CDP
Uniformed Services University

Research Update -- June 3, 2021

What's Here:

- Transitioning from the Battlefield: A Theoretical Model for the Development of Posttraumatic Stress Disorder (PTSD) in Gender Diverse Veterans.
- Longitudinal Examination of the Impact of Resilience and Stressful Life Events on Alcohol Use Disorder Outcomes.
- Mental health and suicidal ideation in US military veterans with histories of COVID-19 infection.
- Factors Associated With Quitting Smoking During Pregnancy Among Women Veterans.
- Behavioral Health Screening and Care Coordination for Rural Veterans in a Federally Qualified Health Center.
- Meta-Analysis of the Treatment of Posttraumatic Stress Disorder in Adults With Comorbid Severe Mental Illness.
- Leveraging Implementation Science to Understand Factors Influencing Sustained Use of Mental Health Apps: a Narrative Review.
- Lessons Learned in Implementing VA Video Connect for Evidence-Based Psychotherapies for Anxiety and Depression in the Veterans Healthcare Administration.
- Building effective networks for the transition from the military to the civilian workforce: Who, what, when, and how.

- Use of electronic cigarettes in the United States service member and Veteran populations: A narrative review (2019).
- Genetically Proxied Diurnal Preference, Sleep Timing, and Risk of Major Depressive Disorder.
- Comparing medical cannabis use in 5 US states: a retrospective database study.
- Prevalence and Trends of Opioid Use in Patients With Depression in the United States.
- Chronic pain: an update on burden, best practices, and new advances.
- Trauma-focused cognitive-behavioral therapies for posttraumatic stress disorder under ongoing threat: A systematic review.
- Transdiagnostic Cognitive Processes in Chronic Pain and Comorbid PTSD and Depression in Veterans.
- Predictors of Veterans Health Administration utilization and pain persistence among soldiers treated for postdeployment chronic pain in the Military Health System.
- Prevalence of Polytrauma Clinical Triad Among Active Duty Service Members.
- Self in the Service: Self-Identification Moderates the Association between Perceived Drinking Norms and Own Drinking among Veterans.
- Effect of a Behavioral Intervention on Outcomes for Caregivers of Veterans with PTSD.
- Remote supervision and training in suicide prevention during the time of the coronavirus pandemic: Recommendations for training programs and supervisors.
- Are Mental Health Apps Adequately Equipped to Handle Users in Crisis?
- Following up internet-delivered Cognitive Behavior Therapy (CBT): A Longitudinal Qualitative Investigation of Clients' Usage of CBT Skills.
- Baseline Sleep Quality Moderates Symptom Improvement in Veterans with Comorbid PTSD and TBI Receiving Trauma-Focused Treatment.
- Links of Interest
- Resource of the Week: VA App Store -- Mental Health

Transitioning from the Battlefield: A Theoretical Model for the Development of Posttraumatic Stress Disorder (PTSD) in Gender Diverse Veterans.

Holland-Deguire, C., Rabalais, A., Soe, K., Anderson, E., & Shivakumar, G.

It is estimated that over 134,000 American veterans identify as transgender and over 15,000 transgender people are serving in the US military today. As such, the prevalence rates of transgender individuals seeking services at Veterans Health Administration (VHA) facilities have increased and are expected to further increase in the years to come. Historically, transgender veterans have been diagnosed with posttraumatic stress disorder (PTSD) at higher rates in comparison to their cisgender veteran counterparts. This article summarizes what is known about PTSD in gender-diverse veterans and proposes a theoretical model to describe how bio-sociocultural factors in this population may interact to increase the risk of developing PTSD. This article will attempt to identify how these risk factors not only influence the development of PTSD but also impact the severity of posttraumatic symptomology. Consolidating the current academic knowledge for this marginalized population regarding the development of PTSD will also likely aid healthcare providers in making culturally appropriate treatment modifications. Finally, the authors of this article propose a theoretical model to describe how bio-sociocultural factors may interact to increase PTSD risk in gender-diverse veterans.

Longitudinal Examination of the Impact of Resilience and Stressful Life Events on Alcohol Use Disorder Outcomes.

Christina M. Sheerin, Kaitlin E. Bountress, Terrell A. Hicks, Mackenzie J. Lind, Steven H. Aggen, Kenneth S. Kendler & Ananda B. Amstadter

Stressful life events (SLEs) are a risk factor for alcohol use problems, and there is a need for identification of factors that may offset this risk. Resilience is uniquely, inversely associated with alcohol use, but there remains a dearth of research examining the buffering effect of resilience toward alcohol use problems in the context of SLEs. Objectives: This study used prospective data from an epidemiological twin sample (N = 7441) to test whether resilience at Time 1 would act as a buffer for new onset SLEs (e.g. assault, marital problems) against risk for alcohol dependence (AD) symptoms at Time 2. Results: The final model, adjusted for familial relatedness and controlling for demographic covariates and Time 1 (lifetime) AD symptoms, identified significant main effects of resilience and SLEs; those with greater resilience at Time 1 reported fewer symptoms ($\beta=-.087$, $p<.001$) and those with greater new-onset SLEs reported greater symptoms ($\beta=.116$, $p<.001$) at Time 2. However, there was no significant interaction ($\beta=-.008$, $p>.05$). Conclusions: Although findings further support the association of resilience and SLEs with AD, results do not support the conceptualization of resilience as a buffer against the impact of future life stressors on alcohol use outcomes. This suggests other factors may be more relevant for understanding protective factors for alcohol use problems or the relation between resilience and SLEs on alcohol use outcomes.

Mental health and suicidal ideation in US military veterans with histories of COVID-19 infection.

