Research Update -- December 12, 2019

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The Associations Between Physical and Psychological Symptoms and Traumatic Military Deployment Exposures.

Graham, K., Searle, A., Van Hooff, M., Lawrence-Wood, E. and McFarlane, A.

Journal of Traumatic Stress
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https://doi.org/10.1002/jts.22451

Current paradigms regarding the effects of traumatic exposures on military personnel do not consider physical symptoms unrelated to injury or illness as independent outcomes of trauma exposure, characteristically dealing with these symptoms as comorbidities of psychological disorders. Our objective was to ascertain the proportions of deployed military personnel who experienced predominantly physical symptoms, predominantly psychological symptoms, and comorbidity of the two and to examine the association between traumatic deployment exposures (TDEs) and these symptomatic profiles. Data were taken from a cross-sectional study of Australian Defence Force personnel who were deployed to the Middle East during 2001–2009 (N = 14,032). Four groups were created based on distributional splits of physical and psychological symptom scales: low-symptom, psychological, physical, and comorbid. Multinomial logistic regression models assessed the probability of symptom group membership, compared with low-symptom, as predicted by self-reported TDEs. Group proportions were: low-symptom, 78.3%; physical, 5.0%; psychological, 9.3%; and comorbid, 7.5%. TDEs were significant predictors of all symptom profiles. For subjective, objective, and human death and degradation exposures, respectively, the largest relative risk ratios (RRRs) were for the comorbid profile, RRRs = 1.47, 1.19, 1.48; followed by the physical profile, RRRs = 1.27, 1.15, 1.40; and the psychological profile, RRRs = 1.22, 1.07, 1.22. Almost half of participants with physical symptoms did not have comorbid psychological symptoms, suggesting that physical symptoms can occur as a discrete outcome trauma exposure. The similar dose–response association between TDEs and the physical and psychological profiles suggests trauma is similarly associated with both outcomes.

Neurocomputational Changes in Inhibitory Control Associated With Prolonged Exposure Therapy.
Posttraumatic stress disorder (PTSD) is associated with inhibitory control dysfunction that extends beyond difficulties inhibiting trauma-related intrusions. Inhibitory learning has been proposed as a potential mechanism of change underlying the effectiveness of extinction-based therapies such as prolonged exposure (PE), a first-line treatment for PTSD. To identify neurocognitive markers of change in inhibitory learning associated with PE, we applied a Bayesian learning model to the analysis of neuroimaging data collected during an inhibitory control task, both before and after PE treatment. Veterans (N = 20) with combat-related PTSD completed a stop-signal task (SST) while undergoing fMRI at time points immediately before and after PE treatment. Participants exhibited a small, significant improvement in performance on the SST, as demonstrated by longer reaction times and improved inhibition accuracy. Amplitude of neural activation associated with a signed prediction error (SPE; i.e., the discrepancy between actual outcome and model-based expectation of needing to stop) in the right caudate decreased from baseline to posttreatment assessment. Change in model-based activation was modulated by performance accuracy, with a decrease in positive SPE activation observed on successful trials, $d = 0.79$, and a reduction in negative SPE activation on error trials, $d = 0.74$. The decrease in SPE-related activation on successful stop trials was correlated with PTSD symptom reduction. These results are consistent with the notion that PE may help broadly strengthen inhibitory learning and the development of more accurate model-based predictions, which may thus facilitate change in cognitions in response to trauma-related cues and help reduce PTSD symptoms.

https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2756320

Prevention of Recurrence After Recovery From a Major Depressive Episode With Antidepressant Medication Alone or in Combination With Cognitive Behavioral Therapy: A Phase 2 Randomized Clinical Trial.

DeRubeis RJ, Zajecka J, Shelton RC, et al.
Key Points
Question
What are the effects of combining cognitive behavioral therapy with antidepressant medications on the prevention of depressive recurrence when antidepressant medications are withdrawn or maintained after recovery in patients with major depressive disorder?

Findings
In this phase 2 randomized clinical trial of 292 adult patients with major depressive disorder who recovered from a chronic or recurrent major depressive episode, withdrawal of antidepressant medication treatment was associated with higher rates of recurrence compared with maintenance of antidepressant medication treatment regardless of whether patients achieved recovery with or without acute cognitive behavioral therapy treatment.

Meaning
Maintenance of antidepressant medication treatment was associated with a reduced risk of depressive recurrence, but previous treatment with cognitive behavioral therapy was not; whether cognitive behavioral therapy has a similar protective effect or whether adding antidepressant medications to cognitive behavioral therapy treatment interferes with any such protective effect remains unclear.

Abstract
Importance
Antidepressant medication treatment is associated with the prevention of depressive recurrence in patients with major depressive disorder (MDD), but whether cognitive behavioral therapy (CBT) treatment is associated with recurrence prevention remains unclear.

Objective
To determine the effects of combining CBT with antidepressant medications on the prevention of depressive recurrence when antidepressant medications are withdrawn or maintained after recovery in patients with MDD.

Design, Setting, and Participants A total of 292 adult outpatients with chronic or recurrent MDD who had previously participated in phase 1 and had recovered from a chronic or recurrent major depressive episode with antidepressant medication treatment
alone or in combination with cognitive behavioral therapy (CBT) in phase 1 participated in a phase 2 trial conducted in research clinics in 3 university medical centers in the United States. Patients in phase 2 were randomized to receive maintenance or withdrawal of treatment with antidepressant medications and were followed for 3 years. The first patient entered phase 2 in August 2003, and the last patient to enter phase 2 began in October 2009. The last patient completed phase 2 in August 2012. Data were analyzed from December 2013 to December 2018.

