

Research Update -- November 18, 2021

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• Resource of the Week -- MedlinePlus: Veterans and Military Health

https://doi.org/10.2105/AJPH.2021.306420

Mental Disorders, Gun Ownership, and Gun Carrying Among Soldiers After Leaving the Army, 2016-2019.

Bossarte, R. M., Ziobrowski, H. N., Benedek, D. M., Dempsey, C. L., King, A. J., Nock, M. K., Sampson, N. A., Stein, M. B., Ursano, R. J., & Kessler, R. C.

American Journal of Public Health 2021 Oct; 111(10): 1855-1864

Objectives.

To examine associations of current mental and substance use disorders with selfreported gun ownership and carrying among recently separated US Army soldiers. Veterans have high rates of both gun ownership and mental disorders, the conjunction of which might contribute to the high suicide rate in this group.

Methods.

Cross-sectional survey data were collected in 2018-2019 from 5682 recently separated personnel who took part in the Army Study to Assess Risk and Resilience in Servicemembers. Validated measures assessed recent mood, anxiety, substance use, and externalizing disorders. Logistic regression models examined associations of sociodemographic characteristics, service characteristics, and mental disorders with gun ownership and carrying.

Results.

Of the participants, 50% reported gun ownership. About half of owners reported carrying some or most of the time. Mental disorders were not associated significantly with gun ownership. However, among gun owners, major depressive disorder, panic disorder, posttraumatic stress disorder, and intermittent explosive disorder were associated with significantly elevated odds of carrying at least some of the time.

Conclusions.

Mental disorders are not associated with gun ownership among recently separated Army personnel, but some mental disorders are associated with carrying among gun owners.

https://doi.org/10.1093/milmed/usaa504

Mild Traumatic Brain Injury and Postconcussive Symptom Endorsement: A Parallel Comparison Between Two Nonclinical Cohorts.

Cornwell, R. E., Arango, J. I., Eagye, C. B., Hill-Pearson, C., Schwab, K., Souvignier, A. R., & Pazdan, R. M.

Military Medicine 021 Nov 2;1 86(11-12): e1191-e1198

Introduction:

The prevalence of mild traumatic brain injury (mTBI) is commonly estimated based on indirect metrics such as emergency department visits and self-reporting tools. The study of postconcussive symptoms faces similar challenges because of their unspecific character and indistinct causality. In this article, we compare two nonclinical, epidemiological studies that addressed these two elements and were performed within a relatively narrow period in the state of Colorado.

Materials and methods:

De-identified datasets were obtained from a random digit-dialed survey study conducted by the Craig Hospital and a study surveying soldiers returning from deployment by Defense and Veteran Traumatic Brain Injury Center. Information pertinent to participants' demographics, a history of mTBI, and symptom endorsement was extracted and homogenized in order to establish a parallel comparison between the populations of the two studies.

Results:

From the 1,558 (Warrior Strong, 679; Craig Hospital, 879) records selected for analysis, 43% reported a history of at least one mTBI. The prevalence was significantly higher among individuals from the Defense and Veteran Traumatic Brain Injury Center study independent of gender or race. Repetitive injuries were reported by 15% of the total combined cohort and were more prevalent among males. Symptom endorsement was significantly higher in individuals with a positive history of mTBI, but over 80% of those with a negative history of mTBI endorsed at least one of the symptoms interrogated. Significant differences were observed between the military and the civilian populations in terms of the types and frequencies of the symptoms endorsed.

Conclusions:

The prevalence of mTBI and associated symptoms identified in the two study

populations is higher than that of previously reported. This suggests that not all individuals sustaining concussion seek medical care and highlights the limitations of using clinical reports to assess such estimates. The lack of appropriate mechanisms to determine symptom presence and causality remains a challenge. However, the differences observed in symptom reporting between cohorts raise questions about the nature of the symptoms, the impact on the quality of life for different individuals, and the effects on military health and force readiness.

https://doi.org/10.1037/tra0000681

Remote exposure to traumatic events and PTSD symptoms among U.S. Air Force intelligence personnel: Moderating effects of morally injurious experiences.

Kelley, M. L., Bravo, A. J., Jinkerson, J. D., Ogle, A. D., Reichwald, R., & Rutland, J. B.

Psychological Trauma: Theory, Research, Practice and Policy 2021 May; 13(4): 412-416

Objectives:

U.S. Air Force (USAF) intelligence, surveillance, and reconnaissance (ISR) personnel continuously view high-resolution, real-time imagery and video feeds that include intermittent exposure to graphic events. This brief report examined whether cumulative exposure (still imagery, video, and audio) to graphic events was associated with posttraumatic stress disorder (PTSD) symptoms among USAF ISR personnel. We also examined whether morally injurious experiences (MIEs)-as well as three MIE subtypes: (a) personal moral transgressions, (b) transgressions by others, and (c) feelings of betrayal by others-moderated the association between ISR work-related traumatic exposure and PTSD symptoms.

Method:

Participants were 277 USAF ISR personnel assigned to intelligence units.

Results:

We found two significant moderation effects. First, we found that the association between ISR remote graphic media exposure and PTSD symptoms was strongest for participants with higher levels of MIE exposure. Second, we found that the ISR remote graphic media exposure-PTSD symptoms association was strongest among participants who reported higher levels of MIEs that were self-directed; that is, they reported being

troubled with believing they had violated their own morals, values, or principles.

Conclusions:

Findings emphasize the importance of moral injury in understanding PTSD symptoms in ISR personnel. Specifically, because MIEs and PTSD are possible in remote combat agents, prevention and intervention efforts for ISR actors should directly target this special population with recognition that (a) remote combat exposure can be traumatic and (b) perceived violations of moral beliefs or values may be central to any posttraumatic psychopathology. (PsycInfo Database Record (c) 2021 APA, all rights reserved).

https://doi.org/10.1037/ser0000422

An intensive outpatient program with prolonged exposure for veterans with posttraumatic stress disorder: Retention, predictors, and patterns of change.

