

# CDP



## Research Update -- May 6, 2021

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- Links of Interest
- Resource of the Week -- Behavioral Health: Patient Access, Provider Claims Payment, and the Effects of the COVID-19 Pandemic

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<https://doi.org/10.1080/00952990.2021.1903479>

## **Biopsychosocial factors and health outcomes associated with cannabis, opioids and benzodiazepines use among older veterans.**

Hyojung Kang, PhD, Jeni Hunnicutt, PhD, Laura Quintero Silva, MSc, Brian Kaskie, PhD & Julie Bobitt, PhD

The American Journal of Drug and Alcohol Abuse  
Published online: 21 Apr 2021

### Background:

Older Veterans may experience injuries that result in chronic pain and mental health conditions. Given the increasing availability of medical cannabis, it is important to examine if it serves as a viable or undesirable form of care relative to existing approaches.

### Objectives:

We compared cannabis, prescription opioids, and benzodiazepines use between older Veteran and non-Veterans, and identified outcomes of cannabis use among Veterans. Because of the physical and mental conditions experienced by older Veterans we expected Veterans to report higher use of opioids and benzodiazepines compared to non-Veterans.

### Methods:

We collected surveys from individuals aged 60 and older enrolled in the Illinois Medical Cannabis Patient Program and conducted logistic regression to identify factors associated with cannabis, opioids and benzodiazepines use between Veterans (N = 514, 90.2% male) and Non-Veterans (N = 2758, 41.1% male) across biopsychosocial factors.

### Results:

Both groups reported similar levels of pain, quality of life, social satisfaction, and sleep quality. Veterans were more likely to use cannabis for mental health conditions ( $p = <.001$ ) while they reported lower use for pain-related conditions ( $p = <.001$ ) than non-Veterans. Veterans were less likely to use opioids ( $p = .013$ ) and benzodiazepines ( $p < .01$ ) compared to non-Veterans. Veterans also reported desirable health outcomes of cannabis use for pain, sleep quality, health conditions, and quality of life.

## Conclusions:

Our work provides insights for clinicians and policy makers to consider whether cannabis can be a viable option to reduce or replace opioid and benzodiazepine use by older Veterans with chronic physical and mental health conditions.

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<https://doi.org/10.1037/ser0000537>

## **Disentangling associations between military service, race, and incarceration in the U.S. population.**

Tsai, J., Edwards, E., Cao, X., & Finlay, A. K.

Psychological Services

Advance online publication

The current study examined (a) how veteran status, race, and other individual characteristics are associated with any lifetime incarceration in the U.S. adult population; and (b) differences between veterans and other adults with any incarceration histories on sociodemographic, health, and psychosocial characteristics. Data from structured interviews conducted in 2012–2013 on a nationally representative sample of 36,121 U.S. adults were analyzed. Results showed that male gender, U.S. born, history of homelessness, antisocial and borderline personality disorders, and various substance use disorders were independently associated with any lifetime incarceration (all adjusted odds ratios [AORs]  $\geq 1.5$ ). Veteran status was not significantly associated with any lifetime incarceration (AOR = 1.12). Among adults with any lifetime incarceration, veterans were more likely to be male than nonveterans (AOR = 5.90), but were otherwise similar in sociodemographic background, physical and mental health, and psychosocial characteristics. Being black was moderately associated with lifetime incarceration among both veterans and nonveterans (AOR = 1.54 and 1.50, respectively) with no significant veteran  $\times$  race interaction. Collectively, these findings suggest veterans and nonveterans are similarly represented among Americans with any lifetime incarceration and share similar factors associated with incarceration. Although prevalence of incarceration did vary by race, psychosocial and substance abuse factors emerged as the major factors associated with incarceration, highlighting the importance of behavioral health and social services for at-risk adults across military and civilian settings. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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<https://doi.org/10.1037/ser0000542>

**Mental health service utilization after military missions: The double-edged consequences of unit-level organizational support.**

Russell, D. W., Russell, C. A., & Hill, R. P.

Psychological Services  
Advance online publication

Many faced with mental health issues do not seek care, especially individuals working in high-risk occupations. This research reports on two studies that investigated the relationships between military service-induced mental health issues and utilization of professional mental health services, and whether the perceived organizational support received from the military unit in which mental health issues arise moderates those relationships. The context for the research is the relatively understudied United States Army Reserve Component. Results reveal that greater social support within the unit, often promoted as a protective factor among servicemembers, have an unintended consequence: Those who experienced high levels of mental health symptoms and also perceived greater support from their units were less likely to use professional mental health services compared to those who perceived weaker unit support. Implications and recommendations for future research to address the double-edged effect of organizational support on utilizing mental health services are discussed. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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<https://doi.org/10.1080/03007995.2021.1918073>

**Economic burden of treatment-resistant depression among veterans in the United States.**

Szukis, H., Joshi, K., Huang, A., Amos, T. B., Wang, L., & Benson, C. J.

Current Medical Research and Opinion  
2021 Apr 21;1

#### Objective:

Evidence is limited on the economic burden associated with treatment-resistant depression (TRD) among US veterans. We evaluated the economic burden among patients with major depressive disorder (MDD) with and without TRD, and those without MDD in the Veterans Health Administration (VHA).

#### Methods:

Three cohorts were identified using VHA claims data (01APR2014-31MAR2018). Patients with MDD (aged  $\geq 18$ ) who failed  $\geq 2$  antidepressant treatments of adequate dose and duration were defined as having TRD; patients with MDD not meeting this criterion constituted the non-TRD MDD cohort (index: first antidepressant claim). The non-MDD cohort included those without MDD diagnosis (index: randomly assigned). Patients with psychosis, schizophrenia, manic/bipolar disorder, or dementia in the 6-month pre-index period were excluded. Patients with non-TRD MDD and non-MDD were matched 1:1 to patients with TRD based on demographic characteristics (age, gender, race, index year). Health care resource utilization (HRU) and costs were analyzed during the post-index period using a negative binomial model and ordinary least squares regression model, respectively.

