

## Research Update -- March 21, 2024

#### What's Here:

- Emotional reactivity linking assaultive trauma and risky behavior: Evidence of differences between cisgender women and men.
- Determining who military service members deem credible to discuss firearm safety for suicide prevention.
- Migraine Prevalence, Environmental Risk, and Comorbidities in Men and Women Veterans.
- Sex-Specific Association of Alcohol Use Disorder With Suicide Mortality: A Systematic Review and Meta-Analysis.
- American Support of Public Programs for Veterans: Estimates From a National Survey Including a Discrete Choice Experiment.
- Examining bias in the award of Veterans Affairs (VA) disability benefits for posttraumatic stress disorder in women veterans: Analysis of evaluation reports and VA decisions.
- Decoding Suicide Decedent Profiles and Signs of Suicidal Intent Using Latent Class Analysis.
- Hypertension at the nexus of veteran status, psychiatric disorders, and traumatic brain injury: Insights from the 2011 Behavioral Risk Factor Surveillance System.
- Characteristics and Correlates of Ten-Year Trajectories of Posttraumatic Stress Symptoms in Older U.S. Military Veterans.

- The Role of Emotion Dysregulation in Understanding Suicide Risk: A Systematic Review of the Literature.
- Non-pharmacological interventions for preventing suicide attempts: A systematic review and network meta-analysis.
- A Randomized Control Trial of a Digital Health Tool for Safer Firearm and Medication Storage for Patients with Suicide Risk.
- Impulsivity and Psychiatric Diagnoses as Mediators of Suicidal Ideation and Suicide Attempts Among Veterans With Traumatic Brain Injury.
- Recurrence of post-traumatic stress disorder: systematic review of definitions, prevalence and predictors.
- Cannabis use and trauma-focused treatment for co-occurring posttraumatic stress disorder and substance use disorders: A meta-analysis of individual patient data.
- Mindfulness-Oriented Recovery Enhancement for Veterans and Military Personnel on Long-Term Opioid Therapy for Chronic Pain: A Randomized Clinical Trial.
- Cohort Differences in PTSD Symptoms and Military Experiences: A Life Course Perspective.
- Design of a hybrid implementation effectiveness cluster randomized controlled trial of delivering written exposure therapy for PTSD in underserved primary care settings.
- Crisis response planning rapidly reduces suicidal ideation among U.S. military veterans receiving massed cognitive processing therapy for PTSD.
- Links of Interest
- DACOWITS (Defense Advisory Committee on Women in the Services) 2023 Annual Report

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#### https://doi.org/10.1002/jts.23028

## Emotional reactivity linking assaultive trauma and risky behavior: Evidence of differences between cisgender women and men.

Anna Stumps, Nadia Bounoua, Naomi Sadeh

Journal of Traumatic Stress First published: 07 March 2024

Accumulating evidence suggests that trauma exposure is positively associated with future engagement in risky behavior, such as substance misuse, aggression, risky sex, and self-harm. However, the psychological factors driving this association and their relevance across gender groups require further clarification. In a community sample of 375 adults with a high rate of trauma exposure (age range: 18–55 years, M = 32.98 years, SD = 10.64; 76.3% assaultive trauma exposure), we examined whether emotional reactivity linked lifetime assaultive trauma exposure with past-month risky behavior. We also explored whether this model differed for cisgender women (n = 178, 47.6%) and men (n = 197, 52.5%). As hypothesized, assaultive trauma was positively related to emotional reactivity,  $\beta$  = .20, SE = 0.03, t(369) = 3.65, p < .001, which, in turn, partially accounted for the association between assaultive trauma and past-month risky behavior, indirect effect:  $\beta$  = .03, SE = 0.01, 95% bootstrapped CI [0.01, 0.06]. Gender moderated this association such that assaultive trauma was indirectly associated with risky behavior via emotional reactivity for women but not for men, index moderation: B = -0.03, SE = 0.02, 95% bootstrapped CI [-0.07, -0.01]. Cross-sectional results suggest that emotional reactivity may be a proximal target for clinical intervention to aid in the reduction of risky behavior among women.

## https://doi.org/10.1111/sltb.13070

## Determining who military service members deem credible to discuss firearm safety for suicide prevention.

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Suicide and Life-Threatening Behavior First published: 03 March 2024

#### Objectives

To examine rankings of credible sources for discussing secure storage within a representative sample of firearm-owning service members, and examine how combinations of demographic variables impact the ranking of credible sources.

#### Methods

The probability-based sample was collected with the help of Ipsos. Participants were US service members who owned a firearm at the time of the survey (n = 719).

#### Results

The total sample ranked service members, Veterans, and members of law enforcement as the most credible sources and faith leaders, casual acquittances, and celebrities as the least credible sources. Black men ranked the NRA as a highly credible source whereas Black females ranked the NRA as one of the least preferred sources. Regardless of political preference, those who lived in non-metropolitan rural environments ranked members of law enforcement as highly credible sources. Those who lived in non-metropolitan rural and urban settings and identified as liberal ranked the National Shooting Sports Foundation as a highly credible source.

## Conclusions

Law enforcement officers, military members, and Veterans are ranked as highly credible sources by most subgroups of firearm-owning service members. Leveraging these voices in firearm safety conversations is necessary, may increase adherence to secure storage recommendations, and ultimately reduce suicide.

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https://doi.org/10.1001/jamanetworkopen.2024.2299

## Migraine Prevalence, Environmental Risk, and Comorbidities in Men and Women Veterans.

Gasperi, M., Schuster, N. M., Franklin, B., Nievergelt, C. M., Stein, M. B., & Afari, N.

JAMA Network Open March 14, 2024

## Key Points

## Question

What is the lifetime prevalence of migraine in US veterans, and how is it associated with comorbidities, environmental risk factors, and service history?

