ANNOTATED LITERATURE REVIEW

Summer 2016

(Bryant Shuey, DJ Smithers: used in our research about CMRN's services and clients)

Literature Review Methodology

This review was conducted according to PRISMA guidelines (kind of). The National Library of Medicine through PubMed was searched for Military Personnel (MeSH/Majr) in combination with one of the following MeSH terms: Suicide, Post-Traumatic Stress Disorder, Mental Health, Veteran Health, Military Psychiatry, Guilt, Deception, Anxiety and Depression. The search was conducted for studies published between January 1, 2013 and June 1, 2016. Our search strategy included studies published in English. Observational and randomized clinical trials were included if they were published in English. Inclusion criteria required research subjects to be US military personnel and US civilians only and required article titles to directly include one of the MeSH terms. Exclusion criteria included using non-US military personnel as research subjects and articles that were not pertinent to military personnel mental health. The literature review was conducted between April 28, 2016 and May 5, 2016. 2 authors (BS, DS) independently (kind of) compiled search results with discrepancies in final article inclusion resolved after joint article review and discussion. 2 other authors (MC, HW) reviewed the final articles included in the review.

Deception:

1. Int J Law Psychiatry. 2013 Jan-Feb;36(1):11-7. doi: 10.1016/j.ijlp.2012.11.002. Epub 2012 Dec 6.

“Misinformation can influence memory for recently experienced, highly stressful events.” Morgan CA 3rd1, Southwick S, Steffian G, Hazlett GA, Loftus EF. http://www.ncbi.nlm.nih.gov/pubmed/23219699

[Search (("Deception"[Mesh])) AND "Military Personnel"[Majr] Filters: published in the last 5 years]: 1 article

Guilt:

[Search ("Guilt"[Mesh]) AND "Military Personnel"[Majr] Filters: published in the last 5 years]: 5 articles

2. Acta Psychiatr Scand. 2015 Jul;132(1):4-19. doi: 10.1111/acps.12406. Epub 2015 Mar 3.

“Role of morality in the experience of guilt and shame within the armed forces.”
Nazarov A1,2, Jetly R3,4, McNeely H1,5, Kiang M1,6,7, Lanius R8, McKinnon MC1,2,9.
http://www.ncbi.nlm.nih.gov/pubmed/25737392
“Results: Nineteen articles were selected for review. There is strong evidence linking exposure to and the perceived perpetration of moral transgressions with experiences of guilt and shame. Critically, symptoms of guilt and shame were related to adverse mental health outcomes, particularly the onset of post-traumatic stress disorder (PTSD). No studies have explored moral judgment in conjunction with assessments of guilt or moral injury.”
NOTE: possible tie-in with qualitative findings?

3. J Affect Disord. 2013 May 15;148(1):37-41. doi: 10.1016/j.jad.2012.11.044. Epub 2012 Dec 8.

“Guilt is more strongly associated with suicidal ideation among military personnel with direct combat exposure.”
Bryan CJ1, Ray-Sannerud B, Morrow CE, Etienne N.
http://www.ncbi.nlm.nih.gov/pubmed/23232420
“RESULTS: Generalized multiple regression analyses indicated a significant interaction of guilt and direct combat exposure (B=.124, SE=.053, p=.020), suggesting a stronger relationship of guilt with suicidal ideation among participants who had direct combat exposure as compared to those who had not. The interactions of direct combat exposure with depression (B=.004, SE=.040, p=.926), PTSD symptoms (B=.016, SE=. 018, p=.382), perceived burdensomeness (B=.159, SE=.152, p=.300) and hopelessness (B=.069, SE=.036, p=.057) were nonsignificant.
CONCLUSIONS: Although guilt is associated with more severe suicidal ideation in general among military personnel, it is especially pronounced among those who have had direct combat exposure.”

4. J Affect Disord. 2013 May;147(1-3):212-6. doi: 10.1016/j.jad.2012.11.006. Epub 2012 Nov 27.

Shame, pride, and suicidal ideation in a military clinical sample.
Bryan CJ1, Ray-Sannerud B, Morrow CE, Etienne N.
http://www.ncbi.nlm.nih.gov/pubmed/23196200
“RESULTS: Shame significantly interacted with hopelessness (B=-0.013, SE=0.004, p<0.001) and worst-point suicidal ideation (B=0.027, SE=0.010, p=0.010), augmenting each variable's effect on severity of current suicidal ideation. A significant three-way interaction among shame, worst-point suicidal ideation, and pride was also observed (B=-0.010, SE=0.0043, p=0.021), indicating that pride buffered the interactive effects of shame with worst-point suicidal ideation.
LIMITATIONS: Small sample size, cross-sectional design, and primarily Air Force sample.

CONCLUSIONS: Among military outpatients with histories of severe suicidal episodes, pride buffers the effects of hopelessness on current suicidal ideation. Results are consistent with FVT."

5. Depress Anxiety. 2013 Jan;30(1):55-60. doi: 10.1002/da.22002. Epub 2012 Oct 17.

Guilt, shame, and suicidal ideation in a military outpatient clinical sample.
Bryan CJ1, Morrow CE, Etienne N, Ray-Sannerud B.
http://www.ncbi.nlm.nih.gov/pubmed/23077111
"Conclusion: Guilt and shame are associated with increased severity of suicidal ideation in military mental health outpatients. Guilt has a particularly strong relationship with suicidal ideation."

Suicide

[Search ("Military Personnel"[Majr]) AND "Suicide"[Majr] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 117 articles

6. Am J Psychiatry. 2015 Nov 1;172(11):1101-11. doi: 10.1176/appi.ajp.2015.14121572. Epub 2015 Sep 4.

Prospective longitudinal evaluation of the effect of deployment-acquired traumatic brain injury on posttraumatic stress and related disorders: results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).
Stein MB1, Kessler RC1, Heeringa SG1, Jain S1, Campbell-Sills L1, Colpe LJ1, Fullerton CS1, Nock MK1, Sampson NA1, Schoenbaum M1, Sun X1, Thomas ML1, Ursano RJ1; Army STARRS collaborators.
http://www.ncbi.nlm.nih.gov/pubmed/26337036
"RESULTS: Complete information was available for 4,645 soldiers. Approximately one in five soldiers reported exposure to mild (18.0%) or more-than-mild (1.2%) TBI(s) during the index deployment. Even after adjusting for other risk factors (e.g., predeployment mental health status, severity of deployment stress, prior TBI history), deployment-acquired TBI was associated with elevated adjusted odds of PTSD and generalized anxiety disorder at T2 and T3 and of major depressive episode at T2. Suicidality risk at T2 appeared similarly elevated, but this association did not reach statistical significance.
CONCLUSIONS: The findings highlight the importance of surveillance efforts to identify soldiers who have sustained TBIs and are therefore at risk for an array of postdeployment adverse mental health outcomes, including but not limited to PTSD. The mechanism(s) accounting for these associations need to be elucidated to inform development of effective preventive and early intervention programs."
Note: findings stress that combat related TBI is a risk factor for mental health disorders

7. Psychiatry. 2015;78(1):1-21. doi: 10.1080/00332747.2015.1006512.

Nonfatal Suicidal Behaviors in U.S. Army Administrative Records, 2004-2009: Results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).
Ursano RJ, Kessler RC, Heeringa SG, Cox KL, Naifeh JA, Fullerton CS, Sampson NA, Kao TC, Aliaga PA, Vegella P, Mash HH, Buckley C, Colpe LJ, Schoenbaum M, Stein MB; Army STARRS collaborators.
http://www.ncbi.nlm.nih.gov/pubmed/26168022
"RESULTS: We identified 21,740 unique regular Army soldiers with a nonfatal suicidal event documented at some point during the HADS study period. There were substantial increases in the annual incidence rates of suicide attempts (179-400/100,000 person-years) and suicide ideation (557-830/100,000 person-years), but not suspicious injuries. Using hierarchical classification rules to identify the first instance of each soldier's most severe behavior, we found increased risk of all outcomes among those who were female, non-Hispanic White, never married, lower-ranking enlisted, less educated, and of younger age when entering Army service. These sociodemographic associations significantly differed across outcomes, despite some patterns that appear similar."
NOTE: article shows demographic information for military personnel who engage in non-fatal suicidal behavior

8. JAMA Psychiatry. 2015 Sep;72(9):917-26. doi: 10.1001/jamapsychiatry.2015.0987.

Suicide Attempts in the US Army During the Wars in Afghanistan and Iraq, 2004 to 2009.
Ursano RJ1, Kessler RC2, Stein MB3, Naifeh JA1, Aliaga PA1, Fullerton CS1, Sampson NA2, Kao TC4, Colpe LJ5, Schoenbaum M5, Cox KL6, Heeringa SG7; Army Study to Assess Risk and Resilience in Servicemembers Collaborators.
http://www.ncbi.nlm.nih.gov/pubmed/26154106
"RESULTS: Enlisted soldiers accounted for 98.6% of all suicide attempts (9650 attempters; overall rate, 377.0 [95% CI, 369.7-384.7] per 100,000 person-years). In multivariate models, suicide attempts among enlisted soldiers were predicted (data reported as odds ratio [95% CI]) by female sex (2.4 [2.3-2.5]), entering Army service at 25 years or older (1.6 [1.5-1.8]), current age of 29 years or younger (<21 years, 5.6 [5.1-6.2]; 21-24 years, 2.9 [2.6-3.2]; 25-29 years, 1.6 [1.5-1.8]), white race (black, 0.7 [0.6-0.7]; Hispanic, 0.7 [0.7-0.8]; Asian, 0.7 [0.6-0.8]), an educational level of less than high school (2.0 [2.0-2.1]), being in the first 4 years of service (1-2 years, 2.4 [2.2-2.6]; 3-4 years, 1.5 [1.4-1.6]), having never (2.8 [2.6-3.0]) or previously (2.6 [2.4-2.8]) been deployed, and a mental health diagnosis during the previous month (18.2 [17.4-19.1]). Attempts among officers (overall rate, 27.9 per 100,000 person-years) were predicted by female sex (2.8 [2.0-4.1]), entering Army service at 25 years or older (2.0 [1.3-3.1]), current age of 40 years or older (0.5 [0.3-0.8]), and a mental health diagnosis during the previous month (90.2 [59.5-136.7]). Discrete-time hazard models indicated risk among enlisted soldiers was highest in the second month of service (102.7 per 100,000 person-months) and declined substantially as length of service increased (mean during the

second year of service, 56.0 per 100,000 person-years; after 4 years of service, 29.4 per 100,000 person-months), whereas risk among officers remained stable (overall mean, 6.1 per 100,000 person-months).
CONCLUSIONS AND RELEVANCE: Our results represent, to our knowledge, the most comprehensive accounting to date of suicide attempts in the Army. The findings reveal unique risk profiles for enlisted soldiers and officers and highlight the importance of research and prevention focused on enlisted soldiers in their first Army tour."
Note: might be interesting to compare demographics. Important to note that 98.6% of suicide attempts occur in the enlisted soldier demographic. Age 29 or younger had OR of 5.6; never deployed was OR of 2.8. Mental health diagnosis within the previous month had an OR of 18.2 (WOW).

