

Research Update -- March 9, 2023

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https://doi.org/10.1001/jamanetworkopen.2022.49422

Massed vs Intensive Outpatient Prolonged Exposure for Combat-Related Posttraumatic Stress Disorder: A Randomized Clinical Trial.

Peterson, A. L., Blount, T. H., Foa, E. B., Brown, L. A., McLean, C. P., Mintz, J., Schobitz, R. P., DeBeer, B. R., Mignogna, J., Fina, B. A., Evans, W. R., Synett, S., Hall-Clark, B. N., Rentz, T. O., Schrader, C., Yarvis, J. S., Dondanville, K. A., Hansen, H., Jacoby, V. M., Lara-Ruiz, J., ... Consortium to Alleviate PTSD

JAMA Network Open 2023 Jan 3; 6(1): e2249422

Importance:

Improved, efficient, and acceptable treatments are needed for combat-related posttraumatic stress disorder (PTSD).

Objective:

To determine the efficacy of 2 compressed prolonged exposure (PE) therapy outpatient treatments for combat-related PTSD.

Design, setting, and participants:

This randomized clinical trial was conducted among military personnel and veterans at 4 sites in Texas from 2017 to 2019. Assessors were blinded to conditions. Data were analyzed from November 2020 to October 2022.

Interventions:

The interventions were massed-PE, which included 15 therapy sessions of 90 minutes each over 3 weeks, vs intensive outpatient program PE (IOP-PE), which included 15 full-day therapy sessions over 3 weeks with 8 treatment augmentations. The IOP-PE intervention was hypothesized to be superior to massed-PE.

Main outcomes and measures:

Coprimary outcomes included the Clinician-Administered PTSD Scale for Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) (DSM-5) (CAPS-5) and the PTSD Checklist for DSM-5 (PCL-5) administered at baseline and posttreatment follow-ups. Measures ranged from 0 to 80, with higher scores indicating greater severity. Diagnostic remission and reliable change were secondary outcomes.

Results:

Among 319 military personnel and veterans screened, 234 were randomized (mean [SD] age, 39.20 [7.72] years; 182 [78%] male participants), with 117 participants randomized to IOP-PE and 117 participants randomized to massed-PE. A total of 61 participants (26%) were African American, 58 participants (25%) were Hispanic, and 102 participants (44%) were White; 151 participants (65%) were married. Linear mixedeffects models found that CAPS-5 scores decreased in both treatment groups at the 1month follow-up (IOP-PE: mean difference, -13.85 [95% CI, -16.47 to -11.23]; P < .001; massed-PE: mean difference, -14.13 [95% CI, -16.63 to -11.62]; P < .001). CAPS-5 change scores differed from 1- to 6-month follow-ups (mean difference, 4.44 [95% CI, 0.89 to 8.01]; P = .02). PTSD symptoms increased in massed-PE participants during follow-up (mean difference, 3.21 [95% CI, 0.65 to 5.77]; P = .01), whereas IOP-PE participants maintained treatment gains (mean difference, 1.23 [95% CI, -3.72 to 1.27]; P = .33). PCL-5 scores decreased in both groups from baseline to 1-month follow-up (IOP-PE: mean difference, -21.81 [95% CI, -25.57 to -18.04]; P < .001; massed-PE: mean difference, -19.96 [95% CI, -23.56 to -16.35]; P < .001) and were maintained at 6 months (IOP-PE: mean change, -0.21 [95% CI, -3.47 to 3.06]; P = .90; massed-PE: mean change, 3.02 [95% CI, -0.36 to 6.40]; P = .08). Both groups had notable PTSD diagnostic remission at posttreatment (IOP-PE: 48% [95% CI, 36% to 61%] of participants; massed-PE: 62% [95% CI, 51% to 73%] of participants), which was maintained at 6 months (IOP-PE: 53% [95% CI, 40% to 66%] of participants; massed-PE: 52% [95% CI, 38% to 66%] of participants). Most participants demonstrated reliable change on the CAPS-5 (61% [95% CI, 52% to 69%] of participants) and the PCL-5 (74% [95% CI, 66% to 81%] of participants) at the 1-month follow-up.

Conclusions and relevance:

These findings suggest that PE can be adapted into compressed treatment formats that effectively reduce PTSD symptoms.

https://doi.org/10.1016/j.sleep.2022.11.015

Short sleep duration is associated with a wide variety of medical conditions among United States military service members.

Knapik, J. J., Caldwell, J. A., Steelman, R. A., Trone, D. W., Farina, E. K., & Lieberman, H. R.

Sleep Medicine

2023 Jan; 101: 283-295

Objectives:

This cross-sectional study investigated self-reported sleep duration and its association with a comprehensive range of clinically-diagnosed medical condition categories (CDMCs), as well as the relationship between short sleep duration (≤6 h) and demographic/lifestyle factors, among United States military service members (SMs).

Methods:

A stratified random sample of SMs (n = 20,819) completed an online questionnaire on usual daily hours of sleep and demographic/lifestyle characteristics. CDMCs for a sixmonth period prior to questionnaire completion were obtained from a comprehensive military electronic medical surveillance system and grouped into 33 CDMCs covering both broad and specific medical conditions. Prevalence of CDMCs was compared among three sleep duration categories ($\leq 4, 5-6$ and ≥ 7 h).

Results:

SMs reported a mean \pm standard deviation of 6.3 \pm 1.4 h of sleep per day. After adjustment for demographic/lifestyle characteristics, shorter sleep duration was associated with higher odds of a medical condition in 25 of 33 CDMCs, with most (n = 20) demonstrating a dose-response relationship. The five CDMCs with the largest differences between \leq 4 vs \geq 7 h sleep were: diseases of the nervous system (odds ratio [OR] = 2.9, 95% confidence interval [95%CI] = 2.4-3.4), mental/behavioral diseases (OR = 2.7, 95%CI = 2.3-3.2), diseases of the musculoskeletal system (OR = 1.9, 95%CI = 1.6-2.1), diseases of the circulatory system (OR = 1.7, 95%CI = 1.3-2.2), and diseases of the digestive system (OR = 1.6, 95%CI = 1.2-2.0). Six hours of sleep or less was independently associated with older age, less formal education, race, Hispanic ethnicity, higher body mass index, smoking, and military service branch.

Conclusions:

In this young, physically active population, reporting shorter sleep duration was associated with a higher risk of multiple CDMCs.

https://doi.org/10.1371/journal.pone.0280217

Trends in suicide rates by race and ethnicity among members of the United States Army.