Na P, Tsai J, Harpaz-Rotem I, Pietrzak R

Introduction
There have been reports of increased prevalence in psychiatric conditions in non-veteran survivors of COVID-19. To date, however, no known study has examined the prevalence, risk and protective factors of psychiatric conditions among US military veterans who survived COVID-19.

Methods
Data were analysed from the 2019 to 2020 National Health and Resilience in Veterans Study, which surveyed a nationally representative, prospective cohort of 3078 US

veterans. Prepandemic and 1-year peripandemic risk and protective factors associated with positive screens for peripandemic internalising (major depressive, generalised anxiety and/or posttraumatic stress disorders) and externalising psychiatric disorders (alcohol and/or drug use disorders) and suicidal ideation were examined using bivariate and multivariate logistic regression analyses.

Results
A total of 233 veterans (8.6%) reported having been infected with COVID-19. Relative to veterans who were not infected, veterans who were infected were more likely to screen positive for internalising disorders (20.5% vs 13.9%, p=0.005), externalising disorders (23.2% vs 14.8%, p=0.001) and current suicidal ideation (12.0% vs 7.6%, p=0.015) at peripandemic. Multivariable analyses revealed that greater prepandemic psychiatric symptom severity and COVID-related stressors were the strongest independent predictors of peripandemic internalising disorders, while prepandemic trauma burden was protective. Prepandemic suicidal ideation, greater loneliness and lower household income were the strongest independent predictors of peripandemic suicidal ideation, whereas prepandemic community integration was protective.

Conclusion
Psychiatric symptoms and suicidal ideation are prevalent in veterans who have survived COVID-19. Veterans with greater prepandemic psychiatric and substance use problems, COVID-related stressors and fewer psychosocial resources may be at increased risk of these outcomes.

-----

https://doi.org/10.1016/j.whi.2021.04.006

Factors Associated With Quitting Smoking During Pregnancy Among Women Veterans.

Aimee Kroll-Desrosiers, Cathryn Glanton Holzhauer, Lindsey Russo, Eric C. DeRycke, ... Kristin M. Mattocks

Introduction
Little is known about the rates of smoking among pregnant veterans. Our objective was

to examine rates of smoking during pregnancy and factors associated with quitting smoking during pregnancy.

Methods
We used data from a cohort study of pregnant veterans from 15 Veterans Health Administration facilities nationwide. Veterans who reported smoking during pregnancy were included in this analysis. Poisson regression models were used to estimate the relative risk (RR) of quitting smoking during pregnancy.

Results
Overall, 133 veterans reported smoking during pregnancy. Among this group of women who smoked, the average age was 31.6 years, 20% were Black, and 14% were Hispanic/Latino. More than one-half of women (65%) who reported smoking at the start of pregnancy quit smoking during pregnancy. Multivariable models, adjusted for history of deployment and age, indicated that prenatal care initiation at 12 or fewer weeks compared with more than 13 weeks (RR, 2.06; 95% confidence interval [CI], 1.18–3.58), living without household smokers compared with any household smokers (RR, 1.58; 95% CI, 1.14–2.17), and first pregnancy (RR, 1.51; 95% CI, 1.17–1.95) were significant predictors of quitting versus persistent smoking during pregnancy.

Conclusions
Women veterans who quit smoking may be different than those who continue to smoke during pregnancy. Establishing prenatal care early in pregnancy, which likely includes counseling about smoking cessation, seems to be an important factor in quitting. Those for whom it is not a first pregnancy and who live with other smokers may especially benefit from such counseling.

Behavioral Health Screening and Care Coordination for Rural Veterans in a Federally Qualified Health Center.

M. Bryant Howren PhD, MPH, Debra Kazmerzak BASW, Sheryl Pruin RN, BSN, Wendy Barbaris RN & Thad E. Abrams MD, MS

Many rural veterans receive care in community settings but could benefit from VA services for certain needs, presenting an opportunity for coordination across systems. This article details the Collaborative Systems of Care (CSC) program, a novel, nurse-led care coordination program identifying and connecting veterans presenting for care in a Federally Qualified Health Center to VA behavioral health and other services based upon the veteran's preferences and eligibility. The CSC program systematically identifies veteran patients, screens for common behavioral health issues, explores VA eligibility for interested veterans, and facilitates coordination with VA to improve healthcare access. While the present program focuses on behavioral health, there is a unique emphasis on assisting veterans with the eligibility and enrollment process and coordinating additional care tailored to the patient. As VA expands its presence in community care, opportunities for VA-community care coordination will increase, making the development and implementation of such interventions important.

Meta-Analysis of the Treatment of Posttraumatic Stress Disorder in Adults With Comorbid Severe Mental Illness.

AL Grubaugh, WJ Brown, JA Wojtalik, US Myers, SM Eack

Objective:
To evaluate the efficacy of psychosocial treatments for posttraumatic stress disorder (PTSD) among individuals with a comorbid severe mental illness (SMI; ie, schizophrenia, bipolar disorder, major depressive disorder).

Data Sources:
PubMed, PsycINFO, CINAHL, and Cochrane Library were searched from January 1998 to March 2020 using keywords related to PTSD, treatment, and severe mental illness.

Study Selection:
All clinical trials for PTSD psychotherapy among individuals with SMI were included. From 38 potentially eligible studies, a total of 14 clinical trials across 684 individuals with comorbid SMI and PTSD were identified and included in the analysis.

Data Extraction:
Data on demographic, SMI diagnosis, symptom severity, sample attrition, and treatment protocol received were extracted. Effect size calculations and subsequent meta-analyses were conducted using the Meta-Analysis Package for R (metafor) version 2.1–0 in R (3.6.0).

