

CDP



Research Update -- August 22, 2019

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https://www.ptsd.va.gov/publications/ctu_docs/ctu_v13n4.pdf

Clinician's Trauma Update

National Center for PTSD (VA)

August 2019 Issue: Vol. 13(4)

CTU-Online includes brief updates on the latest clinically relevant research. Content on treatment and assessment is emphasized. Publications on other topics are included if the content has significant clinical implications.

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2748046>

Firearm Availability and Storage Practices Among Military Personnel Who Have Thought About Suicide.

Craig J. Bryan, PsyD, ABPP; AnnaBelle O. Bryan, MS; Michael D. Anestis, PhD; Lauren R. Khazem, PhD; Julia A. Harris, MS; Alexis M. May, PhD; Cynthia Thomsen, PhD

JAMA Network Open

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Introduction

More than 60% of US military suicides occur at home and involve a firearm.¹ Nearly all military firearm suicides (95%) involve a personally owned firearm.¹ Nonmilitary data indicate that the risk of suicide is 6 times higher in households with a firearm, although this risk may be reduced if the firearms are kept unloaded and/or locked.² Because attempts using firearms have very high fatality rates,³ safe firearm storage practices could be an important component of comprehensive suicide prevention in the military. This study examined associations of firearm ownership and storage practices with suicidal thoughts and behaviors among military personnel.

Methods

In a cross-sectional study, we examined firearm storage practices among 1652 active-duty military personnel enrolled in the Primary Care Screening Methods (PRISM) study, conducted in 6 military primary care clinics across the United States between July 13,

2015, and August 22, 2018. Service members who were eligible for military medical services, aged 18 years or older, and able to complete informed consent procedures completed self-report measures during routine clinic visits. The study was approved by the Naval Health Research Center's institutional review board, and participants provided written informed consent. This study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline.

Firearm ownership and storage practices were assessed using Behavioral Risk Factor Surveillance System items.⁴ All participants were asked, "Are any firearms now kept in or around your home?" Those responding affirmatively were subsequently asked, "Are any of these firearms now loaded?" and "Are any of these firearms now unlocked?" Safe storage was defined as having firearms locked up and unloaded. Lifetime history of suicide ideation and attempts was assessed using items from the Self-injurious Thoughts and Behaviors Interview⁵: "Have you ever had thoughts of killing yourself?" and "Have you ever made an actual attempt to kill yourself in which you had at least some intent to die?" Thoughts of death or self-harm during the preceding 2 weeks were assessed using item 9 of the Patient Health Questionnaire ^{9.6}

To test associations among variables, SPSS statistical software version 25 (IBM) was used to calculate adjusted odds ratios with 95% confidence intervals. Statistical significance was set at $P < .05$ using 2-sided tests.

Results

Of 1652 participants (1071 [64.8%] male; mean [SD] age, 33.6 [15.7] years), 590 participants (35.7%) reported a firearm in or around their home, 141 (8.6%) selected "refuse to answer" or skipped the item, and 11 (0.1%) selected "I don't know." Among participants with a firearm in or around the home, 124 (21.0%) indicated their firearms were loaded and unlocked, 188 (32.2%) indicated their firearms were safely stored (ie, unloaded and locked up), 150 (25.3%) indicated their firearms were not safely stored (ie, 60 [10.2%] unloaded but not locked up and 90 [15.3%] locked up but loaded), and 126 [21.3%] refused to answer or skipped the items. Factors associated with firearm access and safe storage are summarized in Table 1 and Table 2. Participants with recent thoughts of death or self-harm were significantly less likely to have a firearm at home (odds ratio, 0.61; 95% CI, 0.40-0.95; $P = .03$). However, among those with a firearm at home, safe storage was less common among participants endorsing a lifetime history of suicide ideation (odds ratio, 0.47; 95% CI, 0.29-0.78; $P = .003$) or recent thoughts about death or self-harm (odds ratio, 0.26; 95% CI, 0.09-0.79; $P = .02$).

Discussion

In this cross-sectional study of a sample of active-duty military personnel, one-third

reported a firearm in or around the home. Of this subgroup, one-third reported storing the firearm safely (ie, unloaded and locked up). Although military personnel with recent thoughts about death or self-harm were less likely to have a firearm at home, suicidal personnel who did have a firearm at home were much less likely than nonsuicidal service members to use safe storage. This highlights the importance of emphasizing safe storage of personally owned firearms, including temporary removal of access to firearms for high-risk personnel. Limitations of this study include self-report methods, cross-sectional design, and unknown response rate. Further research focused on firearm availability and storage practices among military personnel is warranted.

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2735465>

Association of Firearm Ownership, Use, Accessibility, and Storage Practices With Suicide Risk Among US Army Soldiers.

Catherine L. Dempsey, PhD; David M. Benedek, MD; Kelly L. Zuromski, PhD; Charlotte Riggs-Donovan, MS; Tsz Hin H. Ng, MPH; Matthew K. Nock, PhD; Ronald C. Kessler, PhD; Robert J. Ursano, MD

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Key Points

Question

To what extent do firearm ownership, use, accessibility, and storage practices increase suicide risk among US Army soldiers?