Brenner, L. A., Forster, J. E., Walsh, C. G., Stearns-Yoder, K. A., Larson, M. J., Hostetter, T. A., Hoffmire, C. A., Gradus, J. L., & Adams, R. S.

PLoS One 2023 Jan 17; 18(1): e0280217

Efforts were focused on identifying differences in suicide rates and time-dependent hazard rate trends, overall and within age groups, by race and ethnicity among United States Army members who returned from an index deployment (October 2007 to September 2014). This retrospective cohort study was conducted using an existing longitudinal database, the Substance Use and Psychological Injury Combat Study (SUPIC). Demographic (e.g., race and ethnicity) and military data from the Department of Defense compiled within SUPIC, as well as Department of Veterans Affairs data were linked with National Death Index records (through 2018) to identify deaths by suicide including those that occurred after military service. The cohort included 860,930 Army Service members (Active Duty, National Guard, and Reserve). Age-adjusted (using the direct standardization method) and age-specific suicide rates per 100,000 person years were calculated and rate ratios (RR) were used for comparisons. Trends were evaluated using hazard rates over time since the end of individuals' index deployments. Among those aged 18-29 at the end of their index deployment, the suicide rate for American Indian/Alaskan Native (Al/AN) individuals was 1.51 times higher (95% confidence interval [CI]: 1.03, 2.14) compared to White non-Hispanic individuals (WNH), and lower for Hispanic and Black non-Hispanic (BNH) than for WNH individuals (RR = 0.65 [95% CI: 0.55, 0.77] and RR = 0.71 [95% CI: 0.61, 0.82], respectively). However, analyses revealed increasing trends in hazard rates post-deployment (≤ 6.5 years) within groups of Hispanic and BNH individuals (Average Annual Percent Change [APC]: 12.1% [95% CI: 1.3%, 24.1%] and 11.4% [95% CI: 6.9%, 16.0%], respectively) with a smaller, increase for WNH individuals (APC: 3.1%; 95% CI: 0.1%, 6.1%). Findings highlight key subgroups at risk for post-deployment suicide (i.e., WNH, AI/AN and younger individuals), as well as heterogeneous trends overtime, with rates and trends varying within race and ethnic groups by age groups. Post-deployment suicide prevention efforts that address culturally relevant factors and social determinants of health associated with health inequities are needed.

https://doi.org/10.1001/jama.2023.0589

Borderline Personality Disorder: A Review.

Leichsenring, F., Heim, N., Leweke, F., Spitzer, C., Steinert, C., & Kernberg, O. F.

JAMA February 28, 2023 329(8), 670–679

Importance

Borderline personality disorder (BPD) affects approximately 0.7% to 2.7% of adults in the US. The disorder is associated with considerable social and vocational impairments and greater use of medical services.

Observations

Borderline personality disorder is characterized by sudden shifts in identity, interpersonal relationships, and affect, as well as by impulsive behavior, periodic intense anger, feelings of emptiness, suicidal behavior, self-mutilation, transient, stressrelated paranoid ideation, and severe dissociative symptoms (eg, experience of unreality of one's self or surroundings). Borderline personality disorder is typically diagnosed by a mental health specialist using semistructured interviews. Most people with BPD have coexisting mental disorders such as mood disorders (ie, major depression or bipolar disorder) (83%), anxiety disorders (85%), or substance use disorders (78%). The etiology of BPD is related to both genetic factors and adverse childhood experiences, such as sexual and physical abuse. Psychotherapy is the treatment of choice for BPD. Psychotherapy such as dialectical behavior therapy and psychodynamic therapy reduce symptom severity more than usual care, with medium effect sizes (standardized mean difference) between -0.60 and -0.65. There is no evidence that any psychoactive medication consistently improves core symptoms of BPD. For discrete and severe comorbid mental disorders, eg, major depression, pharmacotherapy such as the selective serotonin reuptake inhibitors escitalopram, sertraline, or fluoxetine may be prescribed. For short-term treatment of acute crisis in BPD, consisting of suicidal behavior or ideation, extreme anxiety, psychotic episodes, or other extreme behavior likely to endanger a patient or others, crisis management is required, which may include prescription of low-potency antipsychotics (eg. quetiapine) or off-label use of sedative antihistamines (eg, promethazine). These drugs are preferred over benzodiazepines such as diazepam or lorazepam.

Conclusions and Relevance

Borderline personality disorder affects approximately 0.7% to 2.7% of adults and is associated with functional impairment and greater use of medical services. Psychotherapy with dialectical behavior therapy and psychodynamic therapy are first-

line therapies for BPD, while psychoactive medications do not improve the primary symptoms of BPD.

https://doi.org/10.1001/jamapsychiatry.2022.5144

Association of Frailty With Risk of Suicide Attempt in a National Cohort of US Veterans Aged 65 Years or Older.

Kuffel, R. L., Morin, R. T., Covinsky, K. E., Boscardin, W. J., Lohman, M. C., Li, Y., & Byers, A. L.

JAMA Psychiatry 2023 Feb 22; e225144

Importance:

Frailty is associated with reduced physiological reserve, lack of independence, and depression and may be salient for identifying older adults at increased risk of suicide attempt.

Objectives:

To examine the association between frailty and risk of suicide attempt and how risk differs based on components of frailty.

Design, setting, and participants:

This nationwide cohort study integrated databases from the US Department of Veterans Affairs (VA) inpatient and outpatient health care services, Centers for Medicare & Medicaid Services data, and national suicide data. Participants included all US veterans aged 65 years or older who received care at VA medical centers from October 1, 2011, to September 30, 2013. Data were analyzed from April 20, 2021, to May 31, 2022.

Exposures:

Frailty, defined based on a validated cumulative-deficit frailty index measured using electronic health data and categorized into 5 levels: nonfrailty, prefrailty, mild frailty, moderate frailty, and severe frailty.

Main outcomes and measures:

The main outcome was suicide attempts through December 31, 2017, provided by the national Suicide Prevention Applications Network (nonfatal attempts) and Mortality Data

Repository (fatal attempts). Frailty level and components of the frailty index (morbidity, function, sensory loss, cognition and mood, and other) were assessed as potential factors associated with suicide attempt.

