Research Update -- October 3, 2019

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• Links of Interest
• Resource of the Week: Strengthening the Military Family Readiness System for a Changing American Society (National Academies)
Clinical depression in untreated obstructive sleep apnea: examining predictors and a meta-analysis of prevalence rates.

Melinda L. Jackson, Julie Tolson, Delwyn Bartlett, David J. Berlowitz, ... Maree Barnes

Sleep Medicine
Volume 62, October 2019, Pages 22-28
https://doi.org/10.1016/j.sleep.2019.03.011

Highlights
- Depressive symptoms are common in OSA patients but less is known about the prevalence of clinical depression in OSA.
- A prevalence of 22.4% of clinical depression was found in this OSA sample, with 24.8% reporting antidepressant use.
- The presence of major depressive disorder in OSA patients was associated with poorer quality of life and sleep quality.
- A meta-analysis revealed a pooled prevalence of 23% of major depressive disorder in OSA across six published studies.

Abstract
Objective/background
Patients with obstructive sleep apnea (OSA) experience daytime sleepiness, cognitive impairment and depressive symptoms. However, the measured prevalence of clinical depression in OSA using standardized clinical assessment is currently unclear. The aims of this study were to examine the prevalence of clinical depression and antidepressant use in untreated OSA patients, to examine predictors of depression, and to conduct an exploratory meta-analysis to determine the pooled prevalence of clinical depression in this population.

Patients/methods
In sum, 109 consecutive patients with diagnosed OSA (mean age (SD) = 52.6 (12.1) years; 43.1% female) who presented to the sleep laboratory completed a structured clinical interview for depression (SCID-IV), the Hospital Anxiety and Depression Scale, the Pittsburgh Sleep Quality Index (PSQI), the Functional Outcomes of Sleep Questionnaire (FOSQ), the Assessment of Quality of Life Questionnaire (AQoL) and the
Epworth Sleepiness Scale (EES). An exploratory meta-analysis was also conducted to quantify the risk of clinical depression in untreated OSA.

Results
Twenty-five (22.7%) participants had clinical depression based on the SCID-IV, and 24.8% were using antidepressants. Those with clinical depression had significantly poorer sleep quality and impaired quality of life. In a regression model, quality of life impairment was most strongly associated with clinical depression. Results from the meta-analysis revealed a pooled prevalence of 23% of clinical depression in OSA patients across seven studies.

Conclusion
Clinical depression and antidepressant use is common in patients with OSA. Depression was associated with reduced quality of life and poorer subjective sleep, however it was not associated with polysomnographic measures or daytime sleepiness. Whether CPAP treatment can alleviate the burden of clinical depression needs to be determined in future studies.

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Gonzalo Martínez-Alés, Katherine M. Keyes

Current Psychiatry Reports
October 2019, 21:104
https://doi.org/10.1007/s11920-019-1080-6

Purpose of Review
To examine current trends in suicide and self-injury in the USA, as well as potential contributors to their change over time, and to reflect on innovations in prevention and intervention that can guide policies and programs to reduce the burden of suicide and self-injury in the USA.

Recent Findings
Suicide and non-fatal self-injury are on the rise in the USA. Reasons for such trends over time remain speculative, although they seem linked to coincident increases in
mood disorders and drug use and overdose. Promising innovative prevention and intervention programs that engage new technologies, such as machine learning–derived prediction tools and computerized ecologic momentary assessments, are currently in development and require additional evidence.

Summary
Recent increases in fatal and non-fatal self-harm in the USA raise questions about the causes, interventions, and preventive measures that should be taken. Most innovative prevention efforts target individuals seeking to improve risk prediction and access to evidence-based care. However, as Durkheim pointed out over 100 years ago, suicide rates vary enormously between societal groups, suggesting that certain causal factors of suicide act and, hence, should be targeted at an ecological level. In the next generation of suicide research, it is critical to examine factors beyond the proximal and clinical to allow for a reimagining of prevention that is life course and socially focused.

Clinical Efficacy of Ketamine for Treatment-resistant Depression.

Sosipatros Bratsos, Sohag N. Saleh

Cureus
Published: July 22, 2019
DOI: 10.7759/cureus.5189

Depression is a common psychiatric disorder affecting more than 300 million people worldwide. According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), the diagnosis of depression requires at least two weeks of either low mood or anhedonia as well as four or more other symptoms such as appetite or weight changes, insomnia or hypersomnia, psychomotor agitation or retardation, loss of energy, inability to concentrate, feelings of worthlessness or excessive guilt, and suicidality. Selective serotonin reuptake inhibitors (SSRIs) target the monoaminergic system and are the commonest drugs used for treating depression, but have certain limitations, such as their delayed onset of action. Ketamine, a non-competitive NMDA receptor antagonist, has shown in several randomized controlled trials (RCTs) promising results with rapid antidepressant effects, especially in patients with severe treatment-resistant depression (TRD), which is depression that has not responded to
more than two antidepressants. In this review, the clinical efficacy of ketamine in TRD has been discussed, with emphasis placed on the evidence from RCTs.

https://www.tandfonline.com/doi/abs/10.1080/08995605.2019.1637210

Factor structure and initial validation of a brief measure of perceived emotional and physical distress tolerance in post-9/11 US Veterans.