Results:
PTSD treatments had a large effect on PTSD outcomes among individuals with SMI, with patients experiencing a standard deviation reduction in PTSD symptomatology pre- to post-treatment ($g = −1.009$, $P < .001$, $k = 34$). Prolonged exposure ($g = −1.464$; $P < .001$; $SE = 0.276$; $k = 5$), eye movement desensitization and reprocessing ($g = −1.351$; $P < .001$; $SE = 0.276$; $k = 5$), and brief treatment program ($g = −1.009$; $P < .001$; $SE = 0.284$; $k = 5$) had the largest effects on PTSD symptoms.

Conclusions:
Although underrepresented in the PTSD literature, PTSD psychotherapies are effective for individuals with SMI. Treatments with an exposure-based component may have greater efficacy in this clinical population.

Leveraging Implementation Science to Understand Factors Influencing Sustained Use of Mental Health Apps: a Narrative Review.

Samantha L. Connolly, Timothy P. Hogan, Stephanie L. Shimada & Christopher J. Miller

Mental health (MH) smartphone applications (apps), which can aid in self-management of conditions such as depression and anxiety, have demonstrated dramatic growth over the past decade. However, their effectiveness and potential for sustained use remain uncertain. This narrative review leverages implementation science theory to explore factors influencing MH app uptake. The review is guided by the integrated Promoting Action on Research Implementation in Health Services (i-PARIHS) framework and discusses the role of the innovation, its recipients, context, and facilitation in influencing successful implementation of MH apps. The review highlights critical literature published between 2015 and 2020 with a focus on depression and anxiety apps. Sources were

identified via PubMed, Google Scholar, and Twitter using a range of keywords pertaining to MH apps. Findings suggest that for apps to be successful, they must be advantageous over alternative tools, relatively easy to navigate, and aligned with users' needs, skills, and resources. Significantly more attention must be paid to the complex contexts in which MH app implementation is occurring in order to refine facilitation strategies. The evidence base is still uncertain regarding the effectiveness and usability of MH apps, and much can be learned from the apps we use daily; namely, simpler is better and plans to integrate full behavioral treatments into smartphone form may be misguided. Non-traditional funding mechanisms that are nimble, responsive, and encouraging of industry partnerships will be necessary to move the course of MH app development in the right direction.

Lessons Learned in Implementing VA Video Connect for Evidence-Based Psychotherapies for Anxiety and Depression in the Veterans Healthcare Administration.

Ursula S. Myers, Sandra Coulon, Katherine Knies, Kelly Dickens, Stephanie M. Keller, Anna Birks & Anouk L. Grubaugh

A top priority for the Veteran's Healthcare Administration is improving access to high-quality mental healthcare. Mobile and telemental healthcare are a vital component of increasing access for veterans. The Veteran's Healthcare Administration is making efforts to further broaden how veterans receive their care through VA Video Connect, which allows veterans to connect with their provider from their residence or workplace. In this mixed-methods study, successes and challenges associated with the rapid implementation of VA Video Connect telemental health appointments are examined through (1) administrative data and (2) qualitative interviews at one medical center. Within 1 year of the telehealth initiative, the number of providers experienced with telemental health increased from 15% to 85%, and telehealth appointments increased from 5376 to 14,210. Provider reported barriers included administrative challenges and concerns regarding care. Having an implementation model of telehealth champions and a team of experienced mental health providers allowed for rapid adoption of telehealth. Utilizing a similar model in other settings will further enable more veterans with

depression and anxiety to have access to evidence-based psychotherapy, regardless of location or national crisis. With the dramatic increase in both training for providers as well as veteran use of telemental healthcare during the COVID-19 pandemic response, future research should aim to better understand which teams were able to switch to telehealth easily versus those which struggled, along with examining system-wide and provider-level factors that facilitated continued use of telehealth after social distancing requirements related to COVID-19 were relaxed.

Building effective networks for the transition from the military to the civilian workforce: Who, what, when, and how.

Nicole A. Alonso, Caitlin M. Porter & Kristin Cullen-Lester

Servicemembers leaving the military and entering the civilian workforce are often encouraged to network to identify and obtain civilian employment. However, there are few resources that offer insights into how to build an effective network when transitioning from the military to the civilian workforce. Based on extant literature, we present a Guiding Framework for Building an Effective Network for the Military to Civilian Workforce Transition to answer questions of who Veterans should include in their professional and personal networks ("Who"), what social resources are available from network contacts ("What") at which phase of the transition ("When"), and how to build relationships with network contacts that may facilitate the transition from the military to civilian workforce ("How"). This framework identifies four types of network contacts that Veterans may include in their networks: family members, other Veterans, civilians, and formal resources persons. Furthermore, we describe the social resources they are likely to receive from these contacts (e.g., love/friendship, information, services, status, money, and goods) at each stage of the transition (e.g. approaching the transition, managing the transition, and assessing the transition) as well as practical suggestions for Veterans to connect with these network contacts. Additionally, we explain how the resources provided by network contacts enable successful role/identity transition. Finally, we discuss practical implications of our framework for service members, and we propose directions for future research on Veterans' networks and the role that they play during Veterans' transition from the military to the civilian workforce.

Use of electronic cigarettes in the United States service member and Veteran populations: A narrative review (2019).

Charles P. Ross, Jie Lin, Kathryn Hefner & Andrew J. Waters

Electronic Nicotine Delivery Systems (ENDS) are an increasingly popular form of a nicotine delivery device, particularly among young adults and adolescents. The health consequences of long-term ENDS use are not known. Two populations that warrant special consideration are members of the United States Military (service members) and US Veterans. In this narrative review of literature before December 2019, research on ENDS use in these two populations is described in relation to four themes relevant to ENDS use: Prevalence of ENDS use; perceptions of ENDS; correlates of ENDS use; and use of ENDS for smoking cessation. This narrative review summarized research findings in each of these four areas and identified areas for future research.