Interventions
Maintenance of or withdrawal from treatment with antidepressant medications.

Main Outcomes and Measures
Recurrence of an MDD episode using longitudinal interval follow-up evaluations and sustained recovery.

Results
A total of 292 participants (171 women and 121 men; mean [SD] age, 45.1 [12.9] years) were included in the analyses of depressive recurrence. Antidepressant medication maintenance was associated with lower rates of recurrence compared with medication withdrawal regardless of whether patients had achieved recovery with monotherapy treatment in phase 1 (48.5% with medication maintained vs 74.8% with medication withdrawn; z = −3.16; P = .002; number needed to treat [NNT], 2.8; 95% CI, 1.8-7.0) or combination therapy treatment (48.5% with medication maintained vs 76.7% with medication withdrawn; z = −3.49; P < .001; NNT, 2.7; 95% CI, 1.9-5.9). Maintenance vs withdrawal of medication was associated with sustained recovery rates (z = 2.90; P = .004; odds ratio [OR], 2.54; 95% CI, 1.37-4.84; NNT, 2.3; 95% CI, 1.5-6.4). The interaction of phase 1 and phase 2 treatment conditions also did not have a significant association with sustained recovery (z = 0.30; P = .77; OR, 1.14; 95% CI, 0.49-2.88).

Conclusions and Relevance
In this study, maintenance monotherapy was associated with reduced rates of depressive recurrence. When CBT was provided in the absence of monotherapy treatment, a preventive effect on depressive relapse was noted. Whether CBT treatment has a similar effect on depressive recurrence or if adding monotherapy treatment interferes with any such preventive effect remains unclear.

Trial Registration
ClinicalTrial.gov identifier: NCT00057577
Association of Patient Treatment Preference With Dropout and Clinical Outcomes in Adult Psychosocial Mental Health Interventions: A Systematic Review and Meta-analysis.

Windle E, Tee H, Sabitova A, Jovanovic N, Priebe S, Carr C.

JAMA Psychiatry
Published online December 04, 2019
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Key Points
Question
Is the receipt of a preferred treatment associated with dropout and clinical outcomes in adult psychosocial mental health interventions?

Findings
This systematic review and meta-analysis of 29 randomized clinical trials involving 5294 participants with a mental health diagnosis found that receiving preferred psychosocial mental health treatment was associated with lower dropout rates and had a medium positive association with therapeutic alliance. There was no evidence of a significant association with clinical outcomes.

Meaning
Offering patients with a mental health diagnosis their preferred treatment is associated with important aspects of engagement in psychosocial interventions; these findings strengthen existing policy and guidance on ensuring informed treatment choice in mental health care.

Abstract
Importance
Receiving a preferred treatment has previously been associated with lower dropout rates and better clinical outcomes, but this scenario has not been investigated specifically for psychosocial interventions for patients with a mental health diagnosis.

Objective
To assess the association of patient treatment preference with dropout and clinical outcomes in adult psychosocial mental health interventions via a systematic review and
meta-analysis.

Data Sources
The Cochrane Library, Embase, PubMed, PsychINFO, Scopus, Web of Science, Nice HDAS (Healthcare Databases Advanced Search), Google Scholar, BASE (Bielefeld Academic Search Engine), Semantic Scholar, and OpenGrey were searched from inception to July 20, 2018, and updated on June 10, 2019.

Study Selection
Studies were eligible if they (1) were a randomized clinical trial; (2) involved participants older than 18 years; (3) involved participants with mental health diagnoses; (4) reported data from a group of participants who received their preferred treatment and a group who received their nonpreferred treatment or who were not given a choice; and (5) offered at least 1 psychosocial intervention.

Data Extraction and Synthesis
Two researchers extracted study data for attendance, dropout, and clinical outcomes independently. Both assessed the risk of bias according to the Cochrane tool. Data were pooled using random-effects meta-analyses.

Main Outcomes and Measures
The following 7 outcomes were examined: attendance, dropout, therapeutic alliance, depression and anxiety outcomes, global outcomes, treatment satisfaction, and remission.

Results
A total of 7341 articles were identified, with 34 eligible for inclusion. Twenty-nine articles were included in the meta-analyses comprising 5294 participants. Receiving a preferred psychosocial mental health treatment had a medium positive association with dropout rates (relative risk, 0.62; 0.48-0.80; P < .001; I² = 44.6%) and therapeutic alliance (Cohen d = 0.48; 0.15-0.82; P = .01; I² = 20.4%). There was no evidence of a significant association with other outcomes.

Conclusions and Relevance
This is the first review, to our knowledge, examining the association of receiving a preferred psychosocial mental health treatment with both engagement and outcomes for patients with a mental health diagnosis. Patients with mental health diagnoses who received their preferred treatment demonstrated a lower dropout rate from treatment and higher therapeutic alliance scores. These findings underline the need to
accommodate patient preference in mental health services to maximize treatment uptake and reduce financial costs of premature dropout and disengagement.


Combat Posttraumatic Stress Disorder and Quality of Life: Do Somatic Comorbidities Matter?