9. Psychiatry Res. 2015 Jun 30;227(2-3):246-52. doi: 10.1016/j.psychres. 2015.01.030. Epub 2015 Apr 1.

The association of military and premilitary sexual trauma with risk for suicide ideation, plans, and attempts.
Bryan CJ1, Bryan AO2, Clemans TA2.
http://www.ncbi.nlm.nih.gov/pubmed/25863823
"Results indicate that premilitary sexual assault was associated with significantly increased risk for later suicide ideation, plans, and attempts during military service. Unwanted sexual experiences occurring during military service was associated with significantly increased risk for suicide ideation and suicide plans for male participants. When considered simultaneously, premilitary sexual trauma showed relatively stronger associations with suicide risk among women whereas military sexual trauma showed relatively stronger associations with suicide risk among men."
Note: The findings in this article demonstrate that sexual trauma is a risk factor for SI and suicidal plans for male participants.

10. JAMA Psychiatry. 2015 Jun;72(6):561-9. doi: 10.1001/jamapsychiatry.2014.3195.

Risk of Suicide Among US Military Service Members Following Operation Enduring Freedom or Operation Iraqi Freedom Deployment and Separation From the US Military.
Reger MA1, Smolenski DJ1, Skopp NA1, Metzger-Abamukang MJ1, Kang HK2, Bullman TA3, Perdue S4, Gahm GA1.
http://www.ncbi.nlm.nih.gov/pubmed/25830941
"RESULTS: Final cohort of 3.1 million, deaths by suicide = 5041. Deployment was not associated with the rate of suicide (hazard ratio, 0.96; 99% CI, 0.87-1.05). There was an increased rate of suicide associated with separation from military service (hazard ratio, 1.63; 99% CI, 1.50-1.77), regardless of whether service members had deployed or not. Rates of suicide were also elevated for service members who separated with less than 4 years of military service or who did not separate with an honorable discharge.
CONCLUSIONS AND RELEVANCE: Findings do not support an association between deployment and suicide mortality in this cohort. Early military separation (<4 years) and discharge that is not honorable were suicide risk factors."

Note: Interesting findings as STARRS reported that hazard ratios for suicide were highest in the 2nd month of service. STARRS also showed that an OR of 2.6 for suicide in pre-deployment personnel. Could be useful for discussion section.

11. Psychol Med. 2015 Mar;45(4):717-26. doi: 10.1017/S003329171400258X. Epub 2014 Oct 31.

Understanding the elevated suicide risk of female soldiers during deployments.
Street AE1, Gilman SE2, Rosellini AJ3, Stein MB4, Bromet EJ5, Cox KL6, Colpe LJ7, Fullerton CS8, Gruber MJ3, Heeringa SG9, Lewandowski-Romps L9, Little RJ10, Naifeh JA8, Nock MK11, Sampson NA3, Schoenbaum M12, Ursano RJ8, Zaslavsky AM3, Kessler RC3; Army STARRS collaborators.
http://www.ncbi.nlm.nih.gov/pubmed/25359554
"RESULTS: The suicide rate of currently deployed women (14.0/100,000 person-years) was 3.1-3.5 times the rates of other (i.e. never-deployed/previously deployed) women. The suicide rate of currently deployed men (22.6/100,000 person-years) was 0.9-1.2 times the rates of other men. The adjusted (for time trends, sociodemographics, and Army career variables) female:male odds ratio comparing the suicide rates of currently deployed v. other women v. men was 2.8 (95% confidence interval 1.1-6.8), became 2.4 after excluding soldiers with Direct Combat Arms occupations, and remained elevated (in the range 1.9-2.8) after adjusting for the hypothesized explanatory variables. CONCLUSIONS: These results are valuable in excluding otherwise plausible hypotheses for the elevated suicide rate of deployed women and point to the importance of expanding future research on the psychological challenges of deployment for women."
Note: opposite of the previous study and STARRS.

12. Depress Anxiety. 2015 Jan;32(1):3-12. doi: 10.1002/da.22317. Epub 2014 Oct 22.

Prevalence and correlates of suicidal behavior among new soldiers in the U.S. Army: results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).
Ursano RJ1, Heeringa SG, Stein MB, Jain S, Raman R, Sun X, Chiu WT, Colpe LJ, Fullerton CS, Gilman SE, Hwang I, Naifeh JA, Nock MK, Rosellini AJ, Sampson NA, Schoenbaum M, Zaslavsky AM, Kessler RC.
http://www.ncbi.nlm.nih.gov/pubmed/25338964
"RESULTS: Lifetime prevalence estimates of preenlistment suicide ideation, plans, and attempts were 14.1, 2.3, and 1.9%, respectively. Most reported onsets of suicide plans and attempts (73.3-81.5%) occurred within the first year after onset of ideation. Odds of these lifetime suicidal behaviors among new soldiers were positively, but weakly associated with being female, unmarried, religion other than Protestant or Catholic, and a race/ethnicity other than non-Hispanic White, non-Hispanic Black, or Hispanic. CONCLUSIONS: Lifetime prevalence estimates of suicidal behaviors among new soldiers are consistent with retrospective reports of preenlistment prevalence obtained

from soldiers later in their Army careers. Given that prior suicidal behaviors are among the strongest predictors of later suicides, consideration should be given to developing methods of obtaining valid reports of preenlistment suicidality from new soldiers to facilitate targeting of preventive interventions."
Note: this is a fantastic article to reference for our discussion section in regard to some of the qualitative themes we have found (showing that pre-enlistment suicidal behavior can predict lifetime suicidal behavior).

13. Depress Anxiety. 2015 Jan;32(1):13-24. doi: 10.1002/da.22316. Epub 2014 Oct 22.

Lifetime prevalence of DSM-IV mental disorders among new soldiers in the U.S. Army: results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).
Rosellini AJ1, Heeringa SG, Stein MB, Ursano RJ, Chiu WT, Colpe LJ, Fullerton CS, Gilman SE, Hwang I, Naifeh JA, Nock MK, Petukhova M, Sampson NA, Schoenbaum M, Zaslavsky AM, Kessler RC.
http://www.ncbi.nlm.nih.gov/pubmed/25338841
"RESULTS: Lifetime prevalence of having at least one internalizing, externalizing, or either type of disorder did not differ significantly between new soldiers and civilians, although three specific disorders (generalized anxiety, posttraumatic stress, and conduct disorders) and multimorbidity were significantly more common among new soldiers than civilians. Although several socio-demographic characteristics were significantly associated with disorder prevalence and persistence, these associations were uniformly weak."
Note: STARRS reports that GAD, PTSD and conduct disorders more common in new soldiers than civilians.

14. Suicide Life Threat Behav. 2015 Feb;45(1):65-77. doi: 10.1111/sltb.12111. Epub 2014 Aug 5.

Precipitating circumstances of suicide among active duty U.S. Army personnel versus U.S. civilians, 2005-2010.
Logan JE1, Skopp NA, Reger MA, Gladden M, Smolenski DJ, Floyd CF, Gahm GA.
http://www.ncbi.nlm.nih.gov/pubmed/25093259
"Abstract: 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."
Note: consider less suicide intent disclosure correlation with double agency effect? An alternative explanation is cited in the paper: *"The Army may have more timely or*

systematic interventions in place to respond to those who disclose suicide intent or have nonfatal attempts than the general civilian population…"

Psychiatr Serv. 2014 Mar 1;65(3):374-80. doi: 10.1176/appi.ps.201200460.
Suicidal behaviors and the use of mental health services among active duty Army soldiers.
McKibben JB, Fullerton CS, Herberman Mash HB, Nock MK, Naifeh JA, Kessler RC, Stein MB, Ursano RJ.
http://www.ncbi.nlm.nih.gov/pubmed/24292523
RESULTS: Thirteen percent had seriously considered or attempted suicide at some point in their lives, 7% since joining the military. One percent who reported suicidality since joining the Army reported having considered or attempted suicide in the past year. After the analyses adjusted for sociodemographic factors, soldiers who seriously considered or attempted suicide since joining the military versus those who did not were 1.71 times more likely to have used a mental health service, 2.33 times more likely to have used two or more types of services, 1.82 times more likely to have seen a mental health specialist, and 1.67 times more likely to have received medication in the past year.
CONCLUSIONS: Understanding the relationship between suicidal thoughts and behaviors and the specific levels and types of mental health services received in this military population is important for health care provision and planning.
Note: an interesting finding to add to the previous article: personnel who considered or attempted suicide had higher usage rates of mental health services but still had less disclosure about attempts than civilians.