## Findings

In this large cross-sectional study of 491 604 US veterans, 8.2% of men and 30.1% of women reported a history of migraine. Veterans with migraine reported significantly worse general health, more pain, and had a higher reported prevalence of neurological and psychiatric conditions, with a noted association to specific environmental exposures during military service.

## Meaning

These findings suggest that migraine in veterans is highly prevalent and imposes a significant burden on quality of life; improved screening, tailored interventions, and targeted management strategies are needed to address the unique needs of veterans with migraines.

## Abstract

## Importance

Migraine is a prevalent and debilitating condition that substantially impacts quality of life. Investigating migraine prevalence, associated comorbidities, and potential military service exposures in veterans, focusing on gender differences, is crucial for targeted interventions and management strategies.

## Objective

To determine the prevalence of migraine, associated health comorbidities, and potential military service and environmental exposures among men and women US veterans using a large-scale epidemiological sample from the Million Veteran Program (MVP).

## Design, Setting, and Participants

This cross-sectional study analyzed self-report survey data from the MVP, a large epidemiological sample of US veterans that was started in 2011 and has ongoing enrollment. Eligible participants were selected from the MVP database in 2023. The study included 491 604 veterans to examine migraine prevalence, health comorbidities, demographic characteristics, military service history, and environmental exposures. Data were analyzed from December 2022 to July 2023.

#### Exposures

Military service and environmental factors, such as chemical or biological warfare exposure, were considered.

## Main Outcomes and Measures

The primary outcome was migraine prevalence among men and women veterans, assessed through self-reported diagnoses. Secondary outcomes included the association between migraine and health comorbidities, demographic characteristics, military service history, and environmental exposures.

## Results

Of the 491 604 veterans included in this study, 450 625 (91.8%) were men and 40 979 (8.2%) were women. The lifetime prevalence of migraine was significantly higher in women (12 324 of 40 979 [30.1%]) than in men (36 816 of 450 625 [8.2%]). Migraine prevalence varied by race and ethnicity, with the highest prevalence in Hispanic or Latinx women (1213 of 3495 [34.7%]). Veterans with migraine reported worse general health, higher levels of pain, increased pain interference with work, a higher likelihood of psychiatric and neurological health conditions, and greater lifetime opioid use. Specific aspects of military service, including service post-September 2001 and deployment in Operation Enduring Freedom and Operation Iraqi Freedom, and environmental factors, including Agent Orange, chemical and biological welfare, and antinerve agent pills history, were significantly associated with migraine prevalence.

## Conclusions and Relevance

In this cross-sectional study of migraine, the results highlighted gender differences in migraine prevalence and associated health comorbidities among US veterans. The findings emphasized the need for interdisciplinary approaches to migraine management, increased awareness and education efforts, and population-based screening strategies, particularly for women and Hispanic veterans who are at greater risk. Our findings encourage further research into tailored interventions for specific subpopulations and the impact of military service and environmental exposures on migraine and related health conditions.

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https://doi.org/10.1001/jamanetworkopen.2024.1941

Sex-Specific Association of Alcohol Use Disorder With Suicide Mortality: A Systematic Review and Meta-Analysis.

Lange, S., Kim, K. V., Lasserre, A. M., Orpana, H., Bagge, C., Roerecke, M., & Rehm, J.

JAMA Network Open March 12, 2024

## Key Points

Question

Does alcohol use disorder (AUD) have a sex-specific association with suicide mortality?

## Findings

This systematic review and meta-analysis found that sex differences in the association of AUD with suicide mortality were a function of bias introduced by the study design. Among longitudinal studies, both sexes with AUD had statistically significantly higher odds of dying by suicide compared with their counterparts without AUD.

## Meaning

Alcohol use disorder is associated with similar heightened odds of suicide mortality for males and females, underscoring the need for simple routine screening measures that could have an important impact in terms of lives saved.

## Abstract

## Importance

Despite individual studies suggesting that sex differences exist in the association between alcohol use disorder (AUD) and suicide, most existing systematic reviews and meta-analyses have reported associations across the sexes.

## Objective

To estimate the sex-specific association between AUD and suicide mortality.

## Data Sources

Embase, MEDLINE (including MEDLINE In-Process), PsycINFO, PubMed, and Web of Science were searched from database inception to April 27, 2022.

## Study Selection

Inclusion criteria consisted of the following: (1) original, quantitative study, (2) inclusion of a measure of association and its corresponding measure of variability (or sufficient data to calculate these [eg, 95% CI]), and (3) results stratified by sex.

#### Data Extraction and Synthesis

Data extraction was completed by one reviewer and then cross-checked by a second reviewer. Risk of bias was assessed by study design. Categorical random-effects metaanalyses were conducted to obtain sex-specific pooled estimates of the association between AUD and suicide mortality risk. Methodological moderators (ie, study design and comparator group) were assessed using sex-stratified meta-regressions.

#### Main Outcomes and Measures

The association between AUD and suicide mortality.

#### Results

A total of 16 347 unique records were identified in the systematic search; 24 studies were ultimately included for 37 870 699 participants (59.7% male and 40.3% female) (23 risk estimates for male and 17 for female participants). Participants ranged in age from 15 years to 65 years or older. Sex-specific meta-regression models indicated that study design (ie, longitudinal vs cross-sectional study design) affected the observed association between AUD and suicide mortality for both male participants (log odds ratio, 0.68 [95% CI, 0.08-1.28]; P = .03) and female participants (log odds ratio, 1.41 [95% CI, 0.57-2.24]; P < .001). For males and females, among longitudinal studies, the pooled odds ratios were 2.68 (95% CI, 1.86-3.87; I2 = 99% [n = 14]) and 2.39 (95% CI, 1.50-3.81; I2 = 90% [n = 11]), respectively.

## Conclusions and Relevance

This systematic review and meta-analysis yielded substantive evidence that AUD was associated with suicide mortality and that the association was similar across the sexes. The findings underscore the importance of identifying and treating AUD as part of a comprehensive suicide prevention strategy.