Kovačić Petrović Z, Peraica T, Eterović M, Anđelinović M, Kozarić-Kovačić D

Abstract
A vast number of veterans with posttraumatic stress disorder (PTSD) have chronic somatic comorbidities. However, their relationship with quality of life (QoL) has received little attention. We aimed to compare QoL of veterans with similar intensity of PTSD but different number of chronic somatic disorders. Of 129 veterans, 78% had at least one somatic disorder, and they reported lower QoL across all domains than veterans without somatic comorbidities. The greatest effect size was observed on social relationship (d = 0.65), it was notable on environment (d = 0.4) and psychological health (d = 0.38), and it was not relevant on physical health (d = 0.05). There was a negative correlation between the number of somatic disorders and scores on psychological health (rs = -0.217, p = 0.014), social relationships (rs = -0.248, p = 0.005), and environment (rs = -0.279, p = 0.001). The QoL of war veterans decreases significantly with the number of comorbid somatic conditions, particularly on the nonphysical domains of QoL.


The Implementation of a Mindfulness-Oriented Retreat Intervention for Rural Women Veterans.

Nichole A. Murray-Swank, Barbara M. Dausch, Aaron B. Murray-Swank

Mindfulness
First Online: 28 November 2019
https://doi.org/10.1007/s12671-019-01234-3
Objectives
Despite significant advances in the study of mindfulness-based interventions, research on the accessibility, acceptability, and effectiveness of varied implementation platforms is lacking, particularly among rural populations. In this study, we examined the preliminary effectiveness of a retreat-based, mindfulness-oriented intervention for rural, women veterans.

Methods
Sixty-six women veterans from rural locales participated in 3-day retreats and completed measures of psychological distress, PTSD symptoms, and mindfulness before the intervention (time 1), after the retreats (time 2), at 1-month (time 3), and 3 months post-intervention (time 4).

Results
Repeated measures ANOVAs revealed statistically significant decreases in global psychological distress, depression, anxiety, and somatization, and significant increases in four facets mindfulness (i.e., observing, acting with awareness, nonjudging, and nonreactivity) at time 2. The participants showed sustained increases in acting with awareness, nonjudging, and nonreactivity at both follow-ups with small effect sizes. At times 3 and 4, participants displayed sustained decreases in PTSD symptoms and depression (ds = .21–.44). Significant interactions demonstrated that those with probable PTSD exhibited the largest changes in symptoms, and sustained changes in PTSD (d = .59) and depression (d = .81) at time 4. Qualitative results revealed the salience of group factors including universality and support; clinician conditions of warmth, availability, and genuineness; retreat-specific elements such as time away and condensed therapeutic care; and programmatic components including mindfulness and yoga.

Conclusions
Retreat-based, mindfulness-oriented programs show promise as an effective alternative for underserved, rural women veterans. The implementation advantages and challenges, particularly among those with PTSD, are discussed.


Suicide prevention using self-guided digital interventions: a systematic review and meta-analysis of randomised controlled trials.
Background
Digital interventions that deliver psychological self-help provide the opportunity to reach individuals at risk of suicide who do not access traditional health services. Our primary objective was to test whether direct (targeting suicidality) and indirect (targeting depression) digital interventions are effective in reducing suicidal ideation and behaviours, and our secondary analyses assessed whether direct interventions were more effective than indirect interventions.

Methods
In this systematic review and meta-analysis, we searched online databases MEDLINE, PubMed, PsycINFO, and Cochrane CENTRAL for randomised controlled trials published between database inception to May 21, 2019. Superiority randomised controlled trials of self-guided digital interventions (app or web based, which delivered theory-based therapeutic content) were included if they reported suicidal ideation, suicidal plans, or suicide attempts as an outcome. Non-inferiority randomised controlled trials were excluded to ensure comparability of the effect. Data were extracted from published reports, and intention-to-treat data were used if available. The primary outcome was the difference in mean scores of validated suicidal ideation measures (Hedges' g) with the associated 95% CI for the analysis of digital intervention effectiveness on suicidal ideation. We also present funnel plots of the primary outcome measure (suicidal ideation) for direct and indirect interventions to assess for publication bias. We calculated I2 (with I2 CI) values to test heterogeneity. We used random-effects modelling for the meta-analyses to assess the primary and secondary outcomes. This study is registered with PROSPERO, CRD42018102084.

Findings
The literature search yielded 739 articles (including manual searching) for suicidality and 8842 articles for depression. After screening, 14 papers reporting on 16 studies were included in the narrative review and meta-analysis. The 16 studies (ten on direct interventions and six on indirect interventions) provided baseline data for 4398 participants. The primary outcome of overall post-intervention effect for suicidal ideation was small but significant immediately following the active intervention phase (Hedges' g −0·18, 95% CI −0·27 to −0·10, p<0·0001; I2=0%, I2 CI 0·0–47·9). The secondary
objective, comparing direct and indirect interventions, showed that direct interventions (targeting suicidality) significantly reduced suicidal ideation at post-intervention (g = 0.23, 95% CI = 0.35 to −0.11, p<0.0001; I² = 17.6%, I² CI 0.0–58.6), but indirect interventions (targeting depression) failed to reach significance (g = −0.12, 95% CI = −0.25 to 0.01, p = 0.071; I² = 0%, I² CI 0.0–30.7).