#### Results:

After 1:1 exact matching, 10,449 patients were included in each cohort (mean age: 48.9 years). Patients with TRD had higher per patient per year (PPPY) HRU than non-TRD MDD (all-cause inpatient visits: incidence rate ratio [IRR]: 1.70 [95% confidence interval: 1.57-1.83]) and non-MDD (IRR: 5.04 [95% confidence interval: 4.51-5.63]), and incurred higher total all-cause health care costs PPPY than non-TRD MDD (mean difference: \$5,906) and non-MDD (mean difference: \$11,873; all  $P < 0.0001$ ).

#### Conclusion:

Among US veterans, TRD poses a significant incremental economic burden relative to non-TRD MDD and non-MDD.

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<https://doi.org/10.1037/adb0000727>

#### **Drinking less on cannabis use days: The moderating role of UPPS-P impulsive personality traits.**

Waddell, J. T., Gunn, R. L., Corbin, W. R., Borsari, B., & Metrik, J.

Objective:

Several studies suggest that alcohol and cannabis co-users are heavier drinkers and experience more alcohol-related consequences. However, day-level associations between co-use and drinking levels are mixed. One reason may be that individual characteristics moderate the daily impact of using alcohol alone or in conjunction with cannabis. The theory would suggest that highly impulsive individuals may drink more on co-use days, yet this assertion remains untested. Therefore, the current study tested whether impulsivity moderated the effect of co-use on same-day drinking quantity within veterans, a high-risk sample for substance use and impulsivity.

Method:

In a longitudinal observational study, co-using veterans (N = 139) completed three semi-annual assessments reporting on their daily drinking quantity and cannabis use via Timeline Followback (Observations = 19,245) and impulsivity via the UPPS-P. Mixed effect modeling was used to test hypotheses that co-use (compared to alcohol-only) days would be associated with heavier drinking for those high (but not low) in positive and negative urgency.

Results:

Significant interactions were found for positive urgency (PU) and lack of perseverance (LP), such that individuals at mean and low levels of PU and LP drank less on co-use (compared to alcohol-only) days. There were no significant interactions for other UPPS-P impulsivity facets.

Conclusion:

Findings are consistent with a substitution/compensatory effect for individuals at mean and low levels of both UPPS-P facets, and may be a byproduct of frequent cannabis use in veterans. In contrast, findings suggest that co-use and alcohol-only days may be characterized by similarly high levels of drinking for highly impulsive individuals.  
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<https://doi.org/10.1027/0227-5910/a000775>

**The Relationships Between Risk-Taking, Depression, and Alcohol Use in the Experience of Suicidal Ideation Among Adults in the General Population.**

Li, J., Bornheimer, L. A., Fernandez, L., & Dagher, J.

Crisis

2021 Apr 23;1-8

Risk-taking is associated with suicide among depressed adolescents. In the United States, alcohol is among the most used substances resulting in need for treatment. While alcohol use relates to greater depression and suicidality, less is known about these relationships with risk-taking tendencies, particularly among adult populations. The current study examined suicidal ideation, alcohol use, depression, and risk-taking tendencies among adults 18-65 years old who participated in the 2017 National Survey on Drug Use and Health. Structural equation modeling was used to examine the specific aims in Mplus8. A total of 1,740 (21.4%) participants endorsed suicidal ideation. The model demonstrated good fit and findings indicate increases in alcohol abuse or dependence ( $b = 0.094$ ,  $SE = 0.01$ ,  $p < .001$ ), depression ( $b = 0.036$ ,  $SE = 0.01$ ,  $p < .001$ ), and risk-taking ( $b = 0.044$ ,  $SE = 0.01$ ,  $p < .001$ ) all independently related to increased odds of ideation. Increases in alcohol abuse or dependence ( $b = 0.210$ ,  $SE = 0.02$ ,  $p < .001$ ) and depression ( $b = 0.026$ ,  $SE = 0.01$ ,  $p < .05$ ) also related to elevated risk-taking. Based on the joint significance test, risk-taking tendencies served as a partial mediator, functioning as a mechanism in the relationships between alcohol use, depression, and ideation. Risk-taking thus serves as an important treatment target in the prevention of suicide. Implications for practice and future research are discussed.

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<https://doi.org/10.1016/j.jpsychires.2021.04.018>

### **Cannabis use disorder, anger, and violence in Iraq/Afghanistan-era veterans.**

KH Dillon, EE Van Voorhees, EB Elbogen, JC Beckham, VA Mid-Atlantic MIRECC Workgroup

Journal of Psychiatric Research

Volume 138, June 2021, Pages 375-379

An association has been found between cannabis use disorder (CUD) and violence in several clinical populations, including veterans with posttraumatic stress disorder (PTSD), and there is evidence that CUD has been increasing among veterans since September 11, 2001. There is also evidence that some veterans may be attempting to



self-medicate psychological problems including PTSD and aggression with cannabis, despite the lack of safety and efficacy data supporting this use. To date, however, the association between CUD and aggression has yet to be examined in a large, non-clinic sample of veterans. The present study examined the association between cannabis use disorder, anger, aggressive urges, and difficulty controlling violence in a large sample of Iraq/Afghanistan-era veterans (N = 3028). Results of multivariate logistic regressions indicated that current CUD was significantly positively associated with difficulty managing anger (OR = 2.93,  $p < .05$ ), aggressive impulses/urges (OR = 2.74,  $p < .05$ ), and problems controlling violence in past 30 days (OR = 2.71,  $p < .05$ ) even accounting for demographic variables, comorbid symptoms of depression and PTSD, and comorbid alcohol and substance use disorders. Lifetime CUD was also uniquely associated with problems controlling violence in the past 30 days (OR = 1.64,  $p < .05$ ), but was not significantly associated with difficulty managing anger or aggressive impulses/urges. Findings indicated that the association between CUD and aggression needs to be considered in treatment planning for both CUD and problems managing anger and aggressive urges, and point to a critical need to disentangle the mechanism of the association between CUD and violence in veterans.