Findings

In this case-control, psychological autopsy study of 135 soldiers who died by suicide, firearm accessibility was associated with a significant increase in the risk of suicide. Next-of-kin reported that soldiers who died by suicide were more likely to own firearms, have home access to firearms, and have home storage of ammunition compared with propensity-matched controls.

Meaning

This study suggests that identifying possible targets for intervention, such as promoting the separate storage of guns and ammunition as well as discouraging public carrying of

firearms when not required for military duties, has important implications for suicide prevention.

Abstract

Importance

Since 2004, the suicide rate among US Army soldiers has exceeded the rate of death from combat injury. It is critical to establish factors that increase the risk of acting on suicidal thoughts to guide early intervention and suicide prevention.

Objective

To assess whether firearm ownership, use, storage practices, and accessibility are associated with increased risk of suicide.

Design, Setting, and Participants

In this case-control study, suicide cases ($n = 135$) were defined as US Army soldiers who died by suicide while on active duty between August 1, 2011, and November 1, 2013. Next-of-kin and Army supervisors of soldiers who died by suicide ($n = 168$) were compared with propensity-matched controls ($n = 137$); those soldiers with a suicidal ideation in the past year ($n = 118$) provided structured interview data. Data were analyzed from April 5, 2018, to April 2, 2019.

Main Outcomes and Measures

Firearm ownership, storage, and accessibility were assessed by using items from the World Health Organization Composite International Diagnostic Interview screening scales along with items created for the purpose of the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS) study.

Results

Among the 135 suicide decedents, next-of-kin reported that they had greater accessibility to firearms compared with propensity-matched controls. Specifically, suicide decedents were more likely to own 1 or more handguns compared with propensity-matched controls (odds ratio [OR], 1.9; 95% CI, 1.0-3.7; $\chi^2_{21} = 4.2$; false discovery rate [FDR] $P = .08$), store a loaded gun at home (OR, 4.1; 95% CI, 1.9-9.1; $\chi^2_{21} = 12.2$; FDR $P = .003$), and publicly carry a gun when not required for military duty (OR, 3.2; 95% CI, 1.4-7.3; $\chi^2_{21} = 7.4$; FDR $P = .02$). The combination of these 3 items was associated with a 3-fold increase in the odds of suicide death (OR, 3.4; 95% CI, 1.2-9.4; $\chi^2_{21} = 5.4$; FDR $P = .05$). Storing a loaded gun with ammunition at home or publicly carrying a gun when not on duty was associated with a 4-fold increase in the odds of suicide death (OR, 3.9; 95% CI, 1.9-7.9; $\chi^2_{21} = 14.1$; FDR $P = .002$).

Conclusions and Relevance

In this study, in addition to gun ownership, ease and immediacy of firearm access were associated with increased suicide risk. Discussion with family members and supervisors about limiting firearm accessibility should be evaluated for potential intervention.

<https://link.springer.com/article/10.1007/s10896-019-00091-x>

Intimate Partner Violence in the Military: an Investigation of Reporting Crimes to Law Enforcement Officials.

Patricia Becker, Ronet Bachman

Journal of Family Violence

First Online: 12 August 2019

<https://doi.org/10.1007/s10896-019-00091-x>

Although awareness of intimate partner violence (IPV) has increased, acknowledging that American military members and their families are particularly vulnerable to these forms of violence has been relatively recent. While scholars have shown that victims of IPV are unlikely to report their victimizations to the police (Venema *Journal of Interpersonal Violence*, 31(5), 872–899, 2016), virtually no attempts have been made to explore reporting crimes to the police by those in the military and/or victimized by someone in the military. In this paper, the National Crime Victimization Survey (NCVS) data from 1992 to 2016 were used to examine whether incidents of intimate partner violence were less likely to be reported to the police if either the victim and/or offender were active duty military personnel. To ascertain whether military status affected decisions to report for other violent crimes, models predicting the probability of reporting to the police for robbery victimizations were also examined. This research revealed that a military connection significantly decreased the likelihood of IPV being reported compared to the civilian population, however, military status had no effect on the likelihood of robbery victimizations being reported. Results support the contention that the military culture may reduce the likelihood that IPV victimizations will be reported to police compared to their civilian counterparts. Because this was not true for robbery victimizations, policies directed at reducing the reluctance of IPV victims to seek justice through law enforcement channels are needed along with continued efforts to prevent IPV in the military specifically, and within the nation generally.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22411>

Association Between Shame and Posttraumatic Stress Disorder: A Meta-Analysis.