<u>Sexual Abuse</u>

J Trauma Stress. 2015 Jun;28(3):167-73. doi: 10.1002/jts.22009. Epub 2015 May 14.
Mental Health and Substance Use Factors Associated With Unwanted Sexual Contact Among U.S. Active Duty Service Women.
Stahlman S1, Javanbakht M1, Cochran S1, Hamilton AB2,3, Shoptaw S4, Gorbach PM1.
http://www.ncbi.nlm.nih.gov/pubmed/25976935
Abstract: Many U.S. military women are exposed to unwanted sexual contact during military service, which can have important implications for mental health. Using data from the 2008 Department of Defense Survey of Health Related Behaviors, we employed multiple logistic regression methods to examine whether unwanted sexual contact was associated with stress, screening positive for mental disorders, or substance use, among active duty service women. The sample included 7,415 female military personnel, of whom 13.4% reported unwanted sexual contact (including any touching of genitals) since entering the military. After adjusting for potentially confounding variables, factors independently associated with unwanted sexual contact included military-related stress (adjusted odds ratio [AOR] = 2.44), family/personal life-

related stress (AOR = 1.78), and gender-related stress (AOR = 1.98) in the past 12 months. In addition, screening positive for depression, anxiety, posttraumatic stress disorder, or psychological distress, and suicidal ideation or attempt were associated with unwanted sexual contact (AOR = 1.57-2.11). For drug/alcohol use, only misuse of tranquilizers/muscle relaxers (past 12 months) was associated with report of unwanted sexual contact (AOR = 1.35). Given the prevalence of unwanted sexual contact and corresponding adverse health outcomes in this sample of active duty women, strategies to create military structural/cultural changes and reduce gender-related stress and sexism are needed.

PTSD

Curr Psychiatry Rep. 2015 May;17(5):37. doi: 10.1007/s11920-015-0575-z.
Prevalence of, risk factors for, and consequences of posttraumatic stress disorder and other mental health problems in military populations deployed to Iraq and Afghanistan.
Ramchand R1, Rudavsky R, Grant S, Tanielian T, Jaycox L.
http://www.ncbi.nlm.nih.gov/pubmed/25876141
"Evidence is provided for demographic, military, and deployment-related risk factors for PTSD, though most derive from cross-sectional studies and few control for combat exposure, which is a primary risk factor for mental health problems in this cohort. Evidence is also provided linking PTSD with outcomes in the following domains: physical health, suicide, housing and homelessness, employment and economic well-being, social well-being, and aggression, violence, and criminality. Also included is evidence about the prevalence of mental health service use in this cohort."

Moral Injury

[Search (military personnel[MeSH Major Topic]) AND moral injury] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 10 articles

2. Acta Psychiatr Scand. 2015 Jul;132(1):4-19. doi: 10.1111/acps.12406. Epub 2015 Mar 3.
Role of morality in the experience of guilt and shame within the armed forces.
Nazarov A[1,2], Jetly R[3,4], McNeely H[1,5], Kiang M[1,6,7], Lanius R[8], McKinnon MC[1,2,9].
http://www.ncbi.nlm.nih.gov/pubmed/25737392
Comment: These authors found a link between expose/moral transgressions and guilt/shame. Symptoms of guilt/shame were then found to be related to adverse mental health outcomes such as the onset of PTSD.
Abstract
OBJECTIVE:

Despite advances in our understanding of mental health issues among military forces, a large proportion of military personnel continue to exhibit deployment-related psychological issues. Recent work has identified symptoms of guilt and shame related to moral injury as contributing significantly to combat-related mental health issues. This systematic scoping review explores the association between morality and symptoms of guilt and shame within military forces.

METHOD:
A search of the literature pertaining to guilt, shame and morality within military samples was conducted.

RESULTS:
Nineteen articles were selected for review. There is strong evidence linking exposure to and the perceived perpetration of moraltransgressions with experiences of guilt and shame. Critically, symptoms of guilt and shame were related to adverse mental health outcomes, particularly the onset of post-traumatic stress disorder (PTSD). No studies have explored moral judgment in conjunction with assessments of guilt ormoral injury.

CONCLUSION:
These findings have important implications for the prevention and treatment of PTSD-related symptoms in military samples. By measuring moral judgment prior to deployment, it may be possible to predict the likelihood of incurring moral injuries and the development of associated symptoms. Early intervention programmes aimed at ameliorating guilt and shame are required to prevent the long-term development of deployment-related psychological distress.

7. Int J Soc Psychiatry. 2014 Sep;60(6):606-12. doi: 10.1177/0020764013502469. Epub 2013 Sep 23.

The interrelationships between moral attitudes, posttraumatic stress disorder symptoms and mixed lateral preference in Israeli reserve combat troops.

Ritov G[1], Barnetz Z[2].
http://www.ncbi.nlm.nih.gov/pubmed/24062233
Comment: This study found that participants who reported a high moral objection to their commands were more likely to exhibit PTSD symptoms.
Abstract
BACKGROUND:
Combat soldiers often encounter moral dilemmas during operational deployment, especially when an armed engagement is situated within a civilian setting. The study of moral dilemmas and posttraumatic stress disorder (PTSD) has mostly focused on the impact of war atrocities andmoral injury. However, the relationship between moral attitudes and different combat-related pathologies has not been thoroughly addressed by quantitative studies.

AIMS:
We aimed to assess the relationship between combatant's moral attitudes, severity of PTSD symptoms and mixed lateral preference.

METHODS:
Data on moral objection, PTSD severity and lateral preference were collected in a right-handed non-pathologic sample (n = 147) of reserve combat troops in the Israel Defense Forces (IDF).

RESULTS:
Nearly one-fifth (19.7%) of the reserve personnel who served in the occupied territories have reported high moral objection to the commands they were expected to act upon. This group of participants exhibited more PTSD symptoms and higher levels of mixed lateral preference. Multiple linear regression analyses revealed a mediating role of moral objection in the relationship between PTSD symptoms severity and lateral preference.

CONCLUSIONS:
Our findings suggest that moral objection has significant implications on combatant's psychological and organic well-being. The findings highlight the need to include moral attitudes in research and clinical practice among combat personnel and veterans.

9. Mil Med. 2013 Jun;178(6):646-52. doi: 10.7205/MILMED-D-13-00017.

Psychometric evaluation of the Moral Injury Events Scale.

Nash WP[1], Marino Carper TL, Mills MA, Au T, Goldsmith A, Litz BT.
http://www.ncbi.nlm.nih.gov/pubmed/23756071
Comment: This article might not be directly relevant to our research paper, but the authors are looking into some interesting techniques for measuring moral injury among service-members. Such techniques might be of interest for the CMRN moving forward.
Abstract
Literature describing the phenomenology of the stress of combat suggests that war-zone experiences may lead to adverse psychological outcomes such as post-traumatic stress disorder not only because they expose persons to life threat and loss but also because they may contradict deeply heldmoral and ethical beliefs and expectations. We sought to develop and validate a measure of potentially morally injurious events as a necessary step toward studying moral injury as a possible adverse consequence of combat. We administered an 11-item, self-report Moral Injury Events Scale to active duty Marines 1 week and 3 months following war-zone deployment. Two items were eliminated because of low item-total correlations. The remaining 9 items were subjected to an exploratory factor analysis, which revealed two latent factors that we labeled perceived transgressions and perceived betrayals; these were confirmed via confirmatory factor analysis on an independent sample. The overall Moral Injury Events Scale and its two subscales had favorable internal validity, and comparisons between the 1-week and 3-month data suggested good temporal stability. Initial discriminant and concurrent validity were also established. Future research directions were discussed.

AWOL

[Search (military personnel[MeSH Major Topic]) AND awol] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 0 articles

[Search (military personnel[MeSH Major Topic]) AND absent without leave] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 0 articles

Anxiety

[Search ("Anxiety"[Majr]) AND "Military Personnel"[Mesh]] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 23 articles

Arch Suicide Res. 2014;18(4):410-8. doi: 10.1080/13811118.2013.845121.

Characteristics of soldiers with self-harm in the israeli defense forces.

Shelef L[1], Fruchter E, Spiegel DO, Shoval G, Mann JJ, Zalsman G.
Author information
http://www.ncbi.nlm.nih.gov/pubmed/25310569
Comment: This study examined the associations between whether an IDF soldier attempted suicide or inflicted self-harm and disorders such as personality or mood/anxiety disorders. They found that soldiers who attempted suicide did not differ from soldiers that inflicted self-harm with regards to these disorders; they did find that personality disorders was the most prevalent diagnosis with mood/ anxiety disorders comprising the smallest group (this included major depression, dysthymia, anxiety, PTSD) .

Abstract
Suicide is the leading cause of soldier death in the Israeli Defense Forces (IDF) in peace time. Suicide attempt (SA) and non-suicidal self-injury (NSSI) are risk factors for death by suicide in civilian studies and therefore their predictive value needs to be determined in the military. All army screening, psychometric and demographic data on consecutive cases of IDF soldier self-harm during the years 2010-2011 were analyzed. The Columbia Suicide Severity Rating Scale was used retrospectively to classify self-harm as suicidal or NSSI. The Suicide Ideation Scale and the Suicide Intent Scale were scored retrospectively by trained clinical psychologists. A total of 107 soldiers reported self-harm during the study period, comprising 70 SA and 37 with NSSI. The most prevalent diagnosis was personality disorder (n = 48). Soldiers with any mood/ anxiety disorders comprised the smallest group (n = 21) and included major depression, dysthymia, anxiety, and posttraumatic stress disorder. Soldiers with NSSI (n = 37) did not differ in any of the characteristics from those who attempted suicide (n = 70). Unlike the well-known female dominance in both SA and NSSI patients in other settings, males dominated this army sample in both groups. Soldiers with self-harm (both SA and NSSI) cannot be easily distinguished by any demographics or specific psychological attributes detectable at induction, and the scales used in suicide research cannot predict an attempt or NSSI. Unlike civilian samples, males dominated attempter and NSSI groups

and the reason for this may be multifactorial. These retrospective findings, if replicated, indicate the need for different screening strategies at induction into the military.

Eur Psychiatry. 2015 Feb;30(2):341-6. doi: 10.1016/j.eurpsy.2014.05.003. Epub 2014 Sep 4.