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<https://doi.org/10.1016/j.yjpm.2021.106572>

## **Suicide as a hidden contributor to the opioid crisis and the role that primary care and emergency medicine play in addressing it.**

Brett R. Harris

Preventive Medicine  
Volume 148, July 2021

### Highlights

- Drug overdose deaths continue to rise dramatically, driven mainly by opioids.
- Suicide is also increasing and is a hidden contributor to the opioid crisis.
- Suicide prevention may be a missing link in the response to the opioid crisis.
- Implementing suicide care in specialty treatment is not sufficient.
- Primary care and emergency departments have a critical role to play.

### Abstract

Deaths from overdose have risen dramatically over the past decade, driven mainly by opioids. In response, the Centers for Disease Control and Prevention released guidance

on safe prescribing, safe storage of medications, Medication-Assisted Treatment (MAT), and the use of Naloxone to reverse an overdose. Even with this guidance, overdose deaths continue to rise. Suicide prevention is a strategy that may help address this problem. Suicide rose 32.4% between 1999 and 2019, from 10.5 to 13.9 per 100,000. Closely linked to overdose, the suicide rate among those with opioid use disorder is 87 per 100,000 population, six times that of the general US population. With multiple shared individual-level risk factors, strict standards for case ascertainment, and high potential for misclassification of opioid suicides, the distinction between overdose and suicide is often unclear, and the number of suicides is likely underestimated. The Surgeon General recently released a call to action for a public health approach to suicide prevention. Primary care and emergency departments have a major role to play. This commentary describes suicide as a hidden contributor to the opioid crisis; the rationale for integration of suicide prevention in primary care and emergency departments; and screening, education, brief intervention, and follow up and monitoring techniques that these settings can employ. Done effectively, this strategy has the potential to save countless lives.

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<https://doi.org/10.1002/jts.22674>

### **Cognitive Processing Therapy for Substance-Involved Sexual Assault: Does an Account Help or Hinder Recovery?**

Anna E. Jaffe Debra Kaysen Brian N. Smith Tara Galovski Patricia A. Resick

Journal of Traumatic Stress  
First published: 05 April 2021

Sexual assault (SA) often occurs in the context of substances, which can impair the trauma memory and contribute to negative cognitions like self-blame. Although these factors may affect posttraumatic stress disorder (PTSD) treatment, outcomes for substance-involved SA have not been evaluated or compared with other types of SA. As such, we conducted a secondary analysis of a dismantling trial for cognitive processing therapy (CPT), focusing on 58 women with an index trauma of SA that occurred since age 14. Women who experienced a substance-involved SA (n = 21) were compared with those who experienced a non-substance-involved SA (n = 37). Participants were randomized to CPT, CPT with written account (CPT+A), or written account only (WA). Regressions controlling for pretreatment symptom levels revealed no differences by SA type in PTSD severity at posttreatment. At 6-month follow-up,

substance-involved SA was associated with more severe residual PTSD severity than non–substance-involved SA, with no significant differences by treatment condition. Among participants in the substance-involved SA group, the largest effect for reduced PTSD symptom severity from pretreatment to follow-up emerged in the CPT condition,  $d = -2.02$ , with reductions also observed in the CPT+A,  $d = -0.92$ , and WA groups,  $d = -1.23$ . Although more research in larger samples is needed, these preliminary findings suggest that following substance-involved SA, a cognitive treatment approach without a trauma account may facilitate lasting change in PTSD symptoms. We encourage replications to better understand the relative value of cognitive and exposure-based treatment for PTSD following substance-involved SAs.

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<https://doi.org/10.1016/j.sleep.2021.04.024>

## **Overview of Sleep Management during COVID-19.**

Philip M. Becker, M.D

### Highlights

- Global prevalence reports of 20-45% for insomnia symptoms during the COVID-19 pandemic.
- Insomnia complaints persist in previously infected patients and in the public after epidemics.
- Strategies to improve sleep have been recommended but efficacy awaits further study.
- Online digital cognitive behavioral therapy holds promise but acceptance and outcomes need refinement.
- As randomized, controlled therapeutic trials are limited for sleep disturbance during COVID-19 and the pandemic, clinicians will need to use their best judgment in application of established treatment guidelines until future clinical research provides direction.
- Brief discussion of treatment of obstructive sleep apnea, ICU delirium, and repurposing of medications in COVID-19.
- Therapeutic strategies from suicide risk and opioid abuse prevention might offer models to address the global problem for improved sleep.

### Abstract

The sleep of millions has suffered during the global COVID-19 pandemic. Prevalence rates of 20-45% are reported globally for insomnia symptoms during the pandemic.