Results:

The study population of 2 858 876 participants included 8955 (0.3%) who attempted suicide over 6 years. Among all participants, the mean (SD) age was 75.4 (8.1) years; 97.7% were men, 2.3% were women, 0.6% were Hispanic, 9.0% were non-Hispanic Black, 87.8% were non-Hispanic White, and 2.6% had other or unknown race and ethnicity. Compared with patients without frailty, risk of suicide attempt was uniformly higher among patients with prefrailty to severe frailty, with adjusted hazard ratios (aHRs) of 1.34 (95% CI, 1.27-1.42; P < .001) for prefrailty, 1.44 (95% CI, 1.35-1.54; P < .001) for mild frailty, 1.48 (95% CI, 1.36-1.60; P < .001) for moderate frailty, and 1.42 (95% CI, 1.29-1.56; P < .001) for severe frailty. Lower levels of frailty were associated with greater risk of lethal suicide attempt (aHR, 1.20 [95% CI, 1.12-1.28] for prefrail veterans). Bipolar disorder (aHR, 2.69; 95% CI, 2.54-2.86), depression (aHR, 1.78; 95% CI, 1.67-1.87), anxiety (aHR, 1.36; 95% CI, 1.28-1.45), chronic pain (aHR, 1.22; 95% CI, 1.15-1.29), use of durable medical equipment (aHR, 1.14; 95% CI, 1.03-1.25), and lung disease (aHR, 1.11; 95% CI, 1.06-1.17) were independently associated with increased risk of suicide attempt.

Conclusions and relevance:

This cohort study found that among US veterans aged 65 years or older, frailty was associated with increased risk of suicide attempts and lower levels of frailty were associated with greater risk of suicide death. Screening and involvement of supportive services across the spectrum of frailty appear to be needed to help reduce risk of suicide attempts.

https://doi.org/10.1002/jts.22915

Predictors of treatment completion in group psychotherapy for male veterans with posttraumatic stress disorder.

Sarah A. Stoycos, Sara R. Berzenski, J. Gayle Beck, William Unger, Jessica M. Cappellano, Christopher M. Spofford, Denise M. Sloan

Journal of Traumatic Stress First published: 13 February 2023 Group therapy is a frequently used therapy format for posttraumatic stress disorder (PTSD). However, factors contributing to treatment completion remain understudied. The current study examined predictors of treatment completion, defined as having completed 10 out of 14 sessions within 16 weeks, in veterans with PTSD who engaged in a hybrid efficacy-effectiveness randomized controlled trial of group psychotherapy for PTSD. Veterans (N = 198) were randomly assigned to 14 sessions of either group cognitive behavioral treatment (GBCT; n = 98) or group present-centered treatment (GPCT; n = 100). Four primary domains of predictors were examined, encompassing sociodemographic factors, the severity of PTSD and comorbid conditions, modifiable predictors, and treatment condition. Multilevel binomial logistic regression models following the Fournier analysis approach were used to examine significant predictors within domains, which were then included in a final model. Overall, 70.7% of participants completed treatment (GCBT = 61.6%, GPCT = 79.8%). Participants in the GPCT condition were 2.389 times, 95% CI [1.394, 4.092], more likely to complete treatment than those in the GCBT condition. Older age, a higher income and level of educational attainment, more lifetime and current mental health diagnoses, and higher use of positive reappraisal ER skills predicted treatment completion. Higher levels of depressive symptoms, cumulative trauma burden, and use of positive refocusing ER skills predicted treatment noncompletion. These findings are discussed in the context of current clinical and research practices for examining treatment noncompletion, with attention to the inclusion of translational predictors.

https://doi.org/10.1002/jts.22914

Development of a brief support and education intervention for loved ones of veterans with posttraumatic stress disorder.

Sarah B. Campbell, Catherine M. Caska Wallace

Journal of Traumatic Stress First published: 09 February 2023

Clinical practice guidelines for managing posttraumatic stress disorder (PTSD) encourage incorporating loved ones into treatment, and supportive relationships can increase engagement in mental health care for veterans with PTSD. This study describes the iterative refinement, feasibility/acceptability testing, and national dissemination of a brief support and psychoeducation intervention for loved ones of

veterans with PTSD. Loved ones (n = 181; range:1-11 per group) attended and qualitatively rated "PTSD 101 for Family and Friends: A Support and Education Workshop." Open-ended questions were used to gather data on suggestions for improvement and descriptions of helpful content, and the workshop was refined following participant and operational partner feedback using a quality improvement framework. Rating quantitative items on a 1–5 scale, participants found the overall quality (M = 4.76) and relevance (M = 4.82) to be excellent, noting they learned substantial new information (M = 4.45). Sense of support (M = 4.95), intentions to use the material (M = 4.87), PTSD self-efficacy (M = 4.41), and understanding of PTSD (M = 4.76) were rated favorably. Common themes among helpful elements were a sense of shared experience and optimism and increased knowledge of treatments/resources. Suggestions for improvement referenced logistics. Following continual stakeholder feedback and refinement, the workshop represents a novel method for providing loved ones with empirically supported psychoeducation, coping skills, and community. It is being disseminated by the Family Services Section of the Veterans Health Administration Office of Mental Health and Suicide Prevention.

https://doi.org/10.1176/appi.prcp.20220027

Recent stressful experiences and suicide risk: Implications for suicide prevention and intervention in U.S. Army soldiers.

Dempsey, C. L., Benedek, D. M., Zuromski, K. L., Nock, M. K., Brent, D. A., Ao, J., Georg, M. W., Haller, K., Aliaga, P. A., Heeringa, S. G., Kessler, R. C., Stein, M. B., & Ursano, R. J.

Psychiatric Research & Clinical Practice

Published Online: 13 Jan 2023

Objectives

To identify the extent to which the presence of recent stressful events are risk factors for suicide among active-duty soldiers as reported by informants.

Methods

Next-of-kin (NOK) and supervisors (SUP) of active duty soldiers (n = 135) who died by suicide and two groups of living controls: propensity-matched (n = 128) and soldiers who reported suicidal ideation in the past year, but did not die (SI) (n = 108) provided data via structured interviews from the Study to Assess Risk and Resilience in

Servicemembers (Army STARRS). Multivariate logistic regression analyses were used to create a risk score for suicide.

Results

The odds of suicide increased significantly for soldiers experiencing relationship problems, military punishment, and perceived failure or humiliation in the month prior to death. Suicide risk models with these risk factors predicted suicide death among those who reported SI in the past year (OR = 5.9, [95% CI = 1.5, 24.0] χ 2 = 6.24, p = 0.0125, AUC, 0.73 (0.7, 0.8) NOK) and (OR = 8.6, [95% CI = 1.4, 51.5] χ 2 = 5.49, p = 0.0191, AUC, 0.78 (0.7, 0.8); SUP) suggesting the combination of these recent stressors may contribute to the transition from ideation to action.