Genetically Proxied Diurnal Preference, Sleep Timing, and Risk of Major Depressive Disorder.

Daghlas I, Lane JM, Saxena R, Vetter C.

Key Points
Question
Does a tendency toward sleeping and waking earlier have a potential causal role in reducing the risk of major depressive disorder?

Findings
This 2-sample mendelian randomization analysis of data from nearly 840 000 adults of European ancestry found an association between earlier sleep timing patterns and lower risk of major depressive disorder.

Meaning
These data suggest that sleep timing patterns are a risk factor for major depressive disorder, and they should be examined further in randomized clinical trials of sleep interventions.

Abstract
Importance
Morning diurnal preference is associated with reduced risk of major depressive disorder (MDD); however, causality in this association is uncertain.
Objective To examine the association of genetically proxied morning diurnal preference with depression risk using mendelian randomization.

Design, Setting, and Participants
This 2-sample mendelian randomization study used summary-level genetic associations with diurnal preference and MDD. Up to 340 genetic loci associated with diurnal preference in a meta-analysis of the UK Biobank and 23andMe cohorts were considered as genetic proxies for diurnal preference. The effect size of these variants was scaled using genetic associations with accelerometer-based measurement of sleep midpoint. Genetic associations with MDD were obtained from a meta-analysis of genome-wide association studies data from the Psychiatric Genomics Consortium and UK Biobank. The inverse-variance weighted method was used to estimate the association of genetically proxied morning diurnal preference, corresponding to a 1-hour earlier sleep midpoint, with MDD risk.

Exposures
Morning diurnal preference scaled to a 1-hour earlier, objectively measured sleep midpoint.

Main Outcomes and Measures
Risk of MDD, including self-reported and clinically diagnosed cases, as ascertained in meta-analyses of genome-wide association studies.
Results A total of 697 828 individuals (all of European ancestry) were in the UK Biobank and 23andMe cohorts; 85 502 in the UK Biobank had measurements of the sleep midpoint. A further 170 756 individuals with MDD and 329 443 control participants (all of European ancestry) were in the Psychiatric Genomics Consortium and UK

Biobank data. Genetically proxied earlier diurnal preference was associated with a 23% lower risk of depression (odds ratio [OR] per 1-hour earlier sleep midpoint, 0.77 [95% CI, 0.63-0.94]; P = .01). This association was similar when restricting analysis to individuals with MDD as stringently defined by the Psychiatric Genomics Consortium (OR, 0.73 [95% CI, 0.54-1.00]; P = .05) but not statistically significant when defined by hospital-based billing codes in the UK Biobank (OR, 0.64 [95% CI, 0.39-1.06]; P = .08). Sensitivity analyses examining potential bias due to pleiotropy or reverse causality showed similar findings (eg, intercept [SE], 0.00 [0.001]; P = .66 by Egger intercept test).

Conclusions and Relevance
The results of this mendelian randomization study support a protective association of earlier diurnal preference with risk of MDD and provide estimates contextualized to an objective sleep timing measure. Further investigation in the form of randomized clinical trials may be warranted.

-----

https://doi.org/10.1186/s42238-021-00075-z

Comparing medical cannabis use in 5 US states: a retrospective database study.

V. Kishan Mahabir, Christopher S. Smith, Christopher Vannabouathong, Jamil J. Merchant & Alisha L. Garibaldi

Background
US states have been adopting their own medical cannabis laws since 1996. There is substantial variability in the medical cannabis programs between states, and these differences have not been thoroughly investigated in the literature. The objective of the study was to compare medical cannabis patient characteristics across five states to identify differences potentially caused by differing policies surrounding condition eligibility.

Methods
We conducted secondary analyses following a retrospective study of a registry database with data from 33 medical cannabis evaluation clinics in the US, owned and operated by CB2 Insights. This study narrowed the dataset to include patients from five states with the largest samples: Massachusetts (n = 27,892), Colorado (n = 16,434),

Maine (n = 4591), Connecticut (n = 2643), and Maryland (n = 2403) to conduct an in-depth study of the characteristics of patients accessing medical cannabis in these states, including analysis of variance to compare average ages and number of conditions and chi-squared tests to compare proportions of patient characteristics between states.

Results
Average ages varied between the states, with the youngest average in Connecticut (42.2) and the oldest in Massachusetts (47.0). Males represented approximately 60% of the patients with data on gender in each state. The majority of patients in each state had cannabis experience prior to seeking medical certification. Primary medical conditions varied for each state, with chronic pain, anxiety, and back and neck problems topping the list in varying orders for Massachusetts, Maine, and Maryland. Colorado had 78.7% of patients report chronic pain as their primary condition, and 70.4% of patients in Connecticut reported post-traumatic stress disorder as their primary medical condition.

Conclusion
This study demonstrated the significant impact that policy has on patients' access to medical cannabis in Massachusetts, Colorado, Maine, Connecticut, and Maryland utilizing real-world data. It highlights how qualifications differ between the five states and brings into question the routes through which patients in states with stricter regulations surrounding eligible conditions choose to seek treatment with cannabis. These patients may turn to alternative treatments, or to the illicit or recreational cannabis markets, where permitted.

-----

https://doi.org/:10.7759/cureus.15309

Prevalence and Trends of Opioid Use in Patients With Depression in the United States.

Terence Tumenta, Derek F. Ugwendum, Muchi Ditah Chobufo, Etaluka Blanche Mungu, Irina Kogan, Tolulope Olupona

Background
Depression and prescription opioid use have a bi-directional relationship. Depression commonly co-occurs with chronic noncancer pain and is known to be associated with opioid use. Studies have found an increased risk of depression only in patients with opioid dependence. Other studies have found an increased risk of opioid misuse in depressed patients. In addition, chronic pain conditions can lead to depression without the use of opioids.