Rauch, S., Yasinski, C. W., Post, L. M., Jovanovic, T., Norrholm, S., Sherrill, A. M., Michopoulos, V., Maples-Keller, J. L., Black, K., Zwiebach, L., Dunlop, B. W., Loucks, L., Lannert, B., Stojek, M., Watkins, L., Burton, M., Sprang, K., McSweeney, L., Ragsdale, K., & Rothbaum, B. O.

Psychological Services 2021 Nov; 18(4): 606-618

High rates of drop-out from treatment of PTSD have challenged implementation. Care models that integrate PTSD focused psychotherapy and complementary interventions may provide benefit in retention and outcome. The first 80 veterans with chronic PTSD enrolled in a 2-week intensive outpatient program combining Prolonged Exposure (PE) and complementary interventions completed symptom and biological measures at baseline and posttreatment. We examined trajectories of symptom change, mediating and moderating effects of a range of patient characteristics. Of the 80 veterans, 77 completed (96.3%) treatment and pre- and posttreatment measures. Self-reported PTSD (p < .001), depression (p < .001) and neurological symptoms (p < .001) showed large reductions with treatment. For PTSD, 77% (n = 59) showed clinically significant reductions. Satisfaction with social function (p < .001) significantly increased. Black veterans and those with a primary military sexual trauma (MST) reported higher baseline severity than white or primary combat trauma veterans respectively but did not differ in their trajectories of treatment change. Greater cortisol response to the trauma

potentiated startle paradigm at baseline predicted smaller reductions in PTSD over treatment while greater reductions in this response from baseline to post were associated with better outcomes. Intensive outpatient prolonged exposure combined with complementary interventions shows excellent retention and large, clinically significant reduction in PTSD and related symptoms in two weeks. This model of care is robust to complex presentations of patients with varying demographics and symptom presentations at baseline. (PsycInfo Database Record (c) 2021 APA, all rights reserved).

https://doi.org/10.1007/s10615-021-00816-w

A Review of Trauma Specific Treatments (TSTs) for Post-Traumatic Stress Disorder (PTSD).

Lee, E., Faber, J. & Bowles, K.

Clinical Social Work Journal Published: 15 October 2021

Trauma is a significant public health concern that has widespread and adverse effects on people. There is a high prevalence of trauma and PTSD in general populations, and that prevalence greatly increases among the clinical populations that social workers serve. To address the hidden epidemic of trauma, there are various trauma-specific treatments for PTSD. Scholars have highlighted a critical use of research evidence as a starting consideration in clinical decision-making and named the necessity to map out effective interventions according to population and types of trauma, including both conventional and non-conventional treatments. A rapid systematic review was conducted to fill this gap and found thirty-four empirically supported studies, including nineteen conventional and seven non-conventional treatment approaches for PTSD. The included conventional therapies are cognitive behavioral therapy (CBT), sleepspecific CBT, trauma-focused CBT, internet CBT, virtual reality exposure therapy, prolonged exposure, narrative exposure therapy, cognitive processing therapy, eye movement desensitization and reprocessing (EMDR), hypnotherapy, emotion focused therapy, skills training in affect and interpersonal regulations (STAIR), interpersonal psychotherapy (IPT), dialectical behavioral therapy (DBT), seeking safety, trauma incident reduction, accelerated resolution therapy (ART), metacognitive therapy, and imaginary rehearsal therapy. The non-conventional approaches included are yoga, physical activities, emotion freedom technique, acupuncture, mantram repetition

program, mind–body therapy, and music therapy. We further explored the therapy content, population, type of trauma, outcomes, and strengths/limitations under each treatment to guide clinicians to select the best practice for idiosyncratic clients. Lastly, we discussed limitations of the current review, clinical considerations in selecting empirically supported treatment for PTSD and future research implications to guide clinical social workers.

https://doi.org/10.1093/milmed/usab407

Sexually Transmitted Infections in the U.S. Military: A Sexual Health Paradigm to Address Risk Behaviors, Unintended Pregnancy, Alcohol Use, and Sexual Trauma.

Cherrie B Boyer, PhD, Charlotte A Gaydos, MS, DrPH, Amy B Geller, MPH, Eric C Garges, MD, MPH, COL, USA, Sten H Vermund, MD

Military Medicine Published: 09 October 2021

To address the ongoing epidemic of sexually transmitted infections (STIs) in the United States, the National Academies of Sciences, Engineering, and Medicine (National Academies) conducted a consensus study on STI control and prevention in the United States to provide recommendations to the Centers for Disease Control and Prevention and the National Association of County and City Health Officials. The culminating report identified military personnel as one of the priority groups that require special consideration given the high prevalence of STIs and their associated behaviors (e.g., concurrent sexual partners and infrequent condom use) that occur during active duty service. Universal health care access, the relative ease and frequency of STI screening, and the educational opportunities within the military are all assets in STI control and prevention. The report offers a comprehensive framework on multiple and interrelated influences on STI risk, prevention, health care access, delivery, and treatment. It also provides an overview of the multilevel risk and protective factors associated with STIs that could be applied using a sexual health paradigm. The military context must integrate the multilevel domains of influences to guide the effort to fill current gaps and research needs. The Department of Defense, with its large clinical and preventive medicine workforce and its well-established universal health care system, is well positioned to enact changes to shift its current approach to STI prevention, treatment, and control. STI control based on highlighting behavioral, social, cultural, and

environmental influences on service members' sexual health and wellness may well drive better STI care and prevention outcomes.

https://doi.org/10.1080/08995605.2021.1968289

Combat and operational stress programs and interventions: A scoping review using a tiered prevention framework.