Affected populations include the public and health care workers. A sleep deprived society faces the increased burden of COVID-related economic disruption, psychosocial problems, substance abuse, and suicide. Disordered sleep is not expected to disappear with control of infection, making interventions acutely necessary. The question becomes how to manage the sleep dysfunction during and after the pandemic. Depression and anxiety are prominent complaints during pandemic restrictions. Insomnia symptoms and fatigue continue even as mood improves in those who are in recovery from COVID-19 infection. Management of disturbed sleep and mental health is particularly needed in frontline health care workers. This overview describes 53 publications, as of February 2021, on disturbed sleep during the pandemic, treatment studies on COVID-related sleep disturbance, and need to rely on current treatment guidelines for common sleep disorders. The available research during the first year of COVID-19 has generally described symptoms of poor sleep rather than addressing treatment strategies. It covers digital cognitive behavioral therapy for insomnia (CBT-i) for the public and frontline workers, recognizing the need of greater acceptance and efficacy of controlled trials of CBT for affected groups. Recommendations based on a tiered public health model are discussed.

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<https://doi.org/10.1016/j.drugalcdep.2021.108725>

**Alcohol dependence and heavy episodic drinking are associated with different levels of risk of death or repeat emergency service attendance after a suicide attempt.**

John E. Robins, Katherine I. Morley, Richard D. Hayes, Kezia R. Ross, ... Nicola J. Kalk

Drug and Alcohol Dependence

Volume 224, 1 July 2021

Highlights

- Latent Class Analysis found 3 distinct classes of alcohol users in suicidal crisis.
- Dependent drinkers' odds of death/repeat crisis >2-fold that of low risk drinkers.
- The lowest odds of death/repeat crisis were found among heavy episodic drinkers.
- Post-crisis care pathways should not take a 'one size fits all' view of alcohol use.

## Abstract

### Background

Alcohol use is a multidimensional risk factor for suicidal behaviour. However, suicide prevention strategies often take 'one-size-fits-all' approaches to alcohol use, reflecting an evidence base built on unidimensional measures. Latent Class Analysis can use a range of measures to differentiate distinct patterns of alcohol using behaviour and their associated risks.

### Methods

We analysed Electronic Health Record data from 650 suicidal adults detained for up to 36 h using police powers (Section 136 of the Mental Health Act 1983, amended 2007) to facilitate psychiatric assessment at a Health-Based Place of Safety, a dedicated emergency psychiatric care centre in London, UK. We conducted a Latent Class Analysis of alcohol using behaviours at first detention, and used multivariable logistic regression to estimate the association of each identified latent class with subsequent death or recontact with emergency psychiatric care over a median follow-up of 490 days, adjusting for sex, age and past-year psychiatric diagnosis.

### Results

Three classes of alcohol use were identified: low risk drinkers, heavy episodic drinkers and dependent drinkers. The dependent drinking class had twice the odds of death or recontact with emergency psychiatric care as the low risk drinking class (OR 2.32, 95 %CI 1.62–3.32,  $p < 0.001$ ). Conversely, the heavy episodic drinking class was associated with lower odds of death or recontact than the low risk drinking class (OR 0.66, 95 %CI 0.53–0.81,  $p < 0.001$ ).

### Conclusions

The risk of adverse outcomes after a suicide attempt are not uniform for different alcohol use classes. Clinical assessment and suicide prevention efforts should be tailored accordingly.

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<https://doi.org/10.1002/jts.22680>

## **The Use of a Brief Family Intervention to Reduce Dropout Among Veterans in Individual Trauma-Focused Treatment: A Randomized Controlled Trial.**

Thompson-Hollands, J., Lee, D.J. and Sloan, D.M.

Dropout from trauma-focused treatment for posttraumatic stress disorder (PTSD) represents a daunting challenge for the field, particularly among military and veteran samples. Family involvement may help to increase the effectiveness of PTSD treatment while also improving retention. We tested a two-session brief family intervention (BFI) protocol delivered as an adjunct to individual trauma-focused treatment among a sample of 20 veteran–family member dyads (N = 40). Willingness to participate in the family-inclusive protocol was high, with over 85% of veterans and family members who were screened agreeing to take part. All enrolled veterans were beginning a course of either cognitive processing therapy (CPT) or prolonged exposure (PE), delivered in outpatient Veterans Affairs clinics. Family members were randomized to either receive or not receive the BFI from study clinicians. In the BFI condition, 20.0% of veterans dropped out of CPT/PE before the 16-week study end; the remainder were either still attending on-protocol sessions or had completed the full protocol. In the control condition, 40.0% of veterans dropped out of CPT/PE before the end of the study. Observed significant, large-magnitude decreases in PTSD symptoms over time did not differ by condition, ES<sub>s</sub> range = -1.12 to -2.04. Accommodation did not significantly decrease over time in either condition, ES<sub>s</sub> range = 0.18 to -0.98. The BFI represents a promising option for veterans, family members, and clinicians who are seeking a brief, feasible, narrowly focused method for incorporating families into veterans' individual trauma-focused therapy and potentially reducing the rate of dropout.

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<https://doi.org/10.1177/01454455211011977>

### **Massed Prolonged Exposure for PTSD in Two Firefighters: Preliminary Case Study Findings.**

Zwetzig SE, Koch LM, Blount TH, Graham MM, Peterson AL

Behavior Modification

First Published April 27, 2021

Military service members and first responders experience significant trauma exposure in the line of duty. Service members who transition to first-responder positions may be at an increased risk for developing PTSD due to the cumulative effects of trauma exposure. A common criticism of the standard delivery methods for most evidence-

based treatments for PTSD is high dropout rates. Massed-prolonged exposure (Massed-PE) has been demonstrated to be efficacious and reduces dropouts by about 50%. This case study is the first of its kind to specifically assess the clinical utility of using Massed-PE to treat PTSD in two firefighters. Results from this case study indicate that both firefighters had significant reductions in their PTSD symptoms. Massed-PE may be an effective approach to treating PTSD in firefighters and may help overcome some of the barriers of conventional treatment delivery. Additional controlled research is needed to further evaluate this promising treatment approach in firefighter populations.