Methods
We used the National Health and Nutrition Examination Survey (NHANES) data collected over seven survey cycles spanning 14 years: 2005/2006-2017/2018. Included in our study were participants ≥18 years who completed the patient health (PHQ-9) questionnaire. Persons with documented use of opioids were considered to have chronic use of opioids. Relevant data files were merged, and analytical weights computed in keeping with the survey analytical guidelines. Prevalence measures are reported as proportions. Associations were assessed using the Chi-square test. Binary logistic regression was used to assess the trend in the prevalence of opioid use. We used STATA-16 for data analysis and p-values <0.05 were considered statistically significant.

Results
A total of 36,459 participants met the inclusion criteria. The prevalence of depression was 7.7% (95% CI: 7.3-8.2). The prevalence of any narcotic use was 6.0%. Among depressed individuals, Blacks: OR 0.71 (95% CI: 0.54-0.93) and Hispanics: OR 0.48 (95% CI: 0.34-0.67) were less likely to be on narcotics compared to non-Hispanic Whites. The prevalence of opioid use was stable over the first 12 years, followed by a significant drop in the last two years.

Conclusion
Beyond the risk for opioid misuse, and opioid use disorder, depression should also be considered when prescribing opioids. It is therefore important to implement a training to screen for depression in patients receiving opioids for pain management.

Chronic pain: an update on burden, best practices, and new advances.

Prof Steven P Cohen, MD; Prof Lene Vase, PhD; Prof William M Hooten, MD

The Lancet
Published:May 29, 2021

Chronic pain exerts an enormous personal and economic burden, affecting more than 30% of people worldwide according to some studies. Unlike acute pain, which carries survival value, chronic pain might be best considered to be a disease, with treatment (eg, to be active despite the pain) and psychological (eg, pain acceptance and optimism as goals) implications. Pain can be categorised as nociceptive (from tissue injury), neuropathic (from nerve injury), or nociplastic (from a sensitised nervous system), all of which affect work-up and treatment decisions at every level; however, in practice there is considerable overlap in the different types of pain mechanisms within and between patients, so many experts consider pain classification as a continuum. The biopsychosocial model of pain presents physical symptoms as the denouement of a dynamic interaction between biological, psychological, and social factors. Although it is widely known that pain can cause psychological distress and sleep problems, many medical practitioners do not realise that these associations are bidirectional. While predisposing factors and consequences of chronic pain are well known, the flipside is that factors promoting resilience, such as emotional support systems and good health, can promote healing and reduce pain chronification. Quality of life indicators and neuroplastic changes might also be reversible with adequate pain management. Clinical trials and guidelines typically recommend a personalised multimodal, interdisciplinary treatment approach, which might include pharmacotherapy, psychotherapy, integrative treatments, and invasive procedures.

-----

https://doi.org/10.1016/j.cpr.2021.102049

Trauma-focused cognitive-behavioral therapies for posttraumatic stress disorder under ongoing threat: A systematic review.

Naomi Ennis, Iris Sijercic, Candice M. Monson

Clinical Psychology Review
Available online 28 May 2021

Highlights
- There is debate about using trauma focused therapy during risk of trauma reexposure.

- Systematic review of trauma focused therapy during ongoing risk of trauma reexposure.
- 21 studies were included and study quality was fair to good.
- Study populations faced war/community violence, domestic violence and work trauma.
- Medium to large effects found for PTSD from pre to posttreatment.
- No evidence that treatments caused adverse effects or retraumatization.

Abstract

Some individuals with posttraumatic stress disorder (PTSD) are at elevated risk of reexposure to trauma during treatment. Trauma-focused cognitive-behavioral therapies (CBT) are recommended as first-line PTSD treatments but have generally been tested with exclusion criteria related to risk for trauma exposure. Therefore, there is limited knowledge on how to best treat individuals with PTSD under ongoing threat of reexposure. This paper systematically reviewed the effectiveness of CBTs for PTSD in individuals with ongoing threat of reexposure. Literature searches yielded 21 studies across samples at ongoing risk of war-related or community violence (n = 14), domestic violence (n = 5), and work-related traumatic events (n = 2). Medium to large effects were found from pre to posttreatment and compared with waitlist controls. There were mixed findings for domestic violence samples on long-term outcomes. Treatment adaptations focused on establishing relative safety and differentiating between realistic threat and generalized fear responses. Few studies examined whether ongoing threat influenced treatment outcomes or whether treatments were associated with adverse events. Thus, although the evidence is promising, conclusions cannot be firmly drawn about whether trauma-focused CBTs for PTSD are safe and effective for individuals under ongoing threat. Areas for further inquiry are outlined.

Transdiagnostic Cognitive Processes in Chronic Pain and Comorbid PTSD and Depression in Veterans.

Melissa A Day, PhD, Rhonda M Williams, PhD, Aaron P Turner, PhD, Dawn M Ehde, PhD, Mark P Jensen, PhD

Background
Chronic pain in Veterans is a major problem compounded by comorbid posttraumatic stress disorder (PTSD) and depression. Adopting a transdiagnostic framework to understanding "shared territory" among these diagnoses has the potential to inform our understanding of the underlying cognitive processes and mechanisms that transverse diagnostic boundaries.

Purpose
To examine the associations between pain-related cognitive processes (diversion, distancing, absorption, and openness), pain intensity, PTSD and depressive symptoms, and the extent to which Veterans with chronic pain with and without comorbid PTSD and depression engage in different/similar pain-related cognitive processes.