Denise C. Cooper, Marjorie S. Campbell, Margaret Baisley, Christina L. Hein & Tim Hoyt

Military Psychology Published online: 08 Oct 2021

Beginning in 1999, Department of Defense policy directed the military services to develop Combat and Operational Stress Control (COSC) programs to address prevention, early identification, and management of the negative effects of combat and operational stress. The aim of this study is to provide a narrative review of COSC programs and organize them into a prevention framework to clarify gaps and future directions. A systematic search was conducted to identify studies between 2001 and 2020 in peer-reviewed articles or government-sponsored reports describing an evaluation of COSC programs. The target population of these programs was US service members who had participated in an intervention designed to address combat or operational stress in a deployed, operational, or field setting. These programs then were rated for level of evidence and categorized using a tiered prevention model. This search identified 36 published evaluations of 19 COSC programs and interventions from. Most programs were described as effective in addressing target outcomes, with behavioral health outcomes reported for 13 of the 19 identified programs; the remaining six focused on knowledge base and behavior changes. Delivery of these prevention programs also ranged from peer-based implementation to formal treatment, including programs at all prevention levels. COSC interventions show promise for helping service members manage stress, with more than half of the programs showing evidence from studies using randomized designs. Future iterations of COSC program evaluations should explore the development of a joint curriculum using existing content in a tiered prevention framework.

https://doi.org/10.1093/milmed/usab413

Association of Military Employment With Late-Life Cognitive Decline and Dementia: A Population-Based Prospective Cohort Study.

Melinda C Power, ScD, Alia E Murphy, MPH, Kan Z Gianattasio, MPP, Y i Zhang, MS, Rod L Walker, MS, Paul K Crane, MD, MPH, Eric B Larson, MD, Laura E Gibbons, PhD, Raj G Kumar, PhD, Kristen Dams-O'Connor, PhD

Military Medicine Published: 09 October 2021

Introduction

As the number of U.S. veterans over age 65 has increased, interest in whether military service affects late-life health outcomes has grown. Whether military employment is associated with increased risk of cognitive decline and dementia remains unclear.

Materials and Methods

We used data from 4,370 participants of the longitudinal Adult Changes in Thought (ACT) cohort study, enrolled at age 65 or older, to examine whether military employment was associated with greater cognitive decline or higher risk of incident dementia in late life. We classified persons as having military employment if their first or second-longest occupation was with the military. Cognitive status was assessed at each biennial Adult Changes in Thought study visit using the Cognitive Abilities Screening Instrument, scored using item response theory (CASI-IRT). Participants meeting screening criteria were referred for dementia ascertainment involving clinical examination and additional cognitive testing. Primary analyses were adjusted for sociodemographic characteristics and APOE genotype. Secondary analyses additionally adjusted for indicators of early-life socioeconomic status and considered effect modification by age, gender, and prior traumatic brain injury with loss of consciousness TBI with LOC.

Results

Overall, 6% of participants had military employment; of these, 76% were males. Military employment was not significantly associated with cognitive change (difference in modeled 10-year cognitive change in CASI-IRT scores in SD units (95% confidence interval [CI]): -0.042 (-0.19, 0.11), risk of dementia (hazard ratio [HR] [95% CI]: 0.92 [0.71, 1.18]), or risk of Alzheimer's disease dementia (HR [95% CI]: 0.93 [0.70, 1.23]). These results were robust to additional adjustment and sensitivity analyses. There was

no evidence of effect modification by age, gender, or traumatic brain injury with loss of consciousness.

Conclusions

Among members of the Adult Changes in Thought cohort, military employment was not associated with increased risk of cognitive decline or dementia. Nevertheless, military veterans face the same high risks for cognitive decline and dementia as other aging adults.

https://doi.org/10.1080/21635781.2021.1982088

Effects of Sleep Deprivation in Military Service Members on Cognitive Performance: A Systematic Review.

Lyddia A. Petrofsky, Corinne M. Heffernan, Brian T. Gregg & Enrique V. Smith-Forbes

Military Behavioral Health Published online: 10 Oct 2021

The U.S. military has a greater risk for insufficient daily sleep than the U.S. population. No systematic review exists exploring the effects of sleep deprivation on cognitive performance in the U.S. military population. The purpose of this review was to examine the current evidence for the impacts of sleep deprivation on cognitive performance in the U.S. military population. A search was conducted for articles within EBSCOHost and PubMed published between 1990 and 2020. Titles and abstracts were screened. Studies performed in a U.S. military population where researchers assessed the cognitive performance of participants in a sleep deprived state were included for final review. Twelve publications (11 cohort studies, and 1 cross-sectional study) were identified. Findings across these Level 2b studies suggest that cognitive performance is negatively impacted by increased sleep deprivation. More specifically, reaction times, cognitive processing speed, decreased accuracy in response, and efficient and moral decision making were most significantly affected by decreased sleep. Sleep deprivation is a known problem in the military population and has adverse effects on cognitive performance. Future studies to further address the identified specific cognitive deficits, and effective strategies for increasing sleep duration may positively impact cognitive performance within a military population.

https://doi.org/10.1186/s40621-021-00352-8

Clinical strategies for reducing firearm suicide.