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## https://doi.org/10.1177/0095327X241235313

## American Support of Public Programs for Veterans: Estimates From a National Survey Including a Discrete Choice Experiment.

Coe, J., Schwam, D., Ramchand, R., & Farmer, C.

Armed Forces & Society First published online March 14, 2024 Do Americans see veterans as particularly deserving or simply as other members of their community? From a nationally representative survey fielded between June and September 2021 with over 2,000 respondents, we find that Americans state high levels of support for veterans and are willing to pay additional tax dollars to provide assistance programs. We find that most Americans support free health care, free college, and affordable housing for all Americans, and the support is notably stronger for programs for veterans. From a discrete choice experiment, we find that Americans are willing to pay hundreds of dollars in additional taxes to provide assistance programs to either veterans or to all community members, and Americans are willing to pay significantly more for certain programs for veterans. In addition, we look at differences in willingness to pay based on military and political affiliation.

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## https://doi.org/10.1002/jts.23034

Examining bias in the award of Veterans Affairs (VA) disability benefits for posttraumatic stress disorder in women veterans: Analysis of evaluation reports and VA decisions.

Mayumi O. Gianoli, Andrew W. Meisler, Rebecca Gordon

Journal of Traumatic Stress First published: 10 March 2024

Studies have raised concerns about possible inequities in the U.S. Department of Veterans Affairs (VA)'s awards of disability for posttraumatic stress disorder (PTSD) to women. However, the diagnoses and opinions made by disability examiners have not been studied. A sample of 270 initial PTSD examination reports and corresponding VA decisions were studied. Compared to men, women veterans were as likely to be diagnosed with a service-related mental disorder,  $\chi^2(1, N = 270) = 2.31$ , p = .129, odds ratio (OR) = 1.79, 95% CI [0.84, 3.80], and be granted service-connection,  $\chi^2(1, N = 270) = 0.49$ , p = .483, OR = 1.28, 95% CI [0.65, 2.51]. Women veterans were considered to have more psychiatric symptoms, Z = -2.05, p = .041, r = .16, and more psychiatric impairment, Z = -2.48, p = .013, r = .20, but the percentage of disability awarded by the VA did not differ,  $\chi^2(1, N = 270) = 0.49$ , p = .483; OR = 1.28, 95% CI [0.65, 2.51]. Secondary analyses implicate the role of military sexual trauma and premilitary trauma in explaining sex differences in symptoms and impairment. The findings indicate that neither opinions by examiners nor corresponding decisions by the

VA regarding service connection reflect a negative bias toward women veterans. Results indicate that unbiased examinations lead to equitable VA claims decisions for women veterans. Future studies of the VA PTSD disability program nationally, including examination procedures and VA policies and implementation, will promote equity for women veterans in the PTSD claims process.

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https://doi.org/10.1001/jamapsychiatry.2024.0171

# Decoding Suicide Decedent Profiles and Signs of Suicidal Intent Using Latent Class Analysis.

Xiao, Y., Bi, K., Yip, P. S., Cerel, J., Brown, T. T., Peng, Y., Pathak, J., & Mann, J. J.

JAMA Psychiatry March 20, 2024

Key Points

Question

Are there distinct suicide profiles linked to varying signs of suicidal intent and risks?

## Findings

This cross-sectional study including 306 800 US suicide decedents from 2003-2020 identified 5 suicide profiles or classes: comorbid mental health and substance use disorders; mental disorders alone; crisis, alcohol-related, and intimate partner problems; physical health problems; and polysubstance use. Class 4 (physical health problems) was the largest, exhibiting minimal explicit suicidal intent, rarely detected psychiatric diagnoses, and minimal psychotropic medication use.

Meaning

Suicide prevention strategies may be more effective when tailored to different suicide profiles because integrated care enhances the detection and treatment of comorbid mental health conditions, substance and alcohol use disorders, and physical health problems.

Abstract

Importance

Suicide rates in the US increased by 35.6% from 2001 to 2021. Given that most

individuals die on their first attempt, earlier detection and intervention are crucial. Understanding modifiable risk factors is key to effective prevention strategies.

#### Objective

To identify distinct suicide profiles or classes, associated signs of suicidal intent, and patterns of modifiable risks for targeted prevention efforts.

## Design, Setting, and Participants

This cross-sectional study used data from the 2003-2020 National Violent Death Reporting System Restricted Access Database for 306 800 suicide decedents. Statistical analysis was performed from July 2022 to June 2023.

#### Exposures

Suicide decedent profiles were determined using latent class analyses of available data on suicide circumstances, toxicology, and methods.

#### Main Outcomes and Measures

Disclosure of recent intent, suicide note presence, and known psychotropic usage.

## Results

Among 306 800 suicide decedents (mean [SD] age, 46.3 [18.4] years; 239 627 males [78.1%] and 67 108 females [21.9%]), 5 profiles or classes were identified. The largest class, class 4 (97 175 [31.7%]), predominantly faced physical health challenges, followed by polysubstance problems in class 5 (58 803 [19.2%]), and crisis, alcohol-related, and intimate partner problems in class 3 (55 367 [18.0%]), mental health problems (class 2, 53 928 [17.6%]), and comorbid mental health and substance use disorders (class 1, 41 527 [13.5%]). Class 4 had the lowest rates of disclosing suicidal intent (13 952 [14.4%]) and leaving a suicide note (24 351 [25.1%]). Adjusting for covariates, compared with class 1, class 4 had the highest odds of not disclosing suicide intent (odds ratio [OR], 2.58; 95% CI, 2.51-2.66) and not leaving a suicide note (OR, 1.45; 95% CI, 1.41-1.49). Class 4 also had the lowest rates of all known psychiatric illnesses and psychotropic medications among all suicide profiles. Class 4 had more older adults (23 794 were aged 55-70 years [24.5%]; 20 100 aged  $\geq$ 71 years [20.7%]), veterans (22 220 [22.9%]), widows (8633 [8.9%]), individuals with less than high school education (15 690 [16.1%]), and rural residents (23 966 [24.7%]).

