

Research Update -- July 15, 2021

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- Behavioral Health Provider Attitudes Toward Behavioral Health Profiles in the U.S. Army.
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- Resource of the Week: Chartbook on the Health Of Lesbian, Gay, And Bisexual Veterans (VHA)

https://doi.org/10.1016/j.sleep.2021.05.046

Effects of pre-bedtime blue-light exposure on ratio of deep sleep in healthy young men.

Masao Ishizawa, Takuya Uchiumi, Miki Takahata, Michiyasu Yamaki, Toshiaki Sato

Sleep Medicine Volume 84, August 2021, Pages 303-307

Highlights

- Electronic media that generate blue-light have become widespread due to the development of electronic devices.
- The effect of blue-light irradiation before bedtime on objective and subjective changes was investigated.
- The use of blue-light equipment may influence of alternation of sleep quality, especially decrease in deep sleep.

Abstract

This study aimed to investigate the effects of pre-bedtime blue-light exposure on ratio of deep sleep and sleep quality. In this study, 11 healthy young men were exposed to three conditions for 1 h before bedtime: 1) incandescent light, 2) blue-light, or 3) blue light-blocking glasses on. The following morning, subjective sleep quality was measured using the Oguri–Shirakawa–Azumi Sleep Inventory. Sleep time, ratio of sleep, ratio of deep sleep, and body movements during sleep were measured using a mat sleep-scan (sleep scan, SL- 504; TANITA Corp., Japan) and an ambulatory portable sleep study system (LS-140; Fukuda Denshi Co. Ltd., Japan). Ratio of deep sleep was significantly decreased in the blue-light exposure group compared to the groups with incandescent light and blue light-blocking glasses (p < 0.01), There were no differences noted in sleep time or body movements among the three groups. These results suggest that blue-light exposure to affects sleep quality by reducing the ratio of deep sleep.

https://doi.org/10.1002/jclp.23202

From everyday life predictions to suicide prevention: Clinical and ethical considerations in suicide predictive analytic tools.

Jeremy W. Luk, Larry D. Pruitt, Derek J. Smolenski, Jennifer Tucker, Don E. Workman, Bradley E. Belsher

Journal of Clinical Psychology First published: 30 June 2021

Advances in artificial intelligence and machine learning have fueled growing interest in the application of predictive analytics to identify high-risk suicidal patients. Such application will require the aggregation of large-scale, sensitive patient data to help inform complex and potentially stigmatizing health care decisions. This paper provides a description of how suicide prediction is uniquely difficult by comparing it to nonmedical (weather and traffic forecasting) and medical predictions (cancer and human immunodeficiency virus risk), followed by clinical and ethical challenges presented within a risk-benefit conceptual framework. Because the misidentification of suicide risk may be associated with unintended negative consequences, clinicians and policymakers need to carefully weigh the risks and benefits of using suicide predictive analytics across health care populations. Practical recommendations are provided to strengthen the protection of patient rights and enhance the clinical utility of suicide predictive analytics tools.

https://doi.org/10.1111/sltb.12778

Social closeness and support are associated with lower risk of suicide among U.S. Army soldiers.

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

Suicide and Life-Threatening Behavior First published: 01 July 2021

Objective

We tested the aspects of social support, unit cohesion, and religiosity hypothesized to be protective factors for suicide among U.S. service members.

Methods

This case–control study compared U.S. Army soldiers who died by suicide while on active duty (n = 135) to controls of two types: those propensity score-matched on known

sociodemographic risk factors (n = 128); and those controls who had thought about, but not died by, suicide in the past year (n = 108). Data included structured interviews of next of kin (NOK) and Army supervisors (SUP) for each case and control soldier. Logistic regression analyses were used to examine predictors of suicide.

Results

Perceived social closeness and seeking help from others were associated with decreased odds of suicide, as reported by SUP (OR = 0.2 [95% CI = 0.1, 0.5]) and NOK (OR = 0.4 [95% CI = 0.2, 0.8]). Novel reports by SUP informants of high levels of unit cohesion/morale decreased odds of suicide (OR = 0.1 [95% CI = 0.0, 0.2]). Contrary to study hypotheses, no religious affiliation was associated with lower odds of suicide (OR = 0.3 [95% CI = 0.2, 0.6]).

Conclusions

Perceived social closeness and unit/group cohesion are associated with lower odds of suicide. These results point toward social intervention strategies as testable components of suicide prevention programs.

https://doi.org/10.1016/j.janxdis.2021.102441

Fear of pain as a predictor of concurrent and downstream PTSD symptoms.

AC Barbano, MT Tull, N Christ, H Xie, B Kaminski, X Wang

Journal of Anxiety Disorders Volume 82, August 2021

Highlights

- Examined role of pain anxiety dimensions in concurrent and later PTSD symptoms.
- Pain anxiety dimensions assessed 3-months post-traumatic exposure.
- PTSD assessed 3- and 12-months post-traumatic exposure.
- Physiological reactivity and fear of pain predicted concurrent PTSD symptoms.
- Fear of pain prospectively associated with PTSD symptoms at 12-months.

Abstract

Background

Pain anxiety has been associated with more severe posttraumatic stress disorder

(PTSD) symptoms. However, the unique role of individual domains of pain anxiety has yet to be explored in the prediction of PTSD severity. This study examined whether specific pain anxiety domains (i.e., cognitive anxiety, escape/avoidance, fear of pain, and physiological anxiety) predict both concurrent and downstream PTSD symptoms above and beyond other PTSD risk factors.