Rocco Pallin and Amy Barnhorst

Injury Epidemeology (2021) 8: 57

Suicide is complex, with psychiatric, cultural, and socioeconomic roots. Though mental illnesses like depression contribute to risk for suicide, access to lethal means such as firearms is considered a key risk factor for suicide, and half of suicides in the USA are by firearm. When a person at risk of suicide has access to firearms, clinicians have a range of options for intervention. Depending on the patient, the situation, and the access to firearms, counseling on storage practices, temporary transfer of firearms, or further intervention may be appropriate. In the USA, ownership of and access to firearms for those at risk of suicide is not universally practiced. Given the burden of suicide (particularly by firearm) in the USA, the prevalence of firearm access, and the lethality of suicide attempts with firearms, we present the existing evidence on the burden of firearm suicide and what clinicians can do to reduce their patients' risk. Specifically, we review firearm ownership in the USA, firearm injury epidemiology, risk factors for firearm-related harm, and available interventions to reduce patients' risk of firearm injury and death.

https://doi.org/10.1080/15402002.2021.1982715

Brief Behavioral Treatment for Insomnia: A Meta-Analysis.

Misol Kwon, Jia Wang, Gregory Wilding, Suzanne S. Dickerson & Grace E. Dean

Behavioral Sleep Medicine Published online: 10 Oct 2021

Purpose:

The current study aims to quantify the effect of brief behavioral treatment for insomnia (BBTI) studies through meta-analysis.

Method:

Searches were performed from inception to February 2020, reporting on the effects of BBTI using randomized controlled trials (RCT) (adults aged 32 to 84). The main outcome measures were sleep onset latency (SOL), wake after sleep onset (WASO), sleep efficiency (SE%), and total sleep time (TST).

Results:

BBTI showed improved SOL compared with control group in mean difference at early (-15.42 [95% CI: -33.05 to -12.01; I2 =49%]) and late follow-up (-10.52 [95% CI: -1.12 to 0.54; I2=93%]). This was statistically significant at early follow-up, but not at late follow-up. The improvement of WASO by BBTI over the control group was shown at early follow-up (-17.47 [95% CI: -2.67 to 0.45; I2=90%]), and was statistically significant. For WASO, a non-statistically significant improvement of BBTI over the control group was shown at late follow-up (-12.77 [95% CI: -22.47 to -3.08; I2=0%]). SE% was shown improved statistically significant by BBTI over control group at early (4.47 [95% CI: -0.35 to 9.29; I2=98%]) and at late follow-up (6.52 [95% CI: -4.00 to 17.05; I2=89%]). The TST was shown no improvement by BBTI at early follow-up in mean difference (-2.97 [95% CI -38.83 to 32.90; I2=96%]). At late follow-up, TST was shown improvement in BBTI with mean difference (14.52 [95% CI: -31.64 to 60.68; I2=94%]) compared with the control group.

Conclusion:

Current evidence suggests that BBTI can be considered preliminarily efficacious and can be used for samples of middle-aged and older adults.

https://doi.org/10.1080/08995605.2021.1962191

Role of deployment-related mTBI and resilience in perceived participation limitations among Veterans.

Maya Troyanskaya, Nicholas J. Pastorek, Annette Walder, Elisabeth A. Wilde, Jan E. Kennedy, Harvey S. Levin & Randall S. Scheibel

Military Psychology Published online: 15 Oct 2021

Problems with social functioning are common following combat deployment, and these may be greater among individuals with a history of traumatic brain injury (TBI). The

present investigation examined the impact of mild TBI (mTBI), deployment-related characteristics, and resilience on perceived participation limitations among combat Veterans. This was a cross-sectional study of 143 participants with a history of at least one deployment-related mTBI (TBI group) and 80 without a history of lifetime TBI (Comparison group). Self-report measures of participation, resilience, posttraumatic stress disorder (PTSD) symptoms, and combat exposure were administered. In addition, each participant completed a structured interview to assess lifetime TBI history. The groups did not differ in basic demographics, but significant differences were found for perceived limitations in participation, the presence of PTSD symptoms, and intensity of combat exposure. A stepwise model indicated a significant effect of resilience on reported limitations in participation (adjusted R2 = 0.61). Individuals with higher resiliency reported a higher degree of social participation, and this effect was stronger in the TBI group. Deployment-related characteristics, including intensity of combat exposure, did not have a significant effect (adjusted R2 = 0.28) on social participation. The role of resilience should be recognized within post-deployment transition and rehabilitation programs.

https://doi.org/10.1002/acp.3898

How PTSD Symptoms Affect Memory for New Events and their 'Hotspots' over a Long Delay.

Niels Peter Nielsen, Dorthe Berntsen

Applied Cognitive Psychology First published: 13 November 2021

Memory for traumatic events and their most distressing moments (hotspots) are typically examined in patients with Posttraumatic Stress Disorder (PTSD) using retrospective memory reports for the index trauma. Effects of PTSD symptoms on memory for new (post-trauma) events and their hotspots have received less attention. Here we used a prospective, experimental design to address this question. Participants completed measures of PTSD symptoms, were exposed to either an emotional (N = 54) or a neutral (N = 44) simulated event, reported hotspots, and rated them on memory characteristics. After a 1-year delay, participants once again reported hotspots and rated their memory characteristics. PTSD symptoms obtained before the event predicted emotional intensity, bodily reaction, and distress associated with hotspots from the event after a 1-year delay, irrespective of event type. This suggests that memory for events in general and not just memory of the index trauma is affected by PTSD symptoms.

https://doi.org/10.1002/jts.22769

Temporal dynamics of symptom change among veterans receiving an integrated treatment for posttraumatic stress disorder and substance use disorders.