Conclusions

Our findings suggest for the first time recent stressors distinguished suicide ideating controls from suicide decedents in the month prior to death as reported by informants. Implications for preventive intervention efforts for clinicians, supervisors and family members in identifying the transition from ideation to action are discussed.

https://doi.org/10.1037/ort0000654

"Always on parade": Pregnancy experience of active-duty air force members.

Day, M. A., Gil-Rivas, V., & Quinlan, M. M.

The American Journal of Orthopsychiatry 2023; 93(1), 41–49

Findings are reported from a qualitative study that sought to understand the maternity experience of active-duty women in the context of improved and expanded pregnancy accommodations. Semistructured interviews were conducted with 30 active-duty women serving in the United States Air Force (15 enlisted and 15 commissioned members). Women described experiencing negative pregnancy-related stereotypes and stigma in the workplace. Connotations unique to military culture were unavoidable changes to uniform and physical body shape, cultural expectations of fitness, and uniformity of dress/appearance. Use of necessary pregnancy accommodations led to increased exposure to stereotypes and stigma, such as being perceived as less disciplined, lazy, weak, or receiving unfair advantages/fewer duties at work. Women relied on "covering behaviors" to separate themselves from negative stereotypes. Extreme covering

behaviors put pregnant women's health and well-being at risk. Finally, women navigated a shift in priorities from an indoctrinated "service before self" perspective to a prioritization of personal health and well-being during pregnancy. Leadership skills were strengthened through this change in perspective, which were perceived as positively influencing unit morale, cohesion, productivity, and retention. Study findings suggest the military will experience limited success in fully integrating and retaining active-duty women due to an organizational climate that lags behind the recent, progressive improvements in pregnancy policies and accommodations. Organizational culture related to pregnancy within the military must be targeted for change to reduce negative stigma and pregnancy-related bias. (PsycInfo Database Record (c) 2023 APA, all rights reserved).

https://doi.org/10.1177/08862605221101197

Sexual Violence in Military Service Members/Veterans Individual and Interpersonal Outcomes Associated with Single and Multiple Exposures to Civilian and Military Sexual Violence.

Blais, R. K., Livingston, W. S., Barrett, T. S., & Tannahill, H. S.

Journal of Interpersonal Violence (2023) 38(3–4), 2585–2613

Sexual harassment and violence is a grave public health concern and risk for revictimization increases following initial exposure. Studies of sexual revictimization in military samples are generally limited to women and are focused on rates of posttraumatic stress disorder (PTSD), with no examination of how revictimization relates to interpersonal outcomes, such as relationship or sexual satisfaction. The current study addressed these gaps in a sample of 833 women and 556 men service members/veterans. Self-reported outcomes of PTSD, depression, suicidal ideation, sexual function, and relationship satisfaction were compared across those reporting exposure to sexual harassment and violence before the military only (i.e., pre-military), during the military only (i.e., military sexual harassment and violence [MSV]), before and during the military (i.e., revictimization), and to no exposure. More than half of women (51.14%, n = 426) reported revictimization and only 5.79% (n = 28) of men reported revictimization. Among women, those reporting MSV or revictimization tended to report higher PTSD, depression, and suicidal ideation relative to pre-military sexual violence and no sexual violence exposure. No interpersonal outcomes were significantly different

among these sexual violence groups. Among men, revictimization was associated with higher PTSD, depression, and sexual compulsivity. PTSD and depression were also higher among those reporting MSV only. No effects were found for premilitary sexual trauma exposure only or relationship satisfaction for either group. Findings highlight the particularly bothersome nature of MSV, whether it occurred alone or in tandem with premilitary sexual violence. Findings also show unique gender differences across outcomes, suggesting interventions following sexual harassment and violence may differ for men and women.

https://doi.org/10.1001/jamanetworkopen.2023.0463

Characterization of Mental Health in US Veterans Before, During, and 2 Years After the Onset of the COVID-19 Pandemic.

Fischer, I. C., Na, P. J., Harpaz-Rotem, I., Krystal, J. H., & Pietrzak, R. H.

JAMA Network Open February 23, 2023

This nationally representative longitudinal study of US veterans revealed that, 1 year into the COVID-19 pandemic, the prevalence of positive screens for distress increased by 51%, with younger and female veterans demonstrating the highest increases, possibly due to unique pandemic-related stressors (eg, school closures; work and relationship disruptions). Nevertheless, 2 years later, distress prevalence returned to prepandemic levels, which aligns with prior work suggesting resilience is the modal response to stressful events.

Despite this overall pattern of resilience, a significant minority of veterans had exacerbated (2.5%; approximately 450 000 based on US veteran population benchmarks) or persistent (5.0%; approximately 900 000) courses of distress. Veterans with exacerbated distress 2 years into the pandemic reported greater prepandemic alcohol use problems, greater likelihood of lifetime MDD or PTSD, and lower emotional stability. Possible mechanisms underlying these findings include alcohol-related neuroinflammatory or metabolic changes and higher levels of stress sensitization.

Pandemic-related socioeconomic concerns were significantly associated with persistent distress. Younger age, lower community integration, and higher pandemic-related social restriction stress were also associated with this outcome. These findings underscore the

importance of assessment, treatment, and policy strategies that target the economic and social needs of veterans with these risk factors.

Limitations of the current study included reliance on self-report and screening measures. Further research is needed to replicate these findings in other samples, identify factors associated with continued distress over time, and evaluate interventions and policies to mitigate distress in veterans at risk for persistent pandemic-related distress.

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https://doi.org/10.1002/jts.22909

Investigating the effects of suicide exposure among a clinical sample of active duty service members.

Emily A. Schmied, Hee-Jin Jun, Lisa H. Glassman, Nicole Pippard, Kristen H. Walter

Journal of Traumatic Stres

First published: 02 February 2023

Suicide exposure warrants further investigation as a risk factor for suicide among military service members. This study aimed to examine associations among suicide exposure, suicidal ideation (SI), and psychological symptoms in a clinical sample of service members (N = 1,565, 64.4% suicide-exposed) and identify how one's relationship with the deceased impacts suicidality and psychological health in exposed individuals. A secondary analysis of cross-sectional survey data was conducted. Generalized linear regression analyses were used to identify associations between suicide exposure and both current SI and psychological symptoms among all participants; the associations between suicide exposure characteristics and psychological symptoms were only examined among exposed individuals. Exposure was not significantly associated with higher SI, β = .007, SE = .16, p = .965, but was associated with PTSD, β = 1.60, SE = 0.49, p = .001; anxiety, β = .68, SE = .31, p = .031; and insomnia symptoms, β = .98, SE = .25, p < .001. Among participants who had been exposed, high/long impact of exposure was positively associated with SI, β = 0.94, SE = .26, p < .001, and psychological symptoms, PTSD: β = 2.32, SE = .77, p = .002; anxiety: $\beta = 1.39$, SE = .50, p = .005; insomnia: $\beta = .96$, SE = .39, p = .015. Results illustrate the significant issue of suicide exposure within the military and show consideration of suicide exposure as a potential risk factor for adverse psychological outcomes is warranted.

https://doi.org/10.1002/jts.22908

Social support and treatment utilization for posttraumatic stress disorder: Examining reciprocal relations among active duty service members.