Interpretation
Self-guided digital interventions directly targeting suicidal ideation are effective immediately post-intervention. Indirect interventions were not significant for reducing suicidal ideation. Our findings suggest that digital interventions should be promoted and disseminated widely, especially where there is a lack of, or minimal access to, health services.


Risk and protective effects of social networks on alcohol use problems among Army Reserve and National Guard soldiers.

Erin M. Anderson Goodell, Renee M. Johnson, Carl A. Latkin, D. Lynn Homish, Gregory G. Homish

Addictive Behaviors
Available online 30 November 2019
https://doi.org/10.1016/j.addbeh.2019.106244

Highlights
● Drinking buddies and heavy-drinkers are risk factors for soldiers’ alcohol problems.
● Frequent drinking with ties a risk factor for soldiers’ alcohol problems.
● Military social ties protective against deployed soldiers’ alcohol problems.

Abstract
Background
Military personnel engage in alcohol-related behaviors for a variety of reasons, some of which may be socially-motivated. Although civilian-based research has established that peers’ drinking behaviors are correlated with individuals’ own drinking behaviors, military work has not yet examined the influence of social network characteristics on
soldier drinking behaviors. This study describes characteristics of soldiers’ social networks in association with soldier alcohol use problems.

Methods
This study includes data on 353 U.S. Reserve and National Guard (R/NG) soldiers and their 2,154 past-year social ties. Descriptive analyses examined social tie characteristics (e.g., military affiliation, substance misuse, and drinking influence). Negative binomial regression models examined relationships between social network characteristics and soldier alcohol use problems.

Results
On average, 14% of a R/NG soldier’s social network was comprised of military-affiliated ties. Further, an average of 14% of ties in a soldier’s network were considered drinking buddies, and 8% of ties were heavy-drinkers. More drinking buddies and heavy-drinking ties in a soldier’s social network and greater average number of past-month days drinking with ties were associated with increases in soldier alcohol problems. For deployed soldiers, larger military-affiliated social networks were protective against alcohol problems.

Conclusions
Drinking-related social network characteristics are associated with increased alcohol problems among soldiers, while military-affiliated ties are protective specifically for deployed soldiers. Interventions to reduce alcohol use problems may focus on enhancing social connections between R/NG soldiers and providing opportunities to connect deployed R/NG soldiers with one another during and after reintegration.

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**Intensive, Multi-Couple Group Therapy for PTSD: A Nonrandomized Pilot Study With Military and Veteran Dyads.**

Steffany J. Fredman, Alexandra Macdonald, Candice M. Monson, Katherine A. Dondanville, ... Alan L. Peterson

Behavior Therapy
Available online 27 November 2019
https://doi.org/10.1016/j.beth.2019.10.003
Highlights
- Brief, intensive couple therapy for PTSD was piloted in a group format.
- Active-duty and veteran couples with PTSD were treated over a weekend.
- All couples completed treatment.
- Patients’ PTSD, depression, anxiety, and anger significantly improved.
- Partners’ mental health and relationship satisfaction significantly improved.

Abstract
Cognitive-behavioral conjoint therapy for posttraumatic stress disorder (CBCT for PTSD; Monson & Fredman, 2012) is efficacious in improving PTSD symptoms and relationship adjustment among couples with PTSD. However, there is a need for more efficient delivery formats to maximize engagement and retention and to achieve faster outcomes in multiple domains. This nonrandomized trial was designed to pilot an abbreviated, intensive, multi-couple group version of CBCT for PTSD (AIM-CBCT for PTSD) delivered over a single weekend for 24 couples that included an active-duty service member or veteran with PTSD who had deployed in support of combat operations following September 11, 2001. All couples completed treatment. Assessments conducted by clinical evaluators 1 and 3 months after the intervention revealed significant reductions in clinician-rated PTSD symptoms (ds = -0.77 and -0.98, respectively) and in patients’ self-reported symptoms of PTSD (ds = -0.73 and -1.17, respectively), depression (ds = -0.60 and -0.75, respectively), anxiety (ds = -0.63 to -0.73, respectively), and anger (ds = -0.45 and -0.60, respectively), relative to baseline. By 3-month follow-up, partners reported significant reductions in patients’ PTSD symptoms (d = -0.56), as well as significant improvements in their own depressive symptoms (d = -0.47), anxiety (d = -0.60), and relationship satisfaction (d = 0.53), relative to baseline. Delivering CBCT for PTSD through an abbreviated, intensive multi-couple group format may be an efficient strategy for improving patient, partner, and relational well-being in military and veteran couples with PTSD.

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Predicting suicide: a comparison between clinical suicide risk assessment and the Suicide Intent Scale.

Åsa U Lindh, Karin Beckman, Andreas Carlborg, Margda Waern, ... Bo Runeson
Highlights

- The predictive accuracy of a clinical suicide risk assessment has only been evaluated in a few studies.
- In a self-harm cohort, the clinical suicide risk assessment performed very similar to the Suicide Intent Scale in predicting suicide during one-year follow-up.
- The positive predictive value for both methods was 6%.

Abstract

Background
How suicide risk should be assessed is under discussion with arguments for both actuarial and clinical approaches. The aim of the present study was to compare the predictive accuracy of a clinical suicide risk assessment to that of the Suicide Intent Scale (SIS) in predicting suicide within one year of an episode of self-harm with or without suicidal intent.

Methods
Prospective clinical study of 479 persons assessed in a psychiatric emergency department after an episode of self-harm. The clinical risk assessment and the SIS rating were made independently of each other. Suicides within one year were identified in the National Cause of Death Register. Receiver operating characteristic (ROC) curves were constructed, optimal cut-offs were identified and accuracy statistics were calculated.

Results
Of 479 participants, 329 (68.7%) were women. The age range was 18–95 years. During one-year follow up, 14 participants died by suicide. The area under the curve (AUC) for the clinical risk assessment and the SIS score were very similar, as were the accuracy statistic measures at the optimal cut-offs of the respective methods. The positive predictive value (PPV) of each assessment method was 6%.

Limitations
The clinical suicide risk assessment is not standardized. The number of suicides is small, not allowing for stratification by e.g. gender or diagnosis.
Conclusion
Predictive accuracy was similar for a clinical risk assessment and the SIS, and insufficient to guide treatment allocation.

https://journals.sagepub.com/doi/abs/10.1177/0886260519889944

An Examination of Stalking Experiences During Military Service Among Female and Male Veterans and Associations With PTSD and Depression.


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Stalking is associated with mental health concerns, although little is known about the influence of stalking and mental health concerns among veterans. This study evaluated stalking experienced during military service in two community-based, nonclinical samples of veterans (N = 1,980). Models explored (a) types of stalking, (b) characteristics of veterans who experienced stalking, and (c) the associations between stalking with posttraumatic stress disorder (PTSD) and depression. Types of stalking varied by sex; female veterans were significantly more likely to experience stalking than male veterans (58.5% vs. 34.6%, p < .001, respectively). Female veterans reported unwanted messages, emails, or phone calls (37.2%), and male veterans experienced someone showing up unannounced or uninvited (23.5%) most frequently. Stalking experiences also differed by age with female and male veterans 18 to 39 years old significantly more likely to have experienced stalking (p < .001 and p < .001, respectively) than veterans over age 40. Associations between prior stalking experiences and mental distress were found for both female and male veterans. Both female and male veterans who experienced stalking were significantly more likely to have probable PTSD (odds ratio [OR] = 1.88, 95% confidence interval [CI] = [1.04, 3.39] and OR = 3.08, 95% CI = [2.27, 4.18], respectively) and depression (OR = 2.54, 95% CI = [1.38, 4.58] and OR = 2.78, 95% CI = [2.05, 3.79], respectively). These findings highlight (a) the rates of stalking experienced during military service, (b) the need for assessment of stalking to inform treatment, and (c) lay the foundation for the Department of Defense (DoD) to further evaluate stalking among military populations.
A Systematic Review of Equine-Assisted Interventions in Military Veterans Diagnosed with PTSD.

Lisa Boss, Sandy Branson, Heather Hagan, Cheryl Krause-Parello

Journal of Veterans Studies
Published on 04 Dec 2019
http://doi.org/10.21061/jvs.v5i1.134

Military veterans transitioning from active duty to civilian life often face challenges during the reintegration process. Reintegration can become more difficult when a veteran is coping with posttraumatic stress disorder (PTSD) and its sequelae. Interventions are urgently needed to support veterans during times of transition. Animal-assisted interventions (AAI) show promise in reducing stress, depression, and improving wellbeing in marginalized populations. Equine-assisted interventions (EAI), in particular, are gaining momentum as a treatment option for veterans with PTSD. To synthesize current evidence on the use of EAI as a treatment option in military veterans formally diagnosed with PTSD. A comprehensive, electronic review of the literature was performed. Inclusion criteria were original quantitative or qualitative research, written in English, use of human participants, published through July 2019. The total number of studies included was nine. Main findings were that the efficacy of EAI on PTSD symptoms were equally mixed with both significant and non-significant findings. Data largely trended in the hypothesized direction for improving mental health states, resiliency, social function, quality of life, biological and behavioral measures, however, overall findings did not reach statistical significance. The investigation of EAI as an adjunct treatment for PTSD in military veterans may be effective, however, we cannot make a clear determination based on current evidence. Although findings largely trended in the hypothesized direction, most were not significant (except for PTSD symptoms) and warrant additional research to understand the effectiveness of EAI as an adjunct treatment in military veterans with PTSD.

Suicide Has Many Faces, So Does Ketamine: a Narrative Review on Ketamine’s Antisuicidal Actions.
Purpose of Review
Suicidal behaviours are a challenge for a medical system and public health, partly due to the current lack of evidence-based, effective, rapid tools for suicidal crisis management. Ketamine and its enantiomer esketamine have raised hopes regarding this issue in the recent years. However, their efficacy in suicidal behaviours and mechanisms for it remain a topic of debate.

Recent Findings
Subanesthetic ketamine doses rapidly, albeit transiently decrease suicidal ideation, with effects emerging within an hour and persisting up to a week. Current evidence points to various and not necessarily exclusive mechanisms for ketamine’s antisuicidal action, including effects on neuroplasticity, inflammation, reward system and pain processing.

Summary
Ketamine rapidly decreases suicidal ideation, but whether it leads to meaningful clinical outcomes past 1 week is unclear. Multiple putative mechanisms drive ketamine’s antisuicidal action. Future studies will have to show long-term ketamine treatment outcomes and further elucidate its mechanisms of action.

Infusing Hope Into the Treatment of Suicidality: a Review of Ketamine’s Effects on Suicidality.

Manivel Rengasamy, Kimberly Hsiung, Rebecca B. Price

Current Behavioral Neuroscience Reports
First Online: 02 December 2019
https://doi.org/10.1007/s40473-019-00184-3
Purpose of Review
Given recent increases in rates of suicide and lack of rapid treatments for suicidality, ketamine has been identified as a potential fast-acting anti-suicidal treatment. Our review seeks to describe the effects of ketamine on suicidality, given the growing literature on the use of ketamine in reducing suicidality. We examine open-label studies and randomized controlled trials evaluating the treatment of suicidality with ketamine. Furthermore, our manuscript identifies potential mechanisms of ketamine’s effects on suicidality.

Recent Findings
Based on existing RCTs, ketamine appears to have rapid anti-suicidal effects, with most literature studying such effects in timeframes less than 1 week. Although still in the early stages of research, mechanisms of ketamine include modulation of molecular, inflammatory, neural, cognitive, and behavioral processes.

Summary
Thus, ketamine appears to be a promising treatment for suicidality but requires larger scale and more robust RCTs to confirm the potential use of this agent in clinical settings.


Couple and family therapies for post-traumatic stress disorder (PTSD).

Suomi A, Evans L, Rodgers B, Taplin S, Cowlishaw S.

Cochrane Database of Systematic Reviews
2019, Issue 12. Art. No.: CD011257
DOI: 10.1002/14651858.CD011257.pub2.

There are few trials of couple-based therapies for PTSD and evidence is insufficient to determine whether these offer substantive benefits when delivered alone or in addition to psychological interventions. Preliminary RCTs suggest, however, that couple-based therapies for PTSD may be potentially beneficial for reducing PTSD symptoms, and there is a need for additional trials of both adjunctive and stand-alone interventions with couples or families which target reduced PTSD symptoms, mental health problems of family members and dyadic measures of relationship quality.
There has been a proliferation of online suicide prevention training for mental health service providers. The present study evaluated the preliminary effectiveness of a web-mediated suicide prevention training program for an interdisciplinary set of mental health service providers. This pilot training project also advanced the literature by evaluating a suicide-related individual difference: the provider's need for affect (NFA). Participant NFA was evaluated as a moderator of training effectiveness. Predictors of intent to utilize training content were also identified. Mental health professionals (n = 43; 18.0% response rate; majority psychologists) completed the training program. The intervention consisted of a 12-module self-paced didactic and case study-based training. Training demonstrated meaningfully sized gains in suicide prevention knowledge, perceived skills/abilities, accuracy in suicide risk judgments, and reduction in negative feelings toward patients. NFA moderated several training gains. In general, participants willing to engage emotional content benefited more from training than affectively avoidant counterparts. Posttraining self-rated suicide prevention skills and confidence in training predicted intent to use training content. The training program requires further testing, but may offer a comprehensive, user-friendly CE training program for mental health service providers. NFA findings suggest potential to tailor future training, or to identify individual differences that may need to be accounted for in clinical training and supervision. Predictors of intent to use training content are consistent with theories of health promotion. Limitations are discussed. (PsycINFO Database Record (c) 2019 APA, all rights reserved)


International Review of Psychiatry
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Post-traumatic stress disorder (PTSD) is one of the common mental disorders in military and veteran populations. Considerable research and clinical opinion has been focused on understanding the relationship between PTSD and military service and the implications for prevention, treatment, and management. This paper examines factors associated with the development of PTSD in this population, considers issues relating to engagement in treatment, and discusses the empirical support for best practice evidence-based treatment. The paper goes on to explore the challenges in those areas, with particular reference to treatment engagement and barriers to care, as well as treatment non-response. The final section addresses innovative solutions to these challenges through improvements in agreed terminology and definitions, strategies to increase engagement, early identification approaches, understanding predictors of treatment outcome, and innovations in treatment. Treatment innovations include enhancing existing treatments, emerging non-trauma-focused interventions, novel pharmacotherapy, personalized medicine approaches, advancing functional outcomes, family intervention and support, and attention to physical health.

Posttraumatic Stress Disorder Severity and Insomnia-Related Sleep Disturbances: Longitudinal Associations in a Large, Gender-Balanced Cohort of Combat-Exposed Veterans.
Few studies have investigated the range and severity of insomnia-related sleep complaints among veterans with posttraumatic stress disorder (PTSD), and the temporal association between insomnia and PTSD severity has yet to be examined. To examine these associations, a large, gender-balanced cohort of veterans (N = 1,649) of the Iraq and Afghanistan conflicts participated in longitudinal assessments of PTSD and insomnia-related symptoms over a period of 2.5 years following enrollment (range: 2–4 years). Data were obtained from multiple sources, including interviews, self-report assessments, and electronic medical record data. Three-fourths (74.0%) of veterans with PTSD diagnoses at Time 1 (T1) reported insomnia-related sleep difficulties on at least half the nights during the past 30 days, and one-third of participants had received a prescription for a sedative-hypnotic drug in the past year. Veterans without PTSD had fewer sleep problems overall, although the prevalence of sleep problems was high among all study participants. In longitudinal, cross-lagged panel models, the frequency of sleep problems at T1 independently predicted increases in PTSD severity at Time 2 (T2), \( B = 0.27, p < .001 \), after controlling for gender and relevant comorbidities. Conversely, T1 PTSD severity was associated with increasing sleep complaints at T2 but to a lesser degree, \( B = 0.04, p < .001 \). Moderately high rates of sedative-hypnotic use were seen in veterans with PTSD, with more frequent use in women compared to men (40.4% vs. 35.0%). Sleep complaints were highly prevalent overall and highlight the need for increased clinical focus on this area.
Background
Deployment-related experiences might be risk factors for soldier suicides, in which case identification of vulnerable soldiers before deployment could inform preventive efforts. We investigated this possibility by using pre-deployment survey and administrative data in a sample of US Army soldiers to develop a risk model for suicide attempt (SA) during and shortly after deployment.

Methods
Data came from the Army Study to Assess Risk and Resilience in Servicemembers Pre-Post Deployment Survey (PPDS). Soldiers completed a baseline survey shortly before deploying to Afghanistan in 2011–2012. Survey measures were used to predict SAs, defined using administrative and subsequent survey data, through 30 months after deployment. Models were built using penalized regression and ensemble machine learning methods.

Results
Significant pre-deployment risk factors were history of traumatic brain injury, 9+ mental health treatment visits in the 12 months before deployment, young age, female, previously married, and low relationship quality. Cross-validated AUC of the best penalized and ensemble models were .75–.77. 21.3–40.4% of SAs occurred among the 5–10% of soldiers with highest predicted risk and positive predictive value (PPV) among these high-risk soldiers was 4.4–5.7%.

Conclusions
SA can be predicted significantly from pre-deployment data, but intervention planning needs to take PPV into consideration.

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Community Treatment for Opioid Use Disorders in Urban and Rural Veterans.

Turvey, C.L., Lund, B.C., Jones, D. and Arndt, S.
The recent opioid crisis is characterized by a relatively greater increase in opioid use disorder and related mortality in rural populations when compared with urban populations.1-5 As almost a quarter of our nation’s veterans reside in rural settings, the United States Veterans Health Administration (VHA) is interested in the impact of this epidemic on rural veterans. This study aims to develop a comprehensive understanding of the trends in substance use disorders (SUD) in veterans seeking treatment from community, non-VHA providers.

Methods
Using Substance Abuse and Mental Health Services Administration (SAMHSA)’s Treatment Episode Data Set (TEDS), this study presents the prevalence of treatment for veterans seeking initial admission into publicly funded non-VHA SUD treatment centers for years 2011-2016. Comparisons were made for all SUD types. Multivariate trend analysis based on annual data from 2011 to 2016 compared urban and rural veterans for opioid use disorder treatment.

Findings
Both urban and rural veterans had comparable rates of treatment for SUD, though rural veterans had slightly higher rates of injectable (11.2% vs 8.7%; P < .001) and opiate drug use disorder admissions (20.7% vs 18.1%; P = .014). Both urban and rural showed an increase in admissions for opioid, heroin, and injectable drug use disorders between 2011 and 2016 (P < .001).

Conclusions
Comprehensive understanding of veteran SUD and treatment should include national-level data on community non-VHA treatment. SAMHSA’s TEDS for years 2011-2016 provides clinical information for more than 90,000 veterans and indicates continued increase in treatment seeking for opioid use disorders, particularly for rural veterans.
Predeployment neurocognitive functioning predicts postdeployment posttraumatic stress in Army personnel.


OBJECTIVE:
The Fort Campbell Cohort study was designed to assess predeployment biological and behavioral markers and build predictive models to identify risk and resilience for posttraumatic stress disorder (PTSD) following deployment. This article addresses neurocognitive functioning variables as potential prospective predictors.

METHOD:
In a sample of 403 soldiers, we examined whether PTSD symptom severity (using the PTSD Checklist) as well as posttraumatic stress trajectories could be prospectively predicted by measures of executive functioning (using two web-based tasks from WebNeuro) assessed predeployment.

RESULTS:
Controlling for age, gender, education, prior number of deployments, childhood trauma exposure, and PTSD symptom severity at Phase 1, linear regression models revealed that predeployment sustained attention and inhibitory control performance were significantly associated with postdeployment PTSD symptom severity. We also identified two posttraumatic stress trajectories utilizing latent growth mixture models. The "resilient" group consisted of 90.9% of the soldiers who exhibited stable low levels of PTSD symptoms from pre- to postdeployment. The "increasing" group consisted of 9.1% of the soldiers, who exhibited an increase in PTSD symptoms following deployment, crossing a threshold for diagnosis based on PTSD Checklist scores. Logistic regression models predicting trajectory revealed a similar pattern of findings as the linear regression models, in which predeployment sustained attention (95% CI of odds ratio: 1.0109, 1.0558) and inhibitory control (95% CI: 1.0011, 1.0074) performance were significantly associated with postdeployment PTSD trajectory.

CONCLUSIONS:
These findings have clinical implications for understanding the pathogenesis of PTSD.
Introduction:
Prenatal maternal anxiety and depression have been implicated as possible risk factors for preterm birth (PTB) and other poor birth outcomes. Within the military, maternal conditions account for 15.3% of all hospital bed days, and it is the most common diagnostic code for active duty females after mental disorders. The majority of women (97.6%) serving on active duty are women of childbearing potential. Understanding the impact that prenatal maternal anxiety and depression can have on PTB and low birthweight (LBW) in a military population is critical to providing insight into biological pathways that alter fetal development and growth. The purpose of the study was to determine the impact of pregnancy-specific anxiety and depression on PTB and LBW within a military population.

Material and Methods:
Pregnancy-specific anxiety and depression were measured for 246 pregnant women in each trimester. Individual slopes for seven different measures of pregnancy anxiety and one depression scale were calculated using linear mixed models. Logistic regression, adjusted and unadjusted models, were applied to determine the impact on PTB and LBW.

Results:
For each 1/10 unit increase in the anxiety slope as it related to well-being, the risk of LBW increased by 83% after controlling for parity, PTB, and active duty status.
Similarly, a 1/10 unit rise in the anxiety slope related to accepting pregnancy, labor fears, and helplessness increased the risk of PTB by 37%, 60%, and 54%, respectively.

Conclusions:
Pregnancy-specific anxiety was found to significantly increase the risk of PTB and LBW in a military population. Understanding this relationship is essential in developing effective assessments and interventions. Results emphasize the importance of prenatal maternal mental health to fetal health and birth outcomes. Further research is needed to determine the specific physiological pathways that link prenatal anxiety and depression with poor birth outcomes.

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Links of Interest

Present-centered Therapy Versus Trauma-focused Treatments for PTSD: And the Winner is…
https://www.pdhealth.mil/news/blog/present-centered-therapy-versus-trauma-focused-treatments-ptsd-and-winner

Veteran households in U.S. are economically better off than those of non-veterans

Commandant Responds to Troubling Study on Marine Corps Culture

60% more female Marines, sailors serving in previously all-male units than in 2018

More veterans struggled to find work last month, even as national unemployment rates fell

Air Force Eyes Lifting More Flight Restrictions for Pregnant Pilots
https://www.military.com/daily-news/2019/12/05/air-force-eyes-lifting-more-flight-restrictions-pregnant-pilots.html
Sailor's Suicide Prompts Calls for Better Mental Health Treatment
https://www.military.com/daily-news/2019/12/05/sailors-suicide-prompts-calls-better-mental-health-treatment.html

Lawmakers seek answers on rising military and veterans suicide rates

More retirees, family members to be booted from military hospitals under Pentagon reform plans

Documentary Follows Force Recon Marine's Raw Struggles After War

VA opens gambling addiction treatment center in Vegas

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Resource of the Week: Military Families and Intimate Partner Violence: Background and Issues for Congress

New, from the Congressional Research Service:

Intimate partner violence (IPV) is a national public health issue. IPV is also a crime characterized by recidivism and escalation, meaning offenders are likely to be repeat abusers, and the intensity of the abuse or violence is likely to grow over time. Like the broader phenomenon of domestic violence and abuse, a subset of which includes IPV, associated physical and mental trauma for those who are victims of abuse, as well as for those minor children who witness the abuse, can have both immediate and long-term health effects and significant costs to society. When military servicemembers are involved as either victims or perpetrators of IPV, the consequences of IPV can also harm unit readiness. Congress has constitutional authority to fund, regulate, and oversee the Armed Forces, including the military justice system. Congress has used this authority in
recent years to mandate domestic violence prevention and victim response policies, programs, and services. In addition, Congress has acted to improve accountability measures for military perpetrators through statutory changes to the Uniform Code of Military Justice (UCMJ).

DOD Definitions of Domestic Abuse and Domestic Violence

**Domestic Violence.** An offense under the U.S. Code, the UCMJ, and state laws involving the use, attempted use, or threatened use of force or violence against a person, or a violation of a lawful order issued for the protection of a person who is:

- A current or former spouse,
- A person with whom the abuser shares a child in common, or
- A current or former intimate partner with whom the abuser shares or has shared a common domicile.

**Domestic Abuse.** Domestic violence or a pattern of behavior resulting in emotional/psychological abuse, economic control, and/or interference with personal liberty that is directed toward a person who is:

- A current or former spouse,
- A person with whom the abuser shares a child in common, or
- A current or former intimate partner with whom the abuser shares or has shared a common domicile.

**Types of Maltreatment**

- **Physical abuse.** The non-accidental use of physical force against a spouse or intimate partner that causes physical injury (e.g., bruise, cut, sprain, or broken bone) or reasonable potential for more than inconsequential physical injury.
- **Emotional abuse.** Non-accidental act or acts, excluding physical or sexual abuse, or threat adversely affecting the psychological well-being of the partner (e.g., isolating partner from friends/family; restricting access to economic resources or benefits; threatening to harm the individual's children, pets or property; or berating, disparaging, or humiliating the partner).
- **Sexual abuse.** The use of physical force to compel the spouse or intimate partner to engage in a sexual act or sexual contact against his or her will, whether or not the sexual act or sexual contact is completed.
- **Neglect of spouse.** Withholding or threatening to withhold access to appropriate, medically indicated health care, nourishment, shelter, clothing, or hygiene where the spouse is incapable of self-care and the abuser is able to provide care or access to care.

**Source:** DOD, *Domestic Abuse Involving DoD Military and Certain Affiliated Personnel*, DODI 6400.06, May 26, 2017. For a complete list of maltreatment categories and corresponding definitions, see http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/640001m_vol3.pdf.

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