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<https://doi.org/10.1016/j.addbeh.2021.106963>

**Prevalence of cannabis use, disorder, and medical card possession in U.S. military veterans: Results from the 2019-2020 National Health and Resilience in Veterans Study.**

Melanie L. Hill, Mallory Loflin, Brandon Nichter, Sonya B. Norman, Robert H. Pietrzak

Addictive Behaviors

Available online 27 April 2021

Highlights

- An estimated 11.9% of veterans used cannabis in the past six months.
- 2.7% of veterans screened positive for cannabis use disorder (CUD)
- Cannabis use was more prevalent among younger and ethnic minority veterans (16-20%)
- 24-30% of veterans with psychiatric conditions used cannabis, and 9-13% had CUD.
- Younger age and childhood adversity were strong predictors of cannabis use and CUD.

Abstract

More than half of U.S. states legalized medical or recreational sale and possession of cannabis since the prevalence of cannabis use was last estimated among U.S. military veterans in 2014. To provide updated estimates of the prevalence and correlates of cannabis use, cannabis use disorder (CUD), and medical cannabis card possession in this population, data were analyzed from the 2019-2020 National Health and Resilience in Veterans Study, a nationally representative survey of 4,069 veterans ages 22-99 years who reported on their past-6-month cannabis use, CUD symptoms, and



possession of a medical cannabis card. An estimated 11.9% [95% confidence interval (CI)=10.9–12.9%] of veterans reported using cannabis, 2.7% (95% CI=2.3-3.3%) screened positive for CUD, and 1.5% (95% CI=1.2-2.0%) reported possessing a medical card. Prevalence of cannabis use, CUD, and card possession were higher among younger veterans (use: 20.2%, CUD: 5.6%, card: 2.1%) and those with psychiatric conditions (use: 24.0%-30.0%, CUD: 8.9%-13.0%, card: 3.1%-4.0%). Younger age, alcohol use disorder, and childhood adversity explained a large proportion of variance in cannabis use and CUD, and depression was independently associated with CUD (odds ratio [OR]= 2.76). Physical disability (OR=3.59), combat veteran status (OR=2.84), and non-Hispanic black (OR=0.23) relative to white race/ethnicity most strongly predicted using cannabis with a medical card. The estimated prevalence of cannabis use in veterans—nearly 12%—is higher than the most recently reported estimate (9% in 2014). Veteran cannabis use may be increasing and is particularly prevalent among veterans with psychiatric conditions.

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<https://doi.org/10.1001/jamanetworkopen.2021.8072>

### **Comparison of Posttraumatic Stress Disorder Checklist Instruments From Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition vs Fifth Edition in a Large Cohort of US Military Service Members and Veterans.**

LeardMann, C. A., McMaster, H. S., Warner, S., Esquivel, A. P., Porter, B., Powell, T. M., Tu, X. M., Lee, W. W., Rull, R. P., Hoge, C. W., & Millennium Cohort Study Team

JAMA Network Open  
2021 Apr 1;4(4):e218072

#### **Importance:**

The definition of posttraumatic stress disorder (PTSD) changed markedly between the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) and DSM-5, creating challenges for studies and in medical settings spanning this transition. Objective: To evaluate the ability to compare and assess PTSD, based on DSM-IV and DSM-5 criteria, using PTSD Checklists (PCLs).

#### **Design, setting, and participants:**

This diagnostic study was conducted with survey data collected in October 2019, from the Millennium Cohort Study, a population-based US military cohort study. The



population for the present study was restricted to a subset of initial web responders of the 2019 survey cycle, randomly assigned to 1 of 4 survey groups.

#### Exposures:

Each group received the DSM-IV and DSM-5 PCL (PCL-Civilian [PCL-C] version and PCL for DSM-5 [PCL-5]). PCL instruments were counterbalanced to control for order effects.

#### Main outcomes and measures:

Survey data were used to assess PTSD (using the PCL-C and PCL-5), major depressive disorder (using the Patient Health Questionnaire), generalized anxiety (using the Generalized Anxiety Disorder scale), and problem drinking (using the Patient Health Questionnaire). Demographic and military characteristics included age, sex, race/ethnicity, marital status, education, service branch, pay grade, enrollment panel, and military service status.

#### Results:

Among the 1921 participants (mean [SD] age, 50.1 [12.5] years), 1358 (70.7%) were men, 1638 (85.3%) were non-Hispanic White individuals, 1440 (75.0%) were married, and 1190 (61.9%) had at least a bachelor's degree; 295 (15.4%) had probable PTSD according to DSM-IV criteria with PCL-C compared with 286 (14.9%) using DSM-5 criteria with PCL-5 ( $\kappa = 0.77$ ). There was substantial agreement between PCLs for probable PTSD based on DSM-IV criteria (295 [15.4%] with PCL-C; 316 [16.4%] with PCL-5;  $\kappa = 0.80$ ) and DSM-5 criteria (286 [14.9%] with PCL-5; 258 [13.4%] with PCL-C;  $\kappa = 0.77$ ). Estimated PTSD sum scores showed excellent agreement with observed scores. Using an established crosswalk, PCL-5 sum scores estimated with the PCL-C were similar to observed PCL-5 scores. Of the 17 corresponding items between the 2 instruments, 16 had substantial agreement. Appending 2 additional PCL-C items to the PCL-5 did not significantly alter estimates. The PCL-C and PCL-5 had nearly identical associations with comorbid conditions.

#### Conclusions and relevance:

The findings of this diagnostic study suggest that PTSD can be successfully assessed and compared over time with either PCL instrument in veteran and military populations.