Method

Participants were 63 survivors of traumatic events with moderate to high baseline pain treated in the emergency department and assessed for PTSD symptoms and pain anxiety at 3- and 12-months.

Results

Three-month pain anxiety domains of fear of pain and physiological anxiety (inversely related) significantly predicted concurrent 3-month PTSD symptoms above and beyond other established PTSD risk factors (i.e., sex, age, pain, and trauma type). However, only 3-month fear of pain significantly predicted 12-month PTSD symptoms.

Conclusions

Findings highlight the relevance of specific pain anxiety domains in concurrent and future PTSD symptoms and suggest the importance of evaluating pain anxiety among patients with PTSD. Interventions focused on increasing willingness to experience and tolerate fear of pain may help mitigate this risk, thereby improving outcomes for individuals with acute PTSD symptoms.

https://doi.org/10.1016/j.janxdis.2021.102413

The impact of sleep quality on the incidence of PTSD: Results from a 7-Year, Nationally Representative, Prospective Cohort of U.S. Military Veterans.

Jason C. DeViva, Elissa McCarthy, Steven M. Southwick, Jack Tsai, Robert H. Pietrzak

Journal of Anxiety Disorders Volume 81, June 2021

Highlights

Poor sleep is associated with a 60 % greater likelihood of subsequent PTSD development.

- Over 22 % of a nationally representative sample of veterans report poor sleep quality.
- Lifetime depression is associated with higher likelihood of PTSD development.

Abstract

Sleep and posttraumatic stress disorder (PTSD) have a complex relationship, with some studies showing that disrupted sleep is associated with subsequent development of PTSD. The purpose of the current study was to examine the relationship between sleep quality and the development of probable PTSD in U.S. veterans surveyed as part of the National Health and Resilience in Veterans Study, a 7-year, nationally representative, prospective cohort study with four waves of data collection. Sociodemographic, military, trauma, and clinical variables were entered into a multivariate analysis to examine independent determinants of new-onset PTSD. A total of 142 (7.3 %) veterans developed PTSD over the 7-year study period. Poor/fair sleep quality at Wave 1 was associated with 60 % greater likelihood of developing PTSD, with more than twice as many veterans who developed PTSD reporting poor sleep quality at Wave 1 (47.8 % vs. 20.7 %). Younger age, using the VA as a primary source of healthcare, greater traumas since Wave, and lifetime depression were additionally associated with this outcome. Results of this study underscore the importance of self-reported sleep quality as a potential risk factor for the development of PTSD in the U.S. veteran population.

https://doi.org/10.1016/j.janxdis.2021.102443

Shame, guilt, and posttraumatic stress symptoms: A three-level meta-analysis.

Congrong Shi, Zhihong Ren, Chunxiao Zhao, Tao Zhang, Sunny Ho-Wan Chan

Journal of Anxiety Disorders Available online 2 July 2021

Highlights

- Use a three-level meta-analysis to analyze bivariate and partial correlation data.
- Both shame and guilt are positively associated with posttraumatic stress symptoms.
- Type of shame and guilt measure is a significant moderator for the above relations.
- The culture (Western vs. Eastern) has a marginally significant moderating effect.

Abstract

Existing empirical findings are inconsistent on the correlations of shame and guilt with posttraumatic stress symptoms (PTSS). This study aimed to quantitatively summarize the strength of the associations of shame and guilt with PTSS and explore potential moderators. Based on a three-level meta-analytic method, shame was positively correlated with PTSS, no matter whether the effects of guilt were controlled; guilt also had a positive correlation with PTSS, regardless of whether the effects of shame were partialling out. Moderator analyses showed that type of shame measure (generalized vs. contextual vs. trauma-specific shame) moderated the relation between shame and PTSS, and type of guilt measure (generalized vs. contextual vs. trauma-specific guilt) moderated the relation between guilt and PTSS. In addition, culture had a marginally significant moderating effect on the relation between guilt and PTSS, with a stronger association of guilt with PTSS in Western culture than in Eastern culture. These results supported the links of shame and guilt to PTSS and implied that we should focus on the conceptual underpinnings of the manifest psychometric issue and maintain cultural sensitivity in future research. The implications for posttraumatic stress disorder treatment were also discussed.

https://doi.org/10.1016/j.addbeh.2021.107035

Severity of substance use as an indicator of suicide risk among U.S. military veterans.

Peter J. Na, Brandon Nichter, Melanie L. Hill, Bora Kim, ... Robert H. Pietrzak

Addictive Behaviors Volume 122, November 2021

Highlights

- The optimal AUDIT cut-off to identify suicidal ideation was ≥14 in the full sample.
- For those with history of MDD/PTSD, the optimal AUDIT cut-off was \geq 18.
- The optimal SDU cut-off was ≥1 for both the full sample and MDD/PTSD subsample.
- Veterans with moderate/severe AUD may need suicide risk assessment.
- Veterans who use any non-prescription drug may warrant suicide risk assessment.

Abstract

Background

Substance use is a strong risk factor for suicidal behavior. To date, however, no known study has evaluated optimal cut-off scores on substance use severity measures to identify individuals who may be at elevated risk for suicide.

