

Research Update -- June 20, 2024

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Emotional Awareness and Expression Therapy vs Cognitive Behavioral Therapy for Chronic Pain in Older Veterans: A Randomized Clinical Trial.

Yarns, B. C., Jackson, N. J., Alas, A., Melrose, R. J., Lumley, M. A., & Sultzer, D. L.

JAMA Network Open June 13, 2024

Key Points

Question

Is group-based emotional awareness and expression therapy (EAET)—a psychological intervention targeting trauma and emotional processing—superior to cognitivebehavioral therapy (CBT) for treatment of chronic pain in a racially and ethnically diverse cohort of older veterans?

Findings In this randomized clinical trial with 126 participants, those randomized to EAET had significantly greater improvements in the primary outcome of reduction in pain severity from baseline to the primary end point of posttreatment (week 10). Moreover, 63% of EAET participants had clinically significant (at least 30%) posttreatment pain reduction vs only 17% in CBT.

Meaning

These findings support the superiority of EAET compared with CBT in reducing chronic pain among older veterans.

Abstract

Importance

Chronic pain is common and disabling in older adults, and psychological interventions are indicated. However, the gold standard approach, cognitive-behavioral therapy (CBT), produces only modest benefits, and more powerful options are needed.

Objectives

To evaluate whether emotional awareness and expression therapy (EAET) is superior to CBT for treatment of chronic pain among predominantly male older veterans and whether higher baseline depression, anxiety, or posttraumatic stress disorder (PTSD) symptoms—key targets of EAET—moderate treatment response.

Design, Setting, and Participants

This 2-arm randomized clinical trial was conducted from May 16, 2019, to September 14, 2023, in the US Department of Veterans Affairs Greater Los Angeles Healthcare System. The trial included a racially and ethnically diverse group of veterans aged 60 to 95 years with at least 3 months of musculoskeletal pain.

Interventions

Emotional awareness and expression therapy or CBT, conducted concurrently, each presented as one 90-minute individual session followed by eight 90-minute group sessions.

Main Outcomes and Measures

The primary outcome was Brief Pain Inventory pain severity (range, 0 to 10) from baseline to posttreatment (week 10, primary end point) and 6-month follow-up. Secondary outcomes included Patient Reported Outcomes Institute Measurement System Anxiety, Depression, Fatigue, General Life Satisfaction (NIH Toolbox), Pain Interference, and Sleep Disturbance Short Forms, Patient Global Impression of Change (PGIC), and Satisfaction with Therapy and Therapist Scale-Revised. A subset of participants completed the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition). All analyses were for the intention-to-treat population and included all randomized participants.

Results

Among 126 randomized participants (66 in the EAET group and 60 in the CBT group; mean [SD] age, 71.9 [5.9] years; 116 [92%] male), 111 (88%) completed posttreatment, and 104 (82%) completed the 6-month follow-up. The EAET was superior to CBT for the primary outcome of reduction in pain severity at posttreatment (estimate, -1.59 [95% CI, -2.35 to -0.83]; P < .001) and follow-up (estimate, -1.01 [95% CI, -1.78 to -0.24]; P = .01). A greater percentage of participants in EAET vs CBT had clinically significant (at least 30%) pain reduction (63% vs 17%; odds ratio, 21.54 [95% CI, 4.66-99.56]; P < .001) at posttreatment. In addition, EAET was superior to CBT on 50% pain reduction (35% vs 7%; odds ratio, 11.77 [95% CI, 2.38-58.25]; P = .002), anxiety (estimate, -2.49 [95% CI, -4.30 to -0.68]; P = .006), depression (estimate, -3.06 [95% CI, -5.88 to -0.25]; P = .03), general life satisfaction (estimate, 1.23 [95% CI, 0.36-2.10]; P = .005), PTSD symptoms (estimate, -4.39 [95% CI, -8.44 to -0.34]; P = .03), PGIC score (estimate, 1.46 [95% CI, 0.77-2.15]; P < .001), and global treatment satisfaction (estimate, 0.28 [95% CI, 0.12-0.45]; P < .001) at posttreatment. Higher baseline depression (estimate, -1.55 [95% CI, -0.37 to 2.73]; P < .001), anxiety (estimate, -1.53 [95% CI, -2.19 to -0.88]; P < .001), and PTSD symptoms (estimate, -1.69 [95% CI, -2.96 to -0.42]; P = .009) moderated greater reduction in pain severity after EAET but not CBT.

Conclusions and Relevance

The results of this randomized clinical trial suggest that EAET may be a preferred intervention for medically and psychiatrically complex patients with pain. The societal

burden of chronic pain could be improved by further incorporating the principles of EAET into mainstream clinical pain medicine.

Trial Registration ClinicalTrials.gov Identifier: <u>NCT03918642</u>

https://doi.org/10.1001/jamanetworkopen.2024.14864

Updated Estimate of the Number of Extreme Risk Protection Orders Needed to Prevent 1 Suicide.

Miller, M., Zhang, Y., Studdert, D. M., & Swanson, S.

JAMA Network Open June 12, 2024

Key Points

Question

How effective are extreme risk protection orders (ERPOs) in preventing suicide for the people subject to these emergency measures?

Findings

This cohort study, which combines information about the suicide methods used by handgun-owning suicide decedents in California, the lethality of different suicide methods, and the distribution of suicide deaths among ERPO respondents in Connecticut, found that 1 suicide death was prevented for every 22 ERPOs issued.

Meaning

These findings suggest that ERPOs can play an important role in averting deaths among high-ris

Abstract

Importance:

Extreme risk protection orders (ERPOs)-also known as red flag, risk warrant, and gun violence restraining orders-authorize law enforcement, family members, and sometimes others to petition a court to remove firearms from and prevent the acquisition of new firearms by a person judged to pose an immediate danger to themselves or others. Previous estimates suggest that 1 suicide is prevented for every 10 ERPOs issued, a

number needed to treat that depends critically on the counterfactual estimate of the proportion of suicidal acts by ERPO respondents that would have involved firearms in the absence of ERPOs.

Objective:

To empirically inform updated estimates of the number of ERPOs needed to prevent 1 suicide.

Design, setting, and participants:

This cohort study used data from California for method-specific suicides by handgun ownership (October 18, 2004, to December 31, 2015). Handgun-owning suicide decedents in California were identified using individual-level registry data about lawful handgun ownership linked to cause-specific mortality for a cohort of more than 25 million adults. The study also used data from Connecticut for method-specific suicides among ERPO respondents who died by suicide, extracted from published data (October 1999 to June 2013). Data analysis was performed in December 2023.

Exposure:

Handgun ownership.

Main outcomes and measures:

The primary outcomes were the number and distribution of suicidal acts by handgun owners in California, estimated using method-specific suicide mortality data and published case fatality ratios, and the counterfactual number and distribution of suicidal acts and deaths among ERPO respondents in Connecticut had no ERPOs been issued.

Results:

A total of 1216 handgun owners (mean [SD] age, 50 [18] years; 1019 male [83.8%]) died by suicide during the study period. Among male handgun owners in California, 28% of suicidal acts involved firearms, 54% involved drug poisoning, 9% involved cutting or piercing, 3% involved hanging or suffocation, 2% involved poisoning with solids and/or liquids, and the remaining 4% involved other methods. Assuming this distribution approximates the counterfactual distribution among ERPO respondents in Connecticut in the absence of ERPOs, 1 suicide death was prevented for every 22 ERPOs issued.

Conclusions and relevance:

The estimates produced by this cohort study of California handgun owners suggest that ERPOs can play an important role in averting deaths among high-risk individuals.

https://doi.org/10.1001/jama.2024.5756

Management of Depression in Adults: A Review.

Simon, G. E., Moise, N., & Mohr, D. C.

JAMA June 10, 2024

Abstract

Importance

Approximately 9% of US adults experience major depression each year, with a lifetime prevalence of approximately 17% for men and 30% for women.

Observations

Major depression is defined by depressed mood, loss of interest in activities, and associated psychological and somatic symptoms lasting at least 2 weeks. Evaluation should include structured assessment of severity as well as risk of self-harm, suspected bipolar disorder, psychotic symptoms, substance use, and co-occurring anxiety disorder. First-line treatments include specific psychotherapies and antidepressant medications. A network meta-analysis of randomized clinical trials reported cognitive therapy, behavioral activation, problem-solving therapy, interpersonal therapy, brief psychodynamic therapy, and mindfulness-based psychotherapy all had at least medium-sized effects in symptom improvement over usual care without psychotherapy (standardized mean difference [SMD] ranging from 0.50 [95% CI, 0.20-0.81] to 0.73 [95% CI, 0.52-0.95]). A network meta-analysis of randomized clinical trials reported 21 antidepressant medications all had small- to medium-sized effects in symptom improvement over placebo (SMD ranging from 0.23 [95% CI, 0.19-0.28] for fluoxetine to 0.48 [95% CI, 0.41-0.55] for amitriptyline). Psychotherapy combined with antidepressant medication may be preferred, especially for more severe or chronic depression. A network meta-analysis of randomized clinical trials reported greater symptom improvement with combined treatment than with psychotherapy alone (SMD, 0.30 [95% CI, 0.14-0.45]) or medication alone (SMD, 0.33 [95% CI, 0.20-0.47]). When initial antidepressant medication is not effective, second-line medication treatment includes changing antidepressant medication, adding a second antidepressant, or augmenting with a nonantidepressant medication, which have approximately equal likelihood of success based on a network meta-analysis. Collaborative care programs, including systematic follow-up and outcome assessment, improve treatment effectiveness, with 1

meta-analysis reporting significantly greater symptom improvement compared with usual care (SMD, 0.42 [95% CI, 0.23-0.61]).

Conclusions and Relevance

Effective first-line depression treatments include specific forms of psychotherapy and more than 20 antidepressant medications. Close monitoring significantly improves the likelihood of treatment success.

https://doi.org/10.1001/jamapsychiatry.2024.0994

Differential Outcomes of Placebo Treatment Across 9 Psychiatric Disorders: A Systematic Review and Meta-Analysis.

Bschor, T., Nagel, L., Unger, J., Schwarzer, G., & Baethge, C.

JAMA Psychiatry May 29, 2024

Importance:

Placebo is the only substance systematically evaluated across common psychiatric diagnoses, but comprehensive cross-diagnostic comparisons are lacking.

Objective:

To compare changes in placebo groups in recent high-quality randomized clinical trials (RCTs) across a broad spectrum of psychiatric disorders in adult patients.

Data sources:

MEDLINE and the Cochrane Database of Systematic Reviews were systematically searched in March 2022 for the latest systematic reviews meeting predetermined highquality criteria for 9 major psychiatric diagnoses.

Study selection:

Using these reviews, the top 10 highest-quality (ie, lowest risk of bias, according to the Cochrane Risk of Bias tool) and most recent placebo-controlled RCTs per diagnosis (totaling 90 RCTs) were selected, adhering to predetermined inclusion and exclusion criteria.

Data extraction and synthesis:

Following the Cochrane Handbook, 2 authors independently carried out the study search, selection, and data extraction. Cross-diagnosis comparisons were based on standardized pre-post effect sizes (mean change divided by its SD) for each placebo group. This study is reported following the Meta-analysis of Observational Studies in Epidemiology (MOOSE) reporting guideline.

Main outcome and measure:

The primary outcome, pooled pre-post placebo effect sizes (dav) with 95% CIs per diagnosis, was determined using random-effects meta-analyses. A Q test assessed statistical significance of differences across diagnoses. Heterogeneity and small-study effects were evaluated as appropriate.

Results:

A total of 90 RCTs with 9985 placebo-treated participants were included. Symptom severity improved with placebo in all diagnoses. Pooled pre-post placebo effect sizes differed across diagnoses (Q = 88.5; df = 8; P < .001), with major depressive disorder (dav = 1.40; 95% CI, 1.24-1.56) and generalized anxiety disorder (dav = 1.23; 95% CI, 1.06-1.41) exhibiting the largest dav. Panic disorder, attention-deficit/hyperactivity disorder, posttraumatic stress disorder, social phobia, and mania showed dav between 0.68 and 0.92, followed by OCD (dav = 0.65; 95% CI, 0.51-0.78) and schizophrenia (dav = 0.59; 95% CI, 0.41-0.76).

Conclusion and relevance:

This systematic review and meta-analysis found that symptom improvement with placebo treatment was substantial in all conditions but varied across the 9 included diagnoses. These findings may help in assessing the necessity and ethical justification of placebo controls, in evaluating treatment effects in uncontrolled studies, and in guiding patients in treatment decisions. These findings likely encompass the true placebo effect, natural disease course, and nonspecific effects.

https://doi.org/10.1001/jamapsychiatry.2024.1140

Extended Swedish Adoption Study of Adverse Stress Responses and Posttraumatic Stress Disorder.

Amstadter, A. B., Abrahamsson, L., Cusack, S., Sundquist, J., Sundquist, K., & Kendler, K. S.

JAMA Psychiatry June 5, 2024

Key Points

Question

Are adverse stress responses (ASRs) or posttraumatic stress disorder (PTSD) transmitted from parents to offspring, and if so, to what extent is the transmission due to genes vs rearing?

Findings

This cohort study of 2 194 171 individuals found that ASRs or PTSD was transmitted from parents to offspring through rearing and genes. Shared traumatic event exposure was likely important in transmission; however, correlations with rearing remained substantial even when controlling for potential shared exposures.

Meaning

Parent-offspring transmission of ASRs or PTSD was correlated with both rearing and genes. Even after accounting for potential shared index traumas, correlations were similar for both rearing and genes.

Abstract

Importance

Twin studies have found that posttraumatic stress disorder (PTSD) is influenced by both genetic and environmental factors within a generation. No study has used an adoption design, which can address questions about the degree and sources of cross-generational transmission of adverse stress responses (ASRs) and PTSD.

Objectives

To examine whether ASRs or PTSD are transmitted from parents to offspring, and to clarify the relative importance of genes and rearing.

Design, Setting, and Participants

This cohort study used nationwide Swedish registry data from parents and offspring (n = 2 194 171, born 1960-1992) of 6 types of families (intact; had not lived with biological father; had not lived with biological mother; lived with stepfather; lived with stepmother; and adoptive). Follow-up occurred on December 31, 2018, and data were analyzed from March 3, 2023, to January 16, 2024.

Exposures

Three sources of parent-offspring resemblance: genes plus rearing, genes only, and rearing only.

Main Outcomes and Measures

Diagnoses of ASRs or PTSD were obtained from national inpatient, outpatient, and primary care medical registries. Parent-child resemblance was assessed by tetrachoric correlation. Sensitivity analyses were conducted to control for possible shared traumatic events.

Results

The study population included 2 194 171 individuals of 6 family types (1 146 703 [52.3%] male; median [range] age, 42 [20-63] years). The weighted tetrachoric correlations across family types were 0.15 (95% CI, 0.15-0.16) for genes plus rearing, 0.08 (95% CI, 0.06-0.11) for genes only, and 0.10 (95% CI, 0.07-0.12) for rearing only. Controlling for potential shared traumatic events, sensitivity analyses found that the correlation for rearing decreased, with the most conservative control (exclusion of parent-offspring dyads with onset of ASRs or PTSD within 1 year) suggesting equal correlations with genes and rearing.

Conclusions and Relevance

Diagnosis of ASRs or PTSD demonstrated cross-generational transmission, including both genetic and rearing correlations. Sensitivity analyses suggested that shared traumatic events partially accounted for the observed rearing correlations.

See also: <u>Genes and Rearing—What Explains Intergenerational Transmission of</u> <u>PTSD?</u> (Editorial)

https://doi.org/10.1111/sltb.13052

Perspectives of suicide loss survivors: Qualitative analysis of data from a psychological autopsy study of U.S. Army soldiers.

Zuromski, K. L., Wilks, C. R., Al-Suwaidi, M., Wittler, E., Scherban, L., Hite, B., Raymond, L., Dempsey, C. L., Stein, M. B., Ursano, R. J., Benedek, D., & Nock, M. K.

Suicide and Life-Threatening Behavior First published: 14 February 2024

Introduction

Suicide loss survivors can provide information not otherwise available about the circumstances preceding a suicide. In this study, we analyzed interview data from suicide loss survivors collected as part of a psychological autopsy study of U.S. Army soldiers.

Methods

Next-of-kin (NOK) (n = 61) and Army supervisors (SUP) (n = 107) of suicide decedents (n = 135) who had died in the last 2–3 months answered open-ended questions about suicide risk factors, ideas for improving suicide prevention, and the impact of the suicide. Responses were coded using conventional content analysis methods to identify common themes.

Results

Many NOK (30%) and SUP (50%) did not observe any signs of risk preceding the soldier's suicide. The most common idea regarding suicide prevention from SUP was that the suicide was inevitable, whereas NOK were more likely to emphasize the importance of increasing mental health treatment and reducing stigma. Both NOK and SUP reported negative effects of the suicide, but SUP reported some positive effects (e.g., increased unit connectedness).

Conclusions

Results underscore the challenges of using informants to identify soldiers at high risk of suicide, given many respondents did not observe any warning signs. Findings also highlight attitudinal barriers present in the military that, if targeted, may increase soldiers' help-seeking and willingness to disclose their risk.

https://doi.org/10.1080/20008066.2024.2353534

The nature and impacts of deployment-related encounters with children among Canadian military Veterans: a qualitative analysis.

Houle, S. A., Abidi, C. B., Birch, M., Reeves, K., Younger, W., Conradi, C., Patten, S., Bélanger, S., Richardson, J. D., Nazarov, A., & Wells, S.

European Journal of Psychotraumatology Volume 15, 2024 - Issue 1

Background:

As armed conflict grows increasingly complex, the involvement of children in armed violence across diverse roles is rising. Consequently, military personnel are more likely to encounter children during deployment. However, little is known about deployment-related encounters with children and their impact on the mental health of military personnel and Veterans.

Objective:

This study qualitatively examines the nature and impacts of deployment-related encounters with children.

Methods:

We conducted semi-structured interviews with 16 Canadian Armed Forces Veterans, eliciting rich information on the nature of child encounters on deployment, the psychosocial-spiritual impacts of these encounters, and perceptions of support. Interview transcripts were analysed using thematic analysis.

Results:

Six primary themes were identified: types of encounters (i.e. factual aspects of deployment-related encounters with children), contextual factors (i.e. aspects of the mission, environment, and personal context relevant to one's experience of the encounter), appraisals of encounters (i.e. sensory or sense-making experiences relevant to the encounter), impacts of encounters (i.e. psycho-social, existential, and occupational impacts), coping strategies engaged in both during and after deployment, and support experiences, describing both formal and informal sources of support.

Conclusions:

Encounters with children are diverse and highly stressful, resulting in impacts pertinent to mental health, including psychological and moral distress, and difficulties with identity, spirituality, and relationships. These impacts are prompted by complex interactions among appraisals, expectations of morality, cultural norms, and professional duties and are amplified by various personal factors (e.g. childhood maltreatment history, parenthood), feelings of unpreparedness, and lack of postdeployment support. Implications for prevention, intervention, and policy are discussed with the aim of informing future efforts to safeguard and support military personnel facing a high likelihood of encounters with children.

HIGHLIGHTS

• Deployment-related encounters with children result in diverse impacts, including

psychological and moral distress, along with disruptions in identity, spirituality, and interpersonal relationships.

- Encounters with children during military deployments are diverse and highly stressful, characterized by complex interactions among appraisals and expectations of morality, cultural norms, and professional duties.
- Emphasis on feeling unprepared for encounters with children highlights the need for future efforts to safeguard and support military personnel facing such situations.

https://doi.org/10.1007/s10826-024-02838-7

Can I Tell My Family I'm Bothered? Adolescent Disclosure and Mental Health in Military Families.

Quichocho, D., Lucier-Greer, M.

Journal of Child and Family Studies Published: 11 June 2024

Adolescents in military families may be at elevated risk for poor mental health outcomes given their developmental stage and exposure to military life stressors. Using Structural Family Theory and a family resilience lens, we examine how the family affective environment created by the roles and rules of families manifests as balanced family cohesion and balanced family flexibility, and how this family environment is related to mental health outcomes for adolescents. Furthermore, the frequency with which adolescents disclose negative emotions to their family members (including fathers, mothers, and siblings) was posited to link family environment elements and adolescent mental health. We used structural equation modeling with 201 military families that featured a Service member father, civilian mother, and adolescent age 11-18 who had at least one sibling. Across models, balanced family cohesion was directly related to adolescent mental health. Emotional disclosure to fathers and siblings was associated with better adolescent mental health. The role of emotional disclosure as a link between family affective environment and adolescent mental health depended on the family member being disclosed to and primarily emerged among fathers. Specifically, balanced family flexibility was indirectly linked to adolescent mental health via emotional disclosure to fathers. These models fit similarly among adolescent boys and girls. Potential points of intervention to support the mental health of adolescents in military families are discussed, including bolstering balanced family cohesion within the family

system and addressing barriers and needed skills to encourage adolescent emotional disclosure.

Highlights

- In military families, balance in family cohesion is protective for adolescent mental health.
- In families with more balanced cohesion, adolescents disclose negative emotion to mothers more frequently.
- In families with more balanced flexibility, adolescents disclose negative emotion to fathers more frequently.
- When adolescents disclose negative emotions to fathers or siblings more frequently, they have better overall mental health.

https://doi.org/10.1016/j.jpsychires.2024.06.014

Health correlates of experiential and behavioral avoidance among traumaexposed veterans.

Elizabeth K.C. Schwartz, Alexandra N. Palmisano, Ismene L. Petrakis, Robert H. Pietrzak, Mehmet Sofuoglu

Journal of Psychiatric Research Volume 176, August 2024, Pages 213-217

Introduction

Avoidance is a well-documented risk factor for poor mental and physical health outcomes. However, limited research has explored this relationship specifically among trauma-exposed veterans, a population known to be particularly prone to avoidance behavior. Conceptually, avoidance is often divided into two distinct but overlapping constructs – experiential avoidance (resisting distressing internal states) and behavioral avoidance (avoiding or changing experiences that elicit distress). In this exploratory survey study, we examined associations between behavioral and experiential avoidance and mental, physical, and cognitive functioning, as well as quality of life.

Methods

Veterans with a trauma history (N = 89) completed a 121-item survey containing validated assessments to examine several mental and physical health and wellness-related variables. Correlations between experiential avoidance and outcome measures,

and behavioral avoidance and outcome measures, were explored. Multivariable linear regression analyses were conducted to explore the association between experiential and behavioral avoidance on mental health outcomes. In addition, we conducted exploratory analyses in which we investigated these correlations in those who screened positive for PTSD versus those who did not, and between different types of behavioral avoidance and major outcomes.

Results

Experiential avoidance was moderately correlated with distress from depressive symptoms, distress related to past trauma, and health-related and cognitive dysfunction. Experiential Avoidance was weakly correlated with distress from anxiety symptoms and poorer quality of life. Behavioral avoidance was moderately correlated with distress from depressive and anxiety symptoms, distress related to past trauma, and cognitive dysfunction, and was weakly correlated with health-related dysfunction and poorer quality of life. Results from multivariable analyses revealed that experiential avoidance was associated with greater distress related to depressive symptoms and past trauma, and behavioral avoidance was associated with greater distress related to anxiety symptoms, depressive symptoms, and past trauma.

Conclusions

Results suggest that avoidance negatively influences major domains of mental and physical health as well as functioning and health-related quality of life in traumaexposed veterans. They further indicate that behavioral and experiential avoidance may be differentially linked to mental health outcomes. The results support the idea that avoidance may be an important marker for psychosocial functioning and may serve as a treatment target in trauma-exposed veterans.

https://doi.org/10.1093/tbm/ibae032

Impact of an internet-based insomnia intervention on suicidal ideation and associated correlates in veterans at elevated suicide risk.

Sarra Nazem, Shengnan Sun, Sean M Barnes, Lindsey L Monteith, Trisha A Hostetter, Jeri E Forster, Lisa A Brenner, Hanga Galfalvy, Fatemeh Haghighi

Translational Behavioral Medicine Published: 12 June 2024 Improving public health approaches to suicide prevention requires scalable evidencebased interventions that can be easily disseminated. Given empirical data supporting the association between insomnia and suicide risk, internet-delivered insomnia interventions are promising candidates to meet this need. The purpose of this study was to examine whether an unguided internet-delivered cognitive-behavioral therapy for insomnia (iCBT-I) improved insomnia severity, suicidal ideation (SI), and suicide risk correlates (depression, post-traumatic stress disorder, anxiety, hostility, belongingness, hopelessness, agitation, irritability, concentration) in a sample of veterans. Secondary data analysis of Operation Enduring Freedom, Operation Iragi Freedom, and Operation New Dawn veterans (n = 50) with clinically significant insomnia and elevated SI drawn from a larger randomized controlled trial (RCT) of an iCBT-I, Sleep Healthy Using the Internet (SHUTi). Two-sample t-tests or Wilcoxon rank sum tests were used to evaluate between-group differences (SHUTi vs. Insomnia Education Website control) in symptom improvement from baseline to post-intervention. SHUTi participants experienced a significant improvement in insomnia severity (P < .001; d = -1.08) and a non-significant with small (subthreshold medium) effect size reduction of SI (P = .17, d = 0.40), compared to control participants. Significant improvement in hopelessness was observed (medium effect size), with non-significant small to medium effect size reductions in most remaining suicide risk correlates. Self-administered iCBT-I was associated with improvements in insomnia severity in veterans at elevated risk for suicide. These preliminary findings suggest that SI and suicide risk correlates may improve following an iCBT-I intervention, demonstrating the need for future wellpowered iCBT-I RCTs targeted for populations at elevated suicide risk.

Lay Summary

In this secondary data analysis, we examined improvements in insomnia severity, suicidal ideation (SI), and suicide risk correlates in veterans with clinically significant insomnia and elevated SI drawn from a larger randomized controlled trial (RCT) examining an unguided internet-delivered cognitive-behavioral therapy for insomnia (iCBT-I). Veterans in the iCBT-I group experienced greater improvements in insomnia severity and hopelessness than veterans in the Insomnia Education Website control. Although between-group differences in SI and other suicide risk correlates were not statistically significant, effect sizes suggest that SI and symptoms of depression, irritability, concentration, post-traumatic stress disorder, and hostility may improve following iCBT-I intervention. These results suggest that digital and iCBT-I interventions may be especially powerful tools for use in suicide prevention among veterans but highlight the critical need for additional large-scale studies to examine suicide-specific mechanisms and outcomes to guide implementation efforts.

https://doi.org/10.1093/milmed/usae313

Comorbid Chronic Pain and Post-traumatic Stress Disorder: Current Rates and Psychiatric Comorbidities Among U.S. Military Veterans.

Katherine Hadlandsmyth, Caywin Zhuang, Mary A Driscoll, Brian C

Military Medicine Published: 13 June 2024

Introduction

This study reports rates of comorbid chronic pain and post-traumatic stress disorder (PTSD) among U.S. military veterans and rates of psychiatric comorbidities among those with both chronic pain and PTSD.

Materials and Methods

This study utilized National Veterans Affairs (VA) administrative data to identify all veterans treated for chronic pain or PTSD in 2023. Multivariable logistic regression models determined the likelihood of each psychiatric comorbidity for those with chronic pain and PTSD relative to those with chronic pain only and separately to those with PTSD only, after adjusting for demographic variables and all other psychiatric comorbidities.

Results

Of the 5,846,453 service users of the VA in 2023, a total of 2,091,391 (35.8%) met the criteria for chronic pain and 850,191 (14.5%) met the criteria for PTSD. Furthermore, 21.6% of those with chronic pain also had PTSD and over half (53.2%) of those with PTSD also met the criteria for chronic pain (n = 452,113). Veterans with chronic pain and PTSD were significantly more likely to be women, Black or African American, Hispanic or Latina, and urban dwelling. Veterans with chronic pain and PTSD had significantly higher rates of all selected comorbidities relative to veterans with chronic pain only.

Conclusions

Patients with comorbid chronic pain and PTSD may benefit from tailored treatments to address the additive impact of these conditions.

https://doi.org/10.1093/milmed/usae310

Factors That Influence Health care–Seeking Behavior and Health Information Disclosure Among U.S. Air Force Pilots.

Tanya M Goodman, Rachael N Martinez, PhD, Nicole L Giarrusso, Christopher Thompson, USAF, William R Hoffman, MD USAF MC

Military Medicine Published: 13 June 2024

Introduction

The reality of pilot health care avoidance behavior is often common knowledge to both pilots and aeromedical physicians, but the underlying factors leading to this behavior are less understood. In the current study, we conducted a qualitative assessment of a sample of U.S. Air Force (USAF) pilots to gather firsthand perceptions of the factors that encourage and discourage disclosure during aeromedical screening and use of mental and physical health care services, as well as recommendations to improve the USAF aeromedical health care system.

Materials and Methods

We conducted interviews with 21 USAF pilots on their perceptions of seeking medical care to identify factors that uniquely discourage or encourage disclosure and health care utilization to understand factors that aid the aeromedical provider/aviator relationship and to elicit interventions that could be prospectively researched. This work was reviewed by the Air Force Research Laboratory Institutional Review Board at Wright-Patterson Air Force Base and designated as exempt research, FWR20220103E.

Results

The most reported factors that discourage military pilot health care disclosure and health care utilization overall were medical revocation, stigma, and lack of trust in providers. Unit-embedded services, ease of access, and severity of condition were the most reported factors encouraging disclosure and utilization. Factor descriptions and exemplary quotes from pilots and pilot recommendations to encourage health care utilization and disclosure are provided.

Conclusions

Results from firsthand interviews with pilots provide valuable information for flight surgeons to focus on building trust with their pilots to reduce health care avoidance.

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Traumatic Brain Injury and Posttraumatic Stress Disorder Are Associated with Physical Health Burden among Post-9/11 Women Veterans.

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Background:

Little research focuses on physical health outcomes of traumatic brain injury (TBI) and posttraumatic stress disorder (PTSD) among post-9/11 women veterans (WVs). This study examined lifetime TBI, current PTSD, and their associations with biomarkers of cardiometabolic health, sleep, pain, and functional disability among post-9/11 WVs.

Methods:

WVs (n = 90) from the Translational Research Center for TBI and Stress Disorders longitudinal cohort study were included in this study. Gold standard clinician administered interviews assessed lifetime TBI (Boston Assessment of TBI-Lifetime) and current PTSD symptoms (Clinician-Administered PTSD Scale-IV). Objective measures of health included waist-hip ratio (WHR) and fasted blood biomarker (high density lipoprotein [HDL], low density lipoprotein [LDL], blood glucose, triglycerides) levels. Selfreported surveys assessed sleep, pain, and functional disability.

Results:

Just under two-thirds (58.9%) of WVs experienced a lifetime TBI, and just over half (53.3%) of this sample had a current PTSD diagnosis at the time of testing. Lifetime TBI was significantly associated with higher WHR, triglycerides levels, and worse pain and sleep (ps = <0.01 to 0.02; ds = 0.01 to 1.12). Current PTSD was significantly associated with higher WHR, lower HDL, and worse pain and sleep (ps = <0.01 to 0.02; ds = 0.009 to 1.19). PTSD was significantly associated with lower total functioning and each of its subdomains (β s = -0.58 to 0.63; ps = <0.001 to 0.02). Lifetime TBI was significantly associated with total functioning, mobility, and life/work (β s = -0.20 to 0.30; ps = <0.01 to 0.02).

Conclusions:

These findings highlight the importance of screening for lifetime TBI and cardiovascular disease for WVs and support transdiagnostic treatment approaches targeting physical health outcomes.

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Moving beyond symptom reduction: A meta-analysis on the effect of exposure therapy for PTSD on quality of life.

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Objectives

Quality of life (QOL) is a multidimensional construct including emotional well-being, life satisfaction, and physical health. Individuals with posttraumatic stress disorder (PTSD) consistently report low QOL, highlighting the importance of assessing the effectiveness of first-line PTSD treatments (e.g., exposure-based therapies) on QOL. This metaanalysis examined the efficacy of exposure therapy for PTSD on QOL compared to control conditions (e.g., waitlist, medication, treatment-as-usual) at posttreatment and follow-up (ranging from 1 month to 2 years).

Methods

Building on a previous meta-analysis of exposure-based therapy for PTSD, we searched PsycINFO and Medline in December 2021, July 2022, and March 2023 to include randomized controlled trials of exposure-based treatments for adult PTSD assessing QOL. We screened 295 abstracts for initial eligibility; 20 articles met inclusion criteria and were included (N = 2729 participants). Risk of bias was evaluated using the Cochrane Risk of Bias tool 2.0.

Results

At posttreatment, exposure-based therapies showed a medium effect on QOL relative to control conditions (k = 25, g = 0.67). This effect was not observed at follow-up for the small subset of studies with follow-up data (k = 8, g = 0.16). At posttreatment, effect size varied significantly as a function of the control condition (p < .0001). There were no

differences in QOL effects across exposure therapies at posttreatment or follow-up (p = .09).

Conclusion

Exposure therapy was associated with greater improvement in QOL compared to control conditions at posttreatment. Exposure was not superior to control conditions at follow-up, and the longer-term impact of exposure on QOL is unclear. The implications of these findings are discussed, along with the need for more PTSD treatment studies to examine QOL outcomes at posttreatment and follow-up.

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Prospective comparison of risk factors for firearm suicide and non-firearm suicide in a large population-based cohort of current and former US service members: findings from the Millennium Cohort Study.

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The Lancet Regional Health: Americas Published: June 13, 2024

Background

Suicide is a leading cause of death among service members and veterans. Among suicide methods, firearms are the most lethal and commonly used method among military populations. Limited research has compared risk factors for the various suicide methods. This study evaluated and compared risk factors for firearm versus non-firearm suicides using data from the Millennium Cohort Study, a large longitudinal military cohort.

Methods

Using a competing risk approach, we identified factors associated with each suicide method. Risk factors included demographics, mental health diagnoses, mental health symptoms, military-specific characteristics, health behaviors, and psychosocial factors. Cause of death was assessed from July 1, 2001, through December 31, 2018.

Findings

Among 201,565 eligible participants with a mean [SD] age of 29.0 [58.1] years, there were 139,789 (69.3%) male, 61,776 (30.7%) female, 15,927 (7.9%) Hispanic, 24,667 (12.3%) non-Hispanic Black, 14,138 (7.0%) Asian, Pacific Islander, American Indian or Multiracial, and 146,736 (72.8%) non-Hispanic White participants. During the study period, 330 died by firearm suicide and 168 died by non-firearm suicide. Overall, effect estimates for risk factors were similar across both methods of suicide. After adjustment, men (HR: 3.69, 95% CI: 2.59, 5.24) and those who screened positive for depression (HR: 1.97, 95% CI: 1.36, 2.87) had an elevated risk for firearm suicide. In contrast, those who self-reported a history of bipolar diagnosis (HR: 3.40, 95% CI: 1.76, 6.55) had significantly increased risk for non-firearm suicide.

Interpretation

Findings suggest that prevention and intervention strategies overall may not need to be differentiated by specific demographic, military, or health factors. Targeted interventions that consider sex and mental health screens might have relative utility in preventing firearm related suicide risk compared with non-firearm suicide.

Funding

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Can profiles of behaviors occurring within 48 h of a suicide attempt predict future severity of suicidal thoughts and reattempt?: An examination of hospitalized patients 12 Months post-discharge.

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Journal of Psychiatric Research Volume 176, August 2024, Pages 259-264

Highlights

- There are distinguishable profiles of behavioral warning signs for suicide attempt.
- Profiles of warning signs for an index attempt can predict risk for reattempt.
- High Risky Behavior Class predicted future worst suicidal ideation and reattempt.

Abstract

Behavioral warning signs (WS) are near-term changes within individuals, which aid in determining imminent risk for suicide attempts. However, those who attempt suicide differ in their engagement of WS, and it is unclear if these differences relate to future risk of suicidal behavior. Using a sample of 132 adults presenting to a hospital following a suicide attempt, the current study sought to determine if differences in engagement in WS for the index attempt prospectively predicted suicide attempt, frequency of ideation, and intensity of suicide ideation 12 months post discharge. Latent class analyses (LCAs) conducted on 6 behaviors (i.e., alcohol use, nightmares, interpersonal negative life events, suicide communication, risky behavior, low sleep, and high sleep) found a 5class solution optimally fit the data. One identified class, characterized by engagement in risky behaviors the hours before an attempt differed from other identified classes in terms of risk for future suicidal ideation and behaviors. More specifically, participants in "High Risky Behavior" class had higher rates of 12-month suicide reattempt, significantly more frequent suicide ideation, and significantly worse intensity of suicide ideation during the 12 months following their index attempt compared to participants endorsing typical patterns of WS. These results held when adjusting for various traditional baseline covariates (e.g., depressive symptoms). The current study demonstrates that patterns of behavioral WS may be utilized as their own prognostic indicator of future suicidal ideation and behaviors among high-risk individuals reporting a recent suicide attempt, which can inform post-discharge clinical intervention and prevention efforts.

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County characteristics and veteran suicide in the United States, 2011-2018.

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American Journal of Preventive Medicine Available online 19 June 2024

Introduction

Few studies have examined county-level hotspots of veteran suicide and associated place-based contributors, limiting development of targeted community-level prevention strategies. The objectives of this national spatial analysis of all veteran suicides were to identify areas of the United States (U.S.) with higher-than-expected veteran suicide

rates and determine county-level social and economic characteristics associated with areas of higher risk.

Methods

Using Bayesian hierarchical modeling, county-level standardized mortality ratios for veteran suicide deaths were estimated for time periods 2011-2018, 2011-2014, and 2015-2018. Adjusted relative risk, accounting for community characteristics, for each county was then estimated and associations between community characteristics and veteran suicide risk were examined. Analyses were conducted in 2023-2024.

Results

Risk of veteran suicide is predominantly concentrated in the Mountain West and West. Significant predictors of risk across all time periods were per capita number of firearm retailers (2011-2018 RR=1.065 [95%CI 1.030-1.102]), the proportion of residents who moved in the past year (2011-2018 RR=1.060 [95%CI 1.039-1.081]), the proportion of residents who live alone (2011-2018 RR=1.067 [95%CI 1.046-1.089]), the proportion of residents in rental housing (2011-2018 RR=1.041 [95%CI 1.018-1.065]), and the proportion of married residents (2011-2018 RR=0.915 [95%CI 0.890-0.941]).

Conclusions

This study contributes to a comprehensive public health approach to veteran suicide prevention by identifying where resources are needed most, and which place-based intervention targets have the largest potential for impact. Findings suggest that public health efforts to address suicide among veterans should address community level firearm access and identify ways to alleviate deleterious effects of social fragmentation.

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Preventing and Mitigating Post-Traumatic Stress: A Scoping Review of Resilience Interventions for Military Personnel in Pre Deployment.

Sun, Z., Song, J., Chen, J., Gan, X., Li, Y., Qiu, C., ... Gao, Y.

Psychology Research and Behavior Management (2024) 17, 2377–2389

Purpose

Resilience is considered as a protective factor that can assist individuals to reduce post-

traumatic stress reactions. In recent years, armies in many countries have widely implemented resilience training programs before deployment to prevent or reduce postdeployment combat stress reactions. Therefore, this study aims to review what is known about resilience interventions for military personnel in pre deployment.

Methods

Based on Arskey and O'Malley's framework, a scoping review was completed. This review was performed through searching databases including PubMed, Embase, Web of Science, Medline and the Cochrane Library, and screening literature to extract data, finally summarizing the findings.

Results

A total of 25 studies focusing on resilience interventions for military personnel in pre deployment were involved and analyzed using intervention approaches, outcome measures, intervention effects, and so on.

Conclusion

Based on the existing evidence in this review, it is cautiously believed that the resilience intervention program for military personnel before deployment is effective. However, there is no single effective best method even the same type intervention can make different effects in different situations and populations. Therefore, the population differences and context should be fully considered in constructing and implementing program to build military personnel resilience.

https://doi.org/10.1080/15332640.2024.2367240

Systemic biases promoting the under-inclusion of marginalized groups in randomized controlled trials for co-occurring alcohol use and posttraumatic stress disorder: an intersectional analysis.

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Journal of Ethnicity in Substance Abuse Published online: 17 Jun 2024

Co-occurring posttraumatic stress disorder and alcohol use disorder is a major public health concern affecting millions of people. Although this disorder affects people from all groups, research shows that, when compared to White people, people of color systematically suffer worse chronicity and burden of disorder. Additionally, research shows that people of color endure a variety of barriers to accessing treatment and often require specialized or culturally appropriate care. Consequently, the array of treatments available must have been determined to be effective for people of color when they access treatment, and people of color must be well represented in research to ensure effective treatment. Therefore, randomized controlled trials testing treatments for this disorder must include racially diverse samples and ensure treatments are effective for all groups. Further, if they lack diversity, it is necessary to explore whether and how the process of conducting randomized controlled trials is biased toward the constrained inclusion of people of color. This study used a Matrix of Domination framework as an intersectional method to investigate this question. It assessed the inclusion of people by race and sex in randomized controlled trials for co-occurring posttraumatic stress disorder and alcohol use disorder. We found that people of color and White women are significantly underincluded in randomized controlled trials and that these studies are hegemonically, disciplinarily, and structurally biased in ways that facilitate the overrepresentation of White men and the underrepresentation of marginalized groups.

Links of Interest

Clinical Practice Guideline Updated for Service Members and Veterans at Risk for Suicide

https://www.health.mil/News/Dvids-Articles/2024/06/07/news473280

• Assessment and Management of Patients at Risk for Suicide (2024)

First NIH-funded clinical trial shows service dogs lower severity of PTSD symptoms in Veterans

https://news.va.gov/132029/service-dogs-lower-ptsd-symptoms-in-veterans/

<u>Service Dogs for Veterans and Military Members With Posttraumatic Stress</u>
<u>Disorder: A Nonrandomized Controlled Trial</u>

It's PTSD Month, but Let's Talk About Posttraumatic GROWTH Instead https://news.va.gov/132042/ptsd-month-lets-talk-about-posttraumatic-growth/

The post-9/11 generation's path to post-traumatic growth

https://www.militarytimes.com/opinion/2024/06/13/the-post-911-generations-path-topost-traumatic-growth/

Maine shooting reveals mental health care gaps for reservists <u>https://www.militarytimes.com/news/your-army/2024/06/13/maine-shooting-reveals-</u> mental-health-care-gaps-for-reservists/

Army undercounted 4,000 domestic abuse cases, according to audit <u>https://taskandpurpose.com/news/army-audit-domestic-abuse-cases/</u>

New mental health copayment exemptions; Includes substance use disorder care https://news.va.gov/131772/new-mental-health-copayment-exemptions/

Veterans: Your suicide crisis doesn't have to define your future https://news.va.gov/131943/veterans-suicide-crisis-doesnt-define-future/

Resource of the Week – <u>Federal Programs to Assist Military-to-Civilian</u> <u>Employment Transitions: Limited Scrutiny and Substantial Investment in</u> <u>Education Programs</u>

New, from the RAND Corporation:

The U.S. government offers a support program to facilitate almost every conceivable military-to-civilian transition. In 2019 and 2020, the U.S. Government Accountability Office (GAO) assessed the federally funded programs that help transitioning service members, veterans, and their families by cataloguing 45 programs overseen by 11 federal agencies. This report attempts to update the GAO's analysis by examining the benefits, costs, and evaluations of these programs.

This report groups such programs into four categories: the budgetary "Big Four" programs, which include the Post-9/11 GI Bill (PGIB), Veteran Readiness and Employment (VR&E), the Department of Defense (DoD)'s Tuition Assistance Program, and Survivors' and Dependents' Educational Assistance (DEA); second-tier programs, which are the Montgomery GI Bill and Jobs for Veterans State Grants; the third-tier program, the DoD's Transition Assistance Program (TAP); and small programs, which include a variety of programs designed for specialized populations. For each program, the authors present a brief history, identify the populations it targets, and summarize the program's goals and provided benefits. The authors conclude each program's section by characterizing the evaluation literature, highlighting key findings about program

effectiveness, and assessing the strength of the evidence supporting these findings.

Key Findings

Most employment transition programs are actually focused on education

- Overall, very few programs and a small amount of funding are dedicated to helping service members and veterans translate their military skills to the civilian labor market, find civilian apprenticeships or jobs, or connect with civilian employers.
- The vast majority of federal funding goes to employment transition programs that primarily support education.
- In fiscal year 2019, the Big Four programs accounted for \$13.5 billion out of \$14.3 billion total, whereas funding for the TAP, which serves all transitioning service members, was approximately \$140 million.

There is limited evidence that federally funded employment transition programs are effective

- In some cases, the evidence is counterintuitive. For example, the TAP is associated with lower wages for program participants.
- Some programs have no reported data, evaluation plans, or outcome measures.

Transition programs face limited oversight and budgetary scrutiny

- This study found outdated and conflicting information, even for such large programs as VR&E, when attempting to update the GAO's findings.
- The largest program in terms of budget, the PGIB, provides little information on participation.
- There is a need for policymaker intervention to require agencies to standardize their budget and performance reporting.

There are opportunities to address redundancies in transition programs and services

- There might be opportunities to consolidate programs that provide on-thejob training in specific skill sets to improve outreach, reduce overhead costs, and avoid duplications of effort.
- The involvement of various federal agencies can make consolidation challenging, so this area needs more research.



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