Prevalence of mental health symptoms in Dutch military personnel returning from deployment to Afghanistan: a 2-year longitudinal analysis.

Reijnen A[1], Rademaker AR[2], Vermetten E[3], Geuze E[4].
Author information
http://www.ncbi.nlm.nih.gov/pubmed/25195152
Comment: This study examined Dutch troops deployed to Iraq and Afghanistan to measure the prevalence of mental health symptoms. They found that fatigue, PTSD, hostility, depression and anxiety significantly increased after deployment; the prevalence of PTSD decreased after the 6 month assessment.
Abstract
OBJECTIVE:
Recent studies in troops deployed to Iraq and Afghanistan have shown that combat exposure and exposure to deployment-related stressors increase the risk for the development of mental health symptoms. The aim of this study is to assess the prevalence of mental health symptoms in a cohort of Dutch military personnel prior to and at multiple time-points after deployment.

METHODS:
Military personnel (n=994) completed various questionnaires at 5 time-points; starting prior to deployment and following the same cohort at 1 and 6 months and 1 and 2 years after their return from Afghanistan.

RESULTS:
The prevalence of symptoms of fatigue, PTSD, hostility, depression and anxiety was found to significantly increase after deployment compared with pre-deployment rates. As opposed to depressive symptoms and fatigue, the prevalence of PTSD was found to decrease after the 6-month assessment. The prevalence of sleeping problems and hostility remained relatively stable.

CONCLUSIONS:
The prevalence of mental health symptoms in military personnel increases after deployment, however, symptoms progression over time appears to be specific for various mental health symptoms. Comprehensive screening and monitoring for a wide range of mental health symptoms at multiple time-points after deployment is essential for early detection and to provide opportunities for intervention.

Arch Suicide Res. 2014;18(3):241-50. doi: 10.1080/13811118.2013.824836.

Agency is associated with decreased emotional distress and suicidal ideation in military personnel.

Bryan CJ[1], Andreski SR, McNaughton-Cassill M, Osman A.
Author information
http://www.ncbi.nlm.nih.gov/pubmed/24712868
Comment: This study, though it may not directly pertain to our paper, might still be relevant for our project's overall goals. They found that feeling of agency are directly associated with decreased emotional distress and severity of suicidal ideation.
Abstract
Suicides in the U.S. military continue to rise at a rapid rate. Identification of protective factors that reduce risk for suicidal thoughts and behaviors among military personnel are therefore needed. Agency--the sense that one is competent, effective, and in control of one's life--has shown to reduce the effects of hopelessness and emotional distress on suicidal thoughts and attempts in non-military populations. The current study explores the association of agency with suicidal ideation in a sample (n = 273) of active duty Air Force Security Forces personnel. Results of generalized regression modeling suggest that agency is directly associated with decreased emotional distress and severity of suicidal ideation, but does not moderate the effect of emotional distress on suicidal ideation.

Occup Med (Lond). 2013 Jul;63(5):354-7. doi: 10.1093/occmed/kqt065. Epub 2013 Jun 7.

Self-harm in the UK military.

Hines LA[1], Jawahar K, Wessely S, Fear NT.
Author information
http://www.ncbi.nlm.nih.gov/pubmed/23749802
Comment: This study might not be too applicable to our paper since the population of interest is in the UK. Nevertheless, the researchers found that self-harm was associated with numerous variables (though not deployment) such as being discharged, separated, of lower rank, female and younger age, no close reported friends or family, etc.
Abstract
BACKGROUND:
Self-harm in the UK military has variously been estimated at 1-5.6% compared with 4.9% in the general UK population.

AIMS:
To establish the overall prevalence of self-harm within the UK military, to establish the association between deployment and self-harm and to identify sociodemographic and social factors associated with self-harm within the UK military.

METHODS:
A cross-sectional postal survey of UK military personnel.

RESULTS:
There were 9803 respondents. The overall prevalence of self-harm was 2.3% in the UK military. Self-harm was not associated with deployment but was significantly associated with being discharged, separated, of lower rank, female and younger age, reporting no close friends or family, reporting fewer social activities, having spent time in local authority care as a child, and having adversity in family relationships as a child.

CONCLUSIONS:
Contrary to predictions, self-harm in the UK military is not associated with deployment. It is linked to available social support in childhood and adulthood.

J Interpers Violence. 2013 May;28(8):1672-92. doi: 10.1177/0886260512468319. Epub 2013 Jan 17.

Contributors to hypervigilance in a military and civilian sample.

Kimble MO[1], Fleming K, Bennion KA.
Author information
http://www.ncbi.nlm.nih.gov/pubmed/23334188
Comment: This study found that a history of military deployment and PTSD symptoms independently predicted hypervigilance among war zone veterans.
Abstract
Hypervigilance toward ambiguous or threatening stimuli is a prominent feature in many trauma survivors including active and returning soldiers. This study set out to investigate the factors that contribute to hypervigilance in a mixed sample. One hundred forty-five individuals, 50 of whom were war zone veterans, filled out a series of questionnaires including the Hypervigilance Questionnaire (HVQ; Kimble, Fleming, & Bennion, 2009). Other participants included military cadets, college undergraduates, and a traumatized community sample. In this sample, a history of military deployment and posttraumatic stress disorder symptoms independently predicted hypervigilance. The findings suggest that deployment to a war zone, in and of itself, can lead to hypervigilant behavior. Therefore, characterizing hypervigilance as pathological in a veteran sample must be done so with caution.

Depression

[Search ("Depression"[Majr]) AND "Military Personnel"[Majr]] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 47 articles

Soc Psychiatry Psychiatr Epidemiol. 2015 Sep;50(9):1329-46. doi: 10.1007/s00127-015-1084-4. Epub 2015 Jul 14.

A systematic review of mental disorders and perpetration of domestic violence among military populations.

Trevillion K[1], Williamson E[2], Thandi G[3], Borschmann R[4,5], Oram S[6], Howard LM[7].
Author information

http://www.ncbi.nlm.nih.gov/pubmed/26169988
Comment: This study might not pertain entirely to our paper but might benefit the CMRN's long-term goals. This study found that there is an association between reported mental disorders and physical or psychological violence towards a partner (causality could not be established).

Abstract

PURPOSE:

Military populations may experience more severe forms of domestic violence than the general population. Although mental disorders are associated with domestic violence perpetration among the general population, it is not clear whether this is the case for military populations. This review aimed to establish the prevalence and odds of domestic violence perpetration among male and femalemilitary personnel with mental disorders.

METHODS:

Systematic review: searches of eleven electronic databases were supplemented by hand searches, reference screening, citation tracking and expert recommendations.

RESULTS:

Ten studies were included; nine reporting on partner violence and one on violence against an adult family member. Median prevalence estimates were calculated for partner violence perpetration among male military personnel with post-traumatic stress disorder (PTSD); estimates on other disorders were not possible due to lack of data. 27.5 % of men with PTSD reported past year physical violence perpetration against a partner and 91.0 % reported past year psychological violence perpetration against a partner. Due to limited data, no median estimates could be calculated for female military personnel. Data from individual papers indicate increased odds of past year partner violence perpetration among male and female military personnel with depression; inconsistent findings were reported for risk of partner violence perpetration among male and female military personnel with PTSD.

CONCLUSIONS:

There is some evidence that mental disorders among military personnel are associated with past year domestic violence perpetration, though current data cannot confirm direction of causality. Research is needed to inform the development of interventions targeted to reduce domestic violence perpetration among military personnel.

Occup Environ Med. 2015 Aug;72(8):560-6. doi: 10.1136/oemed-2014-102646. Epub 2015 Apr 20.

Risk for broad-spectrum neuropsychiatric disorders after mild traumatic brain injury in a cohort of US Air Force personnel.

Miller SC[1], Whitehead CR[2], Otte CN[3], Wells TS[4], Webb TS[3], Gore RK[5], Maynard C[6].
Author information

http://www.ncbi.nlm.nih.gov/pubmed/25896331
Comment: This study might not pertain directly to our paper. They found that mild TBI is associated with an increased probability of memory loss/amnesia,

cognitive disorders, schizophrenia, PTSD, and depression up to at least 6 months post-mTBI and even after eliminating previous neuropsychiatric diagnoses.

Abstract

BACKGROUND:

Military personnel are at increased risk for traumatic brain injury (TBI) from combat and non-combat exposures. Sequelae of moderate-to-severe TBI are well described, but the literature remains conflicted regarding whether mild TBI (mTBI) results in lasting brain injury and functional impairments. This study assessed risk for a range of neuropsychiatric disorders presenting after mTBI while adjusting for the potential confounds of depression and post-traumatic stress disorder (PTSD).

METHODS:

A historical prospective association study was conducted utilising electronic demographic, medical and military-specific data for over 49,000 active duty US Air Force service members (Airmen). This study utilised diagnostic codes considered by an expert panel to be indicative of mTBI to identify cases. Cox proportional hazards modelling calculated HRs for neuropsychiatric outcomes while controlling for varying lengths of follow-up and potentially confounding variables.

RESULTS:

Airmen with mTBI were at increased risk for specific neuropsychiatric disorders compared with a similarly injured non-mTBI control group. HRs for memory loss/ amnesia, cognitive disorders, schizophrenia, PTSD, and depression were significantly elevated and remained so for at least 6 months post-mTBI, even after eliminating those with previous neuropsychiatric diagnoses.

CONCLUSIONS:

mTBI was positively associated with neuropsychiatric disorders in this population of primarily young adult males; with increased HRs 6 months post-mTBI. The results support that mTBI is distinguished from moderate-to-severe TBI in terms of risk for developing neuropsychiatric disorders. Further, these findings suggest the importance of screening for psychiatric and cognitive disorders post-mTBI in general medical practice.

J Psychosom Res. 2015 May;78(5):478-83. doi: 10.1016/j.jpsychores.2014.11.017. Epub 2014 Nov 27.