Methods

Data were analyzed from the 2019–2020 National Health and Resilience in Veterans Study, which surveyed a nationally representative sample of 4069 U.S. veterans. Receiver operating characteristic curve analyses were conducted to identify cut-off scores on the Alcohol Use Disorders Identification Test (AUDIT) and Screen of Drug Use (SDU) that optimally differentiated veterans with and without past-year suicidal ideation (SI) in the full sample, as well a high-risk subsample with histories of major depressive disorder (MDD) and/or posttraumatic stress disorder (PTSD).

Results

The prevalence of past-year SI was 11.7% (n = 387); A total of 10.5% (n = 360) of the sample screened positive for past-year alcohol use disorder, 9.1% (n = 314) for past-year drug use disorder, and 22.4% (n = 833) for lifetime MDD/PTSD. The optimal AUDIT cut-off score that differentiated suicide ideators and non-ideators was \geq 14 in the full sample, and \geq 18 in the high-risk subsample; these scores are indicative of moderate-to-severe alcohol use disorder. The optimal SDU cut-off score was \geq 1 for both the full sample and high-risk subsample, which is lower than the recommend cut-off score for probable drug use disorder (\geq 7).

Conclusions

Results identify high-specificity thresholds on the AUDIT and SDU that may have clinical utility in suicide risk assessment in veterans. Veterans with moderate-to-severe alcohol use disorder or who use non-prescription drugs may warrant further suicide risk assessment.

https://doi.org/10.1016/j.addbeh.2021.107031

Associations between symptoms of posttraumatic stress disorder, pain, and alcohol use disorder among OEF/OIF/OND veterans.

Shaddy K. Saba, Jordan P. Davis, John J. Prindle, Carl Andrew Castro, Eric R. Pedersen

Addictive Behaviors Volume 122, November 2021

Highlights

- Pain and PTSD symptoms were positively associated with AUD symptomology.
- The association between pain and AUD symptomology was stronger among those with relatively low PTSD symptoms.
- Re-experiencing, and negative cognitions and mood were associated with alcohol use.
- We report evidence for sex differences in these relationships.

Abstract

Background

Alcohol use disorder (AUD) is prevalent among Operation Enduring Freedom, Operation Iragi Freedom, and Operation New Dawn (OEF/OIF/OND) veterans. Pain and posttraumatic stress disorder (PTSD) are highly comorbid and increase risk of AUD. Prior studies linking pain or PTSD to AUD have not explored interactions between pain and PTSD symptoms. Methods: OEF/OIF/OND veterans (N = 1230) were recruited from social media websites for a cross-sectional study of health behavior. Pain was assessed using the Pain Outcomes Questionnaire. PTSD symptoms and PTSD symptom clusters were assessed using the Posttraumatic Stress Disorder Checklist for DSM-5. AUD symptoms were assessed with the AUD Identification Test. Linear regression models were used to test for main and interaction effects in the full sample and separately by sex. Results: Both pain and PTSD symptoms were associated with increased AUD symptomology, though the relationship between pain and AUD was heighted at relatively low PTSD symptoms. With respect to PTSD symptom clusters, reexperiencing and negative cognitions and mood were associated with increased AUD symptomology. Interactions between pain and re-experiencing as well as pain and avoidance were revealed. Results for men mirrored the full sample, while an interaction between pain and negative cognitions and mood was associated with AUD in women. Conclusions: Results highlight associations between AUD, PTSD symptoms, and pain among veterans. While the relationship between pain and AUD appeared stronger in the context of low PTSD symptoms, both pain and PTSD symptoms were associated with increased AUD. Clinicians treating veterans with AUD should address the range of potential comorbidities.

https://doi.org/10.1080/08897077.2021.1941512

Alcohol use disorder in active duty service members: Incidence rates over a 19year period.

Jason L. Judkins , DSc, PhD, Kendra Smith , BA, Brain A. Moore , PhD & Sandra B. Morissette , PhD

Substance Abuse Published online: 02 Jul 2021

Background:

Alcohol use is a concerning issue for the military given its potential negative impact on human performance. Limited data are available regarding the incidence of alcohol use disorder in the military, which is critical to understand to evaluate force readiness, as well as for preventative initiatives and treatment planning. The aim was to examine the alcohol use disorder incidence rates (overall and across demographics) among active duty service members from 2001 to 2018.

Methods:

Data on 208,870 active duty service members between 2001 and 2018 from the Defense Medical Epidemiology Database was examined. Incidence rates were analyzed to determine the diagnostic rates of AUD (including both alcohol abuse and dependence), which were then examined by sex, age, service branch, military pay grade, marital status, and race.

Results:

Incidence rates of AUD in active duty service members (per 1,000 service members) ranged from 6.45 to 10.50 for alcohol abuse and 5.21 to 7.11 for alcohol dependence. Initial diagnoses of new-onset AUD occurred most frequently within 20–24 year-old, white, male, and non-married U.S. Army service members in the enlisted pay grades of E-1 to E-4. Statistically significant differences (p < .001) were found between observed and expected counts across all examined demographic variables.

Conclusions:

To our knowledge, this is the first study to provide a comprehensive examination of AUD incidence rates in an active-duty military population over an extended 18-year period and during the last decade. Incidence rates were higher than expected for alcohol dependence and lower than expected for alcohol abuse. Given the untoward effects of AUD on overall health and force readiness, active-duty service members may

benefit from more advanced preventative interventions to decrease incidence rates of AUD over time. Future research should use these data to develop targeted interventions for the demographics at greatest risk.

https://doi.org/10.1016/j.mhpa.2021.100417

Combining a single session of prolonged exposure with physical activity in patients with PTSD: The effect of sequence.