Teresa López-Castro, Tanya Saraiya, Kathryn Zumberg-Smith, Naomi Dambreville

Journal of Traumatic Stress

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<https://doi.org/10.1002/jts.22411>

Posttraumatic stress disorder (PTSD) is a complex condition with affective components that extend beyond fear and anxiety. The emotion of shame has long been considered critical in the relation between trauma exposure and PTSD symptoms. Yet, to date, no meta-analytic synthesis of the empirical association between shame and PTSD has been conducted. To address this gap, the current study summarized the magnitude of the association between shame and PTSD symptoms after trauma exposure. A systematic literature search yielded 624 publications, which were screened for inclusion criteria (individuals exposed to a Criterion A trauma, and PTSD and shame assessed using validated measures of each construct). In total, 25 studies employing 3,663 participants met full eligibility criteria. A random-effects meta-analysis revealed a significant moderate association between shame and posttraumatic stress symptoms, $r = .49$, 95% CI [0.43, 0.55], $p < .001$. Moderator analyses were not completed due to the absence of between-study heterogeneity. Publication bias analyses revealed minimal bias, determined by small attenuation after the superimposition of weight functions. The results underscore that across a diverse set of populations, shame is characteristic for many individuals with PTSD and that it warrants a central role in understanding the affective structure of PTSD. Highlighting shame as an important clinical target may help improve the efficacy of established treatments. Future research examining shame's interaction with other negative emotions and PTSD symptomology is recommended.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22413>

Event Centrality: Factor Structure and Links to Posttraumatic Stress Disorder Symptom Clusters.

Rachel Wamser-Nanney

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First published: 03 July 2019
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Event centrality is defined as the extent to which traumatic events are perceived to be integral to one's life. However, there are discrepancies regarding the factor structure of event centrality, as the factor structure may differ depending on the nature of the trauma. Event centrality has predicted posttraumatic stress disorder (PTSD); yet, few studies have taken into account other key cognitive predictors of PTSD, such as posttraumatic cognitions. The PTSD symptom clusters also remain largely unexamined, despite potential specificity in their ties to event centrality. The aims of the current study were to: (a) examine the factor structure of event centrality and whether the structure differs following interpersonal versus noninterpersonal trauma; (b) investigate whether event centrality predicts PTSD symptom clusters beyond posttraumatic cognitions; and (c) determine if the associations between event centrality, posttraumatic cognitions, and PTSD are equivalent between trauma types. The study aims were examined utilizing 263 college students ($M = 24.54$, $SD = 6.29$; 79.8% female; 58% White). Event centrality was best represented by one factor, which was consistent between groups. Structural equation models indicated that event centrality and posttraumatic cognitions regarding the self predicted each of the PTSD symptom clusters across groups, β s = .27–.58. However, event centrality was more strongly related to avoidance symptoms among individuals who experienced a noninterpersonal trauma. For both the interpersonal and noninterpersonal groups, event centrality had equivalent ties to each cluster. Even after accounting for negative trauma-related beliefs, event centrality appears to be relevant in understanding posttrauma functioning.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22412>

Predictors for Excellent Versus Partial Response to Prolonged Exposure Therapy: Who Needs Additional Sessions?

Yinyin Zang, Yi-Jen Su, Carmen P. McLean, Edna B. Foa

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In practice, the duration of psychotherapy is determined by the patient's response to treatment. Identifying predictors for treatment responses is of great clinical utility to guide clinicians in their treatment planning. Demographic characteristics, trauma history, comorbidity, and early reduction of posttraumatic stress disorder (PTSD) symptoms were examined as predictors of excellent versus partial response to prolonged exposure therapy (PE) for PTSD. Participants were 96 female assault survivors with chronic PTSD who received at least eight PE sessions with or without cognitive restructuring. Participants were classified as excellent responders (n = 27) or partial responders (n = 69) based on whether they achieved at least 70% improvement in self-reported PTSD severity on the PTSD Symptom Scale–Self-Report at the end of Session 8. Excellent responders terminated therapy after Session 9, and partial responders were offered up to three additional sessions. Logistic regression was conducted to investigate predictors of response to PE. Results showed that prior interpersonal violence and comorbid alcohol use disorder were associated with partial response. Comorbid depressive disorder and early PTSD symptom reduction were associated with excellent response. Being treated by a cognitive behavioral therapy expert predicted higher excellent response for patients with a history of prior interpersonal violence. The model accounted for 56.6% of the variance in treatment response and correctly predicted responder status for 83.3% of the sample. These findings contribute to the field's understanding of factors that predict or moderate response to PE and have implications for treatment planning.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22417>

Comparing Outcomes of Women-Only and Mixed-Gender Intensive Posttraumatic Stress Disorder Treatment for Female Veterans.

Elina A. Stefanovics, Robert A. Rosenheck

Journal of Traumatic Stress

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Although most female veterans treated in specialized intensive Veterans Health Administration (VHA) posttraumatic stress disorder (PTSD) programs receive services in settings in which over 95% of participants are men, two programs include only women. Whether outcomes for women with PTSD are superior in women-only programs has not been evaluated. National program evaluation data on 1,357 women veterans

from 57 sites were collected at program entry and 4 months after discharge. With adjustment for differences in baseline characteristics, outcomes of women in two women-only programs (n = 469) were compared with those from 55 mixed-gender programs (n = 888), using mixed models with random effect for site. The primary outcome was total PTSD symptom level, with supplementary information on PTSD assessment subscales, substance use, and other outcomes. At program entry, female veterans in women-only programs had lower scores on measures of total PTSD symptoms, $p = .013$, $d = -0.24$, and on several subscales. Adjusting for these differences, there were no significant differences between program types in terms of PTSD total score or scores on secondary measures. In women-only programs, veterans had longer lengths of stay and were rated by their clinicians to have a higher level of commitment to therapy at discharge. Thus, women-only programs did not show superior outcomes; however, compared to participants in mixed-gender programs, those in women-only programs had longer lengths of stay, higher levels of commitment to therapy, and were more likely to participate in posttreatment outcome assessments following discharge.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22416>

Guilt in the Treatment of Posttraumatic Stress Disorder Among Active Duty Military Personnel.