Methods
Secondary analysis of pretreatment data with a subsample (n = 147) of Veterans with chronic pain from a larger clinical trial. Pretreatment PCL-5 and PROMIS Depression scales were used to categorize participants into three groups: (a) Pain-only; (b) Pain-PTSD; and (c) Pain-PTSD-DEP.

Results
Compared to the Pain-only group, the Pain-PTSD and Pain-PTSD-DEP groups reported significantly greater pain intensity, PTSD and depressive symptoms, and ruminative pain absorption. The Pain-PTSD-DEP group had significantly lower pain diversion and pain openness scores. When diversion and openness were used within the Pain-PTSD-DEP group, however, they were both associated with lower pain intensity and openness was additionally associated with lower PTSD scores. However, in the Pain-PTSD group, pain openness was associated with higher depression scores.

Conclusions
Across increasing complexity of comorbidity profiles (i.e., one vs. two comorbid conditions), ruminative absorption with pain emerged as a cognitive process that transverses diagnoses and contributes to worse outcomes. Nonjudgmental acceptance may not be universally beneficial, potentially depending upon the nature of comorbidity profiles.

Predictors of Veterans Health Administration utilization and pain persistence among soldiers treated for postdeployment chronic pain in the Military Health System.

Adams, R. S., Meerwijk, E. L., Larson, M. J., & Harris, A.

Background:
Chronic pain presents a significant burden for both federal health care systems designed to serve combat Veterans in the United States (i.e., the Military Health System [MHS] and Veterans Health Administration [VHA]), yet there have been few studies of Veterans with chronic pain that have integrated data from both systems of care. This study examined 1) health care utilization in VHA as an enrollee (i.e., linkage to VHA) after military separation among soldiers with postdeployment chronic pain identified in the MHS, and predictors of linkage, and 2) persistence of chronic pain among those utilizing the VHA.

Methods:
Observational, longitudinal study of soldiers returning from a deployment in support of the Afghanistan/Iraq conflicts in fiscal years 2008-2014. The analytic sample included 138,206 active duty soldiers for whom linkage to VHA was determined through FY2019. A Cox proportional hazards model was estimated to examine the effects of demographic characteristics, military history, and MHS clinical characteristics on time to linkage to VHA after separation from the military. Among the subpopulation of soldiers who linked to VHA, we described whether they met criteria for chronic pain in the VHA and pain management treatments received during the first year in VHA.

Results:
The majority (79%) of soldiers within the chronic pain cohort linked to VHA after military separation. Significant predictors of VHA linkage included: VHA utilization as a non-enrollee prior to military separation, separating for disability, mental health comorbidities, and being non-Hispanic Black or Hispanic. Soldiers that separated because of misconduct were less likely to link than other soldiers. Soldiers who received nonpharmacological treatments, opioids/tramadol, or mental health treatment in the MHS linked earlier to VHA than soldiers who did not receive these treatments. Among

those who enrolled in VHA, during the first year after linking to the VHA, 49.7% of soldiers met criteria for persistent chronic pain in VHA.

Conclusions:
The vast majority of soldiers identified with chronic pain in the MHS utilized care within VHA after military separation. Careful coordination of pain management approaches across the MHS and VHA is required to optimize care for soldiers with chronic pain.

Prevalence of Polytrauma Clinical Triad Among Active Duty Service Members.

Sharon Laughter, DDS, MPH, Munziba Khan, MPH, MSHS, Amanda Banaag, MPH, Cathaleen Madsen, PhD, Tracey Perez Koehlmoos, PhD, MHA

Introduction
The polytrauma clinical triad (PCT), encompassing traumatic brain injury, PTSD, and chronic pain, has been identified as a significant concern in the Military Health System (MHS). Conditions in this triad mutually reinforce one another and can pose a significant challenge to treatment for patients and providers. Polytrauma clinical triad has previously been studied in deployed veterans but remains understudied in the active duty military population. Therefore, this novel study seeks to determine the prevalence of PCT among active duty service members and to identify the subpopulations most at risk for PCT.

Materials and Methods
This cross-section study used the MHS Data Repository in order to retrospectively review all administrative claim data for active duty service members within the Army, Navy, Air Force, and Marine Corps from fiscal years 2010 to 2015. Specific ICD-9 codes were extracted that correlated with traumatic brain injury, PTSD, and chronic pain to determine the risk of PCT. We used logistic regression to compare individuals presenting with the PCT conditions to those service members without any of the PCT diagnoses codes.

Results

The study identified 2,441,698 active duty service members eligible for inclusion. The prevalence of all three conditions of PCT was 5.99 per 1,000 patients. Patients with PCT were most likely to be 20–29 years old (52.15%), male (89.83%), White (59.07%), married (64.18%), Junior Enlisted (55.27%), and serving in the Army (74.71%).

Conclusion

This study is the first to identify the risk of PCT in the active duty military population. Awareness of the risk and subsequent prompt identification of the triad will enable treatment through an integrated, team approach, which should alleviate potential patient suffering and improve the efficiency of care and readiness of service members.

-----

https://doi.org/10.1080/10826084.2021.1928216

Self in the Service: Self-Identification Moderates the Association between Perceived Drinking Norms and Own Drinking among Veterans.

Mai-Ly N. Steers, Kathryn S. Macia, Chelsie M. Young, Clayton Neighbors & Eric R. Pedersen

Purpose:

Drinking is common among young adult veterans. Previous research has established that veterans' drinking is more strongly associated with veteran versus civilian drinking norms. The present research extends these findings by examining the influence of self-identification both with other veterans and with civilians as moderators of the association between perceived norms and drinking.