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<https://doi.org/10.1016/j.jad.2021.04.033>

## **Comorbid mental disorders, depression symptom severity, and role impairment among Veterans initiating depression treatment through the Veterans Health Administration.**

Hannah N. Ziobrowski, Lucinda B. Leung, Robert M. Bossarte, Corey Bryant, ... Ronald C. Kessler

Journal of Affective Disorders  
Available online 27 April 2021

### Highlights

- Positive psychiatric comorbidity screens are pervasive among depressed VHA patients
- Depressed VHA patients experience substantial role impairments
- Depression severity is strongly associated with role impairments
- Role impairments are attributable much more to depression severity than comorbidity
- Depression severity accounts for most of the comorbidity-impairment associations

### Abstract

#### Background

Psychiatric comorbidities may complicate depression treatment by being associated with increased role impairments. However, depression symptom severity might account for these associations. Understanding the independent associations of depression severity and comorbidity with impairments could help in treatment planning. This is especially true for depressed Veterans, who have high psychiatric comorbidity rates.

#### Methods

2,610 Veterans beginning major depression treatment at the Veterans Health Administration (VHA) were administered a baseline self-report survey that screened for diverse psychiatric comorbidities and assessed depression severity and role impairments. Logistic and generalized linear regression models estimated univariable and multivariable associations of depression severity and comorbidities with impairments. Population attributable risk proportions (PARPs) estimated the relative importance of depression severity and comorbidities in accounting for role impairments.

## Results

Nearly all patients (97.8%) screened positive for at least one comorbidity and half (49.8%) for 4+ comorbidities. The most common positive screens were for generalized anxiety disorder (80.2%), posttraumatic stress disorder (77.9%), and panic/phobia (77.4%). Depression severity and comorbidities were significantly and additively associated with impairments in multivariable models. Associations were attenuated much less for depression severity than for comorbidities in multivariable versus univariable models. PARPs indicated that 15-60% of role impairments were attributable to depression severity and 5-32% to comorbidities.

## Limitations

The screening scales could have over-estimated comorbidity prevalence. The cross-sectional observational design cannot determine either temporal or causal priorities.

## Conclusions

Although positive screens for psychiatric comorbidity are pervasive among depressed VHA patients, depression severity accounts for most of the associations of these comorbidities with role impairments.

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<https://doi.org/10.1016/j.jad.2021.04.088>

## **The hidden burden of social anxiety disorder in U.S. military veterans: Results from the National Health and Resilience in Veterans Study.**

Simon P. Byrne, Brienna M. Fogle, Ruth Asch, Irina Esterlis, ... Robert H. Pietrzak

Journal of Affective Disorders

Available online 3 May 2021

## Highlights

- Nearly one in ten U.S. veterans reported SAD in their lifetime.
- They had higher odds of mental disorders, particularly depression and PTSD.
- Veterans with SAD had three-fold greater risk for current suicidal ideation.
- SAD was uniquely associated with reductions in functioning.
- Given SAD has low help seeking, it may be undertreated in veterans.

## Abstract

### Background

Social anxiety disorder (SAD) is a chronic and disabling psychiatric disorder associated with low levels of help-seeking. To date, however, scarce research has examined the epidemiology of SAD in veterans. This study examined the prevalence, comorbidities and incremental burden of SAD in relation to suicidality and functioning in a representative sample of U.S. military veterans.

### Methods

A nationally representative sample of 3,157 U.S. veterans completed a web survey containing measures of SAD symptoms, trauma history, psychiatric history and functioning. Multivariable analyses were conducted to examine associations between SAD and psychiatric comorbidities, suicidality and functioning.

### Results

A total 9.5% (n=272) of the sample screened positive for lifetime SAD. Veterans with SAD were more likely than those without SAD to be younger, female, single, racial/ethnic minorities and to have experienced childhood abuse. They also had substantially elevated rates of comorbid psychiatric disorders, particularly lifetime major depression (odds ratio [OR]=5.8) and posttraumatic stress disorder (OR=3.1), as well as current suicidal ideation (OR=3.3). Veterans with SAD scored lower on measures of functioning, particularly social, emotional and mental health functioning (d's=0.21-0.34).

### Limitations

Data were collected cross-sectionally using self-report.

### Conclusions

SAD is prevalent and associated with psychiatric comorbidities, functional impairment and a more than 3-fold greater risk for suicidal ideation in U.S. veterans. Given that SAD is associated with low treatment seeking and engagement, it may be undetected and undertreated relative to other psychiatric morbidities. These results underscore the importance of screening, monitoring and treating SAD in this population along with other prevalent mental disorders.

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<https://doi.org/10.1080/08995605.2021.1906075>

**Operational stressors, psychological distress, and turnover intentions: The impact of potentially morally injurious experiences.**

Kathy Michaud, Cindy Suurd Ralph & Sarah Jayne A. Connick-Keefer

Military Psychology

Published online: 26 Apr 2021

Military personnel experience stressors during deployment that could take a toll on their psychological well-being and on the organization's function. One common approach to better understanding the impact of such stressors is measuring events using psychological scales. The current research examined items measuring potentially morally injurious experiences in post-deployment assessments of personnel involved in the Afghanistan mission using the United States Mental Health Advisory Team – Combat Experiences Scale (MHAT-CES).

Study 1 found that the scale produced five components. Three components showed consistency with past studies that examined the structure of other versions of the CES (i.e., dangerous environments, exposure to dead and injured and active combat). A fourth component that we labeled life threats included items that were typically divided between the aforementioned components. Finally, a stable and reliable fifth component included items related to potentially morally injurious experiences. Study 2 replicated this structure and showed that increased perceptions of potentially morally injurious experiences during deployment were associated with higher levels of psychological distress, which in turn promoted stronger turnover intentions, even after controlling for the effects of the other combat stressor components on these variables. We discuss the implications of potentially morally injurious experiences in relation to individual psychological distress and organizational retention.