Carmen P. McLean, Laurie Zandberg, Lily Brown, Yinyin Zang, Kathy Benhamou, Katherine A. Dondanville, Jeffrey S. Yarvis, Brett T. Litz, Jim Mintz, Stacey Young-McCaughan, Alan L. Peterson, Edna B. Foa for the STRONG STAR Consortium

Journal of Traumatic Stress

First published: 29 July 2019

<https://doi.org/10.1002/jts.22416>

The current study examined the role of trauma-related guilt on posttraumatic stress disorder (PTSD) symptom change during prolonged exposure therapy (PE) as well as the efficacy of PE in reducing three dimensions of guilt (responsibility, wrongdoing, and lack of justification) during treatment. Participants were 331 active duty U.S. military personnel seeking treatment for PTSD who were randomized to one of four groups: massed PE (10 sessions delivered over 2 weeks), spaced PE (10 sessions delivered over 8 weeks), present-centered therapy (PCT; 10 sessions delivered over 8 weeks), or minimal contact control (MCC; weekly therapist phone check-in for 4 weeks). The results showed that baseline guilt did not predict reductions in PTSD symptoms for

spaced PE or for PCT, $ps = .178-.387$, $ds = -0.02-0.07$. Treatment condition (massed PE vs. MCC; spaced PE vs. PCT) did not moderate reductions in guilt for spaced PE versus PCT. Guilt decreased significantly over treatment in all groups, $p < .001$ to $p = .038$, $ds = -0.19$ to -0.42 , except concerning justification in the spaced PE and PCT groups, $p = .140$, $d = -0.10$. The findings suggest that guilt may be reduced significantly following active PTSD treatment and attention control and that PTSD recovery is not impacted by baseline levels of trauma-related guilt in military personnel with PTSD, although reported levels of guilt were low to moderate in this sample.

<https://onlinelibrary.wiley.com/doi/10.1002/jts.22428>

Patterns of Treatment Disengagement and Personality Traits Associated With Posttraumatic Stress Disorder in Recent-Era U.S. Veterans Receiving Cognitive Processing Therapy.

Joanna Lamkin, Natalie Hundt, Eileen P. Ahearn, Melinda Stanley, Tracey L. Smith

Journal of Traumatic Stress

First published: 29 July 2019

<https://doi.org/10.1002/jts.22428>

Low treatment engagement is a barrier to implementation of empirically supported treatments for posttraumatic stress disorder (PTSD) among veterans. Understanding personality traits that predict dropout may help focus attempts to improve engagement. The current study included 90 veterans who served in recent conflicts in Iraq and/or Afghanistan and participated in a trial of cognitive processing therapy for PTSD. Goals were to characterize (a) personality correlates of PTSD, (b) patterns of engagement (i.e., attendance and homework completion), and (c) personality correlates of reduced engagement. Higher levels of PTSD symptoms were associated with a range of characteristics, including affective lability, $r = .44$, $p < .001$; anxiety, $r = .38$, $p < .001$; identity problems, $r = .57$, $p < .001$; intimacy problems, $r = .34$, $p = .001$; low affiliation, $r = .33$, $p = .002$; oppositionality, $r = .36$, $p = .001$; restricted expression, $r = .35$, $p = .001$; and suspiciousness, $r = .50$, $p < .001$. Notably, veterans with worse PTSD symptoms endorsed more cognitive dysregulation, $r = .40$, $p < .001$; and less insecure attachment, $r = .14$, $p = .190$, than expected. Only 52.2% of veterans completed the 12-session course of treatment and 31.0% of participants completed fewer than six sessions. Personality traits did not predict attendance or homework completion. Disengagement continues to be a significant issue in trauma-focused treatment for veterans with PTSD.

Understanding veteran-level factors, such as personality traits, may be useful considerations for future research seeking to understand and improve engagement.

<https://www.tandfonline.com/doi/abs/10.1080/08995605.2019.1645536>

Standardized assessment of relationship functioning in OEF/OIF Veterans with and without PTSD.

Catherine M. Caska-Wallace, Timothy W. Smith, Keith D. Renshaw & Steven N. Allen

Military Psychology

Published online: 14 Aug 2019

<https://doi.org/10.1080/08995605.2019.1645536>

Posttraumatic Stress Disorder (PTSD) is associated with difficulties in intimate relationships, with most prior research examining associations with continuous, single-dimension, and often-unstandardized measures of general relationship quality or aggression. Standardized, well-normed assessments that include multiple couple problem areas could provide more precise information about the presence and specific nature of clinically significant concerns in patient care settings. This investigation aimed to replicate findings regarding increased difficulties in relationship functioning among Operations Enduring and Iraqi Freedom Veterans with PTSD and their romantic partners, specifically using a standardized assessment that permits identification of cases of clinically significant general couple distress and difficulties across multiple problem areas. We compared 32 male Veterans with PTSD and 33 without PTSD, and their romantic partners on reports of several problem areas using the revised Marital Satisfaction Inventory (MSI-R). All participants underwent structured diagnostic interviewing. PTSD couples reported clinically significant levels of relationship distress several times more frequently than comparison couples, both for general distress and across all specific problem areas (e.g., aggressive behavior, quality of leisure time together, sexual functioning, conflicts about finances and child rearing). The most notable problem areas for PTSD couples were affective and problem-solving communication. These results replicate associations of PTSD with general couple discord and multiple specific areas of couple difficulties and extend them by documenting the clinical severity of these problems. Mental health providers may consider incorporating standardized couple assessments into their evaluations of Veterans' functioning. Couple therapies may consider using such measures to prioritize targets for treatment.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/pmrj.12237>