Indirect associations of combat exposure with post-deployment physical symptoms in U.S. soldiers: roles of post-traumatic stress disorder,depression and insomnia.

Quartana PJ[1], Wilk JE[2], Balkin TJ[2], Hoge CW[2].

Author information

http://www.ncbi.nlm.nih.gov/pubmed/25499887

Comment: This study found that PTSD, depression, and insomnia collectively and independently contribute to the majority of the association between combat exposure and post-deployment physical symptoms; thus there appears to be a significant indirect association between combat exposure and physical symptoms mediated by these variables.

Abstract

OBJECTIVE:

To characterize the indirect associations of combat exposure with post-deployment physical symptoms through shared associations with post-traumatic stress disorder (PTSD),depression and insomnia symptoms.

METHODS:

Surveys were administered to a sample of U.S. soldiers (N = 587) three months after a 15-month deployment to Iraq. A multiple indirect effects model was used to characterize direct and indirect associations between combat exposure and physical symptoms.

RESULTS:

Despite a zero-order correlation between combat exposure and physical symptoms, the multiple indirect effects analysis did not provide evidence of a direct association between these variables. Evidence for a significant indirect association of combat exposure and physical symptoms was observed through PTSD, depression, and insomnia symptoms. In fact, 92% of the total effect of combat exposure on physical symptoms scores was indirect. These findings were evident even after adjusting for the physical injury and relevant demographics.

CONCLUSION:

This is the first empirical study to suggest that PTSD, depression and insomnia collectively and independently contribute to the association between combat exposure and post-deployment physical symptoms. Limitations, future research directions, and potential policy implications are discussed.

Soc Psychiatry Psychiatr Epidemiol. 2015 Apr;50(4):639-51. doi: 10.1007/s00127-014-0981-2. Epub 2014 Nov 25.

Mental health among a nationally representative sample of United States Military Reserve Component Personnel.

Russell DW[1], Cohen GH, Gifford R, Fullerton CS, Ursano RJ, Galea S.

Author information

http://www.ncbi.nlm.nih.gov/pubmed/25421591

Comment: This study found notable differences in PTSD and depression prevalence relative to service branch.

Abstract

PURPOSE:

Estimate prevalence of lifetime, current year, and current month depression and post-traumatic stress disorder (PTSD) among US military reservists.

METHODS:

Structured interviews were performed with a nationally representative military reserve sample (n = 2,003). Sociodemographic characteristics, military experiences, lifetime stressors, and psychiatric conditions were assessed. Depression was measured with the PHQ-9, and PTSD (deployment and non-deployment related) was assessed with the PCL-C.

RESULTS:
Depression (21.63% lifetime, 14.31% current year, and 5.99% current month) was more common than either deployment-related PTSD (5.49% lifetime, 4.98% current year, and 3.62% current month) or non-deployment-related PTSD (5.40% lifetime, 3.91% current year, and 2.32% current month), and branch-related differences were found. Non-deployment-related trauma was associated with non-deployment-related PTSD and depression in a dose-response fashion; deployment-related trauma was associated with deployment-related PTSD and depression in a dose-response fashion.

CONCLUSIONS:
The study reveals notable differences in PTSD and depression prevalence by service branch that may be attributable to a combination of factors including greater lifetime trauma exposures and differing operational military experiences. Our findings suggest that service branch and organizational differences are related to key protective and/or risk factors, which may prove useful in guiding prevention and treatment efforts among reservists.

J Trauma Stress. 2014 Oct;27(5):535-41. doi: 10.1002/jts.21946.

Impediments to mental health treatment as predictors of mental health symptoms following combat.

Wright KM[1], Britt TW, Moore D.

Author information

Comment: This study found that greater impediments to care for soldiers having returned from combat predicted increased PTSD and depression symptoms.

Abstract

This longitudinal study examined whether impediments to mental health treatment would predict changes in mental health symptoms (posttraumatic stress disorder [PTSD] and depression) in the months following soldiers returning from combat. Three-hundred ten combat veterans completed measures of impediments to treatment and measures of PTSD and depression symptoms at 2, 3, and 4 months following a 15-month combat deployment. Structural equation modeling revealed that greater impediments (a latent variable indexed by stigma, practical barriers, and negative treatment attitudes) at 2 months predicted increased PTSD and depression symptoms from 2-3 months (β = .14) and greater impediments at 3 months predicted increased symptoms from 3-4 months (β = .26). In contrast, evidence was not obtained for the opposite causal direction of symptoms predicting higher levels of impediments at the different periods. Possible mechanisms for the predictive effects of impediments are discussed.

Am J Prev Med. 2014 Nov;47(5):531-40. doi: 10.1016/j.amepre.2014.07.036. Epub 2014 Sep 16.

Deployment-related depression screening, 2001-2008: comparing clinical versus research surveys.

Welsh MM[1], Federinko SP[2], Burnett DG[2], Gackstetter GD[3], Boyko EJ[4], Seelig AD[5], Wells TS[6], Hooper TI[2].

Author information

Comment: This study examined the variables associated with whether or not an active duty member disclosed symptoms of depression on deployment health surveys.

Abstract

BACKGROUND:
Potential adverse mental health effects of deployment, including depression, are an ongoing concern. Although a previous study assessed under-reporting of depression on post-deployment health assessments compared to anonymous surveys, those results were not examined at the individual level to identify demographic or military factors that may be associated with unwillingness to report depression symptoms.

PURPOSE:
To compare self-reported depression symptoms on post-deployment health assessments with responses to the same depression questions on a research survey.

METHODS:
This cross-sectional study analyzed depression screening responses from 2001 to 2008 from participants of the Millennium Cohort Study, a longitudinal military cohort study, who completed a post-deployment health assessment within 30 days of a research survey. Kappa statistics and percent positive and negative agreement were calculated. Demographic and military characteristics associated with discordant screening results were examined. Initial analyses were performed in 2011, with additional analyses in 2013.

RESULTS:
Moderate agreement (κ=0.464) was observed between paired survey responses. A higher proportion of active duty members, the unmarried, and new accessions into military service endorsed depression symptoms on the research survey but not the military-linked survey. In stratified analyses, agreement was higher in Reserve/National Guard members than active duty (κ=0.561 vs 0.409). New active duty accessions showed lower agreement (κ=0.388), as did unmarried active duty participants (κ=0.304).

CONCLUSIONS:
Deployment health surveys are important tools for identifying returning service members experiencing depression symptoms. However, these findings suggest that ongoing

stigma and barriers to appropriate follow-up mental health care remain to be addressed in the military setting.

J R Army Med Corps. 2015 Jun;161(2):127-31. doi: 10.1136/jramc-2014-000253. Epub 2014 Aug 28.

Prevalence of depressive symptoms and associated socio-demographic factors among recruits during military training.

Bin Zubair U[1], Mansoor S[2], Rana MH[3].

Author information

Comment: This study found a strong association between depression symptoms and level of family income, worrying about the future, and lack of social support among recruits.

Abstract

BACKGROUND:

Military training is a stressful and unusual event. It may predispose individuals towards mental health problems. The stress of military training has been shown to result in depressive symptoms that can potentially influence the combat ability of a soldier. This study aimed to determine the prevalence of depressive symptoms among recruits during military training in Northern Pakistan and analyse the associated socio-demographic factors.

SUBJECTS AND METHOD:

The study was carried out at the Mujahid Force Center, Bhimber, in Azad Jammu and Kashmir (AJK) in the North of Pakistan. This is one of the training institutes of the Pakistan Army. The sample population comprised of 313 adult men undergoing military training at Bhimber AJK. General Health Questionnaire 12 (GHQ-12) was used to screen for any psychiatric illness, and those with a score>4 were administered the Beck Depression Inventory (BDI) to record the presence and severity of depressive symptoms. Age, service type (general duty soldier, cook or clerk), education, level of family income, marital status, tobacco smoking, use of naswar (tobacco based substance), worrying about future and social support status were correlated with depressive symptoms to evaluate the association of these factors with depression in the study population.

RESULTS:

Out of 313 recruits screened with GHQ-12, 232 were found to have a score of 4 or more as an indicator of the presence of psychiatric morbidity, and had the BDI administered. Of these 232 recruits, 31.5% had no depressive symptoms, 41.4% had mild, 17.7% had moderate and 9.5% had severe depressive symptoms. With logistic regression, we found significant correlation among depressive symptoms and level of family income, worrying about future and lack of social support.

CONCLUSIONS:

Prevalence of depressive symptoms was high among recruits. Special attention should be paid to recruits from low socioeconomic background and those who lack social support and who worry about the future.

Suicide Life Threat Behav. 2015 Feb;45(1):65-77. doi: 10.1111/sltb.12111. Epub 2014 Aug 5.

Precipitating circumstances of suicide among active duty U.S. Army personnel versus U.S. civilians, 2005-2010.

Logan JE[1], Skopp NA, Reger MA, Gladden M, Smolenski DJ, Floyd CF, Gahm GA.
Author information

Comment: This study found that soldiers were less likely to disclose intent to commit suicide than civilians.

Abstract

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.

J Affect Disord. 2014 Jun;161:116-22. doi: 10.1016/j.jad.2014.03.016. Epub 2014 Mar 25.

Risk for suicidal behaviors associated with PTSD, depression, and their comorbidity in the U.S. Army.

Ramsawh HJ[1], Fullerton CS[2], Mash HB[2], Ng TH[2], Kessler RC[3], Stein MB[4], Ursano RJ[2].
Author information

Comment: This study found that soldiers with both PTSD and major depressive disorder were almost three times more likely to report suicidality in the past year than a soldier diagnosed with just one of these two conditions.

Abstract

BACKGROUND:
Suicide rates have risen considerably in the United States Army in the past decade. Suicide risk is highest among those with past suicidality (suicidal ideation or attempts). The incidence of posttraumatic stress disorder (PTSD) and depressive illnesses has risen concurrently in the U.S. Army. We examined the relationship of PTSD and depression, independently and in combination, and rates of past-year suicidality in a representative sample of U.S. Army soldiers.