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<https://doi.org/10.1037/drm0000161>

**How sleep disordered breathing impacts posttrauma nightmares and rescripting therapies.**

Youngren, W., Balderas, J., & Farrell-Higgins, J.

Dreaming

2021; 31(1), 20–31

Posttrauma nightmares (PNMs) are initiated by trauma exposure, often include content that resembles the triggering trauma, and are considered a hallmark symptom of posttraumatic stress disorder. Although rescripting therapies are a leading treatment option for PNMs, there are mixed results regarding their effectiveness. One variable that may give us more insight into the relationship between PNMs and rescripting therapies is sleep disordered breathing (SDB), especially when considering SDB may impact nightmare content, frequency, sleep staging, and symptom severity. Thus, given that SDB may influence PNMs, the current study investigated the relationship between SDB, nightmare content, the remembrance of nightmares, and the impact of a nightmare rescripting therapy in a trauma-exposed sample. Although there were no significant differences in nightmare frequency or remembrance among individuals with and without SDB at baseline, the non-SDB group (compared to the probable SDB group) was more likely to report nightmares that were similar to the triggering trauma. Following treatment, the group without SDB symptoms had significantly less nightmares, whereas the probable SDB group showed no significant decrease in nightmare frequency. In conclusion, our results demonstrate that PNMs in the presence of SDB symptoms (complex PNMs) may differ in content than PNMs without comorbid SDB symptoms (isolated PNMs) and that SDB symptoms may interfere with the efficacy of rescripting focused therapies. Future research is needed to determine if there is truly a difference between complex PNMs and isolated PNMs and if types of nightmares (complex and isolated) fare better under different treatment options (continuous positive air pressure vs. rescripting focused therapies). (PsyInfo Database Record (c) 2021 APA, all rights reserved)

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<https://doi.org/10.1001/jama.2021.6700>

## **The Pandemic Stay-at-Home Order and Opioid-Involved Overdose Fatalities.**

Mason M, Arukumar P, Feinglass J

JAMA

Published online April 23, 2021

In response to the COVID-19 pandemic, Illinois enacted a stay-at-home order on March 21, 2020; the order was lifted on May 30, 2020. This report describes trends in opioid-involved overdose deaths over a 3-year period and highlights the number of deaths during the 11-week Illinois stay-at-home order. Trends in substance involvement are also examined.

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<https://doi.org/10.5664/jcsm.9276>

**Risk factors of persistent insomnia among survivors of traumatic injury: a retrospective cohort study.**

Haynes, Z. A., Collen, J. F., Poltavskiy, E. A., Walker, L. E., Janak, J., Howard, J. T., Werner, J. K., Wickwire, E. M., Holley, A. B., Zarzabal, L. A., Sim, A., Gundlapalli, A., & Stewart, I. J.

Journal of Clinical Sleep Medicine  
2021 Apr 30

Study objectives:

Insomnia is a diagnosis with broad health and economic implications that has been increasingly recognized in military service members. This trend was concurrent with an increase in traumatic wartime injuries. Accordingly, we sought to determine longitudinal predictors of persistent insomnia in combat veterans who sustained traumatic injuries.

Methods:

Retrospective cohort study of service members deployed to conflict zones from 2002-2016, with longitudinal follow-up in the Veterans Affairs and Military Health Systems. Two cohorts were derived: 1) service members who sustained traumatic injuries and 2) an age, sex, and service component matched cohort of uninjured service members who deployed to a combat zone. Insomnia was defined using International Classification of Diseases Ninth Revision or International Classification of Diseases Tenth Revision Clinical Modification codes.

Results:

The final population of 17,374 service members was followed from date of injury (or date of matched participant's injury) for a median of 8.4 (IQR 5.3-10.7) years. Service members with traumatic injury were at significantly greater risk of developing insomnia than uninjured service members (HR=1.43, 95% CI 1.30-1.58) after adjustment. Traumatic brain injury (TBI) was associated with insomnia when compared to patients without TBI in the multivariable model: mild/unclassified TBI (HR=2.07, 95% CI 1.82-2.35), moderate/severe/penetrating TBI (HR=2.43, 95% CI 2.06-2.86). Additionally, burn injury (HR=1.95, 95% CI 1.47-2.59) and amputation (HR=1.61, 95% CI 1.26-2.06) significantly increased the risk of a diagnosis.

## Conclusions:

Traumatic injuries significantly predicted a diagnosis of insomnia after controlling for mental health disorders. Our findings strongly suggest the need for long-term surveillance of sleep disorders in trauma survivors.

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<https://doi.org/10.1093/sleep/zsaa221>

## **Sleep and high-risk behavior in military service members: a mega-analysis of four diverse U.S. Army units.**

Mantua, J., Bessey, A. F., Mickelson, C. A., Choynowski, J. J., Noble, J. J., Burke, T. M., McKeon, A. B., & Sowden, W. J.