Gender Differences in Outcomes after Traumatic Brain Injury among Service Members and Veterans.

Alison M. Cogan PhD, OTR/L; Virginia K. McCaughey, BA; Joel Scholten, MD

Journal of Injury, Function and Rehabilitation

First published: 10 August 2019

doi:10.1002/pmrj.12237

This scoping study describes the range of outcomes in TBI studies of military service members and veterans addressing gender differences. A secondary purpose is to identify differences in outcomes between males and females in such studies. We searched PubMed, CiNAHL, and PsychInfo databases for relevant articles. Two reviewers independently screened results. Out of 822 unique titles and abstracts screened for eligibility, 55 full articles were reviewed with 29 studies meeting full inclusion criteria. Twenty of the 29 included studies used retrospective designs and all but two used data collected from Veterans Affairs or Department of Defense health care settings. TBI was diagnosed by self-report, screening and evaluation procedures, and medical record documentation. Ten different outcome categories were identified among the included studies. In general, female service members and veterans have not been well represented in TBI outcomes research. Evidence suggests that female veterans with mTBI report more neurobehavioral symptoms and use more outpatient services than male veterans. Studies also indicate female veterans with TBI are more frequently diagnosed with depression. Additional research is essential to support precision treatment recommendations for female veterans with TBI, as women represent a growing proportion of the patients served by the Veterans Health Administration.

<https://www.sciencedirect.com/science/article/abs/pii/S1087079219300851>

Insomnia and cognitive performance: A systematic review and meta-analysis.

Sophie Wardle-Pinkston, Danica C. Slavish, Daniel J. Taylor

Sleep Medicine Reviews

Available online 12 August 2019

<https://doi.org/10.1016/j.smr.2019.07.008>

Cognitive performance has been extensively investigated in relation to insomnia, yet review of the literature reveals discrepant findings. The current study aimed to synthesize this literature with a systematic review and meta-analysis. 48 studies ($k = 50$ independent samples, $n = 4,539$ total participants) met inclusion criteria. Omnibus meta-analysis revealed insomnia was associated with poorer overall cognitive performance (Hedge's $g = -0.24$, $p < .001$). Analyses by cognitive domain revealed insomnia was specifically associated with impairments in subjective cognitive performance ($g = -0.35$), and objective measures of perceptual function ($g = -0.24$), manipulation ($g = -0.52$) and retention/capacity in working memory ($g = -0.30$), complex attention ($g = -0.36$), alertness ($g = -0.14$), episodic memory ($g = -0.29$), and problem solving in executive functions ($g = -0.39$). Age, percent female, publication year, and insomnia measure did not consistently moderate findings. Approximately 44% of studies failed to use diagnostic criteria when categorizing insomnia and cognitive measures varied widely. This indicates a need for standardization of methods assessing insomnia and cognitive performance in research. Overall, findings from this meta-analysis indicate insomnia is associated with impairment in objective and subjective cognitive performance, highlighting the utility of treating insomnia to potentially improve cognitive outcomes.

<https://www.sciencedirect.com/science/article/abs/pii/S1087079218301965>

Cognitive behavioral therapy for insomnia: a meta-analysis of long-term effects in controlled studies.

Tanja van der Zweerde, Lampros Bisdounis, Simon D. Kyle, Jaap Lancee, Annemieke van Straten

Sleep Medicine Reviews

Available online 12 August 2019

<https://doi.org/10.1016/j.smr.2019.08.002>

Cognitive behavioral therapy for insomnia (CBT-I) is a treatment with moderate to large effects. These effects are believed to be sustained long-term, but no systematic meta-analyses of recent evidence exist. In this present meta-analysis, we investigate long-term effects in 30 randomized controlled trials (RCTs) comparing CBT-I to non-active

control groups. The primary analyses (n =29 after excluding one study which was an outlier) showed that CBT-I is effective at 3-, 6- and 12-month compared to non-active controls: Hedges g for Insomnia severity index: 0.64 (3m), 0.40 (6m) and 0.25 (12m); sleep onset latency: 0.38 (3m), 0.29 (6m) and 0.40 (12m); sleep efficiency: 0.51 (3m), 0.32 (6m) and 0.35 (12m). We demonstrate that although effects decline over time, CBT-I produces clinically significant effects that last up to a year after therapy.

<https://www.healio.com/doiresolver?doi=10.3928/00485713-20190717-02>

Mobile Health Technologies to Deliver and Support Cognitive-Behavioral Therapy.