Anna E. Jaffe, Thomas O. Walton, Denise D. Walker, Debra L. Kaysen

Journal of Traumatic Stress First published: 02 February 2023

Evidence-based treatments for posttraumatic stress disorder (PTSD) are underutilized by active duty service members in the United States. Social support may help service members overcome avoidance and facilitate treatment utilization. In turn, treatment utilization may improve social support. To evaluate these possibilities, the aim of the current study was to examine potential reciprocal associations between social support and treatment utilization among service members. Secondary analyses were conducted on a randomized controlled trial of 161 U.S. military service members with PTSD. Participants completed assessments of perceived social support and attendance at individual therapy sessions at baseline and 3- and 6-month follow-ups. To determine reciprocal relations between social support and treatment utilization, a Bayesian approach was used to estimate a random-intercept cross-lagged panel model with a two-part variable for treatment utilization (i.e., any therapy, and if so, dose). There were no between-person associations between average social support and treatment utilization. One prospective cross-lagged within-person association emerged as significant: social support at 3 months was negatively associated with any therapy use at 6 months; the model explained 26.1% of the variance in this observed variable. The findings revealed that low social support promoted subsequent treatment utilization, but such treatment did not lead to changes in social support. This suggests service members with PTSD may have been motivated to attend individual therapy in pursuit of social connection and support. Future research is needed to determine if reciprocal associations between various forms of social support and therapy utilization differ by treatment modality.

https://doi.org/10.1002/jts.22905

Effects of trauma-focused rumination among trauma-exposed individuals with and without posttraumatic stress disorder: An experiment.

Blair E. Wisco, Suzanne Vrshek-Schallhorn, Casey L. May, Allison A. Campbell, Faith O. Nomamiukor, Cameron P. Pugach

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Rumination, or thinking repetitively about one's distress, is a risk factor for posttraumatic stress disorder (PTSD). Current theories suggest that rumination contributes to PTSD symptoms directly, by increasing negative reactions to trauma cues (i.e., symptom exacerbation), or represents a form of cognitive avoidance, if verbal ruminations are less distressing than trauma imagery. The goal of this study was to test the symptom exacerbation and cognitive avoidance accounts of trauma-focused rumination. We recruited 135 trauma-exposed participants (n = 60 diagnosed with PTSD) and randomly assigned them to ruminate about their trauma, distract themselves, or engage in trauma imagery. For individuals with and without PTSD, rumination led to larger increases in subjective distress (i.e., negative affect, fear, sadness, subjective arousal, valence) than distraction, np2s = .04-.13, but there were no differences between rumination and imagery ηp2s = .001–.02. We found no evidence that rumination or imagery elicited physiological arousal, ds = 0.01–0.19, but did find that distraction reduced general physiological arousal, as measured by heart rate, relative to baseline, d = 0.84, which may be due to increases in parasympathetic nervous system activity (i.e., respiratory sinus arrhythmia), d = 0.33. These findings offer no support for the avoidant function of rumination in PTSD. Instead, the findings were consistent with symptom exacerbation, indicating that rumination leads directly to emotional reactivity to trauma reminders and may be a fruitful target in PTSD intervention.

https://doi.org/10.1007/s40519-022-01429-z

Associations among alexithymia, disordered eating, and depressive symptoms in treatment-seeking adolescent military dependents at risk for adult binge-eating disorder and obesity.

Rice, A., Lavender, J. M., Shank, L. M., Higgins Neyland, M. K., Markos, B., Repke, H., Haynes, H., Gallagher-Teske, J., Schvey, N. A., Sbrocco, T., Wilfley, D. E., Ford, B., Ford, C. B., Jorgensen, S., Yanovski, J. A., Haigney, M., Klein, D. A., Quinlan, J., & Tanofsky-Kraff, M.

Eating and Weight Disorders 2022 Dec; 27(8): 3083-3093

Purpose:

Evidence suggests that difficulties identifying and describing one's feelings, core components of alexithymia, are associated with attitudinal and behavioral symptoms of disordered eating; depressive symptoms also may underlie these associations. Specifically, research indicates that alexithymia is positively related to depressive symptoms, which in turn may promote both disordered-eating attitudes and certain disinhibited-eating behaviors (e.g., emotional eating). Findings also suggest that military-dependent youth with high weight may exhibit elevated depressive symptoms and disordered eating. As such, understanding associations among alexithymia, depressive symptoms, and disordered eating is particularly relevant for this vulnerable population.

Methods:

We examined 149 adolescent military dependents ($14.4 \pm 1.6y$; 55.0% female; 20.0% non-Hispanic Black; BMIz: 1.9 ± 0.4) at high risk for binge-eating disorder and obesity in adulthood. Participants completed questionnaires assessing two components of alexithymia (difficulty identifying feelings [DIF] and difficulty describing feelings [DDF]), depressive symptoms, emotional eating, and trait anxiety; disordered-eating attitudes were assessed via semi-structured interview.

Results:

A series of regression-based models examined indirect relationships of DIF and DDF with disordered-eating attitudes and emotional eating through depressive symptoms. Bootstrapped 95% confidence intervals revealed a significant indirect path from each of the alexithymia components to disordered-eating attitudes via depressive symptoms; indirect paths to emotional eating were non-significant.

Conclusion:

Results support the salience of depressive symptoms in the relationship between alexithymia and disordered-eating attitudes. Future research should utilize prospective designs and explore direct and indirect associations of alexithymia with other disordered-eating behaviors.

Level of evidence:

Level III, evidence obtained from a well-designed cohort study.

https://doi.org/10.1093/milmed/usab342

Prevalence of Comorbidities in Active and Reserve Service Members Pre and Post Traumatic Brain Injury.

Hai, T., Agimi, Y., & Stout, K.

Military Medicine 2023 Jan 5; 188(1-2): e270-e277

Objective:

To understand the prevalence of comorbidities associated with traumatic brain injury (TBI) patients among active and reserve service members in the U.S. Military.