Methods:

Veterans aged 18–34 (N = 1015; 88.7% male; M = 28.23, SD = 3.44) were recruited via Facebook to participate. Measures included same-gender veterans/same-gender civilians self-identification, same-gender veterans/same gender-civilians perceived drinking norms, and own drinking.

Results:

Pairwise comparisons revealed both male and female veterans identified more with

other veterans than civilians and perceived drinking to be more prevalent among other veterans than civilians. However, males overestimated male veteran drinking norms to a greater degree than male civilian norms whereas the opposite was true for females. Negative binomial analysis examining a three-way interaction between veteran identification, civilian identification, and civilian norms revealed civilian drinking norms were positively associated with drinking, particularly for veterans who strongly identified with both veterans and civilians. Conversely, civilian drinking norms were also found to be negatively associated with drinking, particularly for those who did not identify strongly with civilians but identified strongly with veterans.

Implications:
This study represented a preliminary step for understanding how identity plays a role in terms of veterans' drinking. Given that veterans drank at differing levels of identification, it may be important to consider identities that are most salient when designing interventions targeting individual veterans.

Effect of a Behavioral Intervention on Outcomes for Caregivers of Veterans with PTSD.

Jennifer Lynn Martindale-Adams, Jeffrey Zuber, Marshall J Graney, Robert Burns & Linda Olivia Nichols

Caregivers of the approximately 9 million individuals in the US with Posttraumatic Stress Disorder (PTSD) face burdens that may seem overwhelming. In 2017, VA implemented the first national clinical program for caregivers of veterans with PTSD. Previous interventions have focused on caregivers more as adjuncts of persons with PTSD or included PTSD caregivers with other types of military/veteran caregivers. The REACH VA behavioral intervention, 4 one-hour sessions during 2 to 3 months, focusing on caregiver coping and managing PTSD-related concerns, was delivered centrally by telephone. In a pre/post intervention design, the 161 caregivers experienced statistically significant improvement in burden, depression, anxiety, frustrations, general stress, time providing care, number of and bother about troubling behaviors, and safety risks. Pre and post intervention improvements in burden and anxiety were also clinically

significant. Reducing caregivers' psychological distress can improve ability to provide care and positively affect health and safety of persons with PTSD. With REACH, VA has made major steps to support caregivers of veterans. The positive results of this implementation may also serve as a model to support PTSD caregivers in the general population.

-----

https://doi.org/10.1037/tep0000379

Remote supervision and training in suicide prevention during the time of the coronavirus pandemic: Recommendations for training programs and supervisors.

Hausman, C., Vescera, K., Bacigalupi, R., Giangrasso, V., & Bongar, B.

Training and Education in Professional Psychology
Advance online publication

The Coronavirus Pandemic (COVID-19) has led to a widespread surge in need for mental health services. At the same time, trainees in health service psychology rapidly transitioned to remote work to protect the safety of themselves, colleagues, and patients from the pandemic. This abrupt switch has led to pioneering advancements in the use of remote technologies which can improve access for patients and trainees alike. However, the existing guidelines for telehealth lack specific recommendations for training programs and supervision. Further, the literature is especially lacking in information on training in suicide risk assessment and management for when both supervision and treatment are conducted virtually. Trainees commonly experience relatively high anxiety when working with high-risk patients, and close supervision and support are paramount. This review provides information on available technologies that can aid suicide prevention, highlights gaps in existing guidelines and literature for telehealth as these may apply to trainees' work with high-risk patients, and delineates recommendations for training programs and supervisors to optimally support trainees' learning with regard to suicide prevention, and to ensure that trainees provide their patients with optimal treatment. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

Are Mental Health Apps Adequately Equipped to Handle Users in Crisis?

Emma M. Parrish, Tess F. Filip, John Torous, Camille Nebeker, Raeanne C. Moore, and Colin A. Depp

Background:
Mental health (MH) apps are growing in popularity. While MH apps may be helpful, less is known about how crises such as suicidal ideation are addressed in apps.

Aims:
We examined the proportion of MH apps that contained language mentioning suicide or suicidal ideation and how apps communicated these policies and directed users to MH resources through app content, terms of services, and privacy policies.

Method:
We chose apps using an Internet search of "top mental health apps," similar to how a user might find an app, and extracted information about how crisis language was presented in these apps.

Results:
We found that crisis language was inconsistent among apps. Overall, 35% of apps provided crisis-specific resources in their app interface and 10.5% contained crisis language in terms of service or privacy policies. Limitations: This study employed a nonsystematic approach to sampling apps, and therefore the findings may not broadly represent apps for MH.

Conclusion:
To address the inconsistency of crisis resources, crisis language should be included as part of app evaluation frameworks, and internationally accessible, vetted resources should be provided to app users.

Following up internet-delivered Cognitive Behavior Therapy (CBT): A Longitudinal Qualitative Investigation of Clients' Usage of CBT Skills.

Nora Eilert, Ladislav Timulak, Daniel Duffy, Caroline Earley, Angel Enrique, Polly Kennedy, Clare McCormack, Jorge Palacios, Rebecca Wogan, Derek Richards

Background
While the acquisition and application of Cognitive Behavior Therapy (CBT) skills is a core component and likely mechanism of effect maintenance in all CBT-based treatments, the extent of post-therapeutic CBT skills usage among internet-delivered CBT (iCBT) clients remains under-researched.

Method
Nested within a pragmatic randomized controlled trial, 241 participants received an 8-week supported iCBT intervention for anxiety and/or depression and answered open-ended questions about their use and experience of CBT skills at 3-, 6-, 9-, and 12-month follow-up. Recurrent, cross-sectional qualitative analysis following the descriptive and interpretive approach was used to create a taxonomy, through which all qualitative data was coded.

