medicine aimed at alleviating pressures military behavioral healthcare providers face and mitigating moral injuries’ potential ripple effects on provider wellness, retention and care quality.

Links of Interest

Screening for Anxiety in Children and Adolescents: US Preventive Services Task Force Recommendation Statement

<https://jamanetwork.com/journals/jama/fullarticle/2797219>

Screening for Depression and Suicide Risk in Children and Adolescents: US Preventive Services Task Force Recommendation Statement

<https://jamanetwork.com/journals/jama/fullarticle/2797145>

How this Army officer found a work-life balance

<https://www.armytimes.com/news/your-army/2022/10/12/how-this-army-officer-found-a-work-life-balance/>

The Beast: Taming Your Problematic Anger

<https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/The-Beast-Taming-Your-Problematic-Anger>

Connecting with Patients for Conversations about Suicide

<https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/Connecting-with-Patients-for-Conversations-about-Suicide>

Beyond Mental Health: Talking with Commanders about Environmental and Non-Clinical Drivers of Suicide

<https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/Beyond-Mental-Health-Talking-with-Commanders-about-Environmental-and-Non-Clinical-Drivers-of-Suicide>

Mending the Holes in the Suicide Safety Net

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794327>

Staff Perspective: Defining Military Families in Research - It's Not Just Semantics

<https://deploymentpsych.org/blog/staff-perspective-defining-military-families-research-it%E2%80%99s-not-just-semantics>

Staff Perspective: Not Your Fault, but Still Your Responsibility: The Needs of Youth with a Parent with Alcohol Use Disorder

<https://deploymentpsych.org/blog/staff-perspective-not-your-fault-still-your-responsibility-needs-youth-parent-alcohol-use>

Your Pain on a Scale of 1-10? Check Out a New DOD Way to Evaluate Pain

<https://health.mil/News/Articles/2022/10/13/DVPRS-pain-scale>

Air Force puts reporting options for sexual harassment on par with sexual assault

https://www.stripes.com/branches/air_force/2022-10-13/new-reporting-options-sexual-harassment-7674417.html

Sgt. Maj. of the Army to leaders: Stop using behavioral health as a universal band-aid for problems

<https://taskandpurpose.com/news/army-behavioral-health-wellness-checks-grinston/>

Veterans are hitting fairways and greens to ease trauma

<https://www.washingtonpost.com/sports/2022/10/17/veterans-are-hitting-fairways-greens-ease-trauma/>

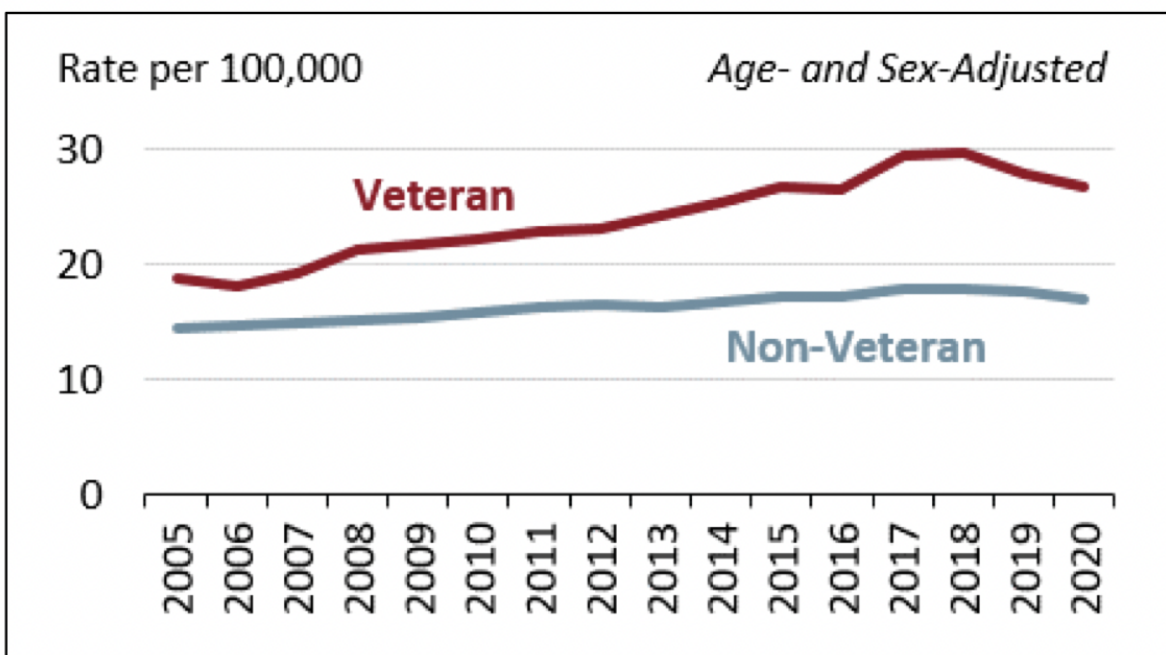
Resource of the Week: [Veteran Suicide Prevention](#)

Recently updated, from the Congressional Research Service:

Suicide is the 10th leading cause of death in the United States. Although suicide rates have increased among the U.S. general population over the past two decades, veterans are disproportionately affected by suicide. According to the U.S. Department of Veterans Affairs (VA), in 2020, the suicide rate for veterans was 57.3% greater than for nonveteran U.S. adults, adjusting for age and sex (see Figure 1), and an average of 16.8 veterans died by suicide per day.

Figure 1. Veteran and Nonveteran Suicide Rate per 100,000 Population, 2005–2020

(Rates adjusted for age and sex)



Source: Prepared by CRS using VA 2005-2020 National Suicide Data Appendix accompanying the 2022 National Veteran Suicide Prevention Annual Report.

VA data suggest that use of Veterans Health Administration (VHA) services by specific veteran populations can reduce suicide. VA has named suicide as its top clinical priority for FY2018 to FY2024. As a result, the department has funded

and implemented numerous suicide prevention programs largely administered through VHA. Congress has also expressed interest in reducing veteran suicide through appropriations and authorizing legislation.

See also: [2022 National Veteran Suicide Prevention Annual Report](#) (VA)

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