Methods:

Active and reserve SMs diagnosed with an incident TBI from January 2017 to October 2019 were selected. Nineteen comorbidities associated with TBI as identified in the literature and by clinical subject matter experts were described in this article. Each patient's medical encounters were evaluated from 6 months before to 2 years following the initial TBI diagnoses date in the Military Data Repository, if data were available. Time-to-event analyses were conducted to assess the cumulative prevalence over time of each comorbidity to the incident TBI diagnosis.

Results:

We identified 47,299 TBI patients, of which most were mild (88.8%), followed by moderate (10.5%), severe (0.5%), and of penetrating (0.2%) TBI severity. Two years from the initial TBI diagnoses, the top five comorbidities within our cohort were cognitive disorders (51.9%), sleep disorders (45.0%), post-traumatic stress disorder (PTSD; 36.0%), emotional disorders (22.7%), and anxiety disorders (22.6%) across severity groups. Cognitive, sleep, PTSD, and emotional disorders were the top comorbidities seen within each TBI severity group. Comorbidities increased pre-TBI to post-TBI; the more severe the TBI, the greater the prevalence of associated comorbidities.

Conclusion:

A large proportion of our TBI patients are afflicted with comorbidities, particularly post-TBI, indicating many have a complex profile. The military health system should continue tracking comorbidities associated with TBI within the U.S. Military and devise clinical practices that acknowledge the complexity of the TBI patient.

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Sexsomnia in Active Duty Military: A Series of Four Cases.

Fernandez, J. D., & Soca, R.

Military Medicine 2023 Jan 4; 188(1-2): e436-e439

Sexsomnia is a type of non-rapid eye movement (NREM) parasomnia in which sexual behaviors arise during sleep; these behaviors are varied and can include masturbation, orgasms with or without self-stimulation, sexual vocalizations and talking, and sexual fondling and/or intercourse with the bed partner. The military creates a challenging environment, with sleep deprivation, shift work, and increased psychosocial stress that may predispose service members to an increased risk for all NREM parasomnias, including sexsomnia. Given that sexsomnia is sometimes invoked in sexual assault military lawsuits, it may behoove the military community to understand how this condition usually manifests so that its medicolegal implications can be addressed more clearly. Here, we present the largest case series of sexsomnia to date in active duty military service members, which adds to the limited literature on such cases in the military and to the broader but still growing literature on this rare disorder. We compare and contrast these cases with the available literature to highlight their similarities and differences in addition to commenting on the relevance of these cases in forensic investigations. As none of these cases were involved in legal issues, they could provide useful information about this rare condition in individuals who are less likely to be affected by the biases that are inherent to litigation.

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(Loss of) the super soldier: combat-injuries, body image and veterans' romantic relationships.

Keeling, M., & Sharratt, N. D.

Disability and Rehabilitation 2023 Jan; 45(2): 209-219

Purpose:

Some military personnel sustain physical injuries that alter their appearance, such as limb-loss and scarring. Veterans injured this way may experience body image distress and mental and physical wellbeing difficulties. While research with civilians indicates those with appearance-altering conditions may experience relationship difficulties, this issue remained unexplored among combat-injured veterans. This study aimed to understand how veterans who sustained appearance-altering combat injuries experienced and understood their changed appearance within the context of their romantic relationships.

Materials and method:

Semi-structured interviews with four male UK combat-injured veterans were conducted and analysed using Interpretative Phenomenological Analysis.

Results:

Three superordinate themes were generated: (loss of) the super solider; new states of vulnerability; and injury tests relationships.

Conclusions:

Masculinity was central to participants' military identity and represented by their military bodies. Following injury and the loss of their military body, some experienced relationship challenges including a test to the foundations and commitment of their relationships. In contrast, some veterans' relationships grew stronger, especially among participants who described dyadic coping. Additional challenges were related to decreased self-confidence, appearance concerns, and sex and intimacy. Implications for the provision of relationship support for combat-injured veterans and their partners through the long-term trajectory of rehabilitation are discussed. Implications for

Rehabilitation

Changes to veterans' body and physique following appearance-altering combat-injuries may affect identity, self-esteem, confidence, perceived attractiveness, sexual activity, and romantic relationships. Appearance-altering combat injuries may test the stability and strength of existing romantic relationships and introduce new challenges in initiating new romantic relationships. Peer support is helpful for combat-injured veterans adjusting to appearance-altering injuries and the impact on their romantic and intimate relationships. Combat-injured veterans may benefit from specific relationship support provided during their rehabilitation and recovery, to help alleviate relationship difficulties, minimise relationship breakdown, and support those whose relationships end post-injury.

https://doi.org/10.1093/milmed/usab514

An Education Intervention to Improve Knowledge of Post-Traumatic Stress Disorder Symptoms and Treatments Among U.S. Women Service Members and Veterans.

Proctor, D. M., Emmons, K. R., & Scannell-Desch, E.

Military Medicine

2023 Jan 4; 188(1-2): 368-373

Introduction:

Due to decades of prolonged combat operations, post-traumatic stress disorder (PTSD) is widely discussed and generally well conceptualized. The objective of this study was to determine if an educational program on the signs and symptoms of PTSD and an explanation of the current treatments utilized by the Veterans Administration is effective in increasing the knowledge levels of women service members and veterans, leading to seeking treatment.

Materials and methods:

The design of this study was a quantitative pretest/posttest interventional study. The educational program was conducted at a Senior Citizen Center. The population was a purposive sample of 44 women service members and veterans from a military base in New Jersey. A 25-item PTSD Knowledge Questionnaire developed for the earlier Web-Based Post-traumatic Stress Disorder Education for Military Family Members (2012) study was used as the pretest and posttest.

Results:

The knowledge level of PTSD among women service members and veterans who participated in this study was significantly higher after completing the educational program with 43% indicating that they would seek mental health care.

Conclusions:

Women service members and veterans were ill-informed on the signs, symptoms, and treatment options of PTSD. If the results of this survey are an indicator of the knowledge level of women service members in broader populations, there is a need to restructure how those who are at risk of developing PTSD are educated. Through better educational programs, women and men could seek care with increasingly favorable long-term outcomes.

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Where, When, and How Alcohol Use Occurs During Air Force Technical Training.

Pebley, K., Mallawaarachchi, I., Talcott, G. W., & Little, M. A.