Military Psychology
2019; 31:5, 363-372
DOI: 10.1080/08995605.2019.1637210

Distress tolerance (i.e., perceived or actual capacity to tolerate aversive internal states) has received considerable research attention as a transdiagnostic risk-factor underlying the development and maintenance of psychopathology. Lower levels of emotional distress tolerance have been linked to psychopathology (e.g. Posttraumatic Stress Disorder) within Military populations; however, the association of physical distress tolerance to psychopathology in this population has been under-researched. This research gap may be due in part to a paucity of comprehensive, temporally stable and brief measures of distress tolerance that have been validated within Military populations, which may hinder further examination and refinement of the construct. Addressing this problem, the current study evaluates the psychometric properties of a novel and brief measure of emotional and physical distress tolerance in a sample of United States post-9/11 Veterans. Participants were 307 Veterans (Mage = 38.9, 67.7% male) who completed the 10-item Distress Tolerance Inventory at baseline and annual follow-up. Exploratory structural equation modeling was used to examine the optimal latent factor structure and longitudinal invariance of the DTI measurement model, along with correlational analyses to examine the convergent properties of the DTI subscales. The DTI reflected a longitudinally invariant two-factor structure (emotional and physical distress tolerance), with excellent internal consistency and preliminary evidence of convergent validity. Thus, the DTI represents a brief, reliable and temporally stable measure of physical and emotional distress tolerance.
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
2019; 31:5, 373-383
DOI: 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.
Acute Shame Predicts Urges for Suicide but not for Substance Use in a Veteran Population.

Amy Y. Cameron PhD, M. Tracie Shea PhD, Alyson B. Randall BA

Suicide and Life-Threatening Behavior
First published: 16 September 2019
https://doi.org/10.1111/sltb.12588

Objective
There is an urgent need to identify ways to reduce rates of suicide among Veterans with a substance use disorder. Since co-occurring disorders can make diagnosis and treatment complex, it is useful for the mental health field to examine common factors that may underlie both problems. One common factor that underlies both substance use and suicidal behavior is shame. This brief report presents data collected in an experimental study examining shame as an acute risk factor for suicide and substance use in Veterans.

Method
Thirty-eight Veterans admitted to an inpatient Veterans Affairs Medical Center unit with suicidal ideation completed measures on depression, hopelessness, addiction, and suicidality. Participants were randomized to either a shame mood induction group or a control group, and completed pre- and postexperiment measures on urges for suicide, urges for substance use, and level of shame.

Results
Results indicate that an acute increase in shame resulted in an increase in an urge for suicide, but was not associated with changes in urges for substance use.

Conclusions
Acute feelings of shame may be a risk factor for increases in suicidal ideation. Limitations and suggestions for future directions are discussed.

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SAVE-CLC: An Intervention to Reduce Suicide Risk in Older Veterans following Discharge from VA Nursing Facilities.


Clinical Gerontologist
Published online: 16 Sep 2019
https://doi.org/10.1080/07317115.2019.1666444

Objective:
We describe the development and implementation of a telephonic intervention (SAVE-CLC) piloted at three VA sites for Veterans returning to the community from VA nursing facilities (Community Living Centers or “CLCs”). Care transitions present a known period of medical risk for older adults and may pose increased risk for suicide. Veterans discharging from CLCs are at elevated risk compared to age and gender matched controls.

Methods:
Using a quality improvement approach, input was gathered from key stakeholders to aid in the development of the intervention. Veterans were screened for depressive symptoms and need for additional support by phone.

Results:
Of the Veterans who received the SAVE-CLC intervention, 87.9% had at least one prior mental health diagnosis, though only 19.7% had an outpatient mental health appointment arranged at CLC discharge. Results suggest that the intervention is feasible across multiple outpatient settings and is generally well-received by Veterans and caregivers, with 97% of those contacted reporting that the telephone calls were helpful.

Conclusion: This flexible, telephone-based intervention addresses the unmet need of integrating mental health care into discharge planning during care transitions.

Clinical Implications:
SAVE-CLC offers a feasible and acceptable solution to suicide risk in older Veterans exiting a CLC.
Purpose of Review
To explore recent research evidence addressing men's depression and suicide. Included are discussions of recent literature investigating male depression symptoms, and men's depression and suicidality help-seeking and engagement with professional mental health care services.

Recent Findings
Specific externalizing symptoms of substance misuse, risk-taking, and poor impulse control among men indicate the need for gender-sensitized depression screening and risk assessments. The reticence of some men for seeking professional health care has drawn public awareness raising and de-stigmatizing efforts, while clinical guidelines for working with boys and men have been offered to better serve men seeking help for depression and/or suicidality.

Summary
There is a strengthening case for male depression comprising specific externalizing symptomatology, and these findings, along with high male suicide rates (including men who are seemingly in care), indicate the need for tailored approaches to men's depression and suicide prevention.

Depression prevention via digital cognitive behavioral therapy for insomnia: a randomized controlled trial.
Study Objectives
Insomnia is a common precursor to depression; yet, the potential for insomnia treatment to prevent depression has not been demonstrated. Cognitive behavioral therapy for insomnia (CBT-I) effectively reduces concurrent symptoms of insomnia and depression and can be delivered digitally (dCBT-I); however, it remains unclear whether treating insomnia leads to sustained reduction and prevention of depression. This randomized controlled trial examined the efficacy of dCBT-I in reducing and preventing depression over a 1-year follow-up period.

Methods
Patients with Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) insomnia disorder were randomly assigned to receive dCBT-I or an attentional control. The follow-up sample included 358 patients in the dCBT-I condition and 300 patients in the online sleep education condition. The primary outcome measure was relative rate ratios for depression at 1-year follow-up. Insomnia responses to treatment were also tested as predictors of incident depression at the 1-year follow-up.