METHODS:

This study used the DoD Survey of Health Related Behaviors Among Active DutyMilitary Personnel (DoD HRB) (N=5927). Probable PTSD and depression were assessed with the PTSD Checklist (PCL) and the 10-item short form of the Center for Epidemiologic StudiesDepression Scale (CES-D), respectively. Past-year suicidality was assessed via self-report.

RESULTS:
Six percent of Army service members reported suicidality within the past year. PTSD and MDD were each independently associated with past-year suicidality. Soldiers with both disorders were almost three times more likely to report suicidality within the past year than those with either diagnosis alone. Population-attributable risk proportions for PTSD, depression, and both disorders together were 24%, 29%, and 45%, respectively.

LIMITATIONS:
The current study is subject to the limitations of a cross-sectional survey design and the self-report nature of the instruments used.

CONCLUSIONS:
PTSD and depression are each associated with suicidality independently and in combination in the active duty component of the U.S. Army. Soldiers presenting with either but especially both disorders may require additional outreach and screening to decrease suicidal ideation and attempts.

Contemp Clin Trials. 2014 May;38(1):134-44. doi: 10.1016/j.cct.2014.04.002. Epub 2014 Apr 16.

Design and methodology of a randomized clinical trial of home-based telemental health treatment for U.S. military personnel and veterans withdepression.

Luxton DD[1], Pruitt LD[2], O'Brien K[2], Stanfill K[2], Jenkins-Guarnieri MA[2], Johnson K[2], Wagner A[3], Thomas E[2], Gahm GA[4].
Author information

Comment: This study is about a clinical trial being run to determine the efficacy of providing at-home telemental health services to military service members/ veterans/their families. They also discuss cultural and contextual factors of providing in-home care delivery to this population, topics that may be of interest to the progression of CMRN.

Abstract
Home-based telemental health (TMH) treatments have the potential to address current and future health needs of military service members, veterans, and their families, especially for those who live in rural or underserved areas. The use of home-based TMH treatments to address the behavioral health care needs of U.S. military healthcare beneficiaries is not presently considered standard of care in the Military Health System. The feasibility, safety, and clinical efficacy of home-based TMH treatments must be established before broad dissemination of home-based treatment programs can be implemented. This paper describes the design, methodology, and protocol of a clinical trial that compares in-office to home-based Behavioral Activation for Depression (BATD) treatment delivered via web-based video technology for service members and veterans

with depression. This grant funded three-year randomized clinical trial is being conducted at the National Center for Telehealth and Technology at Joint-base Lewis-McChord and at the Portland VA Medical Center. Best practice recommendations regarding the implementation of in-home telehealth in the military setting as well as the cultural and contextual factors of providing in-home care to active duty and veteran military populations are also discussed.

J Affect Disord. 2013 May 15;148(1):77-83. doi: 10.1016/j.jad.2012.11.052. Epub 2012 Dec 14.

A comparison of the PRIME-MD PHQ-9 and PHQ-8 in a large military prospective study, the Millennium Cohort Study.

Wells TS[1], Horton JL, LeardMann CA, Jacobson IG, Boyko EJ.

Author information

Comment: This study compared the PHQ8 and PHQ9, as there is concern over including the last question on the PHQ9 about suicidal ideation. This study found that there was minimal difference in the ability of the PHQ8 and 9 to detect depression.

Abstract

BACKGROUND:

In light of increased concerns about suicide in the military, institutional review boards have mandated increased scrutiny of the final item on the depression screening tool, the PHQ-9, which asks about suicidal thoughts. Since real-time monitoring of all individual responses in most observational studies is not feasible, many investigators have adopted the PHQ-8, choosing to remove the ninth item. This study compares the performance of the PHQ-8 with the PHQ-9 in a population-based sample of military or nonmilitary subjects.

METHODS:

The Millennium Cohort Study administers a self-reported questionnaire that includes the PHQ-9 at 3-year intervals to current and former U.S. military personnel. PHQ-9 responses of 143,705 Millennium Cohort members were investigated. Cross-sectional comparisons of the PHQ-9 and PHQ-8 and prospective analyses to detect a 5-unit change in these measures were performed.

RESULTS:

Greater than substantial agreement was found between the PHQ-8 and 9 instruments (kappas, 0.966-0.974 depending on survey cycle). There was similarly high agreement between the PHQ-8 and 9 in detecting a 5-point increase (κ=0.987) or decrease (κ=0.984) in score.

LIMITATIONS:

One potential limitation of this study is that participants completed the PHQ-9, and PHQ-8 scores were extrapolated from the PHQ-9. In addition, the Millennium Cohort may not fully represent the U.S. military; though previous evaluations have shown the cohort to be a well-representative sample.

CONCLUSIONS:

Since excellent agreement was detected between the PHQ-8 and PHQ-9 instruments, the PHQ-8 would capture nearly all the same cases of depression as the PHQ-9 in populations similar to the one in this study.

Mental Health

Epidemiol Rev. 2015;37:7-22. doi: 10.1093/epirev/mxu007. Epub 2015 Jan 16.
Mental health among reserve component military service members and veterans.
Cohen GH, Fink DS, Sampson L, Galea S.
http://www.ncbi.nlm.nih.gov/pubmed/25595172
Abstract
Since 2001, the US military has increasingly relied on National Guard and reserve component forces to meet operational demands. Differences in preparation and military engagement experiences between active component and reserve component forces have long suggested that the psychiatric consequences of military engagement differ by component. We conducted a systematic review of prevalence and new onset of psychiatric disorders among reserve component forces and a meta-analysis of prevalence estimates comparing reserve component and active component forces, and we documented stage-sequential drivers of psychiatric burden among reserve component forces. We identified 27 reports from 19 unique samples published between 1985 and 2012: 9 studies reporting on the reserve component alone and 10 reporting on both the reserve component and the active component. The pooled prevalence for alcohol use disorders of 14.5% (95% confidence interval: 12.7, 15.2) among the reserve component was higher than that of 11.7% (95% confidence interval: 10.9, 12.6) among the active component, while there were no component differences for depression or post-traumatic stress disorder. We observed substantial heterogeneity in prevalence estimates reported by the reserve component. Published studies suggest that stage-sequential risk factors throughout the deployment cycle predicted alcohol use disorders, post-traumatic stress disorder and, to a lesser degree, depression. Improved and more standardized documentation of the mental health burden, as well as study of explanatory factors within a life-course framework, is necessary to inform mitigating strategies and to reduce psychiatric burden among reserve component forces.
Note: findings suggest being in reserve has mental health consequences. This is similar to findings in Army STARRS (pre-deployment was associated with suicide)

Ann Epidemiol. 2015 Sep;25(9):661-7. doi: 10.1016/j.annepidem.2015.06.001. Epub 2015 Jun 19.
Associations of sexual and gender minority status with health indicators, health risk factors, and social stressors in a national sample of young adults with military experience.
Blosnich JR1, Gordon AJ2, Fine MJ3.
http://www.ncbi.nlm.nih.gov/pubmed/26184439
Abstract
PURPOSE:

To assess the associations of self-identified lesbian, gay, bisexual, and questioning sexual orientation or transgender status (LGBTQ) and military experience with health indicators.
METHODS:
We used data from the Fall 2012 National College Health Assessment. The survey included self-identified sociodemographic characteristics, mental (e.g., depression) and physical (e.g., human immunodeficiency virus) conditions, health risk behaviors (e.g., smoking), and social stressors (e.g., victimization). We used modified Poisson regression models, stratified by self-reported military service, to examine LGBTQ-related differences in health indicators, whereas adjusting for sociodemographic characteristics.
RESULTS:
Of 27,176 in the sample, among the military-experienced group, LGBTQ individuals had increased adjusted risks of reporting a past-year suicide attempt (adjusted risk ratio [aRR] = 4.37; 95% confidence interval [CI] = 1.39-13.67), human immunodeficiency virus (aRR = 9.90; 95% CI = 1.04-79.67), and discrimination (aRR = 4.67; 95% CI = 2.05-10.66) than their non-LGBTQ peers. Among LGBTQ individuals, military experience was associated with a nearly four-fold increased risk of reporting a past-year suicide attempt (aRR = 3.61; 95% CI = 1.46-8.91) adjusting for age, sex, race and ethnicity, marital status, depression, and other psychiatric diagnoses.
CONCLUSIONS:
Military experience may moderate health indicators among LGBTQ populations, and likewise, LGBTQ status likely modifies health conditions among military-experienced populations. Results suggest that agencies serving military populations should assess how and if the health needs of LGBTQ individuals are met.
Note: this seems to be a groundbreaking article as I have not come across an article on LGBTQ military demographics. Furthermore, adds to the notion that the military does not provide a healthy atmosphere.

Womens Health Issues. 2015 Jan-Feb;25(1):35-41. doi: 10.1016/j.whi.2014.09.003. Epub 2014 Nov 22.
Gender differences in the impact of warfare exposure on self-rated health.
Wang JM1, Lee LO2, Spiro A 3rd3.
http://www.ncbi.nlm.nih.gov/pubmed/25442366
Abstract
BACKGROUND:
This study examined gender differences in the impact of warfare exposure on self-reported physical health.
METHODS:
Data are from the 2010 National Survey of Veterans, a nationally representative survey of veterans from multiple eras of service. Regression analyses assessed gender differences in the association between warfare exposure (deployment to a war zone, exposure to casualties) and health status and functional impairment, adjusting for sociodemographics.
FINDINGS:

Women reported better health status but greater functional impairment than men. Among men, those who experienced casualties only or both casualties and deployment to a war zone had worse health compared with those who experienced neither stressor or deployment to a war zone only. Among women, those who experienced casualties only or both stressors reported worse health than those who experienced war zone only, who did not differ from the unexposed. No association was found between warfare exposure and functional impairment in women; in men, however, those who experienced exposure to casualties or both stressors had greater odds of functional impairment compared with those who experienced war zone only or neither stressor.
CONCLUSIONS:
Exposure to casualties may be more predictive of health than deployment to a war zone, especially for men. We did not find a stronger association between warfare exposure and health for women than men. Given that the expansion of women's military roles has allowed them to serve in direct combat, their degree and scope of warfare exposure is likely to increase in the future.
Note: findings suggest that military personnel are not mentally prepared to cope with experiencing the death of a peer.