Results
In total 479 qualitative responses across 181 participants were analyzed. Participants reported using a wide range of CBT skills and associated helpful and hindering experiences and impacts. The reasons for discontinued CBT skills usage were diverse, ranging from rare adverse effects to healthy adaptation.

Conclusion
The study shows how clients receiving iCBT in routine care learn CBT skills during treatment and utilize them in productive ways post-treatment. Findings coincide with similar research in face-to-face CBT and may inform future research to drive innovation and iCBT intervention development.

Baseline Sleep Quality Moderates Symptom Improvement in Veterans with Comorbid PTSD and TBI Receiving Trauma-Focused Treatment.

Molly J. Sullan, Laura D. Crocker, Kelsey R. Thomas, Henry J. Orff, ... Amy J. Jak

Highlights
- No improvement in sleep quality regardless of treatment condition.
- Worse sleep quality at baseline associated with less improvement in PTSD symptoms.
- Baseline sleep quality moderated improvements in cognitive complaints.

Abstract
Poor sleep quality is common among Veterans with posttraumatic stress disorder (PTSD) and history of traumatic brain injury (TBI). However, the relationship between sleep quality and treatment outcomes following trauma-focused interventions is less well-understood in this population. We sought to better understand whether 1) sleep quality changed as a result of trauma-focused treatment and 2) if baseline sleep quality moderated psychological and neurobehavioral treatment outcomes. Our sample consisted of 100 Iraq/Afghanistan era Veterans with PTSD and history of mild to moderate TBI who were randomized to one of two trauma-focused treatments: 1) Cognitive Processing Therapy (CPT) or 2) combined CPT and Cognitive Symptom Management and Rehabilitation Therapy (SMART-CPT). Self-reported sleep quality, psychiatric symptoms (PTSD and depression), and neurobehavioral concerns were assessed at multiple timepoints throughout the study. Multilevel modeling showed sleep quality did not improve, regardless of treatment condition. However, worse baseline sleep quality was associated with less improvement in PTSD symptoms and cognitive complaints. There was no effect of baseline sleep quality on change in depression symptoms. These findings suggest that more targeted treatments to address sleep quality either prior to or in conjunction with trauma-focused therapy may help to improve treatment outcomes for Veterans with comorbid PTSD and TBI history.

Links of Interest

Veterans' poor sleep can lead to mental health nightmares
https://blogs.va.gov/VAntage/86248/veterans-poor-sleep-can-lead-mental-health-nightmares/

Does Sleep Flush Wastes From the Brain?
https://jamanetwork.com/journals/jama/fullarticle/2780296

To Stem Suicide and Sexual Assault, the Air Force Dons Headsets
https://www.nytimes.com/2021/05/29/us/politics/air-force-vr-virtual-reality.html

Frequent Military Funeral Duty May Increase Soldiers' Risk of Suicide, Officer Warns
https://www.military.com/daily-news/2021/05/30/frequent-military-funeral-duty-may-increase-soldiers-risk-of-suicide-officer-warns.html

Behavioral health check-ups could soon be as routine for soldiers as teeth cleanings
https://www.armytimes.com/news/your-army/2021/06/01/behavioral-health-check-ups-could-soon-be-as-routine-for-soldiers-as-teeth-cleanings/
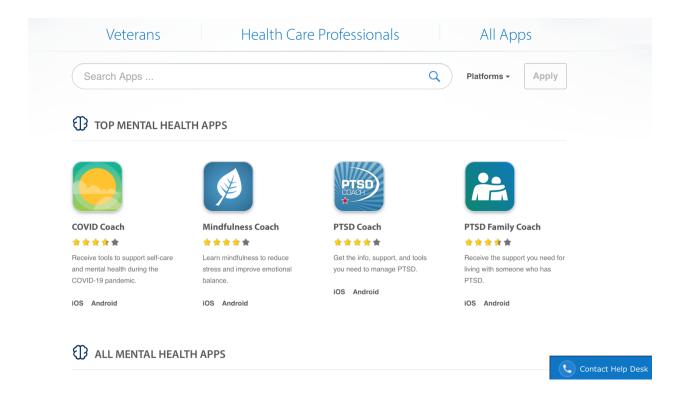
Staff Perspective: Technology in Treatment
https://deploymentpsych.org/blog/staff-perspective-technology-treatment

Staff Perspective: Clinical Skills and Optimizing Treatment - The Case for EBPs
https://deploymentpsych.org/blog/staff-perspective-clinical-skills-and-optimizing-treatment-case-ebps

Mental Health Treatment Considerations for LGBTQ Service Members
https://www.pdhealth.mil/news/blog/mental-health-treatment-considerations-lgbtq-service-members-36

Resource of the Week: VA App Store -- Mental Health

These apps equip you with tools and information to assist you in managing PTSD-related symptoms and stress, learning to practice mindfulness and strengthening parenting skills.

Search Apps ...   Platforms ▾   Apply

🧠 TOP MENTAL HEALTH APPS

COVID Coach
★★★★★
Receive tools to support self-care and mental health during the COVID-19 pandemic.

iOS   Android

Mindfulness Coach
★★★★★
Learn mindfulness to reduce stress and improve emotional balance.

iOS   Android

PTSD Coach
★★★★★
Get the info, support, and tools you need to manage PTSD.

iOS   Android

PTSD Family Coach
★★★★★
Receive the support you need for living with someone who has PTSD.

iOS   Android

🧠 ALL MENTAL HEALTH APPS

📞 Contact Help Desk

Shirl Kennedy
Research Editor (HJF)
Center for Deployment Psychology
www.deploymentpsych.org
shirley.kennedy.ctr@usuhs.edu
240-535-3901