Results
At 1-year follow-up, depression severity continued to be significantly lower in the dCBT-I condition relative to control. In addition, the number of individuals who reported no depression at 1-year follow-up was 51% higher in the dCBT-I condition relative to control. In those with minimal to no depression at baseline, the incident rate of moderate-to-severe depression at 1-year follow-up was reduced by half in the dCBT-I condition relative to the control condition.

Conclusion
dCBT-I showed robust effects as an intervention that prevents depression. Future research should examine dose–response requirements and further characterize mechanisms of action of dCBT-I for depression prevention.

Clinical Trial
Sleep to Prevent Evolving Affective Disorders; NCT02988375.
Opioid use disorders, psychiatric comorbidities, and risk for suicide attempts among veterans seeking pain care.

Ashrafioun, L., Zerbo, K., Bishop, T., & Britton, P.

Psychological Medicine
Published online by Cambridge University Press: 16 September 2019
DOI: https://doi.org/10.1017/S0033291719002307

Background
The purpose of this study was to assess the associations of comorbid opioid use disorders and psychiatric disorders with suicide attempts among veterans seeking pain care.

Methods
The cohort (N = 226 444) was selected by identifying pain care initiation from 2012 to 2014 using national Veterans Health Administration (VHA) data. Data on opioid use disorders (OUD), psychiatric disorders, medical comorbidity, demographics at baseline, and suicide attempts in the year following the initiation of pain care were extracted from VHA databases. Relative excess risk due to interaction (RERI) was used to assess departure from additivity of effects.

Results
Adjusted models indicated that both comorbid OUD and depression (RERI = 1.07) and comorbid OUD and AUD (RERI = 1.23) were significantly associated with additive risk of suicide attempt. In adjusted multiplicative interaction models, only comorbid OUD and bipolar disorder was significantly associated with suicide attempts; however, this association was protective (HR = 0.54).

Conclusions
The current findings highlight the importance of addressing opioid use disorders and alcohol use disorders and depression together to mitigate the risk of suicidal behavior.
Did the War on Terror Ignite an Opioid Epidemic?

Resul Cesur, Joseph J. Sabia, W. David Bradford

NBER Working Paper No. 26264
Issued in September 2019
NBER Program(s): The Health Economics Program

Grim national statistics about the U.S. opioid crisis are increasingly well known to the American public. Far less well known is that U.S. war veterans are at ground zero of the epidemic, facing an overdose rate twice that of civilians. Post-9/11 deployments to Afghanistan and Iraq have exposed servicemembers to injury-related chronic pain, psychological trauma, and cheap opium supplies, each of which may fuel opioid addiction. This study is the first to estimate the causal impact of combat deployments in the Global War on Terrorism on opioid abuse. We exploit a natural experiment in overseas deployment assignments and find that combat service substantially increased the risk of prescription painkiller abuse and illicit heroin use among active duty servicemen. War-related physical injuries, death-related battlefield trauma, and Post-Traumatic Stress Disorder emerge as primary mechanisms. The magnitudes of our estimates imply lower-bound combat exposure-induced health care costs of $1.04 billion per year for prescription painkiller abuse and $470 million per year for heroin use.

Awareness of Suicide Prevention Programs Among U.S. Military Veterans.

Jack Tsai, Meghan Snitkin, Louis Trevisan, Shane W. Kraus, Robert H. Pietrzak

Administration and Policy in Mental Health and Mental Health Services Research
First Online: 12 September 2019
https://doi.org/10.1007/s10488-019-00975-6

To assess U.S. veterans’ awareness and participation in suicide prevention programs offered by the Department of Veterans Affairs (VA). A nationally representative sample of 1002 veterans was surveyed online in 2018. The majority of veterans reported
knowing about Vet Centers (72%), the Veterans Crisis Line (65%), and the VA Center for Suicide Prevention (54%). However, only 5% had attended a community event related to veteran suicide and 2% had used VA’s Virtual Hope Box. Veterans aware of the Veterans Crisis Line had more medical conditions and were more likely to report VA as their primary healthcare provider. Veterans aware of VA’s Center for Suicide Prevention were younger, male, had more medical conditions, and more likely to screen positive for posttraumatic stress disorder, generalized anxiety disorder, and past homelessness. History of suicidal ideation or attempt was not associated with awareness of suicide prevention programs. VA’s suicide prevention programs reach a broad segment of the veteran population, including those with and without histories of suicidality. More targeted outreach may be needed for veterans most at-risk for suicide who are unaware of available resources.


Patterns and correlates of racial/ethnic disparities in posttraumatic stress disorder screening among recently separated veterans.

Juliette McClendon, Daniel Perkins, Laurel A. Copeland, Erin P. Finley, Dawne Vogt

Journal of Anxiety Disorders
Volume 68, December 2019, 102145
https://doi.org/10.1016/j.janxdis.2019.102145

Highlights
● There are racial/ethnic disparities in PTSD screening among veterans.
● Rates were higher among Black, multiracial and Hispanic veterans versus Whites.
● Demographics, trauma, life stress and social support explained some differences.
● Elevated rates persisted for Black men and multiracial women, above covariates.

Abstract
Background
Despite the high prevalence of posttraumatic stress disorder (PTSD) among military veterans, there is a lack of knowledge about racial/ethnic differences. The current study describes patterns and correlates of PTSD screening across race/ethnicity and gender in a sample of 9420 veterans recently separated from the military. Veterans who
identified as White (n = 6222), Hispanic/Latinx (n = 1313), Black (n = 1027), Asian/Hawaiian/Pacific Islander (n = 420) and multiracial (n = 438) were included.

