



**CDP Research Update -- August 14, 2014**

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- Elevated Risk for Autoimmune Disorders in Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder.
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- The role of trauma symptoms in nonsuicidal self-injury.
- Long-term effects of psychotherapy on moderate depression: A comparative study of narrative therapy and cognitive-behavioral therapy.
- Stress and sleep reactivity: a prospective investigation of the stress-diathesis model of insomnia.
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- Links of Interest
- Resource of the Week: Agency for Healthcare Research and Quality Effective Healthcare Program

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<http://www.ncbi.nlm.nih.gov/pubmed/25102551>

Mil Med. 2014 Aug;179(8S):63-70.

### **Symptoms of Psychological Distress and Post-Traumatic Stress Disorder in United States Air Force "Drone" Operators.**

Chappelle WL, McDonald KD, Prince L, Goodman T, Ray-Sannerud BN, Thompson W

The goal of this study is to repeat a survey administered in 2010 to assess for changes in mental health among United States Air Force aircrew operating Predator/Reaper remotely piloted aircraft, also commonly referred to as "drones." Participants were assessed for self-reported sources of occupational stress, levels of clinical distress using the Outcome Questionnaire-45.2, and symptoms of post-traumatic stress disorder (PTSD) using the PTSD Checklist-Military Version. A total of 1,094 aircrew responded to the web-based survey composed of the commercially available standardized instruments mentioned above. The

survey also contained nonstandardized items asking participants to report the main sources of their occupational stress, as well as questions addressing demographics and work-related characteristics. The estimated response rate to the survey was 49%. Study results reveal the most problematic self-reported stressors are operational: low manning, extra duties/administrative tasks, rotating shift work, and long hours. The results also reveal 10.72% of operators self-reported experiencing high levels of distress and 1.57% reported high levels of PTSD symptomology. The results are lower than findings from the 2010 survey and from soldiers returning from Iraq and Afghanistan. Implications of the study and recommendations for United States Air Force line leadership and mental health providers are discussed. Reprint & Copyright © 2014 Association of Military Surgeons of the U.S.

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<http://www.ncbi.nlm.nih.gov/pubmed/25102528>

Mil Med. 2014 Aug;179(8):856-864.

### **Postconcussive Symptom Report in Polytrauma: Influence of Mild Traumatic Brain Injury and Psychiatric Distress.**

Waldron-Perrine B, Hennrick H, Spencer RJ, Pangilinan PH, Bieliauskas LA

Many studies have evaluated the influence of mild traumatic brain injury (mTBI) on neuropsychological test performance and on report of postconcussive symptoms. However, most studies that examine postconcussion syndrome (PCS) do not address the issue of "polytrauma," which is common in military mTBI. This study investigated simultaneously demographic, injury-related, and psychiatric symptom predictors of PCS report in a veteran, polytrauma sample. In prediction of overall report of PCS symptoms with demographic, traumatic brain injury, psychiatric and sleep variables, 60% of the variance was explained. Semipartial correlations revealed that post-traumatic stress disorder uniquely explained 7% of the variance, depression 2%, and sleep dissatisfaction 3%; injury and demographic characteristics accounted for no unique variance. In all 5 hierarchical multiple regressions (prediction of total Neurobehavioral Symptom Inventory score and 4 individual factor scores), the total models were significant ( $p < 0.001$ ). Accurate diagnosis and treatment necessitates an integrative analysis of PCS, psychiatric, behavioral, and health symptom report in addition to neuropsychological functioning in the polytrauma population. This study demonstrated that emotional distress was uniquely predictive of total report of PCS and that no injury-related characteristics were predictive. This is of particular relevance in a Veteran population given the high rates of both mTBI and psychiatric disturbance. Reprint & Copyright © 2014 Association of Military Surgeons of the U.S.

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<http://www.ncbi.nlm.nih.gov/pubmed/25102527>

Mil Med. 2014 Aug;179(8):849-855.

### **Chasing the Care: Soldiers Experience Following Combat-Related Mild Traumatic Brain Injury.**

Hyatt K, Davis LL, Barroso J

#### **OBJECTIVE:**

One of the most common, yet most difficult to detect injuries sustained by U.S. soldiers in Iraq and Afghanistan is mild traumatic brain injury (mTBI). Left untreated, mTBI can negatively impact soldiers' postdeployment adjustment. This research describes the rehabilitation experiences of soldiers with a history of mTBI and their spouses.

#### **METHOD:**

Nine soldiers with mTBI and their spouses participated in the study. A total of 27 interviews were conducted exploring couples' post-mTBI rehabilitation experiences. Participants consisted of active duty soldiers with mTBI who had returned from deployment within 2 years, and their civilian spouses. Strauss and Corbin's grounded theory methodology was used to collect and analyze the data.

#### **FINDINGS:**

The majority of the soldiers and spouses who participated (16/18) indicated that uncertain prognosis and symptom management were the greatest challenges of post-mTBI. Other challenges, such as delayed diagnosis, limited access to mental health care, and difficulty navigating an unfamiliar military health care system was also reported.

#### **CONCLUSIONS:**

Because of mTBI's lack of visible manifestation, soldiers may confuse their mTBI symptoms with those of other deployment-related injuries and this leads to a delay in treatment. Future research should explore the standardization of post-mTBI rehabilitation programs and the effectiveness of soldier education to promote early detection and treatment. Reprint & Copyright © 2014 Association of Military Surgeons of the U.S.

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<http://www.ncbi.nlm.nih.gov/pubmed/25102531>

Mil Med. 2014 Aug;179(8):885-890.

### **Opiate-Related Dependence/Abuse and PTSD Exposure Among the Active-Component U.S. Military, 2001 to 2008.**

Dabbs C, Watkins EY, Fink DS, Eick-Cost A, Millikan AM

#### BACKGROUND:

Over the past 5 years, diagnoses for opiate abuse or dependency and post-traumatic stress disorder (PTSD) have increased across all U.S. military services. Moreover, in the United States, opiate prescription dependence and abuse has now surpassed all other illicit drugs of abuse with the exception of marijuana. Some research indicates that PTSD is predictive of substance dependence and abuse, while other research suggests that substance dependence and abuse may lead to events that trigger PTSD. This dichotomy has not been extensively explored within a military population.

#### METHODS:

Using conditional multiple logistic regression analysis, a matched case-control study with 18,606 active-component U.S. military service members was conducted to examine the relationship between opiate dependence or abuse and PTSD.

#### RESULTS:

Among the 18,606 service members included in the analysis, 21% were cases and 79% were controls. Thirteen percent of service members with substance dependence or abuse diagnosis had a prior PTSD diagnosis compared to 1% of controls. After, adjusting for sociodemographic and military characteristics, the odds of having a prior diagnosis of PTSD was 28 (95% CI: 21.24-37.78) times greater for service members with opiate abuse/dependency compared to controls.

#### CONCLUSION:

These findings suggest active duty military personnel diagnosed with PTSD should be closely monitored to reduce the likelihood of future morbidity because of opiate dependence or abuse. Reprint & Copyright © 2014 Association of Military Surgeons of the U.S.

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<http://www.ncbi.nlm.nih.gov/pubmed/25101684?>

PLoS One. 2014 Aug 7;9(8):e103676. doi: 10.1371/journal.pone.0103676. eCollection 2014.

#### **Efficacy of Eye-Movement Desensitization and Reprocessing for Patients with Posttraumatic-Stress Disorder: A Meta-Analysis of Randomized Controlled Trials.**

Chen YR, Hung KW, Tsai JC, Chu H, Chung MH, Chen SR, Liao YM, Ou KL, Chang YC, Chou KR.

#### BACKGROUND:

We performed the first meta-analysis of clinical studies by investigating the effects of eye-movement desensitization and reprocessing (EMDR) therapy on the symptoms of posttraumatic

stress disorder (PTSD), depression, anxiety, and subjective distress in PTSD patients treated during the past 2 decades.

#### METHODS:

We performed a quantitative meta-analysis on the findings of 26 randomized controlled trials of EMDR therapy for PTSD published between 1991 and 2013, which were identified through the ISI Web of Science, Embase, Cochrane Library, MEDLINE, PubMed, Scopus, PsycINFO, and the Cumulative Index to Nursing and Allied Health Literature electronic databases, among which 22, 20, 16, and 11 of the studies assessed the effects of EMDR on the symptoms of PTSD, depression, anxiety, and subjective distress, respectively, as the primary clinical outcome.