Stephen M. Schueller, PhD; Elizabeth C. Adkins, MA, MS

Psychiatric Annals

2019; 49(8): 348-352

<https://doi.org/10.3928/00485713-20190717-02>

Advances in technology are changing the ways cognitive-behavioral therapy (CBT) can be delivered. Through mobile technologies, effective interventions exist that allow people to receive CBT without ever visiting a practitioner's office. Additionally, mobile technologies are increasingly entering practitioners' offices, combining technological and human elements to create hybrid forms of care. Although clinical research has demonstrated exciting possibilities for mobile technologies to deliver and support CBT, for the most part clinical practice has been unchanged. We provide an overview of mobile CBT tools used either to deliver or to support CBT, highlighting what works and noting current limitations of our understanding. We also discuss new avenues in mobile CBT that leverage peers, artificial intelligence and chatbots, and mobile sensing to create scalable, personalized, and context-aware interventions. The future of mobile CBT should not be confined to digitizing current practices but should leverage technological affordances to improve CBT as it exists today.

<https://academic.oup.com/sleep/advance-article-abstract/doi/10.1093/sleep/zsz179/5549607>

Sleep Duration and Post-Traumatic Stress Disorder Symptoms: A Twin Study.

Catherine A McCall, MD, Eric Turkheimer, PhD, Siny Tsang, PhD, Ally Avery, MS, Glen E Duncan, PhD, RCEP, Nathaniel F Watson, MD, MSC

Sleep

Published: 13 August 2019

<https://doi.org/10.1093/sleep/zsz179>

STUDY OBJECTIVES

Long and short sleep duration are associated with greater risk of developing post-traumatic stress disorder (PTSD); however, it is unknown how genetic and environmental influences impact this relationship. Thus, we investigated the association between sleep duration and PTSD symptoms using twin models.

METHODS

Data were obtained from 1,865 monozygotic and 758 dizygotic twin pairs enrolled in the community-based Washington State Twin Registry (WSTR). PTSD symptoms were assessed using the Impact of Events Scale (IES). A classical twin model decomposed the variances of sleep duration and IES score into additive genetic, shared environmental, and unique environmental components. We used correlated factor models to examine the moderation of variance components of sleep duration and IES.

RESULTS

Shorter and longer sleep duration were associated with higher IES scores with a quadratic association ($p < 0.001$). The heritability of sleep duration was 36%, and IES 31%. Variance in sleep duration attributable to shared ($b1C1=2.91$, 95% CI=1.40,4.43; $p<0.001$) and unique ($b1E1=0.18$, 95% CI=0.10,0.27; $p<0.001$) environment was moderated by IES score. Similarly, but to a lesser extent, variance in IES attributable to additive genetics ($b1A2=-0.23$, 95% CI=-0.45,0.00; $p=0.048$) was moderated by sleep duration.

CONCLUSIONS

Greater PTSD symptom severity was associated with short and long sleep duration. Increasing PTSD symptoms increased variability in sleep duration primarily via shared environmental factors, while decreasing sleep duration increased variability in PTSD symptoms primarily via additive genetic factors. This suggests childhood experiences impact variability of sleep duration and genetic factors impact the variability of PTSD symptoms in trauma-exposed individuals.

<https://link.springer.com/article/10.1007/s11920-019-1066-4>

Trauma Associated Sleep Disorder: Clinical Developments 5 Years After Discovery.

Matthew S. Brock, Tyler A. Powell, Jennifer L. Creamer, Brian A. Moore, Vincent Mysliwicz

Current Psychiatry Reports

September 2019, 21:80

<https://doi.org/10.1007/s11920-019-1066-4>

Purpose of Review

We review recent and growing evidence that provides support for a novel parasomnia, trauma associated sleep disorder (TASD). Based on these findings, we further develop the clinical and polysomnographic (PSG) characteristics of TASD. We also address factors that precipitate TASD, develop a differential diagnosis, discuss therapy, and propose future directions for research.

Recent Findings

Nightmares, classically a REM phenomenon, are prevalent and underreported, even in individuals with trauma exposure. When specifically queried, trauma-related nightmares (TRN) are frequently associated with disruptive nocturnal behaviors (DNB), consistent with TASD. Capture of DNB in the lab is rare but ambulatory monitoring reveals dynamic autonomic concomitants associated with disturbed dreaming. TRN may be reported in NREM as well as REM sleep, though associated respiratory events may confound this finding. Further, dream content is more distressing in REM. Therapy for this complex disorder likely requires addressing not only the specific TASD components of TRN and DNB but comorbid sleep disorders.

Summary

TASD is a unique parasomnia developing after trauma. Trauma-exposed individuals should be specifically asked about their sleep and if they have nightmares with or without DNB. Patients who report TRN warrant in-lab PSG as part of their evaluation.

<https://www.sciencedirect.com/science/article/abs/pii/S2352721819301172>

Use of alcohol as a sleep aid, unhealthy drinking behaviors, and sleeping pill use among women veterans.