## Conclusions and Relevance

This study identified 5 distinct suicide profiles, highlighting a need for tailored prevention strategies. Improving the detection and treatment of coexisting mental health conditions, substance and alcohol use disorders, and physical illnesses is paramount. The

implementation of means restriction strategies plays a vital role in reducing suicide risks across most of the profiles, reinforcing the need for a multifaceted approach to suicide prevention.

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## https://doi.org/10.1371/journal.pone.0298366

## Hypertension at the nexus of veteran status, psychiatric disorders, and traumatic brain injury: Insights from the 2011 Behavioral Risk Factor Surveillance System.

DeBlois, J. P., London, A. S., & Heffernan, K. S.

## PLoS ONE Published: March 18, 2024

Variable military service-related experiences, such as combat exposure, psychiatric disorders (PD), and traumatic brain injuries (TBI), may differentially affect the likelihood of having health care professional-identified high blood pressure (i.e., hypertension).

## PURPOSE:

Compare the odds of self-reported hypertension among non-combat and combat veterans with and without PD/TBI to non-veterans and each other. METHODS: We used data from men from the 2011 Behavioral Risk Factor Surveillance System and distinguished: non-veterans (n = 21,076); non-combat veterans with no PD/TBI (n = 3,150); combat veterans with no PD/TBI (n = 1,979); and veterans (combat and non-combat) with PD and/or TBI (n = 805). Multivariable, hierarchical logistic regression models included exogenous demographic, socioeconomic attainment and family structure, health behavior and conditions, and methodological control variables.

**RESULTS**:

One-third of men reported having been told at least once by a medical professional that they had high blood pressure. Bivariate analyses indicated that each veteran group had a higher prevalence of self-reported hypertension than non-veterans (design-based F = 45.2, p<0.001). In the fully adjusted model, no statistically significant differences in the odds of self-reported hypertension were observed between non-veterans and: non-combat veterans without PD/TBI (odds ratio [OR] = 0.92); combat veterans without PD/TBI (OR = 0.87); veterans with PD and/or TBI (OR = 1.35). However, veterans with PD and/or TBI had greater odds of reporting hypertension than both combat and non-combat veterans without PD/TBI (p<0.05).

DISCUSSION:

Military service-related experiences were differentially associated with a survey-based measure of hypertension. Specifically, veterans self-reporting PD and/or TBI had significantly higher odds of self-reporting hypertension (i.e., medical provider-identified high blood pressure).

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https://doi.org/10.1016/j.jagp.2023.05.011

## Characteristics and Correlates of Ten-Year Trajectories of Posttraumatic Stress Symptoms in Older U.S. Military Veterans.

Jennifer Moye, Ph.D., Anica Pless Kaiser, Ph.D., Joan M. Cook, Ph.D., Ian C. Fischer, Ph.D., Becca R. Levy, Ph.D., Robert H. Pietrzak, Ph.D., M.P.H.

American Journal of Geriatric Psychiatry 2023 Nov; 31(11): 889-901

Objectives:

To examine the nature and correlates of 10-year trajectories of posttraumatic stress disorder (PTSD) symptoms in older U.S. military Veterans.

Design and setting:

A nationally representative web-based survey of older U.S. Veterans who participated in the National Health and Resilience in Veterans Study over 5 waves between 2011 and 2021.

Participants: A total of 1,843 U.S. Veterans aged 50 and older (mean age = 67).

Measurements:

PTSD symptoms were assessed using the PTSD Checklist. Self-report measures at baseline assessed sociodemographic characteristics; trauma exposures; psychiatric and substance use disorders; mental, cognitive, and physical functioning; and psychosocial factors including expectations of aging. Latent growth mixture modeling identified the nature and correlates of 10-year PTSD symptom trajectories.

#### Results:

Most of the sample had no/low PTSD symptoms (88.7%), while 6.0% had consistently subthreshold symptoms, 2.7% consistently high symptoms, and 2.6% increasing symptoms. Relative to the no/low symptom group, the subthreshold and high symptom groups reported more medical conditions and cognitive difficulties, with younger age and more lifetime traumatic events additionally linked to the high symptom trajectory. Relative to the no/low symptom group, Veterans with increasing symptoms were more likely to report functional disability and lifetime nicotine use disorder, cognitive difficulties, negative expectations regarding physical and emotional aging, and traumatic events over the study period.

## Conclusions:

Despite high rates of trauma exposure, most older Veterans do not evidence symptomatic PTSD trajectories; however, about 11% do. Results underscore the importance of assessing PTSD symptoms in this population and considering longitudinal trajectories as well as associated risk and protective factors.

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## https://doi.org/10.3390/healthcare12020169

# The Role of Emotion Dysregulation in Understanding Suicide Risk: A Systematic Review of the Literature.

Rogante, E.; Cifrodelli, M.; Sarubbi, S.; Costanza, A.; Erbuto, D.; Berardelli, I.; Pompili, M.

Healthcare 2024, 12(2): 169

Suicide prevention represents a global imperative, and efforts to identify potential risk factors are intensifying. Among these, emotional regulation abilities represent a transdiagnostic component that may have an impactful influence on suicidal ideation and behavior. Therefore, the present systematic review aimed to investigate the association between emotion dysregulation and suicidal ideation and/or behavior in adult participants. The review followed PRISMA guidelines, and the research was performed through four major electronic databases (PubMed/MEDLINE, Scopus, PsycInfo, and Web of Science) for relevant titles/abstracts published from January 2013 to September 2023. The review included original studies published in peer-reviewed journals and in English that assessed the relationship between emotional regulation, as

measured by the Difficulties in Emotional Regulation Scale (DERS), and suicidal ideation and/or behavior. In total, 44 studies were considered eligible, and the results mostly revealed significant positive associations between emotion dysregulation and suicidal ideation, while the findings on suicide attempts were more inconsistent. Furthermore, the findings also confirmed the role of emotion dysregulation as a mediator between suicide and other variables. Given these results, it is important to continue investigating these constructs and conduct accurate assessments to implement effective person-centered interventions.