Military Medicine 2023 Jan 4; 188(1-2): e69-e73

Introduction:

Alcohol use is prevalent among military personnel, with many engaging in binge drinking behaviors. Military trainees are unique, in that they experience an enforced alcohol ban for 8 weeks while in Basic Military Training. However, they are also typically young adults, who consume alcohol at higher rates than any other age group. The current study aimed to describe alcohol consumption among trainees, determine when, where, and with whom Airmen drank for the first time during Technical Training, and if these patterns were significantly different based on descriptive norms (i.e., beliefs about how many other individuals engage in a certain behavior) related to alcohol use, given that most military members consume alcohol. Last, we aimed to determine if alcohol consumption or potential alcohol use disorders were significantly different based on descriptive norms.

Materials and methods:

Airmen (n = 599) were recruited at Joint Base San Antonio-Fort Sam Houston during their last week of Technical Training to complete a survey. Study procedures were approved by the 59th Medical Wing Institutional Review Board. Participants were asked about their beliefs related to how many other Airmen drink alcohol (i.e., less than 50%, 50%, or greater), their own experiences with alcohol (e.g., how much they drink compared with consumption before military service, blackouts after drinking during Technical Training), and when, where, and with whom they consumed alcohol for the first time after beginning military training.

Results:

Over half of the Airmen reported not engaging in drinking behaviors during Technical Training. Among those who reported drinking one or more drinks during Technical Training, most reported drinking the same amount or less than they did prior to Basic Military Training. The majority of Airmen reported that they had "maybe" experienced blackouts from drinking since Technical Training. Most Airmen drank for the first time with another someone who was not an Airman, at a restaurant, home, or other place off base, and while they were on leave. Results indicated no significant differences between groups related to beliefs about how many Airmen drink during Technical Training and where, when, and with whom Airmen drank for the first time since joining the Air Force. There were also no differences in Alcohol Use Disorders Identification Test scores or drinks per week between these normative belief groups.

Conclusions:

Almost half of Airmen resume drinking after alcohol restrictions are lifted during Technical Training but maintain low numbers of drinks consumed per week and low risk for alcohol use disorders, which may indicate that this is an opportune time for intervention to prevent alcohol consumption from escalating over time. Airmen reported drinking for the first time with another Airman off base during leave. Focusing on how Airmen navigate alcohol-related decision-making while their responsibilities are reduced, or how other Airmen influence their decisions to engage in risky drinking, may help prevent alcohol use rates from increasing post-enforced ban.

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Moral injury and chronic pain among military veterans in an integrated behavioral health clinic.

Hinkel, H. M., Currier, J. M., Isaak, S. L., McAdams, E., & Kilpatrick, J. F.

Psychological Trauma: Theory, Research, Practice and Policy

2023 Jan; 15(1): 140-143

Objective:

Military service may place veterans at increased risk for perpetrating, witnessing, or failing to prevent events that violate deeply held moral values. In some cases, veterans may develop moral injury (MI) symptoms that transcend and/or overlap with mental health conditions such as posttraumatic stress disorder (PTSD) and major depressive disorder (MDD). Further, PTSD and MDD are 2 established risk factors for chronic pain. However, research has not examined the association between MI symptoms and chronic pain.

Method:

We tested whether MI would emerge as a salient correlate of concurrent reports of chronic pain in the presence of PTSD and MDD symptom severity among 59 veterans seeking integrated behavioral health care.

Results:

Findings indicated the severity of MI symptoms was significantly linked with veterans' concurrent reports of chronic pain. Self-directed MI symptoms emerged as a correlate of worse pain in the presence of PTSD and MDD.

Conclusions:

Preliminary findings demonstrate possible associations between MI and chronic pain among veterans with a need for holistic health care. Future research should examine mechanisms for an apparent MI-chronic pain link. (PsycInfo Database Record (c) 2023 APA, all rights reserved).

https://doi.org/10.1016/j.jad.2022.12.160

Suicide risk among combatants: The longitudinal contributions of pre-enlistment characteristics, pre-deployment personality factors and moral injury.

Levi-Belz, Y., Ben-Yehuda, A., & Zerach, G.

Journal of Affective Disorders 2023 Mar 1; 324: 624-631

Background:

Recent studies have shown that exposure to potentially morally injurious events (PMIEs) in deployment situations facilitates higher suicide risk among combatants. However, knowledge about pre-deployment factors that may moderate the negative contribution of PMIEs to suicide risk is rare. In this prospective study, we examined pre-enlistment characteristics and pre-deployment personality factors as possible moderators in the link between exposure to self, other, and betrayal dimensions of PMIEs and post-deployment suicide risk among Israeli active-duty combatants.

Methods:

A sample of 335 active-duty Israeli combatants participated in a 2.5-year prospective study with three waves of measurements: T1-12 months before enlistment, T2-6 months following enlistment (pre-deployment), and T3-18 months following enlistment (post-deployment). Participants were assessed via semi-structured interviews of personal characteristics (e.g., cognitive index) at T1, validated self-report measures of personality factors for emotional regulation, impulsivity, and aggression at T2, and combat exposure, PMIEs, and suicide risk at T3 between 2019 and 2021.

Results:

All three dimensions of PMIEs were significantly associated with higher suicidal risk among combatants. Importantly, higher levels of pre-deployment aggression and lower levels of emotional regulation moderated the association between PMIEs and suicide risk post-deployment, above and beyond pre-enlistment psychiatric difficulties and life events.

Conclusions:

Our results highlight the roles of pre-deployment factors of emotional regulation and aggressiveness as possible moderators in the PMIEs-suicide risk link. These results emphasize the need for higher awareness of suicide risk among deployed combatants with low emotional regulation and high aggressiveness. Moreover, tailored interventions

aiming to decrease emotional dysregulation and aggressiveness levels should be considered, as such interventions may help reduce suicide risk following combat-related transgressive acts.

https://doi.org/10.1177/08862605221109494

The Effects of Adverse Childhood Experiences and Warfare Exposure on Military Sexual Trauma Among Veterans.

Doucette, C. E., Morgan, N. R., Aronson, K. R., Bleser, J. A., McCarthy, K. J., & Perkins, D. F.