C. Amanda Schweizer, Katherine J. Hoggatt, Donna L. Washington, Bevanne Bean-Mayberry, ... Jennifer L. Martin

Sleep Health

Available online 12 August 2019

<https://doi.org/10.1016/j.sleh.2019.06.005>

Objectives

Sleep complaints, such as insomnia and sleep disturbances caused by posttraumatic stress disorder (PTSD), are more common among women veterans than nonveteran women. Alcohol use among some women may be partially motivated by the desire to improve sleep. This study evaluated rates of alcohol use as a sleep aid among women veterans and explored the relationship between alcohol use to aid sleep and drinking frequency and sleeping pill use.

Design and setting

National cross-sectional population-based residential mail survey on sleep and other symptoms.

Participants

Random sample of women veteran VA users who completed a postal survey (N = 1533).

Interventions

None.

Measurements

The survey included demographics, Insomnia Severity Index, Primary Care PTSD screen, and items on alcohol use frequency (days/week), use of prescription or over-the-counter sleep medications, and use of alcohol as a sleep aid (yes/no for each item) over the past month.

Results

A total of 14.3% of respondents endorsed using alcohol to aid sleep. Logistic regression models showed more severe insomnia (odds ratio [OR] = 1.03; 95% confidence interval

[CI]: 1.01-1.06) and PTSD (OR = 2.11; 95% CI: 1.49-2.97) were associated with increased odds of using alcohol to aid sleep. Alcohol use to aid sleep was associated with increased odds of daily drinking (OR = 8.46; 95% CI: 4.00-17.87) and prescription (OR = 1.79; 95% CI: 1.34-2.38) and over-the-counter sleep aid use (OR = 1.54; 95% CI: 1.12-2.11).

Conclusions

Insomnia and PTSD may increase risk for using alcohol as a sleep aid, which may increase risk for unhealthy drinking and for mixing alcohol with sleep medications. Findings highlight the need for alcohol use screening in the context of insomnia and for delivery of cognitive-behavioral therapy for insomnia to women veterans with insomnia.

<https://link.springer.com/article/10.1007/s12671-019-01212-9>

Associations Between Mindfulness, PTSD, and Depression in Combat Deployed Post-9/11 Military Veterans.

Nicholas Barr, Mary Keeling, Carl Castro

Mindfulness

First Online: 16 August 2019

<https://doi.org/10.1007/s12671-019-01212-9>

Objectives

Combat experiences predict PTSD and depression in U.S. military veterans. However, few studies have investigated associations between mindfulness and these constructs. We examined main, direct, and indirect effects for mindfulness and combat experiences on veterans' PTSD and depressive symptoms and investigated the explanatory value of mindfulness on outcome variance in these models.

Methods

A total of 485 post-9/11 era military veterans with previous combat deployments residing in four major US cities completed online surveys asking about their combat experiences, mindfulness, and mental health. Two multivariable ordinary least squares regression models were specified to investigate main effects of mindfulness and combat experiences on veterans' PTSD and depressive symptoms. Path models examined direct and indirect effects of combat experiences and mindfulness on these outcomes.

Results

There were significant associations for mindfulness ($\beta = -0.68$, $p < 0.001$), ($\beta = -0.67$, $p < 0.001$) and combat experiences ($\beta = 0.12$, $p < 0.001$), ($\beta = 0.09$, $p < 0.001$) with PTSD and depression respectively. In both models, the addition of the mindfulness parameter significantly increased model R². Path analysis demonstrated significant direct effects for mindfulness and combat experiences and indirect effects for combat experiences on PTSD and depressive symptoms through the mindfulness pathway.

Conclusions

The associations of mindfulness with PTSD and depressive symptoms were greater in magnitude than the associations for combat experiences, and mindfulness explained a large and significant proportion of the variance in outcomes. Additional longitudinal research investigating how mindfulness skills and strategies may buffer against risk for PTSD and depression posed by combat experience is warranted in this high risk population.

<https://www.sciencedirect.com/science/article/pii/S0740547218306135>

Addiction counselors and suicide: Education and experience do not improve suicide knowledge, beliefs, or confidence in treating suicidal clients.

Martina Fruhbauerova, Katherine Anne Comtois

Journal of Substance Abuse Treatment
Volume 106, November 2019, Pages 29-34
<https://doi.org/10.1016/j.jsat.2019.08.012>

Highlights

- SUD counselors answered more than half the knowledge questions correctly and mostly disagreed with common suicide myths
- SUD counselors confidence in treating suicidal clients scored from “not at all” to “completely confident”
- Neither education nor experience predicted suicide knowledge or confidence for suicide prevention among SUD counselors
- General knowledge about and confidence in suicide prevention were unrelated

Abstract

Substance use disorders (SUDs) are strongly associated with suicide deaths. However,