Method
Trauma exposure and PTSD were assessed with the Primary Care PTSD Screen for DSM-5. Contextual factors examined included the intensity of ongoing stressful events, perceived social support, and sociodemographic variables (e.g., income). Weighted analyses were conducted to account for differential sample response rates. Regression analyses examining correlates of racial/ethnic differences in PTSD screening were stratified by gender.

Results
Among men and women, positive PTSD screening rates were significantly elevated among Black, multiracial, and Hispanic/Latinx veterans compared with White veterans. Sociodemographics, trauma exposure, stress and social support accounted for elevated positive screening rates among all racial/ethnic groups except Black men and multiracial women.

Conclusions
Findings suggest that Black, Hispanic/Latinx and multiracial veterans may be at higher risk for PTSD shortly following separation from the military. Contextual factors examined explain the excess risk among some, but not all, subgroups. Further specifying disparities in PTSD diagnostic rates and risk factors will enable targeted and tailored intervention among veteran subgroups.

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Blast concussion and posttraumatic stress as predictors of postcombat neuropsychological functioning in OEF/OIF/OND veterans.


OBJECTIVES:
Many combat veterans exhibit cognitive limitations of uncertain origin. In this study, we examined factors that predict cognitive functioning by considering effects of blast-
related concussion (BRC), non-blast-related concussion (NBRC), and posttraumatic stress disorder (PTSD) symptoms. Analyses specifically tested whether (a) BRC and NBRC were distinct in their prediction of cognitive performance; (b) a dose-response relationship existed between recurrent concussion (BRC and NBRC) and cognitive impairment; and (c) PTSD symptoms mediated the relationship between BRC and cognitive performance.

METHOD:
Two hundred eighty veterans with combat zone deployment histories completed semistructured clinical interviews to define BRC and NBRC histories, current and past mental health disorders, and dimensional ratings of PTSD symptomatology. Participants were also administered a number of neuropsychological measures to appraise cognitive functioning.

RESULTS:
A structural equation model (SEM) suggested that BRC and NBRC were not distinct in their prediction of cognitive performance, and there was no evidence that recurrent concussion (blast or nonblast) was directly associated with cognitive performance. BRC was significantly associated with PTSD symptoms ($r = .24$), PTSD symptoms were significantly associated with cognitive performance in the SEM ($r = -.27$), and PTSD symptoms significantly mediated the link between BRC and cognitive performance ($p = .03$).

CONCLUSIONS:
These results suggest that concussion history fails to directly contribute to cognitive performance, regardless of mechanism (blast or nonblast) and recurrence. BRC is nonetheless unique in its contribution to PTSD and PTSD-related cognitive deficits. Results support interventions specific to PTSD management in the interest of promoting neuropsychological functioning among war veterans. (PsycINFO Database Record (c) 2019 APA, all rights reserved).

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https://journals.sagepub.com/doi/abs/10.1177/0706743719875602

Identifying Trajectories and Predictors of Response to Psychotherapy for Post-Traumatic Stress Disorder in Adults: A Systematic Review of Literature.

Michelle Dewar, BSc, Alison Paradis, PhD, Christophe A. Fortin, PhD
Objective:
There exists considerable individual variability in the development and progression of pathological stress reactions after experiencing trauma, as well as in individuals’ response to psychological interventions. Yet until recently, such individual differences had not been considered when evaluating the efficacy of therapeutic interventions for post-traumatic stress disorder (PTSD). This systematic review aims to examine the emerging literature on this subject and, specifically, to identify trajectories and predictors of psychotherapeutic response in adults with PTSD.

Method:
Four databases were searched using specific keywords without date or language restrictions. For each study, independent reviewers systematically evaluated whether it met eligibility criteria and assessed risk of bias. For included studies, reviewers completed data extraction using standard formats. Those examining how subgroups of adults respond to therapy for clinical PTSD using trajectory modeling were deemed eligible. Demographic, PTSD, clinical, and trauma-related factors associated to particular trajectories were also examined.

Results:
Of the 1,727 papers identified, 11 were included in this analysis. Of these studies, six focused on military-related traumas and five on civilian ones. Although studies found between two and five trajectories, most supported a three-trajectory model of response categorized as responders, nonresponders, and subclinical participants. Over 22 predictors of treatment trajectories were examined. Comorbid depression, anxiety, and alcohol abuse were the strongest predictors of poor therapeutic response. Age, combat exposure, social support, and hyperarousal were moderate predictors.

Conclusion:
This review provides valuable insight into the treatment of PTSD, as it supports the heterogeneous trajectories of psychotherapeutic responses and provides avenues for the development of interventions that consider individual-level factors in treatment response.
Deployment, suicide, and overdose among comorbidity phenotypes following mild traumatic brain injury: A retrospective cohort study from the Chronic Effects of Neurotrauma Consortium.

Mary Jo Pugh, Alicia A. Swan, Megan E. Amuan, Blessen C. Eapen, Carlos A. Jaramillo, Roxana Delgado, David F. Tate, Kristine Yaffe, Chen-Pin Wang

PLOS ONE
Published: September 20, 2019
https://doi.org/10.1371/journal.pone.0222674