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## https://doi.org/10.1016/j.ajp.2024.103913

Non-pharmacological interventions for preventing suicide attempts: A systematic review and network meta-analysis.

Fei-Hong Hu, Jie Xu, Yi-Jie Jia, Meng-Wei Ge, ... Hong-Lin Chen

Asian Journal of Psychiatry Volume 93, March 2024, 103913

## Highlights

- CT, DBT, CBT, and BIC significantly reduce suicide attempts.
- CT and BIC show effectiveness within 6 months, highlighting timely intervention importance.
- Further studies needed to identify optimal interventions and combinations for enhanced efficacy.

## Abstract

Suicide attempts can cause serious physical harm or death. It would be crucial to gain a better understanding of the comparative efficacy of non-pharmacological interventions. We aimed to identify which non-pharmacological interventions are more effective in preventing suicide attempts. PubMed, Web of Science, and EMBASE databases were searched systematically from their inception until 3 April 2023. To be eligible for inclusion, randomized controlled trials (RCTs) had to meet the following criteria: Participants were individuals who had suicidal ideation or a history of severe self-harm or attempted suicide. A network meta-analysis was performed using a random effects model to estimate the treatment effect of various non-pharmacological interventions. (PROSPERO registration number: CRD42023411393). We obtained data from 54

studies involving 17,630 participants. Our primary analysis found that Cognitive therapy (CT) (OR=0.19, 95%CI =0.04–0.81), Dialectical Behavior Therapy (DBT) (OR=0.37, 95%CI =0.13–0.97), Cognitive-behavioral therapy (CBT) (OR=0.42, 95%CI =0.17–0.99), and Brief intervention and contact (BIC) (OR=0.65, 95%CI=0.44–0.94) were superior to TAU (within the longest available follow-up time) in preventing suicide attempts, while other intervention methods do not show significant advantages over TAU. Secondary analysis showed that the two intervention measures (CT and BIC) were effective when follow-up time did not exceed 6 months, but there was no effective intervention measure with longer follow-up times. CT, DBT, CBT, and BIC have a better effect in preventing suicide attempts than other non-pharmacological interventions. Additional research is necessary to validate which interventions, as well as which combinations of interventions, are the most effective.

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## https://doi.org/10.1007/s11121-024-01641-6

## A Randomized Control Trial of a Digital Health Tool for Safer Firearm and Medication Storage for Patients with Suicide Risk.

Jennifer M. Boggs, LeeAnn M. Quintana, Arne Beck, Christina L. Clarke, Laura Richardson, Amy Conley, Edward T. Buckingham, Julie E. Richards & Marian E. Betz

Prevention Science Volume 25, pages 358–368, (2024)

Most patients with suicide risk do not receive recommendations to reduce access to lethal means due to a variety of barriers (e.g., lack of provider time, training). Determine if highly efficient population-based EHR messaging to visit the Lock to Live (L2L) decision aid impacts patient-reported storage behaviors. Randomized trial. Integrated health care system serving Denver, CO. Served by primary care or mental health specialty clinic in the 75–99.5th risk percentile on a suicide attempt or death prediction model. Lock to Live (L2L) is a web-based decision aid that incorporates patients' values into recommendations for safe storage of lethal means, including firearms and medications. Anonymous survey that determined readiness to change: precontemplative (do not believe in safe storage), contemplative (believe in safe storage but not doing it), preparation (planning storage changes) or action (safely storing). There were 21,131 patients randomized over a 6-month period with a 27% survey response rate. Many (44%) had access to a firearm, but most of these (81%) did not use any safe firearm storage behaviors. Intervention patients were more likely to be

categorized as preparation or action compared to controls for firearm storage (OR = 1.30 (1.07–1.58)). When examining action alone, there were no group differences. There were no statistically significant differences for any medication storage behaviors. Selection bias in those who responded to survey. Efficiently sending an EHR invitation message to visit L2L encouraged patients with suicide risk to consider safer firearm storage practices, but a stronger intervention is needed to change storage behaviors. Future studies should evaluate whether combining EHR messaging with provider nudges (e.g., brief clinician counseling) changes storage behavior.

ClinicalTrials.gov: NCT05288517

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## https://doi.org/10.1176/appi.neuropsych.20230044

## Impulsivity and Psychiatric Diagnoses as Mediators of Suicidal Ideation and Suicide Attempts Among Veterans With Traumatic Brain Injury.

Alexandra L. Aaronson, M.D., Bridget Smith, Ph.D., Kelly Krese, P.T., D.P.T., Meghan Barnhart, M.S., Maheen Adamson, Ph.D., Harriet de Wit, Ph.D., Noah S. Philip, M.D., Lisa A. Brenner, Ph.D., Theresa Bender-Pape, Dr.P.H., Amy A. Herrold, Ph.D.

The Journal of Neuropsychiatry and Clinical Neurosciences Published Online: 9 Jan 2024

## Objective:

Traumatic brain injury (TBI) is a risk factor for suicide, but questions related to mechanisms remain unanswered. Impulsivity is a risk factor for suicide and is a common sequela of TBI. The authors explored the relationships between TBI and both suicidal ideation and suicide attempts and explored whether impulsivity and comorbid psychiatric diagnoses mediate these relationships.

## Methods:

This cross-sectional retrospective chart review study included 164 veterans enrolled in a previous study. Sixty-nine veterans had no TBI history, and 95 had a TBI history (mild, N=44; moderate, N=13; severe, N=12; and unclear severity, N=26). To examine the associations between TBI and suicidal ideation or suicide attempts, as well as potential mediators of these relationships, chi-square tests, t tests, and logistic regression models were used.

## Results:

Unadjusted analyses indicated that veterans with TBI were more likely to report suicidal ideation; however, in analyses controlling for mediators, this relationship was no longer significant. Among veterans with TBI, suicidal ideation was related most strongly to high impulsivity (odds ratio=15.35, 95% CI=2.43–96.79), followed by depression (odds ratio=5.73, 95% CI=2.53–12.99) and posttraumatic stress disorder (odds ratio=2.57, 95% CI=1.03–6.42). TBI was not related to suicide attempts, yet suicide attempts were related to high impulsivity (odds ratio=6.95, 95% CI=1.24–38.75) and depression (odds ratio=3.89, 95% CI=1.56–9.40).

## Conclusions:

These findings suggest that impulsivity, followed by psychiatric diagnoses, most strongly mediate the relationships between TBI and both suicidal ideation and suicide attempts. Impulsivity may be mechanistically related to, and serve as a future treatment target for, suicidality among veterans with TBI.

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## https://doi.org/10.1186/s12888-023-05460-x

Recurrence of post-traumatic stress disorder: systematic review of definitions, prevalence and predictors.

Brooks, S. K., & Greenberg, N.

BMC Psychiatry 2024 Jan 9; 24(1): 37

## Background:

Many people will experience a potentially traumatic event in their lifetime and a minority will go on to develop post-traumatic stress disorder (PTSD). A wealth of literature explores different trajectories of PTSD, focusing mostly on resilient, chronic, recovered and delayed-onset trajectories. Less is known about other potential trajectories such as recurring episodes of PTSD after initial recovery, and to date there has been no estimate of what percentage of those who initially recover from PTSD later go on to experience a recurrence. This systematic review aimed to synthesise existing literature to identify (i) how 'recurrence' of PTSD is defined in the literature; (ii) the prevalence of recurrent episodes of PTSD; and (iii) factors associated with recurrence.

Methods:

A literature search of five electronic databases identified primary, quantitative studies relevant to the research aims. Reference lists of studies meeting pre-defined inclusion criteria were also hand-searched. Relevant data were extracted systematically from the included studies and results are reported narratively.

Results:

Searches identified 5,398 studies, and 35 were deemed relevant to the aims of the review. Results showed there is little consensus in the terminology or definitions used to refer to recurrence of PTSD. Because recurrence was defined and measured in different ways across the literature, and prevalence rates were reported in numerous different ways, it was not possible to perform meta-analysis to estimate the prevalence of recurrence. We also found no consistent evidence regarding predictors of PTSD recurrence.

Conclusion:

A clear and consistent evidence-based definition of recurrence is urgently needed before the prevalence and predictors of recurrence can be truly understood.

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https://doi.org/10.1016/j.janxdis.2024.102827

Cannabis use and trauma-focused treatment for co-occurring posttraumatic stress disorder and substance use disorders: A meta-analysis of individual patient data.

Melanie L. Hill, Alexander C. Kline, Tanya C. Saraiya, Jordan Gette, ... Antonio A. Morgan-López

Journal of Anxiety Disorders Volume 102, March 2024, 102827

Highlights

- Treatment outcomes for PTSD+SUD are similar for those with and without cannabis use.
- Trauma-focused outperforms non-trauma-focused treatment for PTSD severity reduction.

- PTSD, alcohol and drug use decrease during trauma- and non-trauma-focused treatment.
- Trauma-focused treatment is efficacious for individuals with recent cannabis use.
- Reducing access barriers to evidence-based treatments is a priority.

## Abstract

High rates of cannabis use among people with posttraumatic stress disorder (PTSD) have raised guestions about the efficacy of evidence-based PTSD treatments for individuals reporting cannabis use, particularly those with co-occurring alcohol or other substance use disorders (SUDs). Using a subset of four randomized clinical trials (RCTs) included in Project Harmony, an individual patient meta-analysis of 36 RCTs (total N = 4046) of treatments for co-occurring PTSD+SUD, we examined differences in trauma-focused (TF) and non-trauma-focused (non-TF) treatment outcomes for individuals who did and did not endorse baseline cannabis use (N = 410; 70% male; 33.2% endorsed cannabis use). Propensity score-weighted mixed effects modeling evaluated main and interactive effects of treatment assignment (TF versus non-TF) and baseline cannabis use (yes/no) on attendance rates and within-treatment changes in PTSD, alcohol, and non-cannabis drug use severity. Results revealed significant improvements across outcomes among participants in all conditions, with larger PTSD symptom reductions but lower attendance among individuals receiving TF versus non-TF treatment in both cannabis groups. Participants achieved similar reductions in alcohol and drug use across all conditions. TF outperformed non-TF treatments regardless of recent cannabis use, underscoring the importance of reducing barriers to accessing TF treatments for individuals reporting cannabis use.

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## https://doi.org/10.1176/appi.ajp.20230272

## Mindfulness-Oriented Recovery Enhancement for Veterans and Military Personnel on Long-Term Opioid Therapy for Chronic Pain: A Randomized Clinical Trial.

Eric L. Garland, Ph.D., Yoshio Nakamura, Ph.D., Craig J. Bryan, Psy.D., A.B.P.P., Adam W. Hanley, Ph.D., Anna Parisi, Ph.D., Brett Froeliger, Ph.D., William R. Marchand, M.D., Gary W. Donaldson, Ph.D.

The American Journal of Psychiatry Published Online:10 Jan 2024

## Objective:

This randomized clinical trial evaluated the efficacy of Mindfulness-Oriented Recovery Enhancement (MORE) among past and present U.S. military personnel with prescriptions for long-term opioid therapy for chronic pain.

## Methods:

In this clinical trial, 230 past and present military personnel with prescriptions for longterm opioid therapy were randomized in a 1:1 ratio to MORE or supportive psychotherapy (initially delivered in person and then via videoconferencing after the onset of the COVID-19 pandemic). Primary outcomes were chronic pain, measured by the Brief Pain Inventory, and aberrant drug-related behaviors, measured by the Current Opioid Misuse Measure, through 8 months of follow-up. Opioid dose was a key secondary outcome. Other outcomes included psychiatric symptoms, catastrophizing, positive affect, ecological momentary assessments of opioid craving, and opioid attentional bias.

## Results:

MORE was superior to supportive psychotherapy through the 8-month follow-up in reducing pain-related functional interference, pain severity, and opioid dose. MORE reduced daily opioid dose by 20.7%, compared with a dose reduction of 3.9% with supportive psychotherapy. Although there was no overall between-group difference in opioid misuse, the in-person MORE intervention outperformed supportive psychotherapy for reducing opioid misuse. MORE reduced anhedonia, pain catastrophizing, craving, and opioid attentional bias and increased positive affect to a greater extent than supportive psychotherapy. MORE also modulated therapeutic processes, including mindful reinterpretation of pain sensations, nonreactivity, savoring, positive attention, and reappraisal.

## Conclusions:

Among past and present U.S. military personnel, MORE led to sustained decreases in chronic pain, opioid use, craving, and opioid cue reactivity. MORE facilitated opioid dose reduction while preserving adequate pain control and preventing mood disturbances, suggesting its utility for safe opioid tapering.

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https://doi.org/10.1093/geront/gnad129

Cohort Differences in PTSD Symptoms and Military Experiences: A Life Course Perspective.

Maria L Kurth, PhD, Dakota D Witzel, PhD, Suzanne C Segerstrom, MPH, PhD, Soyoung Choun, PhD, Carolyn M Aldwin, PhD

The Gerontologist Volume 64, Issue 2, February 2024, gnad129

#### Background and Objectives

There have been major changes in military service over the past 50 years. Most research on posttraumatic stress disorder (PTSD) among combat Veterans comes from help-seeking Vietnam and WWII cohorts; results from more recent cohort comparisons are mixed. The present study addressed these gaps by exploring cohort differences among Vietnam, Persian Gulf, and Post-9/11 combat Veterans from a life course perspective.

#### **Research Design and Methods**

We recruited community-dwelling combat and war zone Veterans (N = 167), primarily from Veterans' associations in Oregon from three cohorts: Vietnam, Persian Gulf, and Post-911. Online surveys assessed current PTSD symptoms, life course (demographics and cohort membership), and experiential variables (combat severity, appraisals of military service, homecoming, and social support).

#### Results

Cohorts were comparable in demographics and war experiences. Step one of a hierarchical regression found that PTSD symptoms were higher among Veterans of color and those with lower incomes, R2 = 0.37, p < .001. When cohort was added, Vietnam Veterans had higher symptoms than Post-9/11; income and race/ethnicity remained significant,  $\Delta$ R2 = 0.01, p = .13. The final model added experiential variables,  $\Delta$ R2 = 0.38, p < .001; cohort and income were no longer significant, although Veterans of color still reported higher symptoms. Those with more undesirable service appraisals and who sought social support had higher symptoms, while desirable appraisals were protective.

## **Discussion and Implications**

From a life course perspective, the particular war zone that Veterans served in was less important than demographics and both service and postservice experiences, suggesting generalizability of risk and protective factors, as well as treatment modalities, across cohorts.

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## https://doi.org/10.1016/j.cct.2024.107435

Design of a hybrid implementation effectiveness cluster randomized controlled trial of delivering written exposure therapy for PTSD in underserved primary care settings.

Lisa S. Meredith, Eunice C. Wong, Brian P. Marx, Bing Han, ... Denise M. Sloan

Contemporary Clinical Trials Volume 138, March 2024, 107435

Highlights

- Written Exposure Therapy (WET) is a brief treatment for posttraumatic stress disorder (PTSD).
- WET has potential to for uptake in primary care settings that provide care for the poor and underserved.
- Access to WET has not previously been tested in primary care settings.
- We describe a study to examine the effectiveness and implementation of WET in an underserved primary care setting.

## Abstract

## Introduction

Posttraumatic stress disorder (PTSD) results in substantial costs to society. Prevalence of PTSD among adults is high, especially among those presenting to primary care settings. Evidence-based psychotherapies (EBPs) for PTSD are available but dissemination and implementation within primary care settings is challenging. Building Experience for Treating Trauma and Enhancing Resilience (BETTER) examines the effectiveness of integrating Written Exposure Therapy (WET) within primary care collaborative care management (CoCM). WET is a brief exposure-based treatment that has the potential to address many challenges of delivering PTSD EBPs within primary care settings.

## Methods

The study is a hybrid implementation effectiveness cluster-randomized controlled trial in which 12 Federally Qualified Health Centers (FQHCs) will be randomized to either CoCM plus WET (CoCM+WET) or CoCM only with 60 patients within each FQHC. The primary aim is to evaluate the effectiveness of CoCM+WET to improve PTSD and depression symptom severity. Secondary treatment outcomes are mental and physical health functioning. The second study aim is to examine implementation of WET within

FQHCs using FQHC process data and staff interviews pre- and post-intervention. Exploratory aims are to examine potential moderators and mediators of the intervention. Assessments occur at baseline, and 3- and 12-month follow-up.

## Conclusion

The study has the potential to impact practice and improve clinical and public health outcomes. By establishing the effectiveness and feasibility of delivering a brief trauma-focused EBP embedded within CoCM in primary care, the study aims to improve PTSD outcomes for underserved patients.

Trial registration: (Clinicaltrials.gov NCT05330442).

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## https://doi.org/10.1016/j.janxdis.2023.102824

# Crisis response planning rapidly reduces suicidal ideation among U.S. military veterans receiving massed cognitive processing therapy for PTSD.