SUD treatment is associated with lower suicide risk. To this date, we know little about whether SUD counselors are sufficiently knowledgeable about suicide and feel prepared and comfortable with treating and assessing their suicidal clients. This study was designed to characterize SUD counselors' general knowledge and confidence in treating suicidal clients, which was measured by their self-report of general knowledge of suicide prevention and belief in common myths about suicide as well as their self-reported confidence in treating suicidal clients. We hypothesized that confidence would be greater for counselors with more years of education and experience, that degree of education would predict greater knowledge and fewer beliefs in suicide myths, and finally that those counselors with greater knowledge and fewer beliefs in myths would have more confidence when treating suicidal clients. A total of 118 SUD counselors from 15 sites in Western Washington State agreed to participate in the study and completed baseline assessments. They were consented in group setting, usually during a staff meeting, and they were administered surveys on tablet computers. On average, the SUD counselors answered more than half the knowledge questions correctly and disagreed or strongly disagreed with common suicide myths. Their confidence in treating suicidal clients scored across the entire range. Our hypotheses were not supported: Confidence was not greater for those with more education or with more years of experience; degree of education and experience did not predict fewer beliefs in suicide myths; degree of education and experience did not predict greater knowledge; and greater knowledge and fewer beliefs in myths did not predict more confidence. The surprising finding that neither general suicide knowledge nor confidence were associated with the years of their work experience as a SUD counselor nor the level of their education and neither was associated with the other suggests that SUD treatment leadership should not depend on experience, education, general suicide knowledge to assure counselors are confidently able to treat suicidal clients. New or more precise training methods should be considered and evaluated.

<https://www.ncbi.nlm.nih.gov/pubmed/30204903>

Pain Med. 2019 Apr 1;20(4):770-778. doi: 10.1093/pm/pny174

An Open Trial of Morning Bright Light Treatment Among US Military Veterans with Chronic Low Back Pain: A Pilot Study.

Burgess HJ, Rizvydeen M, Kimura M, Pollack MH, Hobfoll SE, Rajan KB, Burns JW

OBJECTIVE:

To examine the feasibility, acceptability, and effects of a home-based morning bright light treatment on pain, mood, sleep, and circadian timing in US veterans with chronic low back pain.

DESIGN:

An open treatment trial with a seven-day baseline, followed by 13 days of a one-hour morning bright light treatment self-administered at home. Pain, pain sensitivity, mood, sleep, and circadian timing were assessed before, during, and after treatment.

SETTING:

Participants slept at home, with weekly study visits and home saliva collections.

PARTICIPANTS:

Thirty-seven US veterans with medically verified chronic low back pain.

METHODS:

Pain, mood, and sleep quality were assessed with questionnaires. Pain sensitivity was assessed using two laboratory tasks: a heat stimulus and an ischemia stimulus that gave measures of threshold and tolerance. Sleep was objectively assessed with wrist actigraphy. Circadian timing was assessed with the dim light melatonin onset.

RESULTS:

Morning bright light treatment led to reduced pain intensity, pain behavior, thermal pain threshold sensitivity, post-traumatic stress disorder symptoms, and improved sleep quality ($P < 0.05$). Phase advances in circadian timing were associated with reductions in pain interference ($r = 0.55$, $P < 0.05$).

CONCLUSIONS:

Morning bright light treatment is a feasible and acceptable treatment for US veterans with chronic low back pain. Those who undergo morning bright light treatment may show improvements in pain, pain sensitivity, and sleep. Advances in circadian timing may be one mechanism by which morning bright light reduces pain. Morning bright light treatment should be further explored as an innovative treatment for chronic pain conditions.

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Links of Interest

Sailors, Marines and Coast Guardsmen hit with new pot, CBD rules

<https://www.navytimes.com/news/your-navy/2019/08/16/sailors-marines-and-coast-guardsmen-hit-with-new-pot-cbd-rules/>

The Next Generation of Soldiers: Inside One Recruit's Pursuit of the Forever War

<https://www.esquire.com/news-politics/a28519625/forever-war-new-recruits-born-after-september-11/>

New Pentagon program empowers military spouses for family's transition to civilian life

<https://www.stripes.com/news/us/new-pentagon-program-empowers-military-spouses-for-family-s-transition-to-civilian-life-1.594352>

He was a Special Forces self-help guru. Then he took his own life.

<https://www.armytimes.com/news/your-army/2019/08/20/he-was-a-special-forces-self-help-guru-then-he-took-his-own-life/>

Why women veterans are more likely than civilian women to commit suicide

<https://www.militarytimes.com/education-transition/2019/08/14/why-women-veterans-are-250-more-likely-than-civilian-women-to-commit-suicide/>

Study suggests confiscating personal weapons from suicidal service members

<https://www.militarytimes.com/news/your-military/2019/08/20/study-suggests-confiscating-personal-weapons-from-suicidal-service-members/>

Military parents' injuries are affecting their children's well-being. Here's how

<https://www.militarytimes.com/pay-benefits/2019/08/21/military-parents-injuries-are-affecting-their-childrens-well-being-heres-how/>

Resource of the Week: [Immigrant Veterans in the United States](#)

From the [Migration Policy Institute](#):

Immigrants have long enlisted in all branches of the U.S. military, beginning with the Revolutionary War. The foreign born represented half of all military recruits by the 1840s and 20 percent of the 1.5 million service members in the Union Army during the Civil War. Today, the number of veterans who were born outside

the United States stands at approximately 530,000, representing 3 percent of all 18.6 million veterans nationwide. Additionally, almost 1.9 million veterans are the U.S.-born children of immigrants. Together, the 2.4 million veterans of immigrant origin, either because they themselves are immigrants or are the children of immigrants, account for 13 percent of all veterans.

Shirl Kennedy
Research Editor
Center for Deployment Psychology
www.deploymentpsych.org
skennedy@deploymentpsych.org
240-535-3901