Demography. 2014 Jun;51(3):895-916. doi: 10.1007/s13524-014-0294-9.
Home front: post-deployment mental health and divorces.
Negrusa B1, Negrusa S.
http://www.ncbi.nlm.nih.gov/pubmed/24781649
Abstract
Since 2003, about 14 % of U.S. Army soldiers have reported symptoms of posttraumatic stress disorder (PTSD) following deployments. In this article, we examine how post-deployment symptoms of PTSD and of other mental health conditions are related to the probability of divorce among married active-duty U.S. Army soldiers. For this purpose, we combine Army administrative individual-level longitudinal data on soldiers' deployments, marital history, and sociodemographic characteristics with their self-reported post-deployment health information. Our estimates indicate that time spent in deployment increases the divorce risk among Army enlisted personnel and that PTSD symptoms are associated with further increases in the odds of divorce. Although officers are generally less likely to screen positive for PTSD than enlisted personnel, we find a stronger relationship between PTSD symptoms and divorces among Army officers who are PTSD-symptomatic than among enlisted personnel. We estimate a larger impact of deployments on the divorce risk among female soldiers, but we do not find a differential impact of PTSD symptoms by gender. Also, we find that most of the effect of PTSD symptoms occurs early in the career of soldiers who deploy multiple times.
Note: This article suggests that PTSD symptomatic officers are more likely to have divorces than among enlisted personnel. This suggests that soldiers leaving the military with PTSD do not always have the social support needed to cope with their disease and contradicts the healthy warrior idea.

Nurs Outlook. 2015 Nov-Dec;63(6):656-79. doi: 10.1016/j.outlook.2015.06.002. Epub 2015 Jun 12.
Impact of deployment on military families with young children: A systematic review.
Trautmann J1, Alhusen J2, Gross D2.
http://www.ncbi.nlm.nih.gov/pubmed/26183660
Abstract
BACKGROUND:
More than 40% of children in military families are <6 years old, a period when children are most dependent on their parents' physical and emotional availability.
PURPOSE:
This systematic review describes the impact of deployment since 9/11 on the mental health of military families with young children, evaluates evidence-based interventions for military parents with young children, and identifies gaps in the science limiting our ability to support the needs of these families.
METHODS:
Databases were reviewed from 2001 to 2014 using preferred reporting items for systematic reviews and meta-analyses approach; 26 studies met review criteria.
RESULTS:
Deployment was associated with increased parent stress, child behavior problems, health care utilization, and child maltreatment. Few studies tested interventions or focused on racial/ethnic minority or veteran families. A number of methodological limitations are noted.
CONCLUSIONS:
More research using multiple methods, stronger designs, and more diverse samples is needed to understand and address the needs of military families with young children.
Note: Again, the findings, while preliminary, suggest that the military involvement negatively impacts the soldiers serving wars and their children as well.

Mil Med. 2014 Dec;179(12):1449-52. doi: 10.7205/MILMED-D-14-00188.
Does mental health stigma change across the deployment cycle?
Steenkamp MM1, Boasso AM1, Nash WP2, Litz BT1.
http://www.ncbi.nlm.nih.gov/pubmed/25469966
Abstract
OBJECTIVES:
Prior research on mental health stigma in military personnel has been cross-sectional. We prospectively examined the course of perceived mental health stigma in a cohort of deployed U.S. combat Marines.
METHODS:
Participants (N = 768) were assessed 1 month before a 7-month deployment to Afghanistan, and again at 1, 5, and 8 months postdeployment. We also examined three predictors of the course of stigma: post-traumatic stress disorder symptom severity, vertical and horizontal unit cohesion, and mental health treatment utilization while deployed.

RESULTS:
Perceptions of stigma remained largely stable across the deployment cycle, with latent growth curve analyses revealing a statistically significant but small decrease in stigma over time. Lower post-traumatic stress disorder symptoms and greater perceived vertical and horizontal support predicted decreases in stigma over time, whereas mental health treatment utilization in theater did not predict the course of stigma.
CONCLUSIONS:
Perceived stigma was low and largely stable over time.
Note: Mental health stigma among military members remained low pre and post deployment.

J Psychiatr Res. 2014 Nov;58:46-54. doi: 10.1016/j.jpsychires.2014.07.014. Epub 2014 Aug 4.
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 A1, Pittman JO2, Angkaw AC3, Nievergelt CM4, Hansen CJ5, Aversa LH6, Parisi SA2, Barkauskas DA7; Marine Resiliency Study Team, Baker DG8. Collaborators (12)
http://www.ncbi.nlm.nih.gov/pubmed/25139009
Abstract
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 1254 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.
Note: Childhood trauma shown to have an additive effect on adult mental and physical health with increasing levels of exposure. Adds to the idea that screening for pre-military health conditions is not adequate in the military.

Psychol Med. 2015 Jan;45(1):11-27. doi: 10.1017/S0033291714000129. Epub 2014 Feb 26.

What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies.

Clement S1, Schauman O1, Graham T1, Maggioni F1, Evans-Lacko S1, Bezborodovs N1, Morgan C1, Rüsch N2, Brown JS3, Thornicroft G1.

http://www.ncbi.nlm.nih.gov/pubmed/24569086

Abstract

BACKGROUND:

Individuals often avoid or delay seeking professional help for mental health problems. Stigma may be a key deterrent to help-seeking but this has not been reviewed systematically. Our systematic review addressed the overarching question: What is the impact of mental health-related stigma on help-seeking for mental health problems? Subquestions were: (a) What is the size and direction of any association between stigma and help-seeking? (b) To what extent is stigma identified as a barrier to help-seeking? (c) What processes underlie the relationship between stigma and help-seeking? (d) Are there population groups for which stigma disproportionately deters help-seeking?

METHOD:

Five electronic databases were searched from 1980 to 2011 and references of reviews checked. A meta-synthesis of quantitative and qualitative studies, comprising three parallel narrative syntheses and subgroup analyses, was conducted.

RESULTS:

The review identified 144 studies with 90,189 participants meeting inclusion criteria. The median association between stigma and help-seeking was d = - 0.27, with internalized and treatment stigma being most often associated with reduced help-seeking. Stigma was the fourth highest ranked barrier to help-seeking, with disclosure concerns the most commonly reported stigma barrier. A detailed conceptual model was derived that describes the processes contributing to, and counteracting, the deterrent effect of stigma on help-seeking. Ethnic minorities, youth, men and those in military and health professions were disproportionately deterred by stigma.

CONCLUSIONS:

Stigma has a small- to moderate-sized negative effect on help-seeking. Review findings can be used to help inform the design of interventions to increase help-seeking.

Note: mental health stigma has small to moderate sized negative effect on help-seeking.

PTSD

[Search ("Military Personnel"[Majr]) AND "Stress Disorders, Post-Traumatic"[Majr]] Filters: Publication date from 2013/01/01 to 2016/05/01; Humans]: 262 articles

JAMA. 2015 Aug 4;314(5):489-500. doi: 10.1001/jama.2015.8370.

Psychotherapy for Military-Related PTSD: A Review of Randomized Clinical Trials.

Steenkamp MM[1], Litz BT[2], Hoge CW[3], Marmar CR[1].
Author information

Abstract

Comment: This article found that CPT and first-line psychotherapies are often clinically effective, but nonresponse rates have been high, many patients continue to have symptoms, and trauma-focused interventions show marginally superior results compared with active control conditions

IMPORTANCE:
Posttraumatic stress disorder (PTSD) is a disabling psychiatric disorder common among military personnel and veterans. First-line psychotherapies most often recommended for PTSD consist mainly of "trauma-focused" psychotherapies that involve focusing on details of the trauma or associated cognitive and emotional effects.

OBJECTIVE:
To examine the effectiveness of psychotherapies for PTSD in military and veteran populations.

EVIDENCE REVIEW:
PubMed, PsycINFO, and PILOTS were searched for randomized clinical trials (RCTs) of individual and group psychotherapies for PTSD in military personnel and veterans, published from January 1980 to March 1, 2015. We also searched reference lists of articles, selected reviews, and meta-analyses. Of 891 publications initially identified, 36 were included.

FINDINGS:
Two trauma-focused therapies, cognitive processing therapy (CPT) and prolonged exposure, have been the most frequently studied psychotherapies for military-related PTSD. Five RCTs of CPT (that included 481 patients) and 4 RCTs of prolonged exposure (that included 402 patients) met inclusion criteria. Focusing on intent-to-treat outcomes, within-group posttreatment effect sizes for CPT and prolonged exposure were large (Cohen d range, 0.78-1.10). CPT and prolonged exposure also outperformed waitlist and treatment-as-usual control conditions. Forty-nine percent to 70% of participants receiving CPT and prolonged exposure attained clinically meaningful symptom improvement (defined as a 10- to 12-point decrease in interviewer-assessed or self-reported symptoms). However, mean posttreatment scores for CPT and prolonged exposure remained at or above clinical criteria for PTSD, and approximately two-thirds of patients receiving CPT or prolonged exposure retained their PTSD diagnosis after treatment (range, 60%-72%). CPT and prolonged exposure were marginally superior compared with non-trauma-focused psychotherapy comparison conditions.

CONCLUSIONS AND RELEVANCE:
In military and veteran populations, trials of the first-line trauma-focused interventions CPT and prolonged exposure have shown clinically meaningful improvements for many

patients with PTSD. However, nonresponse rates have been high, many patients continue to have symptoms, and trauma-focused interventions show marginally superior results compared with active control conditions. There is a need for improvement in existing PTSD treatments and for development and testing of novel evidence-based treatments, both trauma-focused and non-trauma-focused.