Christal L. Badour, Julianne C. Flanagan, Nicholas P. Allan, Amanda K. Gilmore, Daniel F. Gros, Therese Killeen, Kristina J. Korte, Delisa G. Brown, Kateryna Kolnogorova, Sudie E. Back

Journal of Traumatic Stress First published: 13 November 2021

The present study examined temporal patterns of symptom change during treatment for comorbid posttraumatic stress disorders (PTSD) and substance use disorders (SUDs). We hypothesized that PTSD symptom severity would predict subsequent-session substance use and that this association would be particularly strong among patients who received an integrated treatment versus SUD-only treatment. Participants were 81 United States military veterans with current PTSD and an SUD who were enrolled in a 12-week, randomized controlled trial examining the efficacy of an integrated treatment called Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure (COPE) compared with cognitive behavioral relapse prevention therapy (RP). Lagged multilevel models indicated that PTSD symptom improvement did not significantly predict the likelihood of next-session substance use (likelihood of use: B = 0.03, SE = 0.02, p = .141; percentage of days using B = -0.02, SE = 0.01, p = .172. Neither substance use, B = 1.53, SE = 1.79, p = .391, nor frequency of use, B = 0.26, SE = 0.50, p = .612, predicted next-session PTSD symptom severity in either treatment condition. Stronger associations between PTSD symptoms and next-session substance use were expected given the self-medication hypothesis. Additional research is needed to better understand the temporal dynamics of symptom change as well as the specific mediators and mechanisms underlying symptom change.

https://doi.org/10.1080/13811118.2021.1988785

Suicide Notes, Attempts, and Attempt Lethality During Episodes of Ideation Among Suicidal Soldiers and Marines.

Tierney K. Huppert, Martina Fruhbauerova, Amanda H. Kerbrat, Christopher R. DeCou & Katherine Anne Comtois

Archives of Suicide Research Published online: 17 Oct 2021

Objective

Suicide remains a significant public health problem among military personnel despite expanded suicide prevention efforts over the last two decades. It is important to understand the behavioral antecedents of suicide, including the writing of a suicide note, to inform efforts to identify imminent risk. However, the completion of a suicide note increasing the likelihood of making a suicide attempt (SA) and predicting a higher lethality SA during episodes of suicidality have not been evaluated.

Method

To determine whether or not the completion of a suicide note increased the likelihood of making a SA during a given episode of suicidal ideation (current or worst) and predicted a higher lethality SA, we conducted secondary data analysis with a sample of 657 help-seeking, active-duty U.S. Soldiers and Marines. We hypothesized that service members who completed a suicide note would be more likely to make a SA during that given episode of suicidality and make a higher lethality SA.

Results

Completion of a suicide note increased the likelihood of making a SA in both current and worst episodes of suicidal ideation. Additionally, writing a suicide note predicted making a higher lethality SA during a service member's current episode of ideation but not their worst episode.

Conclusions

This is the first study to examine note-writing behavior during episodes of suicidal ideation rather than following a suicide death or attempt, demonstrating a non-trivial number (17%) had written a suicide note and this increased the likelihood of making a SA and a higher lethality SA.

HIGHLIGHTS

- The first study of suicide notes during periods of ideation regardless of attempt.
- A suicide note written during an episode of ideation predicted making an attempt.
- A suicide note predicted making a more lethal suicide attempt.

https://doi.org/10.1016/j.brat.2021.103988

Attentional control may be modifiable with Mindfulness-Based Cognitive Therapy to Prevent Suicide.

Megan S. Chesin, John G. Keilp, Anna Kline, Barbara Stanley, ... Alejandro Interian

Behaviour Research and Therapy Volume 147, December 2021, 103988

Highlights

- Combat-stress interference scores improved among Veterans in MBCT-S.
- Negative affective interference scores deteriorated over time with eTAU only.
- Adjunct MBCT-S may bolster attentional control under affective provocation.

Abstract

Objective

To test whether Mindfulness-Based Cognitive Therapy to Prevent Suicide (MBCT-S) is associated with improvement in attentional control, an objective marker of suicide attempt.

Method

In the context of a randomized clinical trial targeting suicide risk in Veterans, computerized Stroop and emotion Stroop (E-Stroop) tasks were administered 3 times over 6-months follow-up to 135 high suicide risk Veterans. Seventy were randomized to receive MBCT-S in addition to enhanced treatment as usual (eTAU), and 65 were randomized to eTAU only. E-Stroop word types included positively- and negatively-valenced emotion, suicide, and combat-related words. Interference scores and mixed effects linear regression analyses were used.

Results

Veterans receiving MBCT-S showed a more favorable trajectory of attentional control

over time, as indicated by performance on two E-Stroop tasks. Combat-stress interference scores improved over time among Veterans in MBCT-S. Interference processing time for negative affective words deteriorated over time among Veterans receiving eTAU only.

Conclusions

MBCT-S may effectively target attentional control, and in particular reduce processing time during affective interference, in high suicide risk Veterans. Future studies to replicate these findings are warranted.

https://doi.org/10.1002/jts.22738

Narrating life in the military: Links between veterans' narrative processing of service experiences and their posttraumatic stress symptoms and well-being.

Peter C. Tappenden, Rebecca L. Shiner, Fanyi Mo

Journal of Traumatic Stress First published: 15 October 2021

Military veterans frequently experience traumatic, highly stressful events; thus, it is especially important for them to find positive ways of making meaning from these experiences. The present study used the methods of narrative personality psychology to investigate the associations between veterans' narrative processing of highly stressful and significant events from their military service and postdischarge functioning, including posttraumatic stress symptoms (PTSS). United States military veterans (N = 154; M age = 64.28 years, 86.4% men, 57.8% deployed) completed an online survey in which they wrote narratives about one "highly stressful" and one "key scene" military service memory and completed questionnaires to assess PTSS, symptoms of depression and anxiety, functional impairment, and well-being. Narratives were coded for personal growth from the experience, themes of agency and interpersonal communion, affective tone, and coherence. In the highly stressful narratives, small-tomoderate negative associations emerged between both growth and agency and PTSS, depression and anxiety, and functional impairment; growth was also modestly positively associated with well-being. In contrast, affective tone and communion were each only associated modestly with one outcome, and coherence with none, and narrative processing of the key scene narrative was not linked with any mental health outcomes. These findings suggest that (1) the theory and methods of narrative identity research

are relevant for studying trauma narratives, and (2) veterans who narrate themselves as growing from and exerting control over their most stressful service experiences may achieve better mental health and day-to-day functioning.

https://doi.org/10.1001/jamahealthforum.2021.3042

Association Between Means Restriction of Poison and Method-Specific Suicide Rates: A Systematic Review.

Lim JS, Buckley NA, Chitty KM, Moles RJ, Cairns R.

JAMA Health Forum October 15, 2021

Key Points

Question

What is the association between means restriction of poison and population-level suicide rates?

Findings

In this systematic review of 62 studies from 26 countries, means restriction of poison was associated with reductions in method-specific suicide rates without an equivalent shift toward other methods. Means restriction was most promising when the poison was lethal and common, and decreases in suicides by the restricted poison were not associated with increases in suicide by other available methods.

Meaning

The findings suggest that restricting access to poisons was associated with decreases in suicide by poisoning. Changes in other methods of suicide were associated with historical trends rather than reduced availability of the poison.

Abstract

Importance

Suicide is a major and preventable cause of death worldwide. Means restriction aims to reduce the rate of completed suicides by limiting public access to lethal suicide methods. Means restriction of agents used in poisoning is more controversial because there is potential to switch to other lethal methods.

Objective

To identify the changes in suicide rate by the targeted poison and the corresponding changes in suicide by other methods.

Evidence Review

Five databases (MEDLINE, Embase, Scopus, PsycInfo, and Web of Science) were searched for studies on national means restriction of poison that were published in the English language from inception until December 31, 2019. Of the 7657 articles that were screened by title and abstract, 62 studies were included in the analysis.

Findings

Sixty-two studies from 26 countries in Europe, the US, Australia, Asia, and the United Kingdom were included in the review. The studies included restrictions on pesticides (15 countries), domestic gas (14 countries), motor vehicle exhaust (9 countries), and pharmaceuticals (8 countries). The median (IQR) change in method-specific suicide rates was -1.18 (-2.03 to -0.46) per 100 000 people after restrictions, whereas the median (IQR) change in other methods of suicide (not the restricted poison) was -0.09 (-2.22 to 1.65) per 100 000 people. Decreases in suicide by the restricted poison were not associated with increases in suicide by other methods. An estimated 57 355 poison-specific suicides annually (before the interventions were implemented) may have benefited the most from means restriction.

Conclusions and Relevance

This systematic review found that means restriction of poison was associated with decreased method-specific suicide rates without an equivalent shift toward the use of other methods. Suicide prevention strategies need to address both individuals who are at risk and population-level policies.

https://doi.org10.1001/jamanetworkopen.2021.29900

Evaluation of the Recovery Engagement and Coordination for Health–Veterans Enhanced Treatment Suicide Risk Modeling Clinical Program in the Veterans Health Administration.

McCarthy JF, Cooper SA, Dent KR, et al.

JAMA Network Open October 18, 2021

Key Points

Question

Is the Veterans Health Administration Recovery Engagement and Coordination for Health–Veterans Enhanced Treatment (REACH VET) program, which facilitates care enhancements for individuals in the top 0.1% suicide risk tier using a validated algorithm, associated with health care utilization, treatment engagement, suicide attempts, suicide safety plan documentation, and suicide mortality?

Findings

In this cohort study including 173 313 individuals before and after implementation of the REACH VET program using triple differences, inclusion in the REACH VET program was associated with having more outpatient encounters, increased documentation of new suicide prevention safety plans, and fewer inpatient mental health admissions, emergency department visits, and documented suicide attempts.

Meaning

These findings suggest that clinical programs using predictive modeling can support care enhancements and risk reduction.

Abstract

Importance

The Veterans Health Administration (VHA) implemented a national clinical program using a suicide risk prediction algorithm, Recovery Engagement and Coordination for Health–Veterans Enhanced Treatment (REACH VET), in which clinicians facilitate care enhancements for individuals identified in local top 0.1% suicide risk tiers. Evaluation studies are needed.

Objective

To determine associations with treatment engagement, health care utilization, suicide attempts, safety plan documentation, and 6-month mortality.

Design, Setting, and Participants

This cohort study used triple differences analyses comparing 6-month changes in outcomes after vs before program entry for individuals entering the REACH VET program (March 2017-December 2018) vs a similarly identified top 0.1% suicide risk tier cohort from prior to program initiation (March 2014-December 2015), adjusting for trends across subthreshold cohorts. Subcohort analyses (including individuals from March 2017-June 2018) evaluated difference-in-differences for cause-specific mortality using death certificate data. The subthreshold cohorts included individuals in the top

0.3% to 0.1% suicide risk tier, below the threshold for REACH VET eligibility, from the concurrent REACH VET period and from the pre–REACH VET period. Data were analyzed from December 2019 through September 2021.

Exposures

REACH VET-designated clinicians treatment reevaluation and outreach for care enhancements, including safety planning, increased monitoring, and interventions to enhance coping.

Main Outcomes and Measures

Process outcomes included VHA scheduled, completed, and missed appointments; mental health visits; and safety plan documentation and documentation within 6 months for individuals without plans within the prior 2 years. Clinical outcomes included mental health admissions, emergency department visits, nonfatal suicide attempts, and allcause, suicide, and nonsuicide external-cause mortality.

Results

A total of 173 313 individuals (mean [SD] age, 51.0 [14.7] years; 161 264 [93.1%] men and 12 049 [7.0%] women) were included in analyses, including 40 816 individuals eligible for REACH VET care and 36 604 individuals from the pre–REACH VET period in the top 0.1% of suicide risk. The REACH VET intervention was associated with significant increases in completed outpatient appointments (adjusted triple difference [ATD], 0.31; 95% CI, 0.06 to 0.55) and proportion of individuals with new safety plans (ATD, 0.08; 95% CI, 0.06 to 0.10) and reductions in mental health admissions (ATD, -0.08; 95% CI, -0.10 to -0.05), emergency department visits (ADT, -0.03; 95% CI, -0.06 to -0.01), and suicide attempts (ADT, -0.05; 95% CI, -0.06 to -0.03). Subcohort analyses did not identify differences in suicide or all-cause mortality (eg, age-and-sexadjusted difference-in-difference for suicide mortality, 0.0007; 95% CI, -0.0006 to 0.0019).

Conclusions and Relevance

These findings suggest that REACH VET implementation was associated with greater treatment engagement and new safety plan documentation and fewer mental health admissions, emergency department visits, and suicide attempts. Clinical programs using risk modeling may be effective tools to support care enhancements and risk reduction.

https://doi.org/10.1177/15346501211049452

Dialectical Behavior Therapy and Cognitive Processing Therapy Delivered Sequentially to a Woman Veteran: A Promising Alternative to Concurrent Dialectical Behavior Therapy–Prolonged Exposure.

Graham Cooper, Alycia Zink, Shiloh E. Jordan

Clinical Case Studies First Published October 19, 2021

Post-traumatic stress disorder (PTSD) and borderline personality disorder (BPD) are complex and chronic conditions that result in impairment across a number of clinically significant domains. Although the two diagnoses reflect distinct clinical syndromes, they often present comorbidly. Furthermore, the comorbidity of the two diagnoses predicts increased symptomatology and may also result in treatment difficulties that would not arise when treating PTSD without a concurrent BPD diagnosis. The challenging nature of comorbid PTSD and BPD diagnoses has led to an increased interest in integrative approaches to treating both diagnoses together. Recent research has suggested that the integration of prolonged exposure (PE; an evidence-based therapy for PTSD) and dialectical behavior therapy (DBT; an evidence-based therapy for BPD) into one treatment approach (CBT-PE) can offer superior outcomes when compared to treating each diagnosis separately. However, at this time, the literature does not document any such examinations with regards to cognitive processing therapy (CPT), another evidence-based therapy for PTSD. This paper reflects a first step towards exploring the integration of CPT and DBT. In this case, a female-identified military Veteran seeking care at a Veterans Affairs healthcare system was treated utilizing integrated, though sequential, CPT and DBT. The clinical results of this case are discussed, as are the implications for other clinicians considering integrating CPT and DBT.

https://doi.org/10.1016/j.sleh.2021.08.002

Prevalence and predictors of insomnia and sleep medication use in a large triservice US military sample.

Rachel R. Markwald, Felicia R. Carey, Claire A. Kolaja, Isabel G. Jacobson, ... Evan D. Chinoy

Sleep Health Available online 22 October 2021

Objective

The presence of insomnia in the general military population is not well known. This study aimed to determine the prevalence of probable clinical insomnia and identify factors leading to new-onset insomnia and/or sleep medication use in a large military population.

Design

Cross-sectional and longitudinal analyses of a prospective cohort study.

Participants

A tri-service US military and veteran cohort (sample range 99,383-137,114).

Measurements

Participants were surveyed in 2013 (Time 1 [T1]) and 2016 (Time 2 [T2]) using the clinically validated Insomnia Severity Index. The prevalence of insomnia and sleep medication use was quantified at both times. Multivariable models identified military factors associated with new-onset insomnia and/or sleep medication use while adjusting for covariates.

Results

The prevalence of insomnia at T1 and T2 was 16.3% and 11.2%, respectively. Newonset insomnia at T2 was reported by 6.0% of participants screening negative at T1; risk factors included Army service, combat deployment experience, and separation from military service. The prevalence of sleep medication use at T1 and T2 was 23.1% and 25.1%, respectively. Sleep medication use at T2 was newly-reported by 17.1% of participants not reporting sleep medication use at T1; risk factors included number of deployments and having a healthcare occupation.

Conclusions

The prevalence of probable clinical insomnia in this large general military population is within the range of previous reports in military and civilian populations. Certain military factors that predict new-onset insomnia and/or sleep medication use should be considered when designing and implementing sleep interventions in military populations.

https://doi.org/10.1002/jclp.23268

Suicide attempts among adults denying active suicidal ideation: An examination of the relationship between suicidal thought content and suicidal behavior.

Heather M. Wastler, AnnaBelle O. Bryan, Craig J. Bryan

Journal of Clinical Psychology First published: 21 October 2021

Objectives

The purpose of the current study was to examine the possibility that there are multiple pathways to suicidal behavior by conducting a fine-grained investigation of the relationship between suicidal thought content and suicidal behavior.

Methods

Six thousand two hundred US adults completed self-report measures of suicidal thoughts and behaviors. Descriptive statistics and logistic regression were used to examine the relationship between suicidal thoughts and behaviors.

Results

About 36.0% of participants with a lifetime suicide attempt denied ever experiencing any active suicidal thoughts and 11.0% denied ever experiencing any suicidal thoughts; 53.8% of recent attempters denied recent active suicidal thoughts and 22.6% denied any recent suicidal thoughts. Additionally, the sole presence of passive suicidal ideation was associated with increased odds of lifetime and past-month suicide attempts.

Conclusions

These findings suggest that there are likely multiple pathways to suicide, some of which do not involve progressively worsening suicidal thoughts.

https://doi.org/10.1037/tra0001150

Patterns of acute stress disorder in a sample of blast-injured military service members: A latent profile analysis.

Straud, C. L., Moring, J. C., Hale, W. J., McMahon, C., Moore, B. A., Baker, M. T., Bryant, R. A., Young-McCaughan, S., Isler, W. C., Lara-Ruiz, J., Lancaster, C. L., Mintz, J., & Peterson, A. L.

Psychological Trauma: Theory, Research, Practice, and Policy Advance online publication

Objective:

The primary aims of this study were to identify latent profiles of acute stress disorder (ASD) symptoms and to evaluate postconcussive symptom differences across the identified profiles as measured by the Acute Stress Disorder Scale and the Military Acute Concussion Evaluation, respectively.

Method:

Participants (N = 315) in the current study were predominantly active-duty (75.0%), enlisted (97.8%) males (97.4%) serving in the U.S. Army (87.8%). Approximately, half of the sample reported being married or engaged (51.1%) and was on average 25.94 (SD = 6.31) years old. Participants were referred to the Air Force Theater Hospital, 332nd Air Expeditionary Wing, Joint Base Balad, Iraq, to be evaluated as part of routine clinical assessment for neurocognitive and psychological symptoms following exposure to a blast.

Results:

A 3-profile solution was identified as the most parsimonious and best-fitting model based on statistical model fit indices. Blast injured service members in Profile 3 had greater ASD total and subscale severity compared to the other 2 subgroups, with effect size estimates largely differing by hyperarousal and reexperiencing symptoms. Furthermore, Profiles 2 and 3 were more likely to demonstrate postconcussive symptoms compared to Profile 1.

Conclusions:

Findings provide novel information on heterogenous ASD symptom profiles during the acute phase following a blast injury and highlight the relationship between psychological and physical symptoms. Classification of blast-injured service members may help identify at-risk individuals who would benefit from further clinical care and mitigate long-term psychological and neurocognitive issues. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

Links of Interest

The services haven't been properly handling sexual assault cases, IG finds <u>https://www.militarytimes.com/news/pentagon-congress/2021/11/10/the-services-havent-been-properly-handling-sexual-assault-cases-ig-finds/</u>

• Full Report -- <u>Evaluation of Special Victim Investigation and Prosecution</u> <u>Capability Within the Department of Defense</u>

Concussions require more time for recovery than previously thought, DOD-funded study finds

https://www.stripes.com/theaters/us/2021-11-10/concussion-athletes-study-cadetsrecovery-3565508.html

• Journal Article -- <u>The Natural History of Sport-Related Concussion in Collegiate</u> <u>Athletes: Findings from the NCAA-DoD CARE Consortium</u>

Women of color are lagging behind in Air Force's push for diversity <u>https://www.airforcetimes.com/news/your-air-force/2021/11/10/women-of-color-are-lagging-behind-in-air-forces-push-for-diversity/</u>

• Full Report -- Report of Inquiry Addendum (S8918P) Disparity Review

Kids of wounded veterans to get support, attention under new 'hidden helpers' campaign

https://www.militarytimes.com/military-honor/salute-veterans/2021/11/10/kids-ofwounded-veterans-to-get-support-attention-under-new-hidden-helpers-campaign/

How Psychologists Can Help Treat Chronic Pain https://www.nytimes.com/2021/11/09/well/mind/psychologists-chronic-pain-therapy.html

I Was Shot By A Sniper In Iraq. Here's What You Don't Understand About Life After War <u>https://www.huffpost.com/entry/veteran-purple-heart-iraq-</u> war n 6182c789e4b06de3eb6f9684

The services aren't screening for suicide risk and assuring resources for separating troops, IG finds

https://www.militarytimes.com/news/pentagon-congress/2021/11/12/the-services-arent-screening-for-suicide-risk-and-assuring-resources-for-separating-troops-ig-finds/

• Full Report -- Evaluation of the Department of Defense's Implementation of Suicide Prevention Resources for Transitioning Uniformed Service Members (DODIG-2022-030) She was homeless in Modesto at 16; now she's an aircraft carrier officer and nurse <u>https://www.stripes.com/branches/navy/2021-11-13/homeless-child-rises-to-officer-on-aircraft-carrier-lt-cmdr-susan-murphy-3606253.html</u>

Empowering military families through family-building choices <u>https://www.militarytimes.com/opinion/commentary/2021/11/14/empowering-military-families-through-family-building-choices/</u>

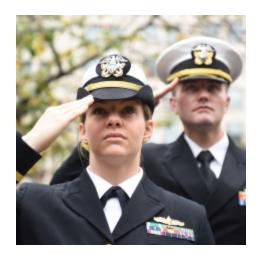
Resource of the Week -- MedlinePlus: Veterans and Military Health

Military service members and veterans have made sacrifices to our country, and they face different health issues than civilians. During their service, they are at risk for various injuries. These injuries can happen during combat, while others involve physical stress to the body. Sometimes the injuries are life-threatening or serious enough to cause disability. Others may not be as serious, but can be painful and affect daily life. Specific types of injuries include:

- Shrapnel and gunshot wounds
- Lost limbs
- Head and brain injuries
- Tinnitus and hearing loss, typically from exposure to noise
- Sprains and strains
- Limited range of motion, especially in ankles and knees

There may also be a risk of health problems from exposure to environmental hazards, such as contaminated water, chemicals, infections, and burn pits.

Being in combat and being separated from your family can be stressful. The stress can put service members and veterans at risk for mental health problemss. These include anxiety, post-traumatic stress disorder, depression, and substance use. Suicide can also be a concern.



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