EM Voorendonk, SA Sanches, M Mojet, A De Jongh, A Van Minen

Mental Health and Physical Activity Volume 21, October 2021

Highlights

- Combining PE and physical activity sessions was shown effective.
- First study to compare physical activity before and after a single PE session.
- Physical activity after PE showed the strongest decrease on distress and vividness.
- Physical activity after PE was perceived as more helpful.

Abstract

Adding physical activity may be a promising new strategy to augment the effectiveness of prolonged exposure (PE) therapy in post-traumatic stress disorder (PTSD). However, it is unknown whether it is more effective to provide the physical activities before or after PE for PTSD. Therefore, the current study examined the influence of the sequence in which physical activity and PE are applied, on the primary outcome measures of trauma-related distress and vividness. In this guasi-experimental study, a total of 93 patients with PTSD were allocated to two conditions: (1) PE followed by physical activity (N = 50) and (2) physical activity followed by PE (N = 43). The physical activity intervention consisted of a low to moderate intensive outside walk. The reduction in trauma-related distress and vividness from pre- to post-intervention was significantly stronger in the group that performed physical activity after a single PE session compared to the group performing physical activity prior to the PE session. However, the explorative results with regard to freezing symptoms and emotion regulation problems indicated that both sequence groups showed an equal decrease in symptoms over time. The current findings suggest that the sequence in which physical activity and PE sessions are performed, could matter. A stronger effect on distress and vividness

was found when physical activity was added after, instead of before, one PE session. These results could further guide interventions for patients with PTSD by taking sequence into account when combining single physical activity and PE sessions in clinical practice.

https://doi.org/10.1080/14999013.2021.1943569

Factors Associated with Repeat Sexual Offending among U.S. Military Veterans Compared to Civilians.

Stephanie Brooks Holliday, Shoba Sreenivasan, Eric Elbogen, David Thornton & Jim McGuire

International Journal of Forensic Mental Health Published online: 05 Jul 2021

Veterans have higher rates of incarceration for sexual offenses than non-veterans, but little is known about the factors associated with repeat sexual offending among veterans. This study used the Survey of Inmates in State and Federal Correctional Facilities to examine whether the factors associated with repeat sexual offending differ between veterans and non-veterans. In a multivariate logistic regression, there were significant interactions between veteran status and both age and race. Diagnosis of personality disorder and history of violation of conditional release were also associated with repeat offense status. Findings can help inform intervention and risk management with veterans.

https://doi.org/10.1016/j.jpsychires.2021.07.004

Treatment response trajectories in a three-week CPT-Based intensive treatment for veterans with PTSD.

Philip Held, Dale L. Smith, Jenna M. Bagley, Merdijana Kovacevic, ... Niranjan S. Karnik

Journal of Psychiatric Research Volume 141, September 2021, Pages 226-232 Response to weekly evidence-based PTSD treatments varies. Little is known about response trajectories and predictors in intensive PTSD treatments. This study sought to identify different trajectories of symptom change among veterans who completed a 3week CPT-based intensive PTSD treatment program and examined potential predictors of trajectory group membership. Four hundred fifty-two veterans completed the program. Demographics, PTSD and depression severity, negative posttrauma cognitions, and alcohol use were assessed at intake and evaluated as possible predictors of group membership. Group based trajectory modeling was used to determine distinct groups based on PTSD symptom trajectory over the course of treatment, as well as predictors of group membership. Four distinct treatment trajectories were identified: Fast responders (15.3%), steady responders (32.0%), partial responders (38.4%), and minimal responders (14.4%). Fast and steady responders reported substantial symptom reductions and dropped below the "probable PTSD" threshold, with fast responders achieving improvements after just one week of treatment. Partial responders experienced clinically significant reductions but remained above the "probable PTSD" threshold. Minimal responders reported the highest baseline PTSD symptoms and changed the least throughout treatment. Negative posttrauma cognitions as well as self-reported and clinician-rated PTSD symptom severity assessed at intake successfully predicted trajectory membership. The identified trajectories closely resemble findings in the limited existing literature on intensive PTSD treatment trajectories. Results suggest that some individuals may improve with even shorter interventions and others might benefit from additional treatment sessions. Overall, findings support the importance of evaluating individual- and group-level treatment responses.

https://doi.org/10.1002/jclp.23205

Patterns of distress associated with exposure to potentially morally injurious events among Canadian Armed Forces service members and Veterans: A multimethod analysis.

Houle, S. A., Vincent, C., Jetly, R., & Ashbaugh, A. R.

Journal of Clinical Psychology 2021 Jul 5

Objective:

This study describes patterns of distress associated with exposure to potentially morally injurious experiences (PMIEs) in a Canadian military sample.

Method:

Thematic analysis was performed on interviews from PMIE-exposed military members and Veterans. Participants also completed structured diagnostic interviews, and measures of trauma exposure and psychopathology. Multiple regression examined associations among these variables. Information on pharmacological treatment and past diagnoses are reported.

Results:

Eight qualitative themes were identified: changes in moral attitudes, increased sensitivity and reactivity to moral situations, loss of trust, disruptions in identity, disruptions in spirituality, disruptions in interpersonal relatedness, rumination, and internalizing and externalizing emotions and behaviors. Self-report data revealed that degree of PMIE exposure was meaningfully associated with posttraumatic stress disorder.