Mild traumatic brain injury in the Veteran population is frequently comorbid with pain, post-traumatic stress disorder, and/or depression. However, not everyone exposed to mild traumatic brain injury experiences these comorbidities and it is unclear what factors contribute to this variability. The objective of this study was to identify comorbidity phenotypes among Post-9/11 deployed Veterans with no or mild traumatic brain injury and examine the association of comorbidity phenotypes with adverse outcomes. We found that Veterans with mild traumatic brain injury (n = 93,003) and no brain injury (n = 434,378) were mean age of 32.0 (SD 9.21) on entering Department of Veterans Health Administration care, were predominantly Caucasian non-Hispanic (64.69%), and served in the Army (61.31%). Latent class analysis revealed five phenotypes in each subcohort; Moderately Healthy and Mental Health phenotypes were common to both. The Healthy phenotype was found only in no brain injury. Unique phenotypes in mild traumatic brain injury included Moderately Healthy+Decline, Polytrauma, and Polytrauma+Improvement. There was substantial variation in adverse outcomes. The Polytrauma+Improvement phenotype had the lowest likelihood of adverse outcomes. There were no differences between Moderately Healthy+Decline and Polytrauma phenotypes. Phenotypes of comorbidity vary significantly by traumatic brain injury status including divergence in phenotypes (and outcomes) over time in the mild traumatic brain injury subcohort. Understanding risk factors for the divergence between Polytrauma vs. Polytrauma+Improvement and Moderately Healthy vs. Moderately Healthy+Decline, will improve our ability to proactively mitigate risk, better understand the early patterns of comorbidity that are associated with neurodegenerative sequelae following mild traumatic brain injury, and plan more patient-centered care.
Risk factors for positive depression screening across a shipboard deployment cycle.

Alice E. Arcury-Quandt, Judith Harbertson, Lauretta Ziajko and Braden R. Hale

BJPsych Open
(2019); 5, e84, 1–6
doi: 10.1192/bjo.2019.70

Background
Depression is a leading cause of healthcare use and risk for suicide among US military personnel. Depression is not well characterised over the shipboard deployment cycle, and personnel undergo less screening than with land-based deployments, making early identification less likely.

Aims
To determine the demographic and behavioural risk factors associated with screening positive for risk of depression (ROD) across the shipboard deployment cycle.

Method
Active-duty ship assigned personnel completed an anonymous assessment using the Center for Epidemiologic Studies Depression Scale (CES-D) in the year prior to deployment, during deployment and in the months following deployment. Longitudinal models were used to determine risk factors.

Results
In total, 598 people were included in the analysis. Over 50% of the study population screened positive for ROD (CES-D score ≥16) and over 25% screened positive for risk of major depressive disorder (CES-D score ≥22) at all time points. Lower age, female gender, alcohol use, stress and prior mental health diagnoses were all associated with greater odds of screening positive for ROD in multivariable models.

Conclusions
Although the risk factors associated with screening positive for ROD are similar to those in other military and civilian populations, the proportion screening positive exceeds
previously reported prevalence. This suggests that shipboard deployment or factors associated with shipboard deployment may present particular stressors or increase the likelihood of depressive symptoms.


Suicide Attempts: How Does the Acute Use of Alcohol Affect Suicide Intent?


Suicide and Life-Threatening Behavior
18 September 2019
https://doi.org/10.1111/sltb.12586

Background
Very few studies have specifically addressed the role of the acute use of alcohol (AUA) in suicide attempts.

Objective
Our study compared the suicide intent scores of self-poisoning patients with and without AUA in order to examine the role of alcohol in attempted suicides.

Methods
We recruited 516 patients admitted to the emergency department for self-poisoning. We screened blood alcohol concentrations (BACs) to determine whether these were positive or negative in the two groups. We collected data about covariates such as psychiatric disorders and sociodemographic and suicide characteristics. We then compared suicide intent between the groups, adjusted according to the covariates.

Results
The patients with AUA had lower scores for suicide intent, but this factor only reduced the self-reporting score, with the scores for objective circumstances and risk similar between the groups. There was a correlation between BACs and self-reported suicide intentionality, but this was not significant.

Conclusion
Acute use of alcohol patients presented with lower suicide intent, as particularly explained by the self-report scores, but there were no differences between the groups in
terms of risk and/or the objective circumstances. The role of alcohol in the self-reporting of suicide attempts must be addressed in future studies.

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Veteran resilience following combat-related amputation.

Juliann M.C. Jeppsen, David S. Wood, Kalin B. Holyoak

Journal of Military, Veteran and Family Health
Published Online: September 14, 2019
https://doi.org/10.3138/jmvfh.2018-0053

Introduction:
Amputation following combat-related injury places substantial stress on survivors and their spouses. The purpose of this study was to explore the experiences of combat-related amputation among military Veterans and explore pathways to resilient behaviours.

Methods:
This qualitative study used a purposeful sample of male US military Veterans and their partners. We used the Metatheory of Resilience and Resiliency (MRR) as a conceptual framework for understanding the drives that promote growth through adversity and disruptions. MRR was also used to characterize each Veterans' state of resilience after the amputation.

Results:
The majority of Veterans returned to their baseline level of functioning (reintegration back to homeostasis) and that some Veterans are functioning better than before the amputation (resilient reintegration).

Discussion:
Veterans who appear to have built a life post-amputation exhibited the following resilience drives: finding perspective and purpose (universal resilience), living consistent with one's values and character strengths (character resilience), and accessing positive social support (ecological resilience). Practitioners should be alert to these themes among Veterans with traumatic amputation.
Changes in trauma-potentiated startle, skin conductance, and heart rate within Prolonged Exposure therapy for PTSD in high and low treatment responders.

Jessica L. Maples-Keller, Sheila A.M. Rauch, Tanja Jovanovic, Carly W. Yasinski, ... Seth Davin Norrholm

Journal of Anxiety Disorders
Available online 21 September 2019
https://doi.org/10.1016/j.janxdis.2019.102147

Highlights

- Psychophysiological data are important indices for investigating treatment response.
- We tested startle, heart rate, and skin conductance in exposure therapy for PTSD.
- Trauma-potentiated startle demonstrated differences in high and low responders.