Sleep

2021 Apr 9;44(4)

Experimental sleep restriction and deprivation lead to risky decision-making. Further, in naturalistic settings, short sleep duration and poor sleep quality have been linked to real-world high-risk behaviors (HRB), such as reckless driving or substance use. Military populations, in general, tend to sleep less and have poorer sleep quality than nonmilitary populations due to a number of occupational, cultural, and psychosocial factors (e.g. continuous operations, stress, and trauma). Consequently, it is possible that insufficient sleep in this population is linked to HRB. To investigate this question, we combined data from four diverse United States Army samples and conducted a mega-analysis by aggregating raw, individual-level data ( $n = 2,296$ , age  $24.7 \pm 5.3$ ). A negative binomial regression and a logistic regression were used to determine whether subjective sleep quality (Pittsburgh Sleep Quality Index [PSQI], Insomnia Severity Index [ISI], and duration [h]) predicted instances of military-specific HRB and the commission of any HRB (yes/no), respectively. Poor sleep quality slightly elevated the risk for committing HRBs (PSQI Exp(B): 1.12 and ISI Exp(B): 1.07), and longer duration reduced the risk for HRBs to a greater extent (Exp(B): 0.78), even when controlling for a number of relevant demographic factors. Longer sleep duration also predicted a decreased risk for commission of any HRB behaviors (Exp(B): 0.71). These findings demonstrate that sleep quality and duration (the latter factor, in particular) could be targets for reducing excessive HRB in military populations. These findings could therefore lead to unit-wide or military-wide policy changes regarding sleep and HRB.



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<https://doi.org/10.1037/ort0000541>

**What the public should know about veterans returning from combat deployment to support reintegration: A qualitative analysis.**

Sayer, N. A., Orazem, R. J., Mitchell, L. L., Carlson, K. F., Schnurr, P. P., & Litz, B. T.

American Journal of Orthopsychiatry  
Advance online publication

Consensus reports have called for interventions to educate civilians about the reintegration challenges that veterans experience. The current study describes veterans' perspectives of what the public should know and what the public can do to help veterans reintegrate into civilian life. We conducted thematic analysis of written essays from a stratified random sample of 100 US veterans (half women, half deployed from National Guard or Reserves) from Afghanistan and Iraq military operations who had participated in the control writing condition from a randomized controlled trial of expressive writing to improve reintegration outcomes. Veterans described a military-civilian divide that makes reintegration difficult and recommended that the public help bridge this divide. The divide was attributable to the uniqueness of military culture and bonds, the personal changes associated with deployment, and the time it takes for veterans to reacclimate. Five themes captured what the public can do to foster veteran reintegration: understand deployment hardships; appreciate deployment accomplishments; assist veterans in getting professional help; listen, don't judge; and recognize that employment is critical to reintegration. Themes were present across groupings by gender, type of military service and screening status for posttraumatic stress disorder. Findings can inform interventions that target the public's understanding of and response to returning veteran. Consistent with an ecological model of reintegration, such interventions have the potential to foster successful reintegration. (PsychoInfo Database Record (c) 2021 APA, all rights reserved)

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<http://dx.doi.org/10.1136/bmjmilitary-2020-001729>

**Accelerated resolution therapy and a thematic approach to military experiences in US Special Operations Veterans.**

Hernandez D, Kip KE, Long CJ

BMJ Military Health

Online First: 28 April 2021

Accelerated Resolution Therapy (ART) is an emerging therapeutic intervention that has demonstrated effectiveness in treating post-traumatic stress, anxiety and depression. The ART protocol aligns with first-line trauma-focused psychotherapies and clinical guides in the USA and UK. This review addresses previous ART research that includes members of US Special Operations Forces. Observations from that research has led to a thematic conceptualisation of trauma through ART interventions. These include three clusters of traumatic memories and several themes relevant to individual distress but not necessarily symptoms that meet diagnostic criteria for PTSD. ART represents a movement in treatment away from the symptoms, to the individuals' story. Not only the story of an event, but how that experience becomes incorporated into one's sense of identity. The themes identified (and treated with ART) appear to have broader application to the entirety of one's military experience, not just PTSD. These themes may be helpful in directing treatment and may help to focus on significant aspects of service not traditionally associated with PTSD. Theoretically, some of these areas may have protective implications in suicide.

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### **Links of Interest**

Examining Pain Experiences and Care in Underserved Populations

<https://www.nccih.nih.gov/research/blog/examining-pain-experiences-and-care-in-underserved-populations>

Military kids are resilient, but far from immune to pandemic effects

<https://health.mil/News/Articles/2021/04/28/Military-kids-are-resilient-but-far-from-immune-to-pandemic-effects>

For veterans, a hidden side effect of COVID: feelings of personal growth

<https://news.yale.edu/2021/04/09/veterans-hidden-side-effect-covid-feelings-personal-growth>

COVID-19 and the "Lost Year" for Smokers Trying to Quit

<https://jamanetwork.com/journals/jama/fullarticle/2779451>

NICoE at forefront of traumatic brain injury research and treatment

<https://health.mil/News/Articles/2021/05/03/NICoE-at-forefront-of-traumatic-brain-injury-research-and-treatment>

Air Force Creates LGBTQA, Indigenous Focus Groups to Address Diversity Issues

<https://www.military.com/daily-news/2021/05/03/air-force-creates-lgbtqa-indigenous-focus-groups-address-diversity-issues.html>

A Psychedelic Drug Passes a Big Test for PTSD Treatment

<https://www.nytimes.com/2021/05/03/health/mdma-approval.html>

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## Resource of the Week -- [Behavioral Health: Patient Access, Provider Claims Payment, and the Effects of the COVID-19 Pandemic](#)

New, from the Government Accountability Office (GAO):

How has the need for and availability of services for mental health and substance use disorders changed during the COVID-19 pandemic?

Evidence suggests these conditions increased while access to care decreased.

- Centers for Disease Control surveys found about 38% of respondents reported symptoms of anxiety or depression from April 2020 through Feb. 2021—up from about 11% in 2019
- Emergency department visits for overdoses and suicide attempts from mid-March to mid-Oct. 2020 were up 36% and 26%, respectively, from 2019
- Many behavioral health service providers reported increasing demand and decreasing staff sizes

## Behavioral Health: Patient Access, Provider Claims Payment, and the Effects of the COVID-19 Pandemic

GAO-21-437R

Published: Mar 31, 2021. Publicly Released: Apr 30, 2021.

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