Conclusion:

Qualitative but not quantitative findings supported existing models of moral injury (MI). Additional research is needed to examine the impact of PMIE type on mental health, and to test basic assumptions of MI theory.

https://doi.org/10.1080/15332691.2021.1945986

Finding Our New Normal: A 10-Year Follow-Up Study with U.S. Army Veterans and Their Spouses.

Natira Mullet, Caroline Fuss, Laura Lyddon, Danielle Mondloch, Sarah Neal, Briana S. Nelson Goff

Journal of Couple & Relationship Therapy Published online: 06 Jul 2021

Deployments can be difficult for military service members and their spouses, with consequences often lasting well beyond when the service member has returned home. Feelings of uncertainty, stress, anxiety, loneliness, and depression are common

throughout all stages of deployment. The current study is a 10-year follow-up, which explores the relational impact of deployment and trauma in married, veteran couples and their support needs. This study identified themes including: the impact of deployment (intrapersonal effects, interpersonal effects, communication effects, and impact on the parenting relationship) and coping with deployment (common bonds, formal resources, and barriers to accessing support systems). Themes are considered during pre-deployment, deployment, and post-deployment stages.

https://doi.org/10.1001/jamanetworkopen.2021.15959

Assessment of Prolonged Physiological and Behavioral Changes Associated With COVID-19 Infection.

Radin JM, Quer G, Ramos E, et al.

JAMA Network Open July 7, 2021

Long-term COVID symptoms marked by autonomic dysfunction and cardiac damage following COVID-19 infection have been noted for up to 6 months after symptom onset, but to date have not been quantified, to our knowledge. Previous studies have found that wearable data can improve real-time detection of viral illness or discrimination of individuals with COVID-19 vs other viral infections. Wearable devices provide a way to continuously track an individual's physiological and behavioral metrics beginning when healthy (ie, before infection), during the course of infection, and recovery back to baseline. In this cohort study, we aimed to examine the duration and variation of recovery among COVID-19–positive vs COVID-19–negative participants.

We found a prolonged physiological impact of COVID-19 infection, lasting approximately 2 to 3 months, on average, but with substantial intraindividual variability, which may reflect various levels of autonomic nervous system dysfunction or potentially ongoing inflammation.

https://doi.org/10.1038/s41398-021-01501-9

Public mental health problems during COVID-19 pandemic: a large-scale metaanalysis of the evidence.

Xuerong Liu, Mengyin Zhu, Rong Zhang, Jingxuan Zhang, Chenyan Zhang, Peiwei Liu, Zhengzhi Feng & Zhiyi Chen

Translational Psychiatry Published: 09 July 2021

The coronavirus disease 2019 (COVID-19) pandemic has exposed humans to the highest physical and mental risks. Thus, it is becoming a priority to probe the mental health problems experienced during the pandemic in different populations. We performed a meta-analysis to clarify the prevalence of postpandemic mental health problems. Seventy-one published papers (n = 146,139) from China, the United States, Japan, India, and Turkey were eligible to be included in the data pool. These papers reported results for Chinese, Japanese, Italian, American, Turkish, Indian, Spanish, Greek, and Singaporean populations. The results demonstrated a total prevalence of anxiety symptoms of 32.60% (95% confidence interval (CI): 29.10–36.30) during the COVID-19 pandemic. For depression, a prevalence of 27.60% (95% CI: 24.00–31.60) was found. Further, insomnia was found to have a prevalence of 30.30% (95% CI: 24.60–36.60). Of the total study population, 16.70% (95% CI: 8.90–29.20) experienced post-traumatic stress disorder (PTSD) symptoms during the COVID-19 pandemic. Subgroup analysis revealed the highest prevalence of anxiety (63.90%) and depression (55.40%) in confirmed and suspected patients compared with other cohorts. Notably, the prevalence of each symptom in other countries was higher than that in China. Finally, the prevalence of each mental problem differed depending on the measurement tools used. In conclusion, this study revealed the prevalence of mental problems during the COVID-19 pandemic by using a fairly large-scale sample and further clarified that the heterogeneous results for these mental health problems may be due to the nonstandardized use of psychometric tools.

https://doi.org/10.1371/journal.pone.0254252

Healthcare workers' emotions, perceived stressors and coping mechanisms during the COVID-19 pandemic.

Suzanne Rose, Josette Hartnett, Seema Pillai

PLoS ONE Published: July 9, 2021

Increasing cases, insufficient amount of personal protection equipment, extremely demanding workloads, and lack of adequate therapies to save lives can contribute to a psychological burden directly related to working during disease outbreaks. Healthcare workers (HCWs) are at a high risk of contracting COVID-19 due to its ability to spread efficiently through asymptomatic and symptomatic individuals. There are limited studies assessing the pandemic's psychological impact on HCWs, specifically those in close proximity to hospitalized patients with COVID-19. Our study explored the emotions, perceived stressors, and coping strategies of front-line HCWs at high risk of exposure to COVID-19 during the first surge at our community-based teaching hospital, the epicenter of COVID-19 in Connecticut. A validated comprehensive questionnaire derived and modified from previous epidemics was used to inquire about staff feelings, factors that caused stress and factors that mitigated stress. Personal coping strategies and factors that can increase staff's motivation to work during future events of similar nature were also asked. Emotional reactions, coping mechanisms, and stressors varied by healthcare role, while some experiences and reactions were similar among groups. Willingness to participate in a second wave of the pandemic or future outbreaks is strongly driven by adequate personal protective equipment, financial recognition, and recognition from management, similarly reported in previous disease outbreaks. All groups felt a reduction in stress due to a sense of camaraderie and teamwork, as well as when sharing jokes or humor with colleagues. Our HCWs at high risk of exposure experienced significant emotional distress during the first wave of the COVID-19 pandemic. By understanding the needs and experiences of our HCWs at highest risk, we can improve our psychological support using targeted interventions during future waves of this pandemic or similar devastating events.

https://doi.org/10.1007/s12144-021-01990-3

PTSD service dogs foster resilience among veterans and military families.

Leanne O. Nieforth, Elizabeth A. Craig, Virginia A. Behmer, Shelley MacDermid Wadsworth & Marguerite E. O'Haire

Current Psychology July 7, 2021

Military deployment and reintegration challenges permeate the lives and relationships of Veterans, their spouses, and their families. Among these challenges, 23% of post-9/11 Veterans have been diagnosed with posttraumatic stress disorder (PTSD). Psychiatric service dogs have been found to help clinically alleviate PTSD symptoms when used as a complementary intervention. However, minimal research exists that explores the role of the service dog as a mechanism for cultivating resilience within the military family system. Researchers utilized a qualitative, constant comparative approach to analyze self-reported experiences of 101 individuals, including Veterans (n = 67) and their spouses (n = 34). Analyzed through the framework of the Theory of Resilience and Relational Load (Afifi et al., 2016), findings suggest complex communication processes that facilitate relational and family adaptation. These processes encompassed (a) the role of the service dog in building emotional reserves, (b) relational load introduced when caring for the service dog, and (c) the service dog's facilitation of relational maintenance behaviors among family members that contributed to communal orientation. Based on the results of this qualitative analysis, researchers suggest educational interventions where service dog trainers and mental health practitioners can incorporate relational maintenance strategies and family-focused approaches to integrating service dogs as military family members.

https://doi.org/10.1177/10547738211030602

Acupuncture for Sleep Disturbances in Post-Deployment Military Service Members: A Randomized Controlled Trial.

Abanes, J. J., Ridner, S. H., Dietrich, M. S., Hiers, C., & Rhoten, B.

Clinical Nursing Research First Published July 6, 2021

This RCT and mixed-methods study examined the difference between two groups receiving the following interventions: (1) brief manual standardized stress acupuncture (MSSA) combined with an abbreviated Cognitive Behavioral Therapy (ACBT) versus (2) ACBT alone. Three study aims: Aim (1): Insomnia Severity Index (ISI) and Pittsburg Sleep Quality Index (PSQI) scores were analyzed using descriptive summaries, linear regression, and reliable change index (RCI). Aim (2): Journal entries were analyzed

using content analysis. Aim (3): Acupuncture Expectancy Scale (AES) scores were analyzed using paired t-test and RCI. Aim (1): Both groups demonstrated similar improvements in the ISI scores (p = .480). Aim (2): The ACBT/MSSA group reported greater benefits in sleep and in other life areas including mental, physical, and social functioning. Aim (3): The AES showed that 21.6% had a clinically meaningful increase in expectations in the effect of acupuncture for stress (p = .965). The study was registered in ClinicalTrials.gov (NCT04031365) at https://clinicaltrials.gov/ct2/show/NCT04031365 on July 24, 2019.

https://doi.org/10.1177/21677026211025018

Inefficient Attentional Control Explains Verbal-Memory Deficits Among Military Veterans With Posttraumatic Reexperiencing Symptoms.

Marquardt, C. A., Pokorny, V. J., Disner, S. G., Nelson, N. W., McGuire, K. A., & Sponheim, S. R.

Clinical Psychological Science First Published July 7, 2021

Among individuals with posttraumatic stress disorder (PTSD), verbal learning and memory are areas of weakness compared with other cognitive domains (e.g., visuospatial memory). In this study, previously deployed military veterans completed clinical assessments of word memory and vocabulary (n = 243) and a laboratory task measuring encoding, free recall, repetition priming, and recognition of words (n = 147). Impaired verbal memory was selectively related to reexperiencing symptoms of PTSD but was not associated with other symptom groupings or blast-induced traumatic brain injury. Implicit priming of response times following word repetition was also unrelated to clinical symptoms. Instead, slowed response times during encoding explained associations between reexperiencing and memory performance. These findings are consistent with alterations in attentional control explaining PTSD-related verbal-memory deficits. Such findings have implications for understanding trauma-focused psychotherapy and recovery, which may depend on efficient attentional processing of words to alter posttraumatic reexperiencing symptoms.

https://doi.org/10.1177/0095327X211030610

Transformational Leadership in Extreme Contexts: Associations with Posttraumatic Growth and Self-Efficacy Among Combat Veterans.

LaRocca, M. A., & Groves, K. S.

Armed Forces & Society First Published July 6, 2021

Decades of research have established transformational leadership as an encompassing leadership approach with broad applications across organizational contexts. Despite dozens of meta-analyses and many empirical studies demonstrating the direct performance effects of transformational leadership, ways in which transformational leaders shape follower personal development and well-being remain largely unexplored, particularly in extreme contexts such as military combat. Based on a sample of 130 combat veterans of multiple conflicts, we examined the impact of transformational leadership in combat on follower posttraumatic growth and follower self-efficacy after deployment, including the moderating effects of the duration and intensity of combat. Moderated regression modeling and analyses demonstrated that transformational leadership was associated with follower self-efficacy independent of combat duration and intensity. Our findings suggest that transformational leaders frame extreme contexts as opportunities for growth, and further implications for research and practice are discussed.

https://doi.org/10.1037/tra0001057

Combat exposure and mental health outcomes: The incremental impact of nonsexual harassment on women veterans.

Stanton, K., Creech, S. K., Snyder, D. K., & McKee, G. B.

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

Objective:

This study investigated the impact of combat exposure and nonsexual harassment

(verbal and nonverbal behaviors that convey negative and harmful attitudes on the basis of minority status) on mental health functioning in female veterans who were deployed Afghanistan and Iraq.

Method:

Participants (N = 134) completed measures of combat exposure, nonsexual harassment, PTSD, depression, and alcohol use.

Results:

Binary logistic regression models indicated nonsexual harassment was significantly associated with later symptoms of PTSD and depression, but not problem drinking; combat exposure was significantly associated with symptoms of PTSD and alcohol use, but not depression. Relative risk ratios indicated that for women with even minimal exposure to combat, experiencing nonsexual harassment significantly increased the likelihood of manifesting PTSD, depression, and problem drinking symptoms that met at least minimum threshold for clinical diagnoses. The impact of nonsexual harassment resulted in an almost 4 times greater risk for PTSD symptoms and problem drinking and up to 6 times greater risk for depression when experienced concurrently with combat exposure.

Conclusions:

Although nonsexual harassment does not pose the same physical threat as assault from enemy fire, findings suggest that it does pose an invisible threat to mental health and contribute to understanding and contextualizing the impact of nonsexual harassment on female veterans' psychological well-being. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

https://doi.org/10.1016/j.jsxm.2021.05.011

Relationship Between Post-Traumatic Stress Disorder and Sexual Difficulties: A Systematic Review of Veterans and Military Personnel.

Elizabeth R. Bird, Marilyn Piccirillo, Natalia Garcia, Rebecca Blais, Sarah Campbell

The Journal of Sexual Medicine Available online 10 July 2021

Background

Posttraumatic stress disorder (PTSD) is associated with sexual difficulties but the nuances of this relationship remain elusive. Research has increased in recent years, most notably following publication of several reviews in 2015.

Aim

This systematic review examines the relationship between PTSD and sexual difficulties in veterans/military personnel.

Methods

A systematic review was conducted using PRISMA guidelines in PsycINFO and PubMed databases for studies examining a diagnosis of PTSD or PTSD severity in relation to a range of sexual difficulties. Forty-three studies were identified that met inclusion and exclusion criteria for this review.

Results

PTSD was associated with increased risk of experiencing at least one sexual difficulty. PTSD was most clearly associated with overall sexual function, sexual desire, sexual satisfaction, and sexual distress. Results were mixed for sexual arousal, orgasm function, erectile dysfunction, premature ejaculation, sexual pain, and frequency of sexual activity. PTSD symptom clusters of avoidance and negative alterations in cognition/mood were most commonly associated sexual difficulties. Few studies compared results by gender and trauma type.

Clinical Implications

Clinicians should inquire about sexual health in relation to PTSD symptoms and target avoidance and negative mood symptoms by incorporating sexual exposure assignments and sexual activation exercises when appropriate.

Strengths & Limitations

This systematic review synthesizes an extensive literature that has grown substantially in the past 5 years and includes studies with low to moderate risk of bias. Limitations of the existing literature include challenges differentiating between PTSD and depression, inconsistent measurement of PTSD and trauma histories, inconsistent operationalization and measurement of sexual outcomes, and largely cross-sectional study designs.

Conclusion

PTSD is linked to a range of sexual outcomes. The current literature suggests that PTSD is associated with sexual difficulties related to both the sexual response cycle (ie,

sexual desire) and one's emotional relationship to sexual activity (eg, sexual distress). More research is needed to increase confidence in findings.

https://doi.org/10.1093/milmed/usab254

Behavioral Health Provider Attitudes Toward Behavioral Health Profiles in the U.S. Army.

Justin M Curley, MC USA, Kristina M Clarke-Walper, MPH, Katie L Nugent, PhD, Joshua E Wilk, PhD

Military Medicine Published: 09 July 2021

Introduction

U.S. Army healthcare providers' use of profiles to document and communicate behavioral health (BH) condition limitations to commanders is vital to understanding both the individual soldier's BH readiness for missions and, as an aggregate, the unit's overall BH readiness status. Quantitative work exploring the link between soldier attitudes toward BH profiles and treatment utilization found that profiles may actually promote increases in treatment-seeking behavior in those receiving conventional BH services. BH provider attitudes on the subject, however, have not been quantitatively explored. Using data from the recently described Behavioral Health Readiness and Decision-Making Instrument (B-REDI) study, the current inquiry addresses this by examining BH providers' pre-/post-B-REDI attitudes toward BH profiles, including therapeutic alliance, to better understand how BH profiles may impact BH treatment.