Abstract

While exposure-based psychotherapy is recommended as a first-line treatment for posttraumatic stress disorder (PTSD) given strong evidence for its effectiveness, some patients fail to receive full benefit. Psychophysiological data may be important complementary indices for investigating variability in treatment response and changes over the course of treatment. The focus of the present investigation was to examine change in psychophysiological indices pre- to post-treatment and to investigate if changes differed for high versus low PTSD treatment responders. Participants included veterans with primary PTSD diagnoses who received a two-week intensive prolonged exposure (PE) treatment. Psychophysiological assessment included trauma-potentiated startle, heart rate, and skin conductance recordings during presentation of three standard virtual reality (VR)-based, trauma-relevant scenes presented through a head mounted display. Results indicate that 48.6% were classified as high treatment responders (>50% reduction in PCL-5 from baseline). Trauma-potentiated startle was observed in all patients at pre-treatment, $F = 13.58, p < 0.001$, in that startle magnitude was increased during VR stimuli relative to baseline regardless of responder status. However, in high treatment responders, there was an interaction of VR with time, $F = 14.10, p = 0.001$; VR scenes did not potentiate startle post-treatment. Specifically, high treatment responders were less reactive to trauma stimuli following PE treatment.
There was no effect of time in the low responder group. Heart rate reactivity data revealed a significant main effect of treatment, $F = 45.7$, $p = .035$, but no significant interaction with responder status. Skin conductance reactivity did not significantly change from pre to post-treatment. These results suggest that trauma-potentiated startle may represent an objective marker of fear- and anxiety-related symptom reduction that is sensitive to both traditional outpatient as well as intensive treatment approaches.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2751558


Hongying Dai, PhD; Kimber P. Richter, PhD

JAMA Netw Open
2019; 2(9):e1911936.

Key Points
Question
What are the prevalence and patterns of marijuana use among adults with medical conditions?

Findings
This survey study using data from 169,036 participants in the 2016 and 2017 Behavioral Risk Factor Surveillance System surveys found that, compared with adults without medical conditions, adults with medical conditions had a significantly higher prevalence of current and daily marijuana use, were more likely to report using marijuana for medical reasons, and were less likely to report using marijuana for recreational purposes. Among respondents with medical conditions, 11.2% of young adults reported using marijuana on a daily basis, and the prevalence of marijuana use decreased with increasing age.

Meaning
Clinicians should discuss marijuana use with their patients to optimize medical outcomes.
Abstract
Importance
The number of states legalizing marijuana for medical and recreational use is increasing. Little is known regarding how or why adults with medical conditions use it.

Objectives
To report the prevalence and patterns of marijuana use among adults with and without medical conditions, overall and by sociodemographic group, and to further examine the associations between current marijuana use and the types and number of medical conditions.

Design, Setting, and Participants
This survey study used a probability sample of US adults aged 18 years and older from the 2016 and 2017 Behavioral Risk Factor Surveillance System, a telephone-administered survey that collects data from a representative sample of US adult residents across the states regarding health-related risk behaviors, chronic health conditions, and use of preventive services.

Main Outcomes and Measures
Current (past month) and daily (≥20 days in the last 30 days) marijuana use.

Results
The study sample included 169,036 participants (95,780 female [weighted percentage, 52.0%]). Adults with medical conditions had higher odds of reporting current marijuana use than those without medical conditions (age 18-34 years: adjusted odds ratio, 1.8 [95% CI, 1.5-2.1]; age 35-54 years: adjusted odds ratio, 1.4 [95% CI, 1.2-1.7]; age ≥55 years: adjusted odds ratio, 1.6 [95% CI, 1.3-2.0]), especially among those with asthma, chronic obstructive pulmonary disease, arthritis, cancer, and depression. Among those with medical conditions, the prevalence of marijuana use decreased with increasing age, ranging from 25.2% (95% CI, 22.0%-28.3%) for those aged 18 to 24 years to 2.4% (95% CI, 2.0%-2.8%) for those aged 65 years or older for current marijuana use and from 11.2% (95% CI, 8.7%-13.6%) to 0.9% (95% CI, 0.7%-1.2%), respectively, for daily marijuana use. Most adults who used marijuana (77.5%; 95% CI, 74.7%-80.3%), either with or without medical conditions, reported smoking as their primary method of administration. Adults with medical conditions were more likely than those without medical conditions to report using marijuana for medical reasons (45.5% [95% CI, 41.1%-49.8%] vs 21.8% [95% CI, 17.8%-25.7%]; difference, 23.7% [95% CI, 17.8%-29.6%]) and less likely to report using marijuana for recreational purposes (36.2% [95% CI, 32.1%-40.3%] vs 57.7% [95% CI, 52.6%-62.9%]; difference, −21.5% [95% CI, −28.1% to 14.9%]).
Conclusions and Relevance
This study found that marijuana use was more common among adults with medical conditions than those without such conditions. Notably, 11.2% of young adults with medical conditions reported using marijuana on a daily basis. Clinicians should screen for marijuana use among patients, understand why and how patients are using marijuana, and work with patients to optimize outcomes and reduce marijuana-associated risks.

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Early First Deployment and Risk of Suicide Attempt Among First-term Enlisted Soldiers in the U.S. Army.


Suicide and Life-Threatening Behavior
First published: 23 September 2019
https://doi.org/10.1111/sltb.12592

Objective
We examined early first deployment and subsequent suicide attempt among U.S. Army soldiers.

Method
Using 2004–2009 administrative data and person-month records of first-term, Regular Army, enlisted soldiers with one deployment (89.2% male), we identified 1,704 soldiers with a documented suicide attempt during or after first deployment and an equal-probability control sample (n = 25,861 person-months).

Results
Logistic regression analyses indicated soldiers deployed within the first 12 months of service were more likely than later deployers to attempt suicide (OR = 1.7 [95% CI = 1.5–1.8]). Adjusting for sociodemographic characteristics, service-related characteristics, and previous mental health diagnosis slightly attenuated this association (OR = 1.6 [95% CI = 1.5–1.8]). Results were not modified by gender, deployment
status, military occupation, or mental health diagnosis. The population-attributable risk proportion for deploying within the first 12 months of service was 17.8%. Linear spline models indicated similar risk patterns over time for early and later deployers, peaking at month 9 during deployment and month 5 postdeployment; however, monthly suicide attempt rates were consistently higher for early deployers.

Conclusions
Enlisted soldiers deployed within the first 12 months of service have elevated risk of suicide attempt during and after first deployment. Improved understanding of why early deployment increases risk can inform the development of policies and intervention programs.

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https://www.ahajournals.org/doi/full/10.1161/CIRCOUTCOMES.119.005563

Increased Cardiovascular Disease Risk in Veterans With Mental Illness.

Mary C. Vance, Wyndy L. Wiitala, Jeremy B. Sussman, Paul Pfeiffer, Rodney A. Hayward

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Background:
Although previous studies have demonstrated an association between various mental illnesses and cardio-cerebrovascular disease (CVD) risk, few have compared the strength of association between different mental illnesses and CVD risk.

Methods and Results:
We assessed the association of psychiatric diagnoses (psychosis, bipolar disorder, depression, anxiety, and posttraumatic stress disorder) with major CVD outcomes (CVD events and CVD mortality) over 5 years, using a national primary prevention cohort of military veterans receiving care in the Department of Veterans Affairs. Data were linked from the Department of Veterans Affairs, Centers for Medicare and Medicaid Services, and Centers for Disease Control and Prevention National Death Index databases. We used multiple logistic regression to examine how the presence of a psychiatric diagnosis at baseline (2005–2009) was associated with CVD outcomes over the next 5 years (January 1, 2010, to December 31, 2014) stratified by sex, adjusting for other
psychiatric diagnoses, as well as age, race, conventional CVD risk factors as calculated by the Veterans Affairs Risk Score-CVD, and antipsychotic and anticonvulsant/mood stabilizer medication prescriptions. Approximately 1.52 million men and over 94,000 women met our inclusion criteria. In the fully adjusted model, among men, we found that depression, psychosis, and bipolar disorder were predictive of both CVD events and CVD mortality, with psychosis having the largest effect size (eg, adjusted odds ratio, 1.48; CI, 1.41–1.56; P<0.001 for psychosis and CVD mortality). Among women, only psychosis and bipolar disorder were predictive of both CVD events and CVD mortality, again with psychosis having the largest effect size (eg, adjusted odds ratio, 1.97; CI, 1.52–2.57; P<0.001 for psychosis and CVD mortality). Anxiety was associated with only CVD mortality in men, and depression was associated with only CVD events in women.

Conclusions:
Consistent with the hypothesis that chronic stress leads to greater CVD risk, multiple mental illnesses were associated with an increased risk of CVD outcomes, with more severe mental illnesses (eg, primary psychotic disorders) having the largest effect sizes even after controlling for other psychiatric diagnoses, conventional CVD risk factors, and psychotropic medication use.

WHAT IS KNOWN
Previous studies have demonstrated an association between various mental illnesses and cardio-cerebrovascular disease (CVD) risk.

However, fewer studies have compared the strength of association between different mental illnesses and CVD risk.

WHAT THE STUDY ADDS
In this sample of 1.52 million men and over 94,000 women receiving Department of Veterans Affairs care, multiple mental illnesses were associated with an increased risk of CVD events over 5 years of follow-up.

Among both men and women, psychosis was most robustly associated with CVD risk even after controlling for age, race, conventional CVD risk factors, other psychiatric diagnoses, and psychotropic medication use.

This evidence supports the hypothesis that chronic stress, as can be seen in severe mental illnesses, independently increases the risk of CVD in a large, nationally representative cohort of veterans.
Transcranial direct current stimulation (tDCS) for post-traumatic stress disorder (PTSD): A randomized, double-blinded, controlled trial.

Mohammad Javad Ahmadizadeh, Mehdi Rezaei, Paul B. Fitzgerald

Brain Research Bulletin
Volume 153, November 2019, Pages 273-278
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Currently, there is not definitive information regarding the efficacy of transcranial direct current stimulation (tDCS) for Post-traumatic stress disorder (PTSD). This study aimed to examine the efficacy of tDCS for PTSD and its sub-symptoms. In a double-blind, controlled randomized clinical trial, 40 participants with PTSD were randomly assigned to receive either 10 tDCS sessions delivered at 2 mA to the right (cathode) and left (anode) dorsolateral prefrontal cortex (DLPFC) or 10 sham tDCS sessions to the same area. A blinded rater assessed PTSD, depressive, and anxiety symptoms before treatment, following it, and after a 1-month follow-up period. According to the results: i) PTSD patients demonstrated a significant reduction in PTSD symptoms, hyper-arousal and negative alterations in cognition and mood sub-symptoms as well as depressive and anxiety symptoms in the active stimulation compared to the sham stimulation at post-treatment and follow-up; ii) active stimulation when compared to sham stimulation revealed greater reductions in re-experiencing sub-symptoms from baseline to post-test. However, follow-up differences did not reach significance; iii) With respect to avoidance sub-symptoms, there were no significant differences between the active and sham stimulation at post-test and follow-up. This study supported the efficacy of 10 sessions of bilateral DLPFC tCDS delivered at 2 mA for the treatment of PTSD symptoms. Taken together, these findings suggest that although tDCS can reduce PTSD symptoms, researchers should consider the different types of PTSD and use strategies to ensure sufficient power to detect a potential effect of tDCS on various types of PTSD.

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Sensory sensitivity as a link between concussive traumatic brain injury and PTSD.
Traumatic brain injury (TBI) is one of the most common injuries to military personnel, a population often exposed to stressful stimuli and emotional trauma. Changes in sensory processing after TBI might contribute to TBI-post traumatic stress disorder (PTSD) comorbidity. Combining an animal model of TBI with an animal model of emotional trauma, we reveal an interaction between auditory sensitivity after TBI and fear conditioning where 75 dB white noise alone evokes a phonophobia-like phenotype and when paired with footshocks, fear is robustly enhanced. TBI reduced neuronal activity in the hippocampus but increased activity in the ipsilateral lateral amygdala (LA) when exposed to white noise. The white noise effect in LA was driven by increased activity in neurons projecting from ipsilateral auditory thalamus (medial geniculate nucleus). These data suggest that altered sensory processing within subcortical sensory-emotional circuitry after TBI results in neutral stimuli adopting aversive properties with a corresponding impact on facilitating trauma memories and may contribute to TBI-PTSD comorbidity.

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Elizabeth Ziff, Felicia Garland-Jackson

Armed Forces & Society
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Within the institution and military community, civilian wives of service members occupy complicated roles. On the one hand, wives are undiscputedly crucial to the functioning of their service member husbands. However, wives are simultaneously considered subordinate to their husbands within the military and extended community. Indicative of this attitude are the divisive stereotypes of military wives that range from lazy and
irresponsible, to overly rank-conscious and entitled. Based on combined in-depth interviews from two samples of military wives, this article investigates how the women navigate the military spouse role within the institutional, community-oriented context of the military. Specifically, we ask, how do these women construct gender and exercise agency when drawing on the stereotypes of wives within the community? By utilizing such mechanisms as symbolic boundary work, gender policing, and stereotyping, women both reify stereotypes of the military spouse and exert agency in creating the military spouse identity for themselves.

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https://journals.sagepub.com/doi/abs/10.1177/1077801219873433

Service-Women’s Responses to Sexual Harassment: The Importance of Identity Work and Masculinity in a Gendered Organization.

Stephanie Bonnes

Violence Against Women
First Published September 24, 2019
https://doi.org/10.1177/1077801219873433

Using data from in-depth interviews with 38 U.S. service-women, this article explores women’s responses to sexual harassment in the military workplace. I argue that in an extremely gendered and masculine institution, sexual harassment threatens service-women’s identities as military insiders, presenting an identity dilemma for them. To resolve this dilemma, women prioritize their masculinity and downplay and excuse harassment. In contrast, service-women who have experienced sexual assault or combat confront sexual harassment. I argue that this is possible because for these two groups of women, sexual harassment does not present an identity dilemma. I show how masculinity is used to downplay and normalize harassment as well as to resist it.

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Links of Interest

Student loan crisis, not Mideast wars, helped Army leaders exceed recruiting goals this year
Overseas trolls targeting veterans on social media: Report

Afghanistan and Iraq veterans were the 'ground zero' of the opioid crisis: Study

The Air Force Has Declared War on Hopelessness in the Ranks

Veteran suicides increase despite host of prevention, mental health efforts

Military family suicide tracked for first time in DOD report

Investigators probing four suicides involving carrier crew

'Everybody’s Overworked:' String of Suicides Raises Questions About Sailors' Stress Levels

Suicide Prediction Models in the Military Health System

Alarming VA Report Totals Decade of Veteran Suicides

How Digital Innovation Can Boost Suicide Prevention Efforts
Meet the Navy chief helping suicidal sailors on Reddit

Suicide Prevention Spotlight: Military Behavioral Health Technicians

Is military domestic violence a ‘forgotten crisis’?

Commands Protect Troops and Fail Families in Domestic Abuse Cases, Victims Say

Appeals court asked to halt discharge of airmen with HIV

SecDef enlists governors' help on military spouse employment issue

New DoD Pain Rating Scale Will Help Military Doctors Assess Patients' Misery

Soldiers say the Army’s relentless push for readiness is ‘breaking the force’ in leaked documents
https://taskandpurpose.com/army-readiness-document

New plan would dramatically expand GI Bill family transfer rules for troops, veterans
Resource of the Week: Strengthening the Military Family Readiness System for a Changing American Society

New, from the National Academies of Sciences, Engineering, and Medicine; Division of Behavioral and Social Sciences and Education; Board on Children, Youth, and Families; Committee on the Well-Being of Military Families:

The U.S. military has been continuously engaged in foreign conflicts for over two decades. The strains that these deployments, the associated increases in operational tempo, and the general challenges of military life affect not only service members but also the people who depend on them and who support them as they support the nation – their families.

Family members provide support to service members while they serve or when they have difficulties; family problems can interfere with the ability of service members to deploy or remain in theater; and family members are central influences on whether members continue to serve. In addition, rising family diversity and complexity will likely increase the difficulty of creating military policies, programs and practices that adequately support families in the performance of military duties.

Strengthening the Military Family Readiness System for a Changing American Society examines the challenges and opportunities facing military families and what is known about effective strategies for supporting and protecting military children and families, as well as lessons to be learned from these experiences.
This report offers recommendations regarding what is needed to strengthen the support system for military families.

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