#### RESULTS:

The meta-analysis revealed that the EMDR treatments significantly reduced the symptoms of PTSD ( $g = -0.662$ ; 95% confidence interval (CI):  $-0.887$  to  $-0.436$ ), depression ( $g = -0.643$ ; 95% CI:  $-0.864$  to  $-0.422$ ), anxiety ( $g = -0.640$ ; 95% CI:  $-0.890$  to  $-0.390$ ), and subjective distress ( $g = -0.956$ ; 95% CI:  $-1.388$  to  $-0.525$ ) in PTSD patients.

#### CONCLUSION:

This study confirmed that EMDR therapy significantly reduces the symptoms of PTSD, depression, anxiety, and subjective distress in PTSD patients. The subgroup analysis indicated that a treatment duration of more than 60 min per session was a major contributing factor in the amelioration of anxiety and depression, and that a therapist with experience in conducting PTSD group therapy was a major contributing factor in the reduction of PTSD symptoms.

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<http://www.ncbi.nlm.nih.gov/pubmed/25099348>

J Clin Psychol. 2014 Aug 5. doi: 10.1002/jclp.22116. [Epub ahead of print]

### **Sleep Disturbance, Disability, and Posttraumatic Stress Disorder in Utility Workers.**

Giosan C, Malta LS, Wyka K, Jayasinghe N, Evans S, Difede J, Avram E

#### OBJECTIVE:

The objective of the present study was to examine the associations between sleep disturbance, posttraumatic stress disorder (PTSD), and functional disability in a population exposed to a singular traumatic event.

#### METHOD:

The participants were a population of 2,453 predominantly male utility workers who were deployed to the World Trade Center site in the aftermath of the 9/11 attack. They underwent psychiatric screenings comprising measures of sleep disturbance, PTSD, and functional disability.

## RESULTS:

Analyses indicated that (a) rates of sleep disturbances were significantly higher among participants diagnosed with PTSD than those without, (b) PTSD severity was significantly associated with sleep disturbance, and (c) sleep disturbance moderated the relationship between PTSD and disability.

## CONCLUSION:

Sleep disturbance is associated with occupational, social functioning, and PTSD severity, suggesting that ameliorating sleep may lead to increased occupational and social functioning, as well as better treatment responses in PTSD. © 2014 Wiley Periodicals, Inc.

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<http://www.ncbi.nlm.nih.gov/pubmed/23653159>

Qual Life Res. 2013 Dec;22(10):2749-56. doi: 10.1007/s11136-013-0424-7. Epub 2013 May 8.

## **Health-related quality of life and comorbidity among older women veterans in the United States.**

Der-Martirosian C, Cordasco KM, Washington DL

## PURPOSE:

This paper examines the predictors of quality of life among older women ( $\geq 65$  years of age) veterans in the United States focusing on the effect of comorbidity on health-related quality of life (HRQOL).

## METHODS:

Data from the National Survey of Women Veterans, a cross-sectional nationally representative population-based, stratified random sample of women veterans, were used with an analytic sample size of 1,379 older women veterans. The SF12 physical and mental composite scores (PCS and MCS) were used as outcome measures, and a weighted comorbidity index was used as a covariate.

## RESULTS:

Older women veterans who are married, employed, with higher income, and higher education have better physical health (PCS). For mental health, education is positively correlated, whereas depression and posttraumatic stress disorder are negatively correlated with MCS. After adjusting for socio-demographic, mental health, and chronic health indicators, the results showed that SF12 PCS varied by VA use status for each level of Seattle Index of Comorbidity. The same pattern was not found for MCS.



## CONCLUSION:

For each level of comorbidity, VA users have worse HRQOL which might suggest that case mix adjustments comparing VA users and non-VA users must take into account more than comorbidity alone.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-13-00483>

## **The Challenge of Undiagnosed Sleep Apnea in Low-Risk Populations: A Decision Analysis.**

Bianchi Matt T., Hershman Steven, Bahadoran Mahshid, Ferguson Matthew, and Westover M. Brandon

Military Medicine 2014 179:8S, 47-54

### Objectives:

Obstructive sleep apnea (OSA) may contribute to impaired performance among otherwise healthy active duty military personnel. We used decision analysis to evaluate three approaches to identifying and treating OSA in low-risk populations, which may differ from current standard practice for high-risk populations.

### Methods:

We developed a decision tree to compare two simple strategies for diagnosis and management of sleep apnea in a low-risk population. In one strategy, a simple screening inventory was followed by conventional laboratory polysomnography (split-night), whereas the alternative strategy involved performing home testing in all individuals. This allowed us to weigh the costs associated with large-scale diagnostic approaches against the costs of untreated OSA in a small fraction of the population.

### Results:

We found that the home testing approach was less expensive than the screen-then-test approach across a broad range of other important parameters, including the annual performance cost associated with untreated OSA, the prevalence of OSA, and the duration of active duty.

### Conclusions:

Assuming even modest annual performance costs associated with untreated OSA, a population strategy involving large-scale home testing is less expensive than a screening inventory approach. These results may inform either targeted or large-scale investigation of undiagnosed OSA in low-risk populations such as active duty military.

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<http://www.tandfonline.com/doi/abs/10.1080/07448481.2014.947992>

**An Exploratory Study of Student Service Members and Veterans Mental Health Characteristics by Sexual Orientation.**

Michael D. Pelts, David L. Albright

Journal of American College Health

Accepted author version posted online: 07 Aug 2014

**Objective:**

Explore the mental health differences of student veterans by sexual orientation.

**Participants:**

Student service members/veterans (n = 702) from the fall 2011 National College Health Assessment. Method: Descriptive statistics and two-sample proportion and mean tests were used to compare mental health characteristics.

**Results:**

Student veterans who identify as lesbian, gay, bisexual or unsure had higher levels of mental health symptoms and treatment.

**Conclusions:**

Results suggest a need for continued examination of student service members/ veterans related to disparities in mental health by sexual orientation.

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<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302064>

**Suicidal Ideation and Mental Distress Among Adults With Military Service History: Results From 5 US States, 2010.**

John R. Blosnich, PhD, MPH, Adam J. Gordon, MD, MPH, and Robert M. Bossarte, PhD

American Journal of Public Health: September 2014, Vol. 104, No. S4, pp. S595-S602.

**Objectives.**

We examined the association of military service history with past-year suicidal ideation and past-30-days mental distress in a probability-based sample of adults.

## Methods.

We gathered 2010 Behavioral Risk Factor Surveillance System data from 5 states that asked about past-year suicidal ideation. Military service was defined as current or former active-duty service or National Guard or Reserves service. We stratified analyses into 18 to 39 years, 40 to 64 years, and 65 years and older age groups and used multiple logistic regression analyses, adjusted for demographic confounders, to discern the association of military service history with past-year suicidal ideation and past-30-days mental distress.

## Results.

Among the 26 736 respondents, 13.1% indicated military service history. After adjusting for several confounders, we found military history status among those aged 40 to 64 years was associated with both past-year suicidal ideation and past-30-days mental distress. We found no significant associations among the younger or older age groups.

## Conclusions.

Differences in suicidal ideation between military and nonmilitary individuals may occur in midlife. Future research should examine the possibility of cohort effects, service era effects, or both.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-14-00016>

## **Three-Year Outcome Following Moderate-to-Severe TBI in U.S. Military Service Members: A Descriptive Cross-Sectional Study.**

Brickell Tracey A., Lange Rael T., and French Louis M.

Military Medicine 2014 179:8, 839-848

This study examined the prospective course of neurobehavioral symptom reporting and health-related quality of life within the first 3 years following moderate-to-severe traumatic brain injury (TBI). Participants were 52 U.S. service members who were evaluated following a moderate-to-severe TBI sustained in the combat theater during Operations Iraqi and Enduring Freedom (90.4%), or from other noncombat-related incidents. Participants completed the Neurobehavioral Symptom Inventory and Post-Traumatic Stress Disorder-Checklist within 3 months postinjury, and at least one follow-up telephone interview at 12 (n = 27), 24 (n = 31), or 36 months (n = 22) postinjury. Approximately half of the sample (41.9%–63.0%) reported “persistent” symptoms from baseline to follow-up. A substantial minority also “improved” (22.2%–31.8%) or “developed” new symptoms (3.7%–16.1%). Ongoing physical and mental health problems were also reported. The number of service members receiving mental health treatment significantly reduced between 12 and 36 months postinjury (48.1%–18.2%), while complaints of bodily pain significantly increased (40.7%–68.2%). Despite ongoing symptom reporting, few reported suicidal/homicidal ideation (6.5%–9.1%), and a substantial majority reported good/excellent health status (74.1%–90.9%) and satisfaction with their life (81.5%–

90.9%). Continued support and care for all service members who sustain a combat-related moderate-to-severe TBI is recommended, regardless of the presence or absence of symptom reporting within the first few months postinjury.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-14-00048>

### **Psychometric Properties of the Beck Depression Inventory-II for OEF/OIF Veterans in a Polytrauma Sample.**

Glen A. Palmer, PhD, ABN; Maggie C. Happe, PsyD; Janine M. Paxson, PhD; Benjamin K. Jurek, PsyD; Joseph J. Graca, PhD; Stephen A. Olson, BA

Military Medicine

Volume 179 Issue 8, August 2014, pp. 879-884

#### Objective:

The Beck Depression Inventory-II (BDI-II) is widely used as a screening instrument for depressive symptomatology in clinical settings. The factor structure has been researched in a variety of settings with results ranging from a single factor to a five-factor structure. The purpose of this study was to examine several identified factor structures when applied to a mixed polytrauma sample.

#### Method:

A sample of 310 veterans was used for this study. All subjects were administered the BDI-II screening measure as part of an evaluation in an outpatient polytrauma clinic. Confirmatory factor analysis was used to determine the best model.

#### Results:

Confirmatory factor analysis revealed that a three-factor model provided a best fit. A model previously identified for individuals in residential treatment for substance abuse provided a best fit for this sample.

#### Conclusions:

The BDI-II may provide additional information for clinicians when examining the three-factor model with veterans in polytrauma settings.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-13-00282>

**Postconcussive Symptom Report in Polytrauma: Influence of Mild Traumatic Brain Injury and Psychiatric Distress.**

Brigid Waldron-Perrine, PhD; Heather Hennrick, BS; Robert J. Spencer, PhD; Percival H. Pangilinan, MD; Linas A. Bieliauskas, PhD

Military Medicine

Volume 179 Issue 8, August 2014, pp. 856-864

Many studies have evaluated the influence of mild traumatic brain injury (mTBI) on neuropsychological test performance and on report of postconcussive symptoms. However, most studies that examine postconcussion syndrome (PCS) do not address the issue of "polytrauma," which is common in military mTBI. This study investigated simultaneously demographic, injury-related, and psychiatric symptom predictors of PCS report in a veteran, polytrauma sample. In prediction of overall report of PCS symptoms with demographic, traumatic brain injury, psychiatric and sleep variables, 60% of the variance was explained. Semipartial correlations revealed that post-traumatic stress disorder uniquely explained 7% of the variance, depression 2%, and sleep dissatisfaction 3%; injury and demographic characteristics accounted for no unique variance. In all 5 hierarchical multiple regressions (prediction of total Neurobehavioral Symptom Inventory score and 4 individual factor scores), the total models were significant ( $p < 0.001$ ). Accurate diagnosis and treatment necessitates an integrative analysis of PCS, psychiatric, behavioral, and health symptom report in addition to neuropsychological functioning in the polytrauma population. This study demonstrated that emotional distress was uniquely predictive of total report of PCS and that no injury-related characteristics were predictive. This is of particular relevance in a Veteran population given the high rates of both mTBI and psychiatric disturbance.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-14-00012>

**Opiate-Related Dependence/Abuse and PTSD Exposure Among the Active-Component U.S. Military, 2001 to 2008.**

Clifton Dabbs, DO, MPH; Eren Youmans Watkins, PhD, MPH; David S. Fink, MPH; Angelia Eick-Cost, PhD, ScM; Amy M. Millikan, MD, MPH

Military Medicine

Volume 179 Issue 8, August 2014, pp. 885-890

#### Background:

Over the past 5 years, diagnoses for opiate abuse or dependency and post-traumatic stress disorder (PTSD) have increased across all U.S. military services. Moreover, in the United States, opiate prescription dependence and abuse has now surpassed all other illicit drugs of abuse with the exception of marijuana. Some research indicates that PTSD is predictive of substance dependence and abuse, while other research suggests that substance dependence and abuse may lead to events that trigger PTSD. This dichotomy has not been extensively explored within a military population.

#### Methods:

Using conditional multiple logistic regression analysis, a matched case–control study with 18,606 active-component U.S. military service members was conducted to examine the relationship between opiate dependence or abuse and PTSD.

#### Results:

Among the 18,606 service members included in the analysis, 21% were cases and 79% were controls. Thirteen percent of service members with substance dependence or abuse diagnosis had a prior PTSD diagnosis compared to 1% of controls. After, adjusting for sociodemographic and military characteristics, the odds of having a prior diagnosis of PTSD was 28 (95% CI: 21.24–37.78) times greater for service members with opiate abuse/dependency compared to controls.

#### Conclusion:

These findings suggest active duty military personnel diagnosed with PTSD should be closely monitored to reduce the likelihood of future morbidity because of opiate dependence or abuse.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-13-00429>

#### **Review of Mobile Health Technology for Military Mental Health.**

Jay H. Shore, MD, MPH; Matt Aldag, PhD; COL Francis L. McVeigh, MS USA (Ret.); CAPT Ronald L. Hoover, MSC USNR (Ret.); Robert Ciulla, PhD|| ; Ashley Fisher

Military Medicine

Volume 179 Issue 8, August 2014, pp. 865-878

Mental health problems pose challenges for military veterans, returning service members, and military family members including spouses and children. Challenges to meeting mental health needs include improving access to care and improving quality of care. Mobile Health, or “mHealth,” can help meet these needs in the garrison and civilian environments. mHealth brings unique capabilities to health care provision through the use of mobile device technologies. This

report identifies high-priority mHealth technology development considerations in two categories. First, priority considerations specific to mental health care provision include safety, privacy, evidence-based practice, efficacy studies, and temperament. Second, priority considerations broadly applicable to mHealth include security, outcomes, ease of use, carrier compliance, hardware, provider perspectives, data volume, population, regulation, command policy, and reimbursement. Strategic planning for the advancement of these priority considerations should be coordinated with stated Department of Defense capability needs to maximize likelihood of adoption. This report also summarizes three leading, military programs focused on mHealth projects in mental health, The Telemedicine and Advanced Technology Research Center, The Military Operational Medicine Research Program, United States Army Medical Research and Materiel Command, and The National Center for Telehealth and Technology.

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<http://psycnet.apa.org/psycinfo/2014-30610-001/>

### **Moral Injury, Suicidal Ideation, and Suicide Attempts in a Military Sample.**

Bryan, AnnaBelle O.; Bryan, Craig J.; Morrow, Chad E.; Etienne, Neysa; Ray-Sannerud, Bobbie

Traumatology, Jul 28 , 2014

Moral injury entails emotional distress associated with perceived violations of one's moral code and has been proposed to be a possible contributor to self-injurious thoughts and behaviors (SITB) among military personnel. Three dimensions of moral injury have previously been empirically derived: transgressions committed by others (Transgressions-Others), transgressions committed by oneself (Transgressions-Self), and perceived betrayal by others (Betrayal). The current study examined the relationship of these dimensions of moral injury with SITB in a clinical sample of 151 active duty military personnel. Transgressions-Other and Transgressions-Self were significantly higher among personnel with a history of suicide attempt relative to history of suicidal ideation and no suicidality (Hedge's  $g$ 's > .64). Transgressions-Self was associated with significantly more severe suicidal ideation during the past week ( $p = .018$ ). (PsycINFO Database Record (c) 2014 APA, all rights reserved)

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<http://www.sciencedirect.com/science/article/pii/S0924933814775893>

### **EPA-0113 – Cpap treatment compliance in combat veterans with obstructive sleep apnea and ptsd and how it affects their ptsd symptoms.**

European Psychiatry

Volume 29, Supplement 1, 2014, Pages 1

## Abstracts of the 22nd European Congress of Psychiatry

As a Psychiatrist working at Veterans Affairs Hospital, I have seen many patients with co-existence of Obstructive Sleep Apnea and PTSD. As we know sleep disturbances are very common in combat veterans with PTSD, most common of which are nightmares and insomnia. There have been studies showing that people with OSA can have worsening of PTSD but PTSD is not found to be deleterious for OSA. CPAP is the treatment of choice for OSA and it has been found that people who start using CPAP machine have less occurrence of nightmares and they sleep better. There is considerable ratio of veterans seen in my practice who do not use CPAP despite being prescribed for it, I compared the veterans with OSA who use CPAP machine versus those who do not use CPAP machine. Patient's subjective reporting of improvement in PTSD symptoms in those who use CPAP machine will be compared to those who do not use CPAP machine and continued to have PTSD symptoms.

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<http://jel.sagepub.com/content/17/3/33.abstract>

### **Veteran Transfer Students and Concealed Weapons on Campus.**

Christine Pesetski, Jennifer Ofstein, Stacy Outlaw, and Racheal Brooks

Journal of Cases in Educational Leadership

September 2014 17: 33-47

This case details the challenges faced by various members of a 4-year university regarding Kathryn, a non-traditional transfer student and military veteran who recently returned from a traumatic deployment in Afghanistan. Precisely, this study identifies ambiguities pertaining to (a) threat assessment, (b) university weapons policies, (c) transfer students from community colleges to 4-year institutions, (d) military veteran students, (e) awareness and treatment of student mental health concerns, and (f) student residential issues. The case presents educational leaders with a detailed narrative of various campus stakeholders and promotes discussion of topics related to university policy, veterans' affairs, and campus safety.

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<http://onlinelibrary.wiley.com/doi/10.1111/sltb.12111/full>

### **Precipitating Circumstances of Suicide among Active Duty U.S. Army Personnel Versus U.S. Civilians, 2005–2010.**

Logan, J. E., A. Skopp, N., Reger, M. A., Gladden, M., Smolenski, D. J., Faye Floyd, C. and Gahm, G. A.



## Suicide and Life-Threatening Behavior

Article first published online: 5 AUG 2014

To help understand suicide among soldiers, we compared suicide events between active duty U.S. Army versus civilian decedents to identify differences and inform military prevention efforts. We linked 141 Army suicide records from 2005 to 2010 to National Violent Death Reporting System (NVDRS) data. We described the decedents' military background and compared their precipitators of death captured in NVDRS to those of demographically matched civilian suicide decedents. Both groups commonly had mental health and intimate partner precipitating circumstances, but soldier decedents less commonly disclosed suicide intent.

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<http://www.journalofpsychiatricresearch.com/article/S0022-3956%2814%2900211-8/abstract>

### **The cumulative effect of different childhood trauma types on self-reported symptoms of adult male depression and PTSD, substance abuse and health-related quality of life in a large active-duty military cohort.**

Agorastos Agorastos , James O.E. Pittman , Abigail C. Angkaw , Caroline M. Nievergelt , Christian J. Hansen , Laura H. Aversa , Sarah A. Parisi , Donald A. Barkauskas , the Marine Resiliency Study team, Dewleen G. Baker, MD.

Journal of Psychiatric Research

Published Online: August 04, 2014

History of childhood trauma (CT) is highly prevalent and may lead to long-term consequences on physical and mental health. This study investigated the independent association of CT with symptoms of adult depression and posttraumatic stress disorder (PTSD), mental and physical health-related quality of life (HRQoL), as well as current tobacco consumption and alcohol abuse in a large homogenous cohort of 1,254 never-deployed, young male Marines enrolled in the Marine Resiliency Study. Independent effects of CT history, number and type of CT on outcomes were analyzed using hierarchical multivariate logistic regression models. Our results suggested dose-dependent negative effect of an increasing number of trauma types of CT on depression, PTSD and HRQoL. Experience of single CT type demonstrated overall weak effects, while history of multiple CT types distinctively increased the likelihood of adult PTSD symptomology (OR: 3.1, 95% CI: 1.5-6.2), poor mental (OR: 2.3, 95% CI: 1.7-3.1) and physical HRQoL (OR: 1.4, 95% CI: 1.1-1.9). Risk for depression symptoms was similar for both single and multiple CT (OR: 2.2, 95% CI: 1.3-3.8 and OR: 2.1, 95% CI: 1.2-3.5 respectively). CT history had no effects on current tobacco use and alcohol abuse. Our study thus provides evidence for substantial additive effect of different CT types on adult mental and physical health with increasing levels of exposure.

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<http://www.sciencedirect.com/science/article/pii/S0010440X14001916>

## **Resilience moderates the risk of depression and anxiety symptoms on suicidal ideation in patients with depression and/or anxiety disorders.**

Jung-Ah Mina, Chang-Uk Leeb, Jeong-Ho Chae

Comprehensive Psychiatry

Available online 4 August 2014

### Background

Few studies have investigated the role of protective factors for suicidal ideation, which include resilience and social support among psychiatric patients with depression and/or anxiety disorders who are at increased risk of suicide.

### Methods

Demographic data, history of childhood maltreatment, and levels of depression, anxiety, problematic alcohol use, resilience, perceived social support, and current suicidal ideation were collected from a total of 436 patients diagnosed with depression and/or anxiety disorders. Hierarchical multiple logistic regression analyses were used to identify the independent and interaction effects of potentially influencing factors.

### Results

Moderate-severe suicidal ideation was reported in 24.5% of our sample. After controlling for relevant covariates, history of emotional neglect and sexual abuse, low resilience, and high depression and anxiety symptoms were sequentially included in the model. In the final model, high depression (adjusted Odds Ratio (OR) = 9.33, Confidence Interval (CI) 3.99-21.77) and anxiety (adjusted OR = 2.62, CI = 1.24-5.53) were independently associated with moderate-severe suicidal ideation among risk factors whereas resilience was not. In the multiple logistic regression model that examined interaction effects between risk and protective factors, the interactions between resilience and depression ( $p < 0.001$ ) and between resilience and anxiety were significant ( $p = .021$ ). A higher level of resilience was protective against moderate-severe suicide ideation among those with higher levels of depression or anxiety symptoms.

### Conclusions

Our results indicate that resilience potentially moderates the risk of depression and anxiety symptoms on suicidal ideation in patients with depression and/or anxiety disorders. Assessment of resilience and intervention focused on resilience enhancement is suggested for suicide prevention.

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<http://www.nature.com/tp/journal/v4/n8/full/tp201463a.html>

**Colour or shape: examination of neural processes underlying mental flexibility in posttraumatic stress disorder.**

E W Pang, P Sedge, R Grodecki, A Robertson, M J MacDonald, R Jetly, P N Shek and M J Taylo

Translational Psychiatry (2014) 4, e421

Posttraumatic stress disorder (PTSD) is a mental disorder that stems from exposure to one or more traumatic events. While PTSD is thought to result from a dysregulation of emotional neurocircuitry, neurocognitive difficulties are frequently reported. Mental flexibility is a core executive function that involves the ability to shift and adapt to new information. It is essential for appropriate social-cognitive behaviours. Magnetoencephalography (MEG), a neuroimaging modality with high spatial and temporal resolution, has been used to track the progression of brain activation during tasks of mental flexibility called set-shifting. We hypothesized that the sensitivity of MEG would be able to capture the abnormal neurocircuitry implicated in PTSD and this would negatively impact brain regions involved in set-shifting. Twenty-two soldiers with PTSD and 24 matched control soldiers completed a colour–shape set-shifting task. MEG data were recorded and source localized to identify significant brain regions involved in the task. Activation latencies were obtained by analysing the time course of activation in each region. The control group showed a sequence of activity that involved dorsolateral frontal cortex, insula and posterior parietal cortices. The soldiers with PTSD showed these activations but they were interrupted by activations in paralimbic regions. This is consistent with models of PTSD that suggest dysfunctional neurocircuitry is driven by hyper-reactive limbic areas that are not appropriately modulated by prefrontal cortical control regions. This is the first study identifying the timing and location of atypical neural responses in PTSD with set-shifting and supports the model that hyperactive limbic structures negatively impact cognitive function.

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<http://link.springer.com/article/10.1007/s11916-014-0447-y>

**Negotiating the Maze: Risk Factors for Suicidal Behavior in Chronic Pain Patients.**

Toby R. O. Newton-John

Current Pain and Headache Reports

August 2014, 18:447

Chronic pain disorders can exert major negative effects on virtually every aspect of an individual's life. It is not surprising then that many chronic pain sufferers find themselves at a point of emotional fragility where they experience thoughts of ending their life. Suicidal behavior encompasses a spectrum of experience, from "life weariness" or passive suicidal ideation, to more active suicidal intent and suicide completion. A range of risk factors for suicidal behavior in the general population have been identified, and these apply equally to the chronic pain population: a family history of mental illness, past history of suicide attempts, and the presence of comorbid depression. With regard specifically to chronic pain patients, elevated suicide risk is also associated with severe or recurrent headache, ambiguous diagnoses (psychogenic pain, abdominal pain), and medicolegal issues related to the pain. A number of suggestions for clinicians managing chronic pain patients with regards to managing suicide risk are given.

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<http://onlinelibrary.wiley.com/doi/10.1111/jmft.12086/abstract>

### **Psychological Flexibility as a Framework for Understanding and Improving Family Reintegration Following Military Deployment.**

Sandoz, E. K., Moyer, D. N., Armelie, A. P.

Article first published online: 7 AUG 2014

Postdeployment reintegration may present an exceptional challenge to service members and their families; yet, overcoming this challenge seems to strengthen family relationships through a shared sense of purpose. Navigating family reintegration may be an important determinant of long-term psychological well-being. If the needs of military families are to be answered effectively, it is of critical importance to identify the skills that facilitate positive reintegration following deployment. This article proposes psychological flexibility as a group of interrelated skills that could be directly intervened on to facilitate not only resilience but also positive growth and development. This paper focuses on the conceptualization of family reintegration in terms of psychological flexibility, including common deficits observed in this population and potential goals of treatment.

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<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302064>

### **Suicidal Ideation and Mental Distress Among Adults With Military Service History: Results From 5 US States, 2010.**

John R. Blosnich, PhD, MPH, Adam J. Gordon, MD, MPH, and Robert M. Bossarte, PhD

American Journal of Public Health: September 2014, Vol. 104, No. S4, pp. S595-S602.

### Objectives.

We examined the association of military service history with past-year suicidal ideation and past-30-days mental distress in a probability-based sample of adults.

### Methods.

We gathered 2010 Behavioral Risk Factor Surveillance System data from 5 states that asked about past-year suicidal ideation. Military service was defined as current or former active-duty service or National Guard or Reserves service. We stratified analyses into 18 to 39 years, 40 to 64 years, and 65 years and older age groups and used multiple logistic regression analyses, adjusted for demographic confounders, to discern the association of military service history with past-year suicidal ideation and past-30-days mental distress.

### Results.

Among the 26 736 respondents, 13.1% indicated military service history. After adjusting for several confounders, we found military history status among those aged 40 to 64 years was associated with both past-year suicidal ideation and past-30-days mental distress. We found no significant associations among the younger or older age groups.

### Conclusions.

Differences in suicidal ideation between military and nonmilitary individuals may occur in midlife. Future research should examine the possibility of cohort effects, service era effects, or both.

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<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302124>

### **Asian American and Pacific Islander Military Veterans in the United States: Health Service Use and Perceived Barriers to Mental Health Services.**

Jack Tsai, PhD, Julia M. Whealin, PhD, and Robert H. Pietrzak, PhD, MPH

American Journal of Public Health: September 2014, Vol. 104, No. S4, pp. S538-S547.

### Objectives.

We (1) compared use of various health services nationally between Asian American and Pacific Islander (AA/PI) veterans and veterans of other racial/ethnic groups and (2) specifically compared perceived barriers and stigma related to mental health services.

### Methods.

Using bivariate and multivariable statistics, we analyzed a population-weighted sample of 8315 veterans from the 2010 National Survey of Veterans and a random sample of 567 recent veterans from Hawaii.

## Results.

A total of 1.5% of veterans were AA/PI compared with 0.4% a decade ago. Compared with other veterans, AA/PI veterans reported higher socioeconomic status and better mental health, although these findings may be specific to AA veterans. Adjusting for sociodemographic and health differences, we found no differences in health service use or perceived barriers or stigma related to mental health services.

## Conclusions.

AA/PIs are a small but fast-growing racial/ethnic group within the veteran population that deserves attention. Although veteran status may be protective against some barriers to mental health care found in the general AA/PI population, efforts to reduce barriers to health care among veterans should be continued.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-12-00367>

## **Mental Health, Help Seeking, and Stigma and Barriers to Care Among 3- and 12-Month Postdeployed and Never Deployed U.S. Army Combat Medics.**

Paula L. Chapman, PhD; Christine Elnitsky, PhD; Barbara Pitts, MS; Charles Figley, PhD; Ryan M. Thurman, BA; COL Brian Unwin, MC USA

Military Medicine

Volume 179 Issue 8S, August 2014, pp. 55-62

U.S. Army Combat Medic serves as both Soldier and provider of combat casualty care, often in the heat of battle and with limited resources. Yet little is known about their help-seeking behavior and perceived stigma and barriers to care. Participants were three groups of U.S. Army Combat Medics surveyed at 3- and 12-months postdeployment from assignment with line units vs. those Medics who had never deployed to combat. The primary data source was surveys of mental health service utilization, perceived stigma and barriers to care, and depression and post-traumatic stress disorder screens. Medics who received help in the past year from a mental health professional ranged from 18% to 30%, with 18% to 30% seeking mental health assistance from other sources. Previously deployed Medics were more likely to obtain assistance than those who never deployed. Those meeting a mental health screening criteria were more likely to report associated stigma and barriers to care. Findings indicate that Medics in need of assistance report greater perceived barriers to mental health care, as well as stigma from seeking treatment, and that depression may be a salient issue for Medics. The longitudinal nature of the ongoing study will help determine the actual trajectory and onset of depression and post-traumatic stress disorder.

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<http://publications.amsus.org/doi/abs/10.7205/MILMED-D-13-00526>

## **Chasing the Care: Soldiers Experience Following Combat-Related Mild Traumatic Brain Injury.**

MAJ Kyong Hyatt, AN USA; Linda L. Davis, RN, ANP, FAAN, PhD; Julie Barroso, RN, ANP, FAAN, PhD

Military Medicine

Volume 179 Issue 8, August 2014, pp. 849-855

### Objective:

One of the most common, yet most difficult to detect injuries sustained by U.S. soldiers in Iraq and Afghanistan is mild traumatic brain injury (mTBI). Left untreated, mTBI can negatively impact soldiers' postdeployment adjustment. This research describes the rehabilitation experiences of soldiers with a history of mTBI and their spouses.

### Method:

Nine soldiers with mTBI and their spouses participated in the study. A total of 27 interviews were conducted exploring couples' post-mTBI rehabilitation experiences. Participants consisted of active duty soldiers with mTBI who had returned from deployment within 2 years, and their civilian spouses. Strauss and Corbin's grounded theory methodology was used to collect and analyze the data.

### Findings:

The majority of the soldiers and spouses who participated (16/18) indicated that uncertain prognosis and symptom management were the greatest challenges of post-mTBI. Other challenges, such as delayed diagnosis, limited access to mental health care, and difficulty navigating an unfamiliar military health care system was also reported.

### Conclusions:

Because of mTBI's lack of visible manifestation, soldiers may confuse their mTBI symptoms with those of other deployment-related injuries and this leads to a delay in treatment. Future research should explore the standardization of post-mTBI rehabilitation programs and the effectiveness of soldier education to promote early detection and treatment.

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[http://www.rand.org/pubs/research\\_reports/RR257.html](http://www.rand.org/pubs/research_reports/RR257.html)

## **How Deployments Affect the Capacity and Utilization of Army Treatment Facilities**

Adam C. Resnick, Mireille Jacobson, Srikanth Kadiyala, Nicole K. Eberhart, Susan D. Hosek

2014, RAND Corporation

The Army was concerned about how the Army Force Generation (ARFORGEN) cycle, established to provide a predictable process by which Army units deploy, reset, and train to become ready and available to deploy again, affected the lives of Army soldiers and their families. In particular, the Vice Chief of Staff of the Army asked RAND Arroyo Center to determine whether ARFORGEN resulted in ebbs and flows in the ability of Army military treatment facilities (MTFs) to provide medical care and respond to changes in family needs as soldiers and care providers deploy and return home. This concern is especially well-founded because military health research has shown that family members of service members utilize health care differently during deployment than when the soldier is at home. This study found that MTF capacity is not greatly affected when soldiers and care providers deploy, and that MTFs may be slightly less busy than when soldiers and care providers are both at home. In aggregate, family member access to health care does not appear to be impinged when soldiers deploy, and soldiers who did not deploy with their unit slightly increase their utilization of health care during those times.

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<http://www.sciencedirect.com/science/article/pii/S0369811414000881>

### **Sleep and wake disturbances following traumatic brain injury.**

C. Duclos, M. Dumont, C. Wiseman-Hakes, C. Arbour, V. Mongrain, P.-O. Gaudreault, S. Khoury, G. Lavigne, A. Desautels, N. Gosselin

Pathologie Biologie

Available online 7 August 2014

Traumatic brain injury (TBI) is a major health concern in industrialised countries. Sleep and wake disturbances are among the most persistent and disabling sequelae after TBI. Yet, despite the widespread complaints of post-TBI sleep and wake disturbances, studies on their etiology, pathophysiology, and treatments remain inconclusive. This narrative review aims to summarise the current state of knowledge regarding the nature of sleep and wake disturbances following TBI, both subjective and objective, spanning all levels of severity and phases post-injury. A second goal is to outline the various causes of post-TBI sleep-wake disturbances. Globally, although sleep-wake complaints are reported in all studies and across all levels of severity, consensus regarding the objective nature of these disturbances is not unanimous and varies widely across studies. In order to optimise recovery in TBI survivors, further studies are required to shed light on the complexity and heterogeneity of post-TBI sleep and wake disturbances, and to fully grasp the best timing and approach for intervention.



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<http://gradworks.umi.com/36/23/3623454.html>

### **Relational Maintenance: Experiences of Civilian Male Spouses Left Behind during the Deployment of their Wives**

Porter, Tonya L., Ph.D., WALDEN UNIVERSITY, 2014, 277 pages; 3623454

The number of active duty military women with families continues to increase, creating a unique phenomenon where husbands are left behind during deployment to manage children and spousal relationships while redefining gender roles. Research on this phenomenon is limited. Building on theories of gender role strain and relational maintenance, transcendental phenomenology was used to explore experiences of 12 civilian male spouses who were recruited through advertisements in military-affiliated newspapers posted on 6 military bases. Rubin and Rubin's approach was used to interview the men, and an affinity diagram was then used to facilitate open coding of the data. NVivo10 © aided in discovering connections among codes, patterns of repeated words and phrases, and the development of themes. Epoché, member checking, reflective journaling, and an observational log were used to help avoid bias. Results revealed male spouses lacked support for and recognition of their changing roles in supporting their wives. They continued to act stereotypically with respect to not seeking help and were treated stereotypically by others. Positive experiences included deeper relationships with their children and learning to support their wives through commitment and deliberate communications. These findings underscore the importance of military-sponsored supportive programs, ones designed specifically for men, to foster healthy marital relationships and avoid devaluing their masculinity while they continue to support their wives.

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<https://digarchive.library.vcu.edu/handle/10156/4998>

### **Examining the role of unit cohesion as a moderator of the relationship between warfare exposure and PTSD**

Gulin, Shaina

Thesis, M.S., Department of Psychology  
2014, Virginia Commonwealth University

The purpose of the current study was to examine the effects of warfare exposure and unit cohesion on posttraumatic stress disorder (PTSD) symptomatology among male and female National Guard and Reserve service members deployed to Iraq or Afghanistan. National Guard and Reserve soldiers and female service members have been shown to be at greatest risk of

psychological distress, and thus identification of resiliency factors among this population is worthy of further study. An emerging body of research has identified unit cohesion as a potentially modifiable protective factor against the deleterious effects of warfare exposure; however, such research is in its early stages, with female service members consistently reporting less unit cohesion than male service members. National Guard and Reserve soldiers (N = 463; 418 men and 45 women) age 19 to 59 were assessed on measures of warfare exposure, PTSD symptomatology, and degree of unit cohesion immediately following deployment to Iraq or Afghanistan. Results demonstrated that greater exposure to warfare was associated with more severe PTSD symptoms for both men and women. Specifically, combat experiences involving the threat of direct attack or personal injury tended to occur together and were the most significant risk factors for increased PTSD symptomatology. In addition, female service members in our sample reported significantly lower levels of unit cohesion than male service members, a finding that is consistent with the nascent research on gender differences in cohesion. Although the current study did not find greater unit cohesion to be a buffer against the effects of warfare exposure on PTSD severity, there was a direct effect: greater unit cohesion was associated with less PTSD symptomatology above and beyond the effects of demographic control variables. This relationship held for both male and female service members. Future research should aim to establish causality by examining these constructs longitudinally, with a focus on uncovering the mechanisms by which unit cohesion may lead to fewer PTSD symptoms.

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<http://www.ncbi.nlm.nih.gov/pubmed/25110851>

Health Psychol. 2014 Aug 11. [Epub ahead of print]

### **Posttraumatic Stress Disorder and Responses to Couple Conflict: Implications for Cardiovascular Risk.**

Caska CM, Smith TW, Renshaw KD, Allen SN, Uchino BN, Birmingham W, Carlisle M

#### **Objective:**

Posttraumatic stress disorder (PTSD) is associated with increased risk of coronary heart disease (CHD) and difficulties in intimate relationships. Greater frequency and severity of couple conflict and greater cardiovascular reactivity to such conflict might contribute to CHD risk in those with PTSD, but affective and physiological responses to couple conflict have not been examined previously in this population.

#### **Method:**

In a preliminary test of this hypothesis, 32 male veterans of the Iraq and Afghanistan Wars with PTSD and their female partners, and 33 control male veterans without PTSD and their female partners completed relationship quality assessments and a conflict discussion task. PTSD diagnosis was confirmed through diagnostic interviews and questionnaires. State anger, state

anxiety, and cardiovascular measures (i.e., blood pressure, heart rate) were recorded during baseline and the conflict discussion.

#### Results:

Compared with controls, PTSD couples reported greater couple conflict and less warmth, and displayed pronounced increases in anger and greater increases in systolic blood pressure in response to the conflict task (all  $p$ s < .05; range  $\eta^2$ : .05-.24). Partners in the PTSD group exhibited similar, if not greater, responses as veterans.

#### Conclusions:

This was the first investigation to document emotional and cardiovascular responses to couple conflict in veterans with PTSD and their partners. PTSD was associated with greater frequency and severity of couple conflict, and greater anger and cardiovascular reactivity to conflict discussions. Anger and physiological responses to couple discord might contribute to CHD risk in veterans with PTSD, and perhaps their partners, as well. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

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<http://www.ncbi.nlm.nih.gov/pubmed/25104173>

Biol Psychiatry. 2014 Jun 28. pii: S0006-3223(14)00457-0. doi: 10.1016/j.biopsych.2014.06.015. [Epub ahead of print]

### **Elevated Risk for Autoimmune Disorders in Iraq and Afghanistan Veterans with Posttraumatic Stress Disorder.**

O'Donovan A, Cohen BE, Seal KH, Bertenthal D, Margaretten M, Nishimi K, Neylan TC

#### BACKGROUND:

Posttraumatic stress disorder (PTSD) is associated with endocrine and immune abnormalities that could increase risk for autoimmune disorders. However, little is known about the risk for autoimmune disorders among individuals with PTSD.

#### METHODS:

We conducted a retrospective cohort study of 666,269 Iraq and Afghanistan veterans under age 55 who were enrolled in the Department of Veterans Affairs health care system between October 7, 2001, and March 31, 2011. Generalized linear models were used to examine if PTSD, other psychiatric disorders, and military sexual trauma exposure increased risk for autoimmune disorders, including thyroiditis, inflammatory bowel disease, rheumatoid arthritis, multiple sclerosis, and lupus erythematosus, adjusting for age, gender, race, and primary care visits.

## RESULTS:

PTSD was diagnosed in 203,766 veterans (30.6%), and psychiatric disorders other than PTSD were diagnosed in an additional 129,704 veterans (19.5%). Veterans diagnosed with PTSD had significantly higher adjusted relative risk (ARR) for diagnosis with any of the autoimmune disorders alone or in combination compared with veterans with no psychiatric diagnoses (ARR = 2.00; 95% confidence interval, 1.91-2.09) and compared with veterans diagnosed with psychiatric disorders other than PTSD (ARR = 1.51; 95% confidence interval, 1.43-1.59;  $p < .001$ ). The magnitude of the PTSD-related increase in risk for autoimmune disorders was similar in women and men, and military sexual trauma exposure was independently associated with increased risk in both women and men.

## CONCLUSIONS:

Trauma exposure and PTSD may increase risk for autoimmune disorders. Altered immune function, lifestyle factors, or shared etiology may underlie this association. Copyright © 2014 Society of Biological Psychiatry. All rights reserved.

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<http://www.ncbi.nlm.nih.gov/pubmed/24138957>

Compr Psychiatry. 2014 Jan;55(1):113-22. doi: 10.1016/j.comppsy.2013.08.011. Epub 2013 Oct 17.

### **An investigation of the relationship between borderline personality disorder and cocaine-related attentional bias following trauma cue exposure: the moderating role of gender.**

Bardeen JR, Dixon-Gordon KL, Tull MT, Lyons JA, Gratz KL

Elevated rates of borderline personality disorder (BPD) have been found among individuals with substance use disorders (SUDs), especially cocaine-dependent patients. Evidence suggests that cocaine-dependent patients with BPD are at greater risk for negative clinical outcomes than cocaine-dependent patients without BPD and BPD-SUD patients dependent on other substances. Despite evidence that cocaine-dependent patients with BPD may be at particularly high risk for negative SUD outcomes, the mechanisms underlying this risk remain unclear. The present study sought to address this gap in the literature by examining cocaine-related attentional biases among cocaine-dependent patients with ( $n = 22$ ) and without ( $n = 36$ ) BPD. On separate days, participants listened to both a neutral and a personally-relevant emotionally evocative (i.e., trauma-related) script and then completed a dot-probe task with cocaine-related stimuli. Findings revealed a greater bias for attending to cocaine-related stimuli among male cocaine-dependent patients with (vs. without) BPD following the emotionally evocative script. Study findings suggest the possibility that cocaine use may have gender-specific functions among SUD patients with BPD, with men with BPD being more likely to use cocaine to decrease contextually induced emotional distress. The implications of our findings for informing future research on cocaine use among patients with BPD are discussed. © 2014.

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<http://www.ncbi.nlm.nih.gov/pubmed/23878145>

Trauma Violence Abuse. 2014 Jan;15(1):41-56. doi: 10.1177/1524838013496332. Epub 2013 Jul 22.

### **The role of trauma symptoms in nonsuicidal self-injury.**

Smith NB, Kouros CD, Meuret AE

Reports of traumatic events by individuals who engage in nonsuicidal self-injury (NSSI) are common; yet, evidence for the relation between traumatic events and NSSI is inconclusive. This review explores the thesis that trauma symptoms, rather than the experience of a traumatic event per se, underlie this relation, specifically suggesting that trauma symptoms might serve as a mediator. The literature indicates that self-injury plays an important functional role in coping with trauma symptoms such that self-injury can provide an escape from intrusive thoughts and aversive emotional states, as well as end dissociation and periods of numbness through the generation of feelings. Additionally, trauma symptoms have been shown to mediate the relation between the occurrence of traumatic events and NSSI. Taken together, trauma symptoms may play an important role in the development and maintenance of NSSI. The review concludes with treatment implications and future directions for research.

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<http://www.ncbi.nlm.nih.gov/pubmed/25082116>

J Affect Disord. 2014 Oct;167:64-73. doi: 10.1016/j.jad.2014.05.042. Epub 2014 Jun 2.

### **Long-term effects of psychotherapy on moderate depression: A comparative study of narrative therapy and cognitive-behavioral therapy.**

Lopes RT, Gonçalves MM, Fassnacht DB, Machado PP, Sousa

#### **BACKGROUND:**

In a previous clinical controlled trial (Lopes et al., 2014), narrative therapy (NT) showed promising results in ameliorating depressive symptoms with comparable outcomes to cognitive-behavioral therapy (CBT) when patients completed treatment. This paper aims to assess depressive symptoms and interpersonal problems in this clinical sample at follow-up.

#### METHODS:

Using the Beck Depression Inventory-II and Outcome Questionnaire-45.2 Interpersonal Relations Scale, naturalistic prospective follow-up assessment was conducted at 21 and 31 months after the last treatment session.

#### RESULTS:

At follow-up, patients kept improving in terms of depressive symptoms and interpersonal problems. The odds that a patient maintained recovery from depressive symptoms at follow-up were five times higher than the odds that a patient maintained recovery from interpersonal problems. In the same way, the odds of a patient never recovering from interpersonal problems were five times higher than the odds of never recovering from depressive symptoms.

#### LIMITATIONS:

The study did not control for the natural course of depression or treatment continuation.

#### CONCLUSIONS:

For depressed patients with greater interpersonal disabilities, longer treatment plans and alternative continuation treatments should be considered. Copyright © 2014 Elsevier B.V. All rights reserved.

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<http://www.ncbi.nlm.nih.gov/pubmed/25083009>

Sleep. 2014 Aug 1;37(8):1295-304. doi: 10.5665/sleep.3916.

#### **Stress and sleep reactivity: a prospective investigation of the stress-diathesis model of insomnia.**

Drake CL, Pillai V, Roth T

#### STUDY OBJECTIVES:

To prospectively assess sleep reactivity as a diathesis of insomnia, and to delineate the interaction between this diathesis and naturalistic stress in the development of insomnia among normal sleepers. DESIGN: Longitudinal.

#### SETTING:

Community-based.

#### PARTICIPANTS:

2,316 adults from the Evolution of Pathways to Insomnia Cohort (EPIC) with no history of insomnia or depression ( $46.8 \pm 13.2$  y; 60% female).

#### INTERVENTIONS:

None.

#### MEASUREMENTS AND RESULTS:

Participants reported the number of stressful events they encountered at baseline (Time 1), as well as the level of cognitive intrusion they experienced in response to each stressor. Stressful events (OR = 1.13;  $P < 0.01$ ) and stress-induced cognitive intrusion (OR = 1.61;  $P < 0.01$ ) were significant predictors of risk for insomnia one year hence (Time 2). Intrusion mediated the effects of stressful events on risk for insomnia ( $P < 0.05$ ). Trait sleep reactivity significantly increased risk for insomnia (OR = 1.78;  $P < 0.01$ ). Further, sleep reactivity moderated the effects of stress-induced intrusion ( $P < 0.05$ ), such that the risk for insomnia as a function of intrusion was significantly higher in individuals with high sleep reactivity. Trait sleep reactivity also constituted a significant risk for depression (OR = 1.67;  $P < 0.01$ ) two years later (Time 3). Insomnia at Time 2 significantly mediated this effect ( $P < 0.05$ ).

#### CONCLUSIONS:

This study suggests that premorbid sleep reactivity is a significant risk factor for incident insomnia, and that it triggers insomnia by exacerbating the effects of stress-induced intrusion. Sleep reactivity is also a precipitant of depression, as mediated by insomnia. These findings support the stress-diathesis model of insomnia, while highlighting sleep reactivity as an important diathesis.

#### CITATION:

Drake CL, Pillai V, Roth T. Stress and sleep reactivity: a prospective investigation of the stress-diathesis model of insomnia.

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<http://www.ncbi.nlm.nih.gov/pubmed/25083008>

Sleep. 2014 Aug 1;37(8):1283-93. doi: 10.5665/sleep.3914.

#### **Trends in Outpatient Visits for Insomnia, Sleep Apnea, and Prescriptions for Sleep Medications among US Adults: Findings from the National Ambulatory Medical Care Survey 1999-2010.**

Ford ES, Wheaton AG, Cunningham TJ, Giles WH, Chapman DP, Croft JB

#### STUDY OBJECTIVE:

To examine recent national trends in outpatient visits for sleep related difficulties in the United States and prescriptions for sleep medications.

#### DESIGN:

Trend analysis.

#### SETTING:

Data from the National Ambulatory Medical Care Survey from 1999 to 2010. PARTICIPANTS: Patients age 20 y or older.

#### MEASUREMENTS AND RESULTS:

The number of office visits with insomnia as the stated reason for visit increased from 4.9 million visits in 1999 to 5.5 million visits in 2010 (13% increase), whereas the number with any sleep disturbance ranged from 6,394,000 visits in 1999 to 8,237,000 visits in 2010 (29% increase). The number of office visits for which a diagnosis of sleep apnea was recorded increased from 1.1 million visits in 1999 to 5.8 million visits in 2010 (442% increase), whereas the number of office visits for which any sleep related diagnosis was recorded ranged from 3.3 million visits in 1999 to 12.1 million visits in 2010 (266% increase). The number of prescriptions for any sleep medication ranged from 5.3 in 1999 to 20.8 million in 2010 (293% increase). Strong increases in the percentage of office visits resulting in a prescription for nonbenzodiazepine sleep medications (~350%), benzodiazepine receptor agonists (~430%), and any sleep medication (~200%) were noted.

#### CONCLUSIONS:

Striking increases in the number and percentage of office visits for sleep related problems and in the number and percentage of office visits accompanied by a prescription for a sleep medication occurred from 1999-2010.

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<http://www.ncbi.nlm.nih.gov/pubmed/25082217>

Psychiatr Serv. 2014 Aug 1. doi: 10.1176/appi.ps.201300453. [Epub ahead of print]

#### **Timing of Mental Health Treatment and PTSD Symptom Improvement Among Iraq and Afghanistan Veterans.**

Maguen S, Madden E, Neylan TC, Cohen BE, Bertenthal D, Seal KH

#### OBJECTIVE:

This study examined demographic, military, temporal, and logistic variables associated with improvement of posttraumatic stress disorder (PTSD) among Iraq and Afghanistan veterans who received mental health outpatient treatment from the U.S. Department of Veterans Affairs (VA) health care system. The authors sought to determine whether time between last deployment and initiating mental health treatment was associated with a lack of improvement in PTSD symptoms.

#### METHODS:

The authors conducted a retrospective analysis of existing medical records of Iraq and



Afghanistan veterans who enrolled in VA health care, received a postdeployment PTSD diagnosis, and initiated treatment for one or more mental health problems between October 1, 2007, and December 31, 2011, and whose records contained results of PTSD screening at the start of treatment and approximately one year later (N=39,690).

#### RESULTS:

At the start of treatment, 75% of veterans diagnosed as having PTSD had a positive PTSD screen. At follow-up, 27% of those with a positive screen at baseline had improved, and 43% of those with a negative screen at baseline remained negative. A negative PTSD screen at follow-up was associated with female gender, older age, white race, having never married, officer rank, non-Army service, closer proximity to the nearest VA facility, and earlier initiation of treatment after the end of the last deployment.

#### CONCLUSIONS:

Interventions to reduce delays in initiating mental health treatment may improve veterans' treatment response. Further studies are needed to test interventions for particular veteran subgroups who were less likely than others to improve with treatment.

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<http://www.jpain.org/article/S1526-5900%2814%2900815-3/abstract>

### **Longitudinal Interactions Of Pain Symptoms And Posttraumatic Stress Disorder In U.S. Military Service Members Following Blast Exposure.**

Shaunna L. Clark , Sage E. Hawn Kelcey J. Stratton , Ananda B. Amstadter , David X. Cifu , William C. Walker

Journal of Pain

Published online 18 July 2014

Military personnel returning from conflicts in Iraq and Afghanistan often endorse pain and posttraumatic stress disorder (PTSD) symptoms, either separately or concurrently. Associations between pain and PTSD may be further complicated by blast exposure from explosive munitions. Although many studies have reported on the prevalence and disability associated with polytraumatic injuries following combat, less is known about symptom maintenance over time. Accordingly, this study examined longitudinal interactive models of co-occurring pain and PTSD symptoms in a sample of 209 military personnel (Mage = 27.4 years, SD = 7.6) who experienced combat-related blast exposure. Autoregressive cross-lagged analysis examined longitudinal associations between self-reported pain and PTSD symptoms over a one-year period. The best-fitting model indicated that pain and PTSD were significantly associated with one another across all assessment periods,  $\chi^2(3) = 3.66$ ,  $p = .30$ ; TLI = .98; CFI = .99; RMSEA = .03, and PTSD had a particularly strong influence on subsequent pain symptoms. The

relationship between pain and PTSD is related to older age, race, and traumatic brain injury characteristics. Results further the understanding of complex injuries among military personnel and highlight the need for comprehensive assessment and rehabilitation efforts addressing the interdependence of pain and co-occurring mental health conditions.

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### **Links of Interest**

Combat Stress Among Veterans Is Found to Persist Since Vietnam

<http://www.nytimes.com/2014/08/08/us/combat-stress-found-to-persist-since-vietnam.html>

As wars end, a benefits system complicates the process of moving on for spouses

[http://www.washingtonpost.com/world/national-security/as-wars-end-a-benefits-system-complicates-the-process-of-moving-on-for-spouses/2014/08/07/4f1b26e6-1984-11e4-9349-84d4a85be981\\_story.html](http://www.washingtonpost.com/world/national-security/as-wars-end-a-benefits-system-complicates-the-process-of-moving-on-for-spouses/2014/08/07/4f1b26e6-1984-11e4-9349-84d4a85be981_story.html)

Phases of clinical depression could affect treatment

[http://www.eurekalert.org/pub\\_releases/2014-08/uoa-poc080414.php](http://www.eurekalert.org/pub_releases/2014-08/uoa-poc080414.php)

Veterans and their smartphones: Creating a 21st century veterans service system

<http://www.techpolicydaily.com/technology/veterans-smartphones-creating-21st-century-veterans-service-system/>

Disabled veterans at college transition program pursue STEM, develop assistive technologies (Inside Higher Ed)

<https://www.insidehighered.com/news/2014/08/12/disabled-veterans-college-transition-program-pursue-stem-develop-assistive>

How Genes Could Predict Who Will Get PTSD

<http://www.defenseone.com/technology/2014/08/how-genes-could-predict-who-will-get-ptsd/91280/>

Shift workers: Evidence for sleep-inducing and alertness drugs is weak

[http://www.eurekalert.org/pub\\_releases/2014-08/w-swe080814.php](http://www.eurekalert.org/pub_releases/2014-08/w-swe080814.php)

Treating mental illness by changing memories of things past

<http://www.sciencedaily.com/releases/2014/08/140812121837.htm>

Anxiety and amen: Prayer doesn't ease anxiety disorders for everyone, Baylor study finds

[http://www.eurekalert.org/pub\\_releases/2014-08/bu-aaa081214.php](http://www.eurekalert.org/pub_releases/2014-08/bu-aaa081214.php)

Kessler Foundation scientists identify predictors of prospective memory deficit post TBI

[http://www.eurekalert.org/pub\\_releases/2014-08/kf-kfs081214.php](http://www.eurekalert.org/pub_releases/2014-08/kf-kfs081214.php)

ADHD, substance abuse and conduct disorder develop from the same neurocognitive deficits  
[http://www.eurekalert.org/pub\\_releases/2014-08/uom-asa081214.php](http://www.eurekalert.org/pub_releases/2014-08/uom-asa081214.php)

Trauma Before Enlistment Linked to High Suicide Rates Among Military Personnel, Veterans, Research Finds  
<http://www.apa.org/news/press/releases/2014/08/military-suicide.aspx>

VA has higher burden of proof for PTSD claims related to sex trauma  
<http://www.navytimes.com/article/20140808/BENEFITS06/308080073/VA-has-higher-burden-proof-PTSD-claims-related-sex-trauma>

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**Resource of the Week:** [Agency for Healthcare Research and Quality Effective Healthcare Program](#)

The Effective Health Care Program:

- Reviews and synthesizes published and unpublished scientific evidence.
- Generates new scientific evidence and analytic tools.
- Compiles research findings that are synthesized and/or generated and translates them into useful formats for various audiences.

The Effective Health Care Program produces three primary products:

- Research reviews: These comprehensive reports draw on completed scientific studies to make head-to-head comparisons of different health care interventions. They also show where more research is needed. There are two types of research reviews:
  - Comparative effectiveness and effectiveness reviews outline the effectiveness — or benefits and harms — of treatment options.
  - Technical briefs explain what is known — and what is not known — about new or emerging health-care tests or treatments.
- Original research reports: These reports are based on clinical research and studies that use health-care databases and other scientific resources and approaches to explore practical questions about the effectiveness — or benefits and harms — of treatments.
- Research Summaries: These short summaries, written in plain language are tailored to clinicians, consumers, or policymakers and summarize the findings of

research reviews on the benefits and harms of different treatment options. Consumer summaries provide useful background information on health conditions. Clinician and policymaker summaries rate the strength of evidence behind a report's conclusions. The summaries on medications also contain basic wholesale price information.

The easy-to-use [search form](#) allows you to quickly drill down to your subject area of interest.

The screenshot shows the Effective Health Care Program search interface. The page title is "Search for Research Summaries, Reviews, and Reports". The search criteria are "Posttraumatic Stress Disorder". The results show three topics: "Psychological Treatments and Pharmacological Treatments for Adults With Posttraumatic Stress Disorder (PTSD)", "Interventions for the Prevention of Posttraumatic Stress Disorder (PTSD) in Adults After Exposure to Psychological Trauma", and "Child and Adolescent Exposure to Trauma: Comparative Effectiveness of Interventions Addressing Trauma Other Than Maltreatment or Family Violence". The interface includes a navigation menu on the left, a search bar at the top, and various filters for health conditions, keywords, summary types, report types, and project status.

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