Craig J. Bryan, AnnaBelle O. Bryan, Lauren R. Khazem, Darrin M. Aase, ... Justin C. Baker

Journal of Anxiety Disorders Volume 102, March 2024, 102827

Highlights

- Evidence supporting the effectiveness of safety planning-type interventions is limited.
- Crisis response planning (CRP) has been shown to reduce suicidal ideation and attempts.
- Veterans with PTSD randomly received either CRP or a safety plan before treatment.
- Reductions in suicidal ideation were significantly larger in CRP.
- Fewer participants in CRP reported new-onset suicidal ideation and suicide attempts.

## Abstract

Posttraumatic stress disorder (PTSD) is common among U.S. military veterans and is associated with increased risk of suicidal thoughts and behaviors. Crisis response

planning (CRP), a brief safety planning-type intervention, has been shown to rapidly reduce suicidal ideation and suicide attempts in emergency and acute care settings. CRP's effectiveness when combined with trauma-focused therapies remains unknown. In this randomized pragmatic clinical trial with one-year follow-up, 157 U.S. military personnel and veterans were randomly assigned to receive CRP or self-guided safety planning (SP) prior to beginning massed cognitive processing therapy (CPT) for PTSD. Among 51 (32.5 % of sample) participants endorsing suicidal ideation at baseline, reductions in the severity of suicidal ideation were significantly larger and faster in CRP (F(11,672)= 15.8, p < .001). Among 106 participants denying suicidal ideation at baseline, 8.5 % of CRP participants versus 11.9 % of SP participants (OR=0.69, 95 % CI=0.19–2.52) reported new-onset suicidal ideation during any follow-up assessment. PTSD symptoms significantly reduced over time with no differences between groups. Results support the effectiveness of CRP for rapidly reducing suicidal ideation and managing suicide risk during outpatient treatment for PTSD.

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## Links of Interest

Air Force Publishes Sweeping Analysis of Suicide Deaths in 2020 <u>https://www.airandspaceforces.com/air-force-suicide-analysis-2020/</u>

<u>Total Force DAF Standardized Suicide Fatality Analysis: Calendar Year 2020</u>
<u>Leadership Report</u>

Vets, cops should teach firearm storage safety to troops, study finds <u>https://www.militarytimes.com/news/your-military/2024/03/13/vets-cops-should-teach-firearm-storage-safety-to-troops-study-finds/</u>

VA sets new goal of housing 41,000 veterans in 2024 https://www.militarytimes.com/veterans/2024/03/14/va-sets-new-goal-of-housing-41000veterans-this-year/

VA-sponsored psychedelics studies get green light in FY24 budget https://www.militarytimes.com/news/your-military/2024/03/14/va-sponsoredpsychedelics-studies-get-green-light-in-fy24-budget/

DOD Amends Assisted Reproductive Services Policy for Seriously, Severely III or Injured Active Duty Service Members <u>https://www.defense.gov/News/News-Stories/Article/Article/3702693/dod-amends-assisted-reproductive-services-policy-for-seriously-severely-ill-or/</u> Safe Viewing of Solar Eclipses

https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2816113

Binge Eating in the Military

https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Clinicians-Corner-Blog/Binge-Eating-in-the-Military

Improving Behavioral Health Through Targeted Care

https://www.dvidshub.net/news/466490/improving-behavioral-health-through-targetedcare

Pentagon won't say if troop deployment tempo exceeds recommended goal <u>https://www.militarytimes.com/news/your-military/2024/03/18/pentagon-wont-say-if-troop-deployment-tempo-exceeds-recommended-goal/</u>

Survey of Blue Star Families finds considerable reluctance for recommending military life

https://www.stripes.com/theaters/us/2024-03-15/spouse-employment-blue-star-survey-13327689.html

• 2023 Blue Star Military Family Lifestyle Survey

When will the Pentagon listen on blast injuries? (Commentary) <u>https://www.defenseone.com/ideas/2024/03/when-will-pentagon-listen-blast-injuries/394958/</u>

Pentagon committee recommends full gender integration for Marine recruits, policies to protect pregnant troops in annual report on women's issues <u>https://www.stripes.com/branches/marine\_corps/2024-03-15/pentagon-women-integrated-marines-pregnancy-reform-13330407.html</u>

Coast Guard Takes Steps to Improve Service Members' Access to Mental Health Screenings

https://www.military.com/daily-news/2024/03/18/coast-guard-takes-steps-improveservice-members-access-mental-health-screenings.html I Wanted My Life as a Mom Separate From My Work With Death. I Had to Make Room for Both.

https://thewarhorse.org/air-force-officer-balances-mortuary-work-with-life-as-a-mom/

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Resource of the Week: <u>DACOWITS (Defense Advisory Committee on Women in</u> <u>the Services) 2023 Annual Report</u>

From press release:

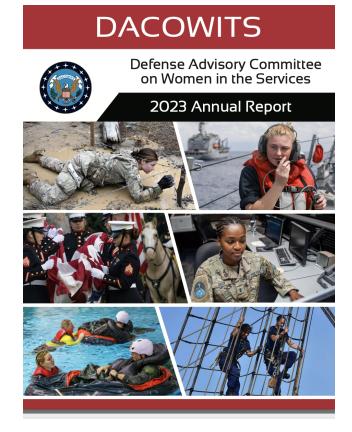
The Defense Advisory Committee on Women in the Services (DACOWITS) released its 2023 annual report on March 15, 2024.

DACOWITS provides the Secretary of Defense with recommendations, via a comprehensive annual report, on matters and policies relating to the recruitment, retention, employment, integration, well-being, and treatment of women in the U.S. armed forces. The report is available online and includes detailed reasoning supporting each recommendation addressed by the committee.

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Based upon the data collected and analyzed, the committee submitted 26 recommendations to the secretary on the following topics:

- Recruitment initiatives to increase women's propensity to serve.
- Retention initiatives for servicewomen.
- Gender integration.
- Women in aviation.
- Physical fitness standards.
- Pregnancy in the military.
- Gender discrimination.



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Henry M. Jackson Foundation for the Advancement of Military Medicine