Methods

This study was approved by the WRAIR Institutional Review Board and is part of the larger B-REDI study. BH providers (n = 307) across five installations supporting active duty U.S. Army Divisions completed surveys longitudinally across three time points from September 2018 to March 2019. The survey specific to this study included five items, developed by WRAIR, assessing BH provider attitudes toward BH profiles. Of the providers who completed the survey, 250 (81%) consented to participate in the study and 149 (60%) completed the 3-month follow-up survey.

Results

Over 80% of BH providers expressed agreement with each of three items assessing

rationale for issuing BH profiles in both the pre- and post B-REDI period. Specifically, most providers agreed that profiles facilitate commander support to the soldier, afford soldiers resources for recovery, and give commanders increased understanding of soldier health for mission planning. Twenty-six percent of BH providers agreed, 46% were neutral, and 28% disagreed on whether profile impact on the soldier was positive or not in the pre-B-REDI period, but there was a significant positive trend relative to baseline in the post B-REDI period. The vast majority of providers (≥94%) did not endorse agreement that BH profiles negatively impact therapeutic alliance in either the pre- or post-B-REDI period.

Conclusions

Assuming that therapeutic alliance and perceptions of BH profile impact on soldiers are useful proxy measures of how treatment utilization may be affected by profiling, this inquiry fails to establish any meaningful negative association between them. This may provide some additional reassurance to BH providers and policymakers that efforts to improve readiness decision-making, such as B-REDI, and increased profiling in conventional military BH settings may not negatively impact treatment utilization rates.

Links of Interest

Commentary: Institutions of higher learning must double down support for student veterans

https://www.militarytimes.com/education-transition/2021/07/08/commentary-institutionsof-higher-learning-must-double-down-support-for-student-veterans/

Staff Perspective: MDMA-Assisted Psychotherapy for PTSD - Reactions from a Skeptic <u>https://deploymentpsych.org/blog/staff-perspective-mdma-assisted-psychotherapy-ptsd-reactions-skeptic</u>

Staff Perspective: I'm Having the Thought That Cognitions are Important in Trauma Work

https://deploymentpsych.org/blog/staff-perspective-im-having-thought-cognitions-areimportant-trauma-work

Resource of the Week: <u>Chartbook on the Health Of Lesbian, Gay, And Bisexual</u> <u>Veterans</u>

From the Veterans Health Administration, Office of Health Equity:

While the health of all LGBTQ+ Veterans are a priority for the VHA, this chartbook utilizes the 2013-2018 National Center for Health Statistics (NCHS) National Health Interview Survey (NHIS) which only has data available for a subset of the LGBTQ+ population. In this chartbook, the term LGB refers to individuals that identified themselves as lesbian, gay, or bisexual and the term non-LGB refers to individuals that identified themselves as "straight, that is not gay" in their responses to the survey.

	Veteran		Non-Veteran	
	LGB ¹	Non-LGB	LGB ¹	Non-LGB
	n (%)	n (%)	n (%)	n (%)
Sex				
Male	297,000	19,650,000	2,912,000	90,196,000
	(68.1)	(92.4)	(45.1)	(43.6)
Female	139,000	1,623,000	3,545,000	116,674,000
	(31.9)	(7.6)	(54.9)	(56.4)
Age (years)				
20-34	64,000	1,907,000	2,958,000	59,632,000
	(14.6)	(9.0)	(45.8)	(28.8)
35-49	83,000	3,376,000	1,635,000	55,737,000
	(19.1)	(15.9)	(25.3)	(26.9)
50-64	142,000	5,618,000	1,394,000	55,221,000
	(32.6)	(26.4)	(21.6)	(26.7)
65 and Over	147,000	10,372,000	470,000	36,279,000
	(33.7)	(48.8)	(7.3)	(17.5)
Race and Hispanic Origin ²				
Hispanic	24,000	1,323,000	959,000	34,011,000
	(5.6)	(6.2)	(14.9)	(16.4)
Non-Hispanic White	335,000	16,726,000	4,231,000	131,694,000
	(76.9)	(78.6)	(65.5)	(63.7)
Non-Hispanic Black	50,000	2,428,000	760,000	23,730,000
	(11.4)	(11.4)	(11.8)	(11.5)
Non-Hispanic Asian	8,000	355,000	260,000	12,871,000
	(1.8)	(1.7)	(4.0)	(6.2)
County of Residence ³				
Urban	382,000	17,790,000	5,898,000	179,587,000
	(87.8)	(83.6)	(91.4)	(86.8)
Rural	53,000	3,484,000	558,000	27,283,000
	(12.2)	(16.4)	(8.6)	(13.2)
Disability Status ⁴				
With Disability	60,000	3,085,000	755,000	18,579,000
	(13.7)	(14.5)	(11.7)	(9.0)
Without Disability	376,000	18,188,000	5,702,000	188,291,000
	(86.3)	(85.5)	(88.3)	(91.0)
Total Number	435,000	21,273,000	6,457,000	206,869,000
Sample Size	422	17,959	5,091	157,389

 Table 1. Estimated Number & Percentages of U.S. Adults Aged 20 and Over,

 by Veteran Status, LGB Status, and Selected Demographics (2013-2018)

¹ Sexual orientation of respondents who responded "something else" or "I don't know" was imputed as either non-LGB or LGB.

² Refers to adults who are of Hispanic or Latino origin and may be of any race or combination of races. "Non-Hispanic" refers to persons who are not of Hispanic or Latino origin, regardless of race. Adults who are non-Hispanic multiple or other races are not shown.

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