Journal of Interpersonal Violence 2023 Feb; 38(3-4): 3777-3805

Military sexual trauma (MST) is a pervasive problem; this study examined the relationship of the precursory traumas of adverse childhood experiences (ACEs) and warfare exposure with MST. Post-9/11 veterans were surveyed at 3 months and at 24 to 30 months post-military separation. Female veterans who experienced at least 1 ACE but no warfare exposure were significantly more likely to receive unwanted sexual attention. Veterans (males and females) experiencing three or more ACEs but no warfare exposure were significantly more likely to receive unwanted sexual attention and contact. Experiencing only warfare exposure was not related to unwanted sexual attention or contact for females; however, a significant interaction was found between combined warfare exposure, ACEs, and MST for males and females. Veterans who reported warfare exposure and one to two or three or more ACEs were more likely to report unwanted sexual attention and/or contact. Exploration of individual ACEs revealed a significant relationship between childhood sexual abuse and unwanted sexual contact. For females, witnessing domestic violence predicted unwanted sexual contact. There was also a significant interaction between childhood sexual abuse and warfare exposure. Females who experienced both childhood sexual abuse and warfare exposure were significantly more likely to receive unwanted sexual attention and unwanted sexual contact. Albeit a small sample, males who experienced both were also significantly more likely to receive unwanted sexual attention. The findings reveal that precursory traumatic experiences in childhood and the interaction of ACEs and warfare exposure during military service can increase the likelihood of unwanted sexual attention and contact. This research further substantiates the need for screening efforts. It also demonstrates the importance of practitioners engaging in trauma-informed care

principles and practices to address the residual effects of previous experiences during sexual trauma or mental health treatment efforts.

https://doi.org/10.1037/tra0001213

Morally injurious combat events as an indirect risk factor for postconcussive symptoms among veterans: The mediating role of posttraumatic stress.

Kinney, A. R., Gerber, H. R., Hostetter, T. A., Brenner, L. A., Forster, J. E., & Stephenson, R. O.

Psychological Trauma: Theory, Research, Practice and Policy

2023 Jan; 15(1): 144-152

Objective:

Psychosocial factors, including combat-related distress (e.g., posttraumatic stress disorder [PTSD]), contribute to postconcussive symptoms (PCS) among veterans with mild traumatic brain injury (mTBI). However, research on risk factors for PCS has focused solely on life-threatening combat experiences, neglecting the morally injurious dimension of combat-related trauma and associated implications for treatment. Morally injurious events (MIEs) are associated with PTSD symptoms among veterans, a robust risk factor of PCS. Nonetheless, the interplay between MIEs, PTSD symptoms, and PCS remains poorly understood. We sought to investigate MIEs as an indirect risk factor for PCS among Veterans with mTBI.

Method:

This cross-sectional study of 145 veterans with mTBI used path analysis to investigate whether PTSD symptoms mediated the relationship between MIEs (transgressions and betrayals) and PCS (mood-behavioral, vestibular-sensory, and cognitive domains) among 145 veterans with mTBI. We used the Moral Injury Event Scale, PTSD Checklist-Civilian Version, and Neurobehavioral Symptom Inventory to measure MIEs, PTSD, and PCS, respectively.

Results:

Perceived transgressions were indirectly associated with mood-behavioral (β = .21, p = .005), vestibular-sensory (β = .17, p = .005), and cognitive PCS (β = .20, p = .005), as mediated by PTSD. Greater transgressions were associated with more severe PTSD (β = .27, p = .003), and greater PTSD was associated with more severe mood-behavioral

 $(\beta = .79, p < .001)$, vestibular-sensory ($\beta = .64, p < .001$), and cognitive PCS ($\beta = .73, p < .001$). Betrayals were not indirectly associated with PCS.

Conclusions:

Findings offer preliminary support for responses to MIEs being a modifiable risk factor for PCS among veterans. Interventions designed to foster veterans' recovery by targeting the unique emotions and beliefs associated with MIEs may be indicated. (PsycInfo Database Record (c) 2023 APA, all rights reserved).

Links of Interest

Navy issues new 'playbook' for addressing sailors' mental health needs https://www.navytimes.com/news/your-navy/2023/03/01/navy-issues-new-playbook-for-addressing-sailors-mental-health-needs/

Mental Health Playbook (Navy Culture and Force Resilience Office)

Top Enlisted Sailor Says Service Members Should Be Able to Access Mental Health Care Without a Referral

https://www.military.com/daily-news/2023/02/28/top-enlisted-sailor-says-service-members-should-be-able-access-mental-health-care-without-referral.html

Veterans on Managing Change and Anxiety https://www.maketheconnection.net/read-stories/veterans-on-managing-change-and-anxiety/

Staff Perspective: Impact of COVID-19 on Couples Accessing Counseling https://deploymentpsych.org/blog/staff-perspective-impact-covid-19-couples-accessing-counseling

Staff Perspective: Beginning to Fill the Void - Recent Publications on Healthcare Experiences in LGBTQ Service Members https://deploymentpsych.org/blog/staff-perspective-beginning-fill-void-recent-publications-healthcare-experiences-lgbtq-service

Finding Support From Fellow Veterans To Cope With Trauma https://www.maketheconnection.net/read-stories/finding-support-from-fellow-veterans-to-cope-with-trauma/

Army approach to sexual assault prevention may overlook hazing and male victims, study finds

https://www.stripes.com/branches/army/2023-02-28/army-sexual-assault-9280632.html

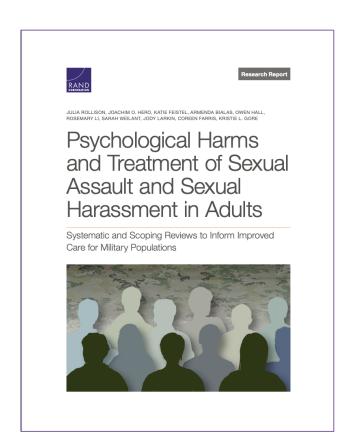
Scam Artists Target Older Vets

https://www.nextavenue.org/older-vets-are-prime-scam-targets/

Resource of the Week – <u>Psychological Harms and Treatment of Sexual Assault and Sexual Harassment in Adults: Systematic and Scoping Reviews to Inform Improved Care for Military Populations</u>

From the RAND Corporation:

Victims of sexual assault and sexual harassment often experience a variety of psychological outcomes and mental health symptoms related to posttraumatic stress disorder (PTSD), depression, anxiety, substance abuse, suicidal ideation, and self-harm. Sexual trauma also might affect careers. Despite a need to address these harms, some service members have reported that connecting to health care or mental health services following sexual assault or sexual harassment can be difficult—in part because of a lack of leadership support. Given these persistent challenges, the Psychological Health Center of Excellence identified an urgent need to better understand research that is pertinent to sexual assault and sexual harassment during military service so that the U.S. Department of Defense and the military services can improve the health care response for service members. RAND researchers investigated and synthesized relevant research in three topic areas: (1) the effectiveness of psychotherapy treatments designed for adult victims of sexual assault or sexual harassment in military settings; (2) barriers faced by U.S. military members to accessing and remaining in mental health care settings; and (3) associations between sexual assault or sexual harassment and mental health conditions.



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