PLoS One. 2015 Mar 20;10(3):e0120270. doi: 10.1371/journal.pone.0120270. eCollection 2015.

A meta-analysis of risk factors for combat-related PTSD among military personnel and veterans.

Xue C[1], Ge Y[1], Tang B[1], Liu Y[1], Kang P[1], Wang M[2], Zhang L[1].
Author information

Comment: This study examined sociodemographic factors, trauma factors, and post-deployment factors that are associated with PTSD. Many of these factors such as female gender, ethnic minority status, low education, and lack of post-deployment support are factors that we have been seeing in our population.

Abstract

Post-traumatic stress disorder (PTSD), a complex and chronic disorder caused by exposure to a traumatic event, is a common psychological result of current military operations. It causes substantial distress and interferes with personal and social functioning. Consequently, identifying the risk factors that make military personnel and veterans more likely to experience PTSD is of academic, clinical, and social importance. Four electronic databases (PubMed, Embase, Web of Science, and PsycINFO) were used to search for observational studies (cross-sectional, retrospective, and cohort studies) about PTSD after deployment to combat areas. The literature search, study selection, and data extraction were conducted by two of the authors independently. Thirty-two articles were included in this study. Summary estimates were obtained using random-effects models. Subgroup analyses, sensitivity analyses, and publication bias tests were performed. The prevalence of combat-related PTSD ranged from 1.09% to 34.84%. A total of 18 significant predictors of PTSD among military personnel and veterans were found. Risk factors stemming from before the trauma include female gender, ethnic minority status, low education, non-officer ranks, army service, combat specialization, high numbers of deployments, longer cumulative length of deployments, more adverse life events, prior trauma exposure, and prior psychological problems. Various aspects of the trauma period also constituted risk factors. These include increased combat exposure, discharging a weapon, witnessing someone being wounded or killed, severe trauma, and deployment-related stressors. Lastly, lack of post-deployment support during the post-trauma period also increased the risk of PTSD. The current analysis provides evidence of risk factors for combat-related PTSD in military personnel and veterans. More research is needed to determine how these variables interact and how to best protect against susceptibility to PTSD.

J Affect Disord. 2015 May 1;176:87-94. doi: 10.1016/j.jad.2015.01.043. Epub 2015 Jan 29.

PTSD symptom presentation across the deployment cycle.

Steenkamp MM[1], Boasso AM[2], Nash WP[3], Larson JL[2], Lubin RE[2], Litz BT[4].
Author information

Comment: This study might be helpful to our organization moving forward. This study found that variability in reported PTSD symptoms was highest during the first month following deployment but then stabilizes over time.

Abstract

BACKGROUND:
Symptom-level variation in posttraumatic stress disorder (PTSD) has not yet been examined in the early post-deployment phase, but may be meaningful etiologically, prognostically, and clinically.

METHODS:
Using latent class analysis (LCA), we examined PTSD symptom heterogeneity in a cohort of participants from the Marine Resiliency Study (MRS), a longitudinal study of combat Marines deployed to Iraq and Afghanistan (N=892). Typologies of PTSD symptom presentation were examined at one month pre-deployment and again one, five, and eight months post-deployment.

RESULTS:
Heterogeneity in PTSD symptom presentation was evident at each assessment point, and the degree of symptom heterogeneity (i.e., the number of classes identified) differed by time point. Symptom patterns stabilized over time from notable symptom fluctuations during the early post-deployment period to high, medium, and low symptom severity by eight months post-deployment. Hypervigilance and exaggerated startle were frequently endorsed by participants in the initial month post-deployment. Flashbacks, amnesia, and foreshortened future were infrequently endorsed. Greater combat exposure, lifespan trauma, and avoidant coping generally predicted worse outcomes.

LIMITATIONS:
Data were self-report and may have limited generalizability due to our lack of women and inclusion of only combat Marines. Attrition and re-ranging of data resulted in significant missing data and affected the representativeness of the sample.

CONCLUSIONS:
Symptom-level variability is highest in the month following deployment and then stabilizes over time. Should post-deployment assessments occur too soon, they may capture common and transient early post-deployment reactions, particularly anxious arousal.

US Army Med Dep J. 2015 Jan-Mar:88-92.

Predicting willingness to report behavioral health problems and seek treatment among US male soldiers deployed to Afghanistan: a retrospective evaluation.

Whalen RJ[1].
Author information
Comment: This article might be somewhat relevant to our paper and/or the CMRN. They analyzed factors that predicted whether or not a soldier would disclose behavioral health problems and seek treatment for it.
Abstract
This retrospective evaluation explores anonymous survey data to identify predictors of Soldier willingness to report and seek treatment for behavioral health problems during screening mandated by the Department of Defense (DoD). After controlling for stigma and barriers to care concerns, Soldiers with high (+1SD) combat exposure and high (+1SD) levels of posttraumatic stress symptoms were significantly more willing to report these symptoms during DoD-mandated screening. Furthermore, Soldiers who perceived that their unit leaders took action on anonymous Unit Behavioral Health Needs Assessment survey findings were significantly more likely to report a willingness to disclose behavioral health problems and seek treatment for the same. Performance improvement considerations are discussed.

J Trauma Stress. 2014 Oct;27(5):542-9. doi: 10.1002/jts.21956. Epub 2014 Sep 29.

Prevalence of a positive screen for PTSD among OEF/OIF and OEF/OIF-era veterans in a large population-based cohort.

Dursa EK[1], Reinhard MJ, Barth SK, Schneiderman AI.
Author information
Comment: This study could be relevant to the paper because it examined the prevalence of PTSD in a population which also included individuals that don't use the VA.
Abstract
Multiple studies have reported the prevalence of posttraumatic stress disorder (PTSD) in Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) veterans; however, these studies have been limited to populations who use the Department of Veterans Affairs (VA) for health care, specialty clinic populations, or veterans who deployed. The 3 aims of this study were to report weighted prevalence estimates of a positive screen for PTSD among OEF/OIF and nondeployed veterans, demographic subgroups, and VA health care system users and nonusers. The study analyzed data from the National Health Study for a New Generation of U.S. Veterans, a large population-based cohort of OEF/OIF and OEF/OIF-era veterans. The overall weighted prevalence of a positive screen for PTSD in the study population was 13.5%: 15.8% among OEF/OIF veterans and 10.9% in nondeployed veterans. Among OEF/OIF veterans, there was increased risk of a positive screen for PTSD among VA health care users (OR = 2.71), African Americans (OR = 1.61), those who served in the Army (OR = 2.67), and those on active duty (OR = 1.69). The same trend with decreased magnitude was observed in nondeployed veterans. PTSD is a significant public health problem in OEF/OIF-era veterans, and should not be considered an outcome solely related to deployment.

Assessment. 2015 Jun;22(3):289-97. doi: 10.1177/1073191114548683. Epub 2014 Sep 1.

Diagnostic Utility of the Posttraumatic Stress Disorder (PTSD) Checklist for Identifying Full and Partial PTSD in Active-Duty Military.

Dickstein BD[1], Weathers FW[2], Angkaw AC[3], Nievergelt CM[3], Yurgil K[4], Nash WP[5], Baker DG[3], Litz BT[6];Marine Resiliency Study Team.
Collaborators (49)
Author information

Comment: This study could be useful for the CMRN in that it examined the best cut-off scores for diagnosing PTSD through the PCL checklist which we use.

Abstract

The aim of this study was to determine optimally efficient cutoff scores on the Posttraumatic Stress Disorder Checklist (PCL) for identifying full posttraumatic stress disorder (PTSD) and partial PTSD (P-PTSD) in active-duty Marines and Sailors. Participants were 1,016 Marines and Sailors who were administered the PCL and Clinician-Administered PTSD Scale (CAPS) 3 months after returning from Operations Iraqi and Enduring Freedom. PCL cutoffs were tested against three CAPS-based classifications: full PTSD, stringent P-PTSD, and lenient P-PTSD. A PCL score of 39 was found to be optimally efficient for identifying full PTSD. Scores of 38 and 33 were found to be optimally efficient for identifying stringent and lenient P-PTSD, respectively. Findings suggest that the PCL cutoff that is optimally efficient for detecting PTSD in active-duty Marines and Sailors is substantially lower than the score of 50 commonly used by researchers. In addition, findings provide scores useful for identifying P-PTSD in returning service members.

Mil Med. 2014 Aug;179(8):885-90. doi: 10.7205/MILMED-D-14-00012.

Opiate-related dependence/abuse and PTSD exposure among the active-component U.S. military, 2001 to 2008.

Dabbs C[1], Watkins EY[2], Fink DS[2], Eick-Cost A[3], Millikan AM[2].
Author information

Comment: This paper *might* be relevant to our paper in that it examines a very pressing contemporary concern (opioid dependence) and its relation to PTSD exposure among members of the military.

Abstract

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.

Am J Public Health. 2014 Sep;104(9):1671-9. doi: 10.2105/AJPH.2014.301971. Epub 2014 Jul 17.

Trends in mental health services utilization and stigma in US soldiers from 2002 to 2011.

Quartana PJ[1], Wilk JE, Thomas JL, Bray RM, Rae Olmsted KL, Brown JM, Williams J, Kim PY, Clarke-Walper K, Hoge CW.
Author information

Comment: The data in this paper could be helpful for our paper, since this paper examines parameters that also impinge on whether or not US soldiers decide to seek health care services outside of the military.

Abstract

OBJECTIVES:
We characterized trends in mental health services utilization and stigma over the course of the Afghanistan and Iraq wars among active-component US soldiers.

METHODS:
We evaluated trends in mental health services utilization and stigma using US Army data from the Health-Related Behavior (HRB) surveys from 2002, 2005, and 2008 (n = 12,835) and the Land Combat Study (LCS) surveys administered to soldiers annually from 2003 to 2009 and again in 2011 (n = 22,627).

RESULTS:
HRB and LCS data suggested increased mental health services utilization and decreased stