

Research Update -- February 10, 2022

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https://doi.org/10.17226/26353

Letter Report on Review of Department of Veterans Affairs Monograph on the Economic Impact and Cost Effectiveness of Service Dogs on Veterans with Post Traumatic Stress Disorder.

National Academies of Sciences, Engineering, and Medicine/The National Academies Press

2021

Service dogs have been promoted as a potential intervention for veterans with posttraumatic stress disorder (PTSD); however, research supporting their effectiveness is limited. At the request of the U.S. Department of Veterans Affairs (VA), the National Academies provided iterative reviews of a VA monograph that assesses the economic impact and cost effectiveness of programs involving trained service dogs or emotional support dogs and veterans with PTSD. The reviews evaluated the draft monograph with regard to consistency and the use of accepted scientific principles. Working from this input, the VA finalized and released the monograph, The Economic Impact and Cost Effectiveness of Service Dogs for Veterans with Post Traumatic Stress Disorder, in January 2022.

https://doi.org/10.1080/16506073.2021.1996453

Web-based provider training of cognitive behavioral therapy of insomnia: engagement rates, knowledge acquisition, and provider acceptability.

Allison K. Wilkerson, Sophie Wardle-Pinkston, Jessica R. Dietch, Kristi E. Pruiksma, Richard Oliver Simmons, Brian E. Bunnell & Daniel J. Taylor

Cognitive Behaviour Therapy Published online: 31 Jan 2022 Insomnia is common but severely underreported and undertreated. One possible reason for this problem is the lack of providers in cognitive behavioral therapy for insomnia (CBT-I). To address this we created CBTIweb.org, an online training platform for providers to learn the basics of sleep, assessing insomnia, and CBT-I. The present study assessed the reach of CBTIweb by examining engagement, knowledge acquisition, and perceived acceptability. Participants who registered for CBTIweb selfreported their practice setting and personal characteristics (i.e. degree, profession, licensure status). Knowledge acquisition was assessed with pre- and post-tests, and provider acceptability was assessed via a survey. In the first three months after launching CBTIweb, 2586 providers registered and 624 of these completed the training within three months of registering. Chi-square tests of independence revealed no differences in completion rates by education or profession, though trainees were more likely to initiate and complete treatment than licensed providers. Paired t tests revealed significant knowledge acquisition, and most providers positively rated the website navigation, content, aesthetics, and understanding of core CBT-I skills. This study demonstrated CBTIweb is an effective platform for training health professionals to be minimally proficient in the gold standard treatment for insomnia disorder.

https://doi.org/10.1080/16506073.2021.2009019

Very long-term outcome of cognitive behavioral therapy for insomnia: one- and ten-year follow-up of a randomized controlled trial.

Susanna Jernelöv, Kerstin Blom, Nils Hentati Isacsson, Pontus Bjurner, Ann Rosén, Martin Kraepelien, Erik Forsell & Viktor Kaldo

Cognitive Behaviour Therapy Published online: 31 Jan 2022

Insomnia is a common and chronic disorder, and cognitive behavioral therapy (CBT) is the recommended treatment. Very long-term follow-ups of CBT are very rare, and this study aimed to investigate if improvements were stable one and ten years after CBT for insomnia (CBT-i). Based on a three-armed randomized controlled trial of bibliotherapeutic CBT-i, participants received an insomnia-specific self-help book and were randomized to therapist guidance, no guidance, or a waitlist receiving unguided treatment after a delay. Six weeks of treatment was given to 133 participants diagnosed with insomnia disorder. After one and ten years, participants were assessed with selfreports and interviews. Improvements were statistically significant and well maintained at one- and ten-year follow-ups. Average Insomnia Severity Index score [95%CI] was 18.3 [17.7–18.8] at baseline, 10.1 [9.3–10.9] at post-treatment, 9.2 [8.4–10.0] at oneand 10.7 [9.6–11.8] at ten-year follow-up, and 64% and 66% of participants no longer fulfilled criteria for an insomnia diagnosis at one and ten years, respectively. Positive effects of CBT were still present after ten years. Insomnia severity remained low, and two-thirds of participants no longer fulfilled criteria for an insomnia diagnosis. This extends previous findings of CBT, further confirming it as the treatment of choice for insomnia.

https://doi.org/10.1037/adb0000804

Co-occurring alcohol and mental health problems in the military: Prevalence, disparities, and service utilization.

Ayer, L., Ramchand, R., Karimi, G., & Wong, E. C.

Psychology of Addictive Behaviors Advance online publication

Objective:

To examine the prevalence of co-occurring alcohol and mental health (MH) problems (COPs), perceived MH service need, and MH service utilization among active duty service members, and to identify differences in gender, race/ethnicity, age, and sexual orientation and gender identity.

Method:

16,699 active duty service members participated in the Department of Defense's 2015 Health Related Behaviors Survey. Measures included demographics, combat deployment, smoking status, problematic alcohol use (Alcohol Use Disorders Identification Test-C, AUDIT-C), posttraumatic stress disorder (PTSD Checklist, Civilian Version, PCL-C), depression (Patient Health Questionnaire-9, PHQ-9), anxiety (Generalized Anxiety Disorder-7, GAD-7), and perceived need for and use of MH services. We examined groups of service members with probable: COP, alcohol problem only, MH problem only, and neither.

Results:

Eight percent of service members reported COPs, 26.89% reported alcohol use problem only, and 9.41% reported a MH condition only. COPs were more common

among those who were lesbian, gay, bisexual, and transgender (LGBT), those who had three or more combat deployments, and smokers, and less common among those aged 35 years and older, Asian or Black, and in the Air Force and Coast Guard (relative to Navy). Those reporting a probable MH problem only were significantly less likely to report use of past year MH counseling than those with probable COPs; otherwise, patterns of service utilization and perceived need were similar.

Conclusions:

COPs are common enough that screening for and attention to their co-occurrence are needed in the military, and some subgroups of service members are at particularly high risk for COPs. Future research and policy should delve deeper into how the needs of service members with COPs can be addressed. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

https://doi.org/10.1037/ser0000607

Opioid use disorder with chronic pain increases disease burden and service use.

MacLean, R. R., Sofuoglu, M., Stefanovics, E., & Rosenheck, R.

Psychological Services Advance online publication

To address the ongoing opioid epidemic, there has been an increased focus on the treatment and evaluation of opioid use disorder (OUD). OUD and chronic pain (CP) frequently co-occur; however, little is known about the additional comorbidities that present when they occur together as compared to when either condition presents alone. Using data from Fiscal Year 2012 Veteran's Health Administration, all veterans diagnosed with both OUD + CP were compared to those diagnosed with OUD or CP alone on socioenvironmental characteristics, medical and mental health diagnoses, and Veterans Affairs (VA) clinical service use. Veterans with OUD + CP (n = 33,166), compared to those with OUD only (n = 12,517), had higher numbers of medical conditions. Compared to those with CP only (n = 2,015,368), veterans with OUD + CP had higher rates of homelessness and substance use diagnoses. Most mental health diagnoses, numbers of psychotropic medication fills, opioid prescriptions, and use of all other services were higher in the OUD + CP group than in either single disorder group. Multinomial regression analysis revealed stronger effects for medical disorders and medical–surgical outpatient service use in the comparison of OUD + CP with OUD only

and stronger effects for substance use and mental health disorders and use of prescription opiates in the comparison with CP only. These findings suggest that concurrent OUD + CP imposes exceptional disease and clinical service burdens that likely require the development of simultaneous, integrated approaches to treatment. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

https://doi.org/10.3389/fpubh.2021.809357

Impact of Military Service in Vietnam on Coping and Health Behaviors of Aging Veterans During the COVID-19 Pandemic.

Stellman, J. M., Stellman, S. D., Spiro, A., 3rd, Pless Kaiser, A., & Smith, B. N.

Frontiers in Public Health 2022 Jan 17; 9: 809357

Many Vietnam War veterans who experienced military trauma still exhibit PTSD symptomatology. Little is known about how new stressful situations, like the COVID-19 pandemic, affect previously traumatized people or whether they will react differently to them. We explore whether military combat experiences in Vietnam affect veterans' perceived abilities to cope with COVID-19 and whether current PTSD symptoms and later-adulthood reengagement with trauma memories are related to coping. We examine the extent that current PTSD symptoms and trauma reengagement relate to preventive practices. Participants were part of a randomly sampled cohort of American Legionnaires who responded to two previous surveys (1984, 1998), were born 1945-1953 and deployed to Vietnam 1963-1973, thus representing an aging veteran population. A survey supplement assessed coping with the pandemic and adherence to public health guidelines. The response rate was 74% (N = 507); 422 (61.6%) completed the COVID-19 supplement. Military experiences were found to affect coping with 41.4% reporting they affected ability to cope with COVID-19. Medium- and high-combat veterans were more likely to report that military experience affected coping than lowcombat (OR 2.4, 95% CI 1.51-3.96; 2.6, 95% CI 1.41-4.61, respectively). Those with high PTSD scores had 7.7-fold (95% CI 4.3-13.17) increased likelihood of reporting that their coping was affected, compared to low-PTSD scorers. Few adopted social distancing (4%), staying at home (17%), or ceasing usual activities (32%); high-combat veterans were least likely to stay home. Veterans who practiced handwashing, sanitizer use, mask-wearing, and surface disinfection had significantly higher PTSD scores than those who did not. Veterans with higher scores on the LOSS-SF scale associated more

reengagement with trauma memories and were more likely to engage in personal preventive strategies. Analysis of open-ended responses supported these findings. We conclude that fifty years after returning from Vietnam, PTSD scores were high for high-combat veterans, suggestive of PTSD diagnosis. Military experiences affected coping with COVID both positively and negatively, and may have helped instill useful personal health behaviors. Veterans, especially those with PTSD symptomatology, may have special needs during stressful times, like the COVID-19 pandemic, affecting compliance with recommended practices, as well as their overall health and well-being.

https://doi.org/10.1093/milmed/usac022

Comparison of Musculoskeletal Injury and Behavioral Health Diagnoses Among U.S. Army Active Duty Servicewomen in Ground Combat and Non-Ground Combat Military Occupational Specialties.

Phillips, K. J., Banaag, A., Lynch, L. C., Wu, H., Janvrin, M., & Koehlmoos, T. P.

Military Medicine 022 Feb 2; usac022

Introduction:

The U.S. Army's Soldier 2020 program, which started in January 2016, was designed to achieve full integration of women in all military occupational specialties. This study was undertaken to determine differences in risk of musculoskeletal injury and behavioral health (BH) disorders among U.S. Army Active Duty Servicewomen (ADSW) in ground combat military occupational specialties (MOS) versus those in non-ground combat MOS since the start of the program until January 2019.

Materials and methods:

Using healthcare claims data from the Military Health System's Data Repository we conducted a cross-sectional study on ADSW from January 1, 2016 to January 1, 2019 and categorized them as either ground combat specialists (GCSs) or non-ground combat specialists (NGCSs). We identified all female soldiers in our cohort with a musculoskeletal injury (MSKI) and/or BH diagnosis during the study period. A multivariable logistic regression, adjusted by pregnancy or delivery status, was used to assess risk factors associated with GCS and included soldier age, race, body mass index (BMI), tobacco use, alcohol/substance use, and MSKI and BH status as predictor variables.

Results:

A total of 92,443 U.S. Army ADSW were identified, of whom 3,234 (3.5%) were GCS (infantry, field artillery, cavalry/armor, and air defense) and 89,209 (96.5%) were in nonground combat billets. A large difference was observed when comparing the age of the population by occupation; GCS women were predominantly between the ages of 18-23 years (71.9%), compared to NGCS women aged 18-23 (41.0%). Top MSKI and BH diagnoses for both occupations were joint pain (44.9% GCS, 50.2% NGCS) and adjustment disorders (26.2% GCS, 28.0% NGCS). GCS women had lower odds for musculoskeletal injury (0.86 AOR, 0.79-0.93 CI, P = 0.0002), obesity per BMI classification (0.82 AOR, 0.70-0.97 CI, P = 0.0214), and BH disorders (0.87 AOR, 0.80-0.95 CI, P = 0.0019); and higher odds for tobacco use (1.44 AOR, 1.27-1.63 CI, P < 0.0001), substance use (1.36 AOR, 1.04-1.79 CI, P = 0.0257), and alcohol use (1.18 AOR, 1.02-1.38 CI, P = 0.0308) when compared to NGCS women.

Conclusions:

With the increasing focus on soldier medical readiness in today's U.S. Army, the health of all soldiers is of paramount concern to command groups, unit leaders, and individual soldiers. The integration of women into ground combat military occupational specialties is a relatively new program; further longitudinal research of these groups should follow, focusing on their progression and improvement in soldier readiness, overall health, and the well-being of all servicewomen.

https://doi.org/10.1037/tra0001098

Sleep disorder symptoms and massed delivery of prolonged exposure for posttraumatic stress disorder: Nodding off but not missing out.

Sherrill, A. M., Patton, S. C., Bliwise, D. L., Yasinski, C. W., Maples-Keller, J., Rothbaum, B. O., & Rauch, S.

Psychological Trauma : Theory, Research, Practice and Policy 2022 Feb; 14(2): 173-177

Objective:

The impact of disrupted sleep on the effectiveness of prolonged exposure (PE) therapy for posttraumatic stress disorder (PTSD) is not well understood. Researchers have suggested that comorbid sleep disorders contribute to nonresponse by impairing

therapeutic mechanisms such as emotional processing of trauma memories and extinction in cued fear conditioning. Several studies indicate daytime sleepiness, insomnia, and nightmares are correlated with PTSD symptom severity. However, a recent randomized controlled trial found that these sleep disorder symptoms did not affect PTSD symptom change over the course of massed PE (i.e., daily sessions across 2 weeks).

Method:

The current study used an ecologically valid clinical sample to examine whether daytime sleepiness, insomnia, and nightmares interfere with the slope of symptom change in massed PE.

Results:

Results indicate that all 3 sleep disorder symptoms correlate with PTSD symptom severity on the first day of treatment but were not associated with symptom change.

Conclusions:

These findings are consistent with the expectation that the daily structure of massed PE may enhance treatment engagement in patients who are typically drowsy or not well-rested, thus facilitating fear extinction. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

https://doi.org/10.1002/jts.22762

Change in posttraumatic stress disorder–related thoughts during treatment: Do thoughts drive change when pills are involved?

Sheila A.M. Rauch, H. Myra Kim, Margaret R. Venners, Katherine E. Porter, Sonya B. Norman, Naomi M. Simon, Barbara O. Rothbaum, Peter W. Tuerk, Ronald E. Acierno, Eric Bui, Corey Powell, Erin R. Smith, Elizabeth Goetter, Lauren B. McSweeney

Journal of Traumatic Stress First published: 31 December 2021

Posttraumatic negative thoughts about one's self and the world are related to posttraumatic stress disorder (PTSD) symptom severity and change in cognitive behavioral treatment (CBT), but little is known about this association when CBT is delivered with medication. The current study presents a planned comparison of changes

in negative posttraumatic thoughts during (a) prolonged exposure (PE) plus pill placebo (PE+PLB), (b) sertraline plus enhanced medication management (SERT+EMM), and (c) PE plus sertraline (PE+SERT) as part of a randomized clinical trial in a sample of 176 veterans. Lagged regression modeling revealed that change in posttraumatic negative thoughts was associated with PTSD symptom change in the conditions in which participants received sertraline, ds = 0.14-0.25, ps = 0.04-.001). However, contrary to previous research, the models that started with symptom change were also statistically significant, d = 0.23, p < .001, for the lagged effect of symptoms on negative thoughts about self in the SERT+EMM condition, indicating a bidirectional association between such thoughts and PTSD symptoms. In the PE+PLB condition, no significant association between posttraumatic thoughts and PTSD symptom reduction in PE may be altered when combined with pill administration, either active or placebo.

https://doi.org/10.1093/milmed/usab542

Measuring the Impact of Operational Stress: The Relevance of Assessing Stressrelated Health Across the Deployment Cycle.

Niclas Wisén, Psychologist, Gerry Larsson, PhD, Psychologist, Mårten Risling, MD, PhD, Ulf Arborelius, MD, PhD

Military Medicine Published: 03 January 2022

Introduction

Mental health issues from intense or prolonged stress are a common concern in regard to military deployment. Deployments can objectively vary in stress exposure, but it is the individuals' perception of that stress that affects sustainability, mental health, and combat fitness, which calls for the need of a protocol to evaluate and maintain a current estimation of stress impact. So, how can we assess the impact of stressors during different phases of deployment?

Materials and Methods

We used three psychological self-rating forms, the PSS14—Perceived Stress Scale, SMBM—Shirom Melamed Burnout Measure, and KSQ—Karolinska Sleep Questionnaire, to measure the impact of stress before (T1), during (T2), and at

homecoming (T3). We also wanted to see if T1 or T2 results could predict T3 results to be able to better prepare the homecoming program. The forms were handed out to Swedish soldiers deployed in Mali in 2017. The forms were collected as a way to assess the status of the mental health load at three timepoints based on the personnel function as a way to assess the current "psychological fitness level".

Results

The results show that stress measured using PSS14 was high at homecoming. The same result was observed for SMBM. No measures from T1 or T2 could however predict the T3 results.

Conclusions

Taken together, we found that screening of all contingent staff is relatively easy and provides personnel with relevant data on mental health and stress at the current time. We also found that test results correlated between T1 and T2 but not with T3. This indicates that there might be different stressors that affect staff at different timepoints.

https://doi.org/10.1007/s10597-021-00935-1

Effects of Social Network Characteristics on Mental Health Outcomes Among United States Army Reserve and National Guard Soldiers.

Bonnie M. Vest, Erin M. Anderson Goodell, D. Lynn Homish & Gregory G. Homish

Community Mental Health Journal Published: 03 January 2022

We sought to examine the relative salience of multiple social network structural characteristics (e.g., size, composition, quality, substance use) for understanding soldiers' mental health symptoms (anger, anxiety, depression, PTSD). Data are drawn from soldiers (N = 421) participating in the Operation: SAFETY study. Negative binomial regression models examined the relationship between ten social network characteristics and mental health outcomes, controlling for age, sex, years of military service, and deployment history. Greater number of close network ties was associated with fewer symptoms of anger, anxiety, and depression (ps < 0.05), but not PTSD. Having more illicit drug-using network ties was associated with greater severity of anxiety symptoms (p < 0.05). Finally, more days spent drinking with network members was related to higher levels of anger (p < 0.05). Interpersonal relationships that entail substance use

are associated with greater anxiety and anger while a greater number of close ties is associated with fewer anger, anxiety, and depression symptoms.

https://doi.org/10.1089/lgbt.2021.0246

Identifying Posttraumatic Stress Disorder and Disparity Among Transgender Veterans Using Nationwide Veterans Health Administration Electronic Health Record Data.

Nicholas A. Livingston, Kristine E. Lynch, Zig Hinds, Elise Gatsby, Scott L. DuVall, and Jillian C. Shipherd

LGBT Health Online Ahead of Print: January 4, 2022

Purpose:

The prevalence of posttraumatic stress disorder (PTSD) and other psychiatric disorders is high among military veterans and even higher among transgender veterans. Prior prevalence estimates have become outdated, and novel methods of estimation have since been developed but not used to estimate PTSD prevalence among transgender veterans. This study provides updated estimates of PTSD prevalence among transgender transgender and cisgender veterans.

Methods:

We examined Veterans Health Administration (VHA) medical record data from October 1, 1999 to April 1, 2021 for 9995 transgender veterans and 29,985 cisgender veteran comparisons (1:3). We matched on age group at first VHA health care visit, sex assigned at birth, and year of first VHA visit. We employed both probabilistic and rule-based algorithms to estimate the prevalence of PTSD for transgender and cisgender veterans.

Results:

The prevalence of PTSD was 1.5–1.8 times higher among transgender veterans. Descriptive data suggest that the prevalence of depression, schizophrenia, bipolar disorder, alcohol and non-alcohol substance use disorders, current/former smoking status, and military sexual trauma was also elevated among transgender veterans.

Conclusion:

The PTSD and overall psychiatric burden observed among transgender veterans was significantly higher than that of their cisgender peers, especially among recent users of VHA care. These PTSD findings are consistent with prior literature and minority stress theory, and they were robust across probabilistic and two rule-based methods employed in this study. As such, enhanced and careful screening, outreach, and evidence-based practices are recommended to help reduce this disparity among transgender veterans.

https://doi.org/10.4103/jfmpc.jfmpc_98_21

Military TBI—What civilian primary care providers should know.

Lindberg, Megan A.; Sloley, Stephanie S.; Ivins, Brian J.; Marion, Donald W.; Moy Martin, Elisabeth M.

Journal of Family Medicine and Primary Care December 2021

In June 2019, the Department of Veterans Affairs (VA) launched the VA Mission Act, which expanded veterans' health care access to doctors within the private sector. This Act increased the number of veterans eligible to receive treatment in the private sector from 8% to 40% of the VA's 9.5 million patients.[1] Each year approximately 200,000 U.S. military service members (SMs) transition out of the military and into civilian life.[2] This transition may present unique challenges as the veteran shifts to a new set of demands. Oftentimes, SMs and veterans are instilled with an ethos from the military culture that influences beliefs about seeking or obtaining assistance within the health care system. Although many veterans have healthcare access through the Military Health System and VA, only 34% pursue care through these resources.[3] This means that a majority are obtaining their healthcare in the civilian sector, most likely primary care. It is therefore important for civilian primary care providers to have an understanding of military culture and recognize these influences to maximize treatment effectiveness and outcomes. Additionally, members of the Reserves, National Guard, and some Active Duty SMs obtain their healthcare in the civilian community.

Traumatic brain injury (TBI) is second only to musculoskeletal injuries as one of the most prevalent injuries encountered in the military.[4] Sustaining one or more TBIs is associated with the development of distinct comorbidities and physiological sequelae that can impair function and decrease quality of life. Therefore, TBI is an important

factor to consider when assessing and treating veterans and SMs. In this article, we discuss the unique characteristics of military TBI, influences of military culture, and considerations for civilian practitioners and/or primary care providers who may treat SMs and veterans with persistent TBI-related symptoms. Understanding the differences between civilian and military TBI may inform prognosis and treatment and enables practitioners to provide more personalized care to achieve better outcomes.

https://doi.org/10.1177/23743735211069833

What Do You Want Us to Know?: Learning From Life Stories to Improve Veterans' Healthcare Experiences.

Rosen M, Nguyen BA, Khetarpal S, Sgro G.

Journal of Patient Experience First Published January 4, 2022

My Life My Story (MLMS) is a national Veterans Health Administration (VA) life story interview program that aims to provide more humanistic care for veterans by focusing on the patient as a person. Our project took place at the Pittsburgh VA Healthcare System and had 3 main goals: (1) describe themes that emerge in MLMS interviews from the prompting question, what do you want your healthcare provider to know about you?; (2) identify topics of importance to veterans and suggest ways for healthcare providers to explore them; and (3) foster a culture at the Pittsburgh VA that places not only the health but also the personal triumphs, hardships, and aspirations of veterans at the center. Veterans provided verbal consent to have their previously recorded stories used in this study. Stories were coded and then analyzed for patterns and themes. A total of 17 veterans participated in our study. Themes that emerged from the stories include (1) Early Hardships; (2) Economic Disadvantage; (3) Polaroid Snapshots; (4) Around the World; (5) Haunted by Combat; (6) Life-altering Moments; (7) Homecoming; (8) Romantic Beginnings & Obstacles; (9) Inequity across Gender & Race; and (10) Facing Mortality. This study's findings underscore the need to address the traumas associated with military service, as well as the challenges faced with re-integration into civilian life, when working with veterans. The MLMS interviews explored in this study can help clinicians identify topics of importance to veterans, strengthen their relationships with their patients, and improve the care that veterans receive.

https://doi.org/10.1186/s12909-021-03024-9

Talking about firearm injury prevention with patients: a survey of medical residents.

Rocco Pallin, Sara Teasdale, Alicia Agnoli, Sarabeth Spitzer, Rameesha Asif-Sattar, Garen J. Wintemute & Amy Barnhorst

BMC Medical Education 22, Article number: 14 (2022)

Background

Firearm injury and death are significant public health problems in the U.S. and physicians are uniquely situated to help prevent them. However, there is little formal training in medical education on identifying risk for firearm injury and discussing safe firearm practices with patients. This study assesses prior education, barriers to counseling, and needs for improved training on firearm safety counseling in medical education to inform the development of future education on clinical strategies for firearm injury prevention.

Method

A 2018 survey administered to 218 residents and fellows at a large, academic medical center asked about medical training on firearm injury prevention, frequency of asking patients about firearm access, and perceived barriers.

Results

The most common barriers cited were not knowing what to do with patients' answers about access to firearms (72.1%), not having enough time (66.2%), not feeling comfortable identifying patients at-risk for firearm injury (49.2%), and not knowing how to ask patients about firearm access (48.6%). Prior education on firearm injury prevention was more strongly associated with asking than was personal exposure to firearms: 51.5% of respondents who had prior medical education reported asking compared with who had not received such education (31.8%, p=0.004). More than 90% of respondents were interested in further education about interventions, what questions to ask, and legal mechanisms to separate dangerous people from their firearms.

Conclusions

Education on assessing risk for firearm-related harm and, when indicated, counseling

on safe firearm practices may increase the likelihood clinicians practice this behavior, though additional barriers exist.

https://doi.org/10.1016/j.socscimed.2022.114702

Changes in the health and broader well-being of U.S. veterans in the first three years after leaving military service: Overall trends and group differences.

DS Vogt, SC Borowski, LR Godier-McBard, MJ Fossey, LA Copeland, DF Perkins, EP Finley

Social Science & Medicine Volume 294, February 2022

Highlights

- The proportion of veterans reporting poor outcomes increased over time.
- Female veterans were at greater risk for declines in health and broader wellbeing.
- Results highlight the value of bolstering support for new military veterans.
- Prevention and intervention efforts should target at-risk veteran subgroups.

Abstract

Objectives

Scholars have theorized that the initial period after military discharge may be a particularly vulnerable time for veterans. Yet, several recent studies raise the prospect that risk for poor adjustment may actually increase rather than decrease over time. The current study examined whether the U.S. military veteran population experiences improvements or declines in their health and broader well-being during the first three years after leaving military service and documented differences based on gender, military rank, and warzone deployment history.

Methods

A population-based sample of 3733 newly separated veterans completed a survey within three months of separation (Fall 2016), followed by five additional surveys at sixmonth intervals. Weighted multilevel logistic regressions were conducted to examine changes in the proportion of veterans reporting good health and broader well-being over time.

Results

Most aspects of veterans' health and broader well-being worsened over time, with a noteworthy increase in reporting of mental health conditions and a decline in veterans' community involvement. Declines in the proportion of veterans reporting good health and well-being were most notable for women, with smaller differences observed for other subgroups.

Conclusions

The finding that veterans experienced worsening health and broader well-being over time highlights the need for enhanced prevention and early intervention efforts to mitigate these declines. Findings also point to the importance of attending to the unique readjustment concerns of female veterans and other at-risk subgroups.

https://doi.org/10.1097/HTR.0000000000000759

Longitudinal Analysis of Persistent Postconcussion Symptoms, Probable TBI, and Intimate Partner Violence Perpetration Among Veterans.

Portnoy, Galina A.; Relyea, Mark R.; Presseau, Candice; Orazietti, Skye; Martino, Steve; Brandt, Cynthia A.; Haskell, Sally G.

Journal of Head Trauma Rehabilitation 37(1): 34-42, January/February 2022

Objective:

To determine veterans' intimate partner violence (IPV) perpetration following report of traumatic brain injury (TBI) and persistent postconcussion symptoms (PPCSs).

Setting: Five Department of Veterans Affairs (VA) medical centers.

Participants:

Veterans with nonmissing data on main measures, resulting in N = 1150 at baseline and N = 827 at follow-up.

Design:

Prospective cohort study with secondary data analysis of self-reported TBI, PPCSs, and

IPV perpetration, controlling for common predictors of IPV, including binge drinking, marijuana use, pain intensity, and probable posttraumatic stress disorder.

Main Measures:

VA TBI Screening Tool to assess for probable TBI and PPCSs; Conflict Tactics Scale-Revised (CTS-2S) to assess for IPV perpetration.

Results:

Almost half (48%) of participants reported IPV perpetration at follow-up. Both probable TBI and higher PPCSs at baseline were associated with overall IPV perpetration and more frequent IPV perpetration at follow-up. Only PPCSs significantly predicted IPV perpetration after controlling for common predictors of IPV perpetration. Neither probably TBI nor PPCSs predicted frequency of IPV perpetration.

Conclusion:

When considered alongside common risk factors for IPV perpetration, PPCS was uniquely associated with the likelihood of IPV perpetration in this veteran sample. Given post-9/11 veterans' elevated risk for head injury, findings emphasize the distinctive value of PPCSs in understanding risk for IPV perpetration. We recommend increased assessment for PPCSs in clinical practice among veterans enrolled in VA care and highlight several important areas for future research and intervention development.

https://doi.org/10.1186/s40779-021-00363-y

Military traumatic brain injury: a challenge straddling neurology and psychiatry.

Ling-Zhuo Kong, Rui-Li Zhang, Shao-Hua Hu & Jian-Bo Lai

Military Medical Research Published: 06 January 2022

Military psychiatry, a new subcategory of psychiatry, has become an invaluable, intangible effect of the war. In this review, we begin by examining related military research, summarizing the related epidemiological data, neuropathology, and the research achievements of diagnosis and treatment technology, and discussing its comorbidity and sequelae. To date, advances in neuroimaging and molecular biology have greatly boosted the studies on military traumatic brain injury (TBI). In particular, in terms of pathophysiological mechanisms, several preclinical studies have identified abnormal protein accumulation, blood-brain barrier damage, and brain metabolism abnormalities involved in the development of TBI. As an important concept in the field of psychiatry, TBI is based on organic injury, which is largely different from many other mental disorders. Therefore, military TBI is both neuropathic and psychopathic, and is an emerging challenge at the intersection of neurology and psychiatry.

https://doi.org/10.1007/s10826-021-02161-5

Exploring the Advocacy Experiences of Military Families with Children Who Have Disabilities.

Janeth Aleman-Tovar, Kristen Schraml-Block, Robyn DiPietro-Wells & Meghan Burke

Journal of Child and Family Studies Published: 11 January 2022

When children with disabilities receive appropriate services, they experience long-term developmental benefits. Yet, military families of children with disabilities in the United States report lacking access to needed services and having difficulty navigating service delivery systems. Unlike civilian families, military families face added stressors such as deployment and relocation. Parent advocacy may be critical for military families of children with disabilities to access needed services. However, little research has explored advocacy among military families. The purpose of this exploratory study was to examine the advocacy experiences of military families of children with disabilities. Using a snowballing sampling, we conducted individual interviews with 11 military parents of children with disabilities from five states. Participants reported unique military experiences (e.g., satisfaction with the coverage of their healthcare program but had difficulty navigating healthcare policies), barriers to advocacy (e.g., limited school resources), and facilitators to advocacy (e.g., perseverance and resilience). Based on the findings, implications for practice and research are discussed.

https://doi.org/10.1080/16506073.2021.2001689

Testing the role of aerobic exercise in the treatment of posttraumatic stress disorder (PTSD) symptoms in U.S. active duty military personnel: a pilot study.

Stacey Young-McCaughan, Alan L. Peterson, Jim Mintz, Willie J. Hale, Katherine A. Dondanville, Elisa V. Borah, Tabatha H. Blount, Abby E. Blankenship, Brooke A. Fina, Brittany N. Hall-Clark, Ann Marie Hernandez, Vanessa M. Jacoby, Steffany L. Malach, Jacob M. Williams, Katherine E. Compton, Mona O. Bingham, Catherine A. Vriend, Alice W. Inman, Antoinette Brundige, Sonya M. Arzola, M. Danet Lapiz-Bluhm, Douglas E. Williamson, Brett T. Litz, Elizabeth A. Hembree, John D. Roache, Daniel J. Taylor, Kristi E. Pruiksma, Adam M. Borah & Jeffrey S. Yarvis

Cognitive Behaviour Therapy Published online: 10 Jan 2022

The purpose of this pilot study was to determine if the efficacy of imaginal exposure for symptoms of posttraumatic stress disorder (PTSD) could be improved by adding aerobic exercise. We hypothesized that aerobic exercise would enhance the efficacy of exposure therapy. Active duty service members with clinically significant symptoms of posttraumatic stress (PTSD Checklist—Stressor-Specific Version, [PCL-S], ≥25) were randomized into one of four conditions: exercise only; imaginal exposure only; imaginal exposure plus exercise; no exercise/no exposure therapy (control). Participants (N = 72) were primarily male, Army, noncommissioned officers ranging in age from 22 to 52. PTSD symptom severity decreased over time (p < .0001); however, there were no significant differences between the experimental conditions. The prediction that imaginal exposure alone or aerobic exercise alone was not supported, suggesting that engaging in exercise and imaginal exposure simultaneously may not be any better than engaging in either activity alone. A better understanding of individually administered and combined exercise and exposure therapy interventions for PTSD is warranted.

https://doi.org/10.1080/09638237.2021.2022625

Social isolation and well-being in veterans with mental illness.

Teresa Ann Grenawalt, Junfei Lu, Karl Hamner, Christopher Gill & Emre Umucu

Journal of Mental Health Published online: 10 Jan 2022

Background Veterans with mental illness are a growing population in the United States (US). For some veterans, their military service has a negative effect on well-being. Social isolation is problematic for veterans' mental health by increasing incidence of depression, suicidal ideation or attempts, and readmittance to psychiatric hospitals. Social support is a protective factor for individuals with mental illness and is key to a successful military-to-civilian transition.

Aim

Thus, we examine the relationship of social isolation on well-being among veterans with any mental illness.

Methods

This cross-sectional correlational study consisted of a sample of 146 US veterans with any mental illness. A three-step hierarchical regression analysis was used to determine if social isolation is a predictor of well-being after controlling for demographics, functional limitations and depression.

Results

Findings revealed social isolation was positively correlated with functional limitations (r = 0.48, p < 0.001), depression (r = 0.66, p < 0.001) and negatively correlated with wellbeing (r = -.64, p < 0.001). Hierarchical regression analysis revealed social isolation was negatively correlated (β = -.44, p < 0.001) with well-being. Overall, our three-step model accounted a total of 50% of variance in well-being, a large effect size.

Conclusion

The findings underscore the importance of assessing the relationship of social isolation on well-being in veterans with mental illness. The findings also highlight promising targets to improve prevention and psychosocial interventions to improve well-being among veterans with mental illness.

https://doi.org/10.1080/00918369.2021.2015952

Lesbian Gay Bisexual Transgender and Queer Health-Care Experiences in a Military Population.

Pedro N. Oblea, Ashley R. Adams, Elizabeth D. Nguyen-Wu, Joshua S. Hawley-Molloy, Kimberly Balsam, Terry A. Badger, Amanda R. Witwer & Joel Cartwright

Journal of Homosexuality Published online: 10 Jan 2022

This study aimed to understand the experiences of lesbian, gay, bisexual, transgender, and queer of former military service members. Data for this analysis was collected from the two open-ended survey questions as part of a larger online survey. The analysis was performed using the web-based data analysis application Dedoose. Eighty-eight qualitative responses were used. Analysis of the responses revealed five main themes: (1) identity, (2) negative experiences, (3) impact of experiences, (4) policy, and (5) positive experiences. These findings can influence future military research by focusing on the effects of the Don't Ask Don't Tell policy, negative and positive experiences, and the impact of those experiences.

https://doi.org/10.1037/cps0000033

To support and defend: A eusociality-based account of suicide in U.S. military service members and first responders.

Ringer, F. B., Rogers, M. L., Podlogar, M. C., Chu, C., Gai, A. R., & Joiner, T.

Clinical Psychology: Science and Practice 2021; 28(4), 380–390

Humans are eusocial, a term used to describe "colony life" systems in highly social species. Eusocial features include specialized defense and cooperative care of the young, self-sacrificial characteristics that aid in the survival of the extended community. A eusociality-based perspective on suicide views suicide as a dysfunction of the self-sacrificial aspect of eusociality. We consider a eusociality-based conceptualization of suicide in military personnel and first responders, groups that may be characterized as eusocial defenders. Military personnel, veterans, and first responders display unique factors that may be associated with increased suicide risk and exhibit consistent behavioral, environmental, and temperamental traits. We conceptualize these traits considering a eusociality-based view and draw out implications for suicide prevention among military and first responder populations. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

https://doi.org/10.1001/jamanetworkopen.2021.40911

Effect of Written Exposure Therapy vs Cognitive Processing Therapy on Increasing Treatment Efficiency Among Military Service Members With Posttraumatic Stress Disorder: A Randomized Noninferiority Trial.

Sloan, D. M., Marx, B. P., Resick, P. A., Young-McCaughan, S., Dondanville, K. A., Straud, C. L., Mintz, J., Litz, B. T., Peterson, A. L., & STRONG STAR Consortium

JAMA Network Open 2022 Jan 4; 5(1): e2140911

Importance:

Posttraumatic stress disorder (PTSD) occurs more commonly among military service members than among civilians; however, despite the availability of several evidence-based treatments, there is a need for more efficient evidence-based PTSD treatments to better address the needs of service members. Written exposure therapy is a brief PTSD intervention that consists of 5 sessions with no between-session assignments, has demonstrated efficacy, and is associated with low treatment dropout rates, but prior randomized clinical trials of this intervention have focused on civilian populations.

Objective:

To investigate whether the brief intervention, written exposure therapy, is noninferior in the treatment of PTSD vs the more time-intensive cognitive processing therapy among service members diagnosed with PTSD.

Design, setting, and participants:

The study used a randomized, noninferiority design with a 1:1 randomization allocation. Recruitment for the study took place from August 2016 through October 2020. Participants were active-duty military service members diagnosed with posttraumatic stress disorder. The study was conducted in an outpatient setting for service members seeking PTSD treatment at military bases in San Antonio or Killeen, Texas.

Interventions:

Participants received either written exposure therapy, which consisted of 5 weekly sessions, or cognitive processing therapy, which consisted of 12 twice-weekly sessions.

Main outcomes and measures:

Participants were assessed at baseline and at 10, 20, and 30 weeks after the first treatment session. The primary outcome measure was PTSD symptom severity

assessed with the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5). Noninferiority was defined as the difference between the 2 groups being less than the upper bound of the 1-sided 95% CI-specified margin of 10 points on the CAPS-5.

Results:

Overall, 169 participants were included in the study. Participants were predominantly male (136 [80.5%]), serving in the Army (167 [98.8%]), with a mean (SD) age of 34 (8) years. Eighty-five participants were randomly assigned to written exposure therapy, with 65 (76.5%) completing all treatment sessions, and 84 to cognitive processing therapy, with 47 (54.8%) completing all treatment sessions. Findings indicated that written exposure therapy was noninferior to cognitive processing therapy, with the largest difference in change in outcome between the treatment conditions of 3.96 points on the outcome measure. The 1-sided 95% CI upper limit was less than 10 points across time points in both groups and ranged from 4.59 at week 30 to 6.81 at week 10. Within-condition effect sizes ranged from a Cohen d of 0.48 for the written exposure therapy group in the intention-to-treat analysis at week 10, and between-condition effect size ranged from 0.06 in the intention-to-treat analysis at week 30 to 0.22 in the per-protocol analysis at week 10.

Conclusions and relevance:

In this randomized clinical trial, support was found for an effective and more efficient PTSD treatment approach for service members. Future research should determine who does and does not benefit from PTSD treatment to best maximize treatment outcomes.

Trial registration: ClinicalTrials.gov Identifier: <u>NCT03033602</u>.

https://doi.org/10.1089/tmj.2021.0294

Teletherapy Versus In-Person Psychotherapy for Depression: A Meta-Analysis of Randomized Controlled Trials.

Annaleis K. Giovanetti, Stephanie E.W. Punt, Eve-Lynn Nelson, and Stephen S. Ilardi

Telemedicine and e-Health Online Ahead of Print: January 10, 2022

Introduction:

The recent surge in telehealth service delivery represents a promising development in the field's ability to address access gaps in health care across underserved populations. Telehealth also carries the potential to help reduce the societal burden of mental illnesses such as major depression, which often go untreated. There is now a sufficiently large corpus of randomized controlled trials to examine the comparative effectiveness of teletherapy and in-person services meta-analytically.

Methods:

We searched the PubMed, PsycINFO, and Cochrane Central Register of Controlled Trials (CENTRAL) databases for articles from January 1, 2000 to February 1, 2021 to identify randomized head-to-head trials of video-based versus in-person delivery of psychotherapy to reduce depressive symptoms. We conducted a random-effects metaanalysis to evaluate potential differences in efficacy rates. We calculated and metaanalyzed odds ratios to examine differential attrition rates between video and in-person conditions. Finally, we conducted subgroup analyses based on the primary treatment focus (depression or another condition) of each trial.

Results:

Primary study analyses yielded evidence that video-based psychotherapy is roughly comparable in efficacy with in-person psychotherapy for reducing depressive symptoms (g = 0.04, 95% confidence interval [CI = -0.12 to 0.20], p = 0.60, I2 = 5%). Likewise, attrition rates between the two conditions were not significantly different (odds ratio = 1.07, 95% CI = [0.78 to 1.49], p = 0.63, I2 = 25%). Finally, we did not observe significant subgroup differences in either efficacy (p = 0.38) or attrition (p = 0.94).

Conclusions:

The present findings suggest that video-based teletherapy may be a feasible and effective alternative to in-person services for reducing depressive symptoms. Continued research on the effectiveness of telehealth in clinically depressed samples, and further elucidation of the access barriers entailed by each delivery modality, can help the field better determine which patients will derive the greatest benefit from each mode of intervention.

Links of Interest

Military kids face delays, inequities in getting special education services <u>https://www.militarytimes.com/pay-benefits/2022/02/03/military-kids-face-delays-inequities-in-getting-special-education-services/</u>

US service members balk at some duty posts over racism fears, survey finds <u>https://www.stripes.com/theaters/us/2022-02-02/racism-study-military-families-troops-blue-star-4524140.html</u>

• Blue Star Families Racial Equity and Inclusion reports

A Healthy Mind and Body: The Psychological Aspects of Weight Loss https://www.health.mil/News/Articles/2022/01/27/A-Healthy-Mind-and-Body-The-Psychological-Aspects-Weight-Loss

Mild Traumatic Brain Injury in Young Veterans Linked to Lower Scores on Cognitive Tests

https://journals.lww.com/neurotodayonline/Fulltext/2022/01060/Mild Traumatic Brain I njury in Young Veterans.7.aspx

Air Force Invisible Wounds Initiative helps build a supportive culture <u>https://health.mil/News/Articles/2022/02/04/Air-Force-Invisible-Wounds-Initiative-helps-build-a-supportive-culture</u>

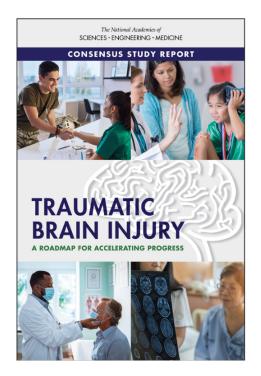
Meet the First Coast Guard Sponsored USU Medical Student https://health.mil/News/Articles/2021/12/09/Meet-First-Coast-Guard-Sponsored-USU-Medical-Student

Resource of the Week - Traumatic Brain Injury: <u>A Roadmap for Accelerating</u> <u>Progress</u> (2022)

New, from the National Academies of Sciences, Engineering, and Medicine:

Every community is affected by traumatic brain injury (TBI). Causes as diverse as falls, sports injuries, vehicle collisions, domestic violence, and military incidents can result in injuries across a spectrum of severity and age groups. Just as the many causes of TBI and the people who experience it are diverse, so too are the physiological, cognitive, and behavioral changes that can occur following injury. The overall TBI ecosystem is not limited to healthcare and research, but includes the related systems that administer and finance healthcare, accredit care facilities, and provide regulatory approval and oversight of products and therapies. TBI also intersects with the wide range of community organizations and institutions in which people return to learning, work, and play, including the education system, work environments, professional and amateur sports associations, the criminal justice system, and others.

Traumatic Brain Injury: A Roadmap for Accelerating Progress examines the current landscape of basic, translational, and clinical TBI research and identifies gaps and opportunities to accelerate research progress and improve care with a focus on the biological, psychological, sociological, and ecological impacts. This report calls not merely for improvement, but for a transformation of attitudes, understanding, investments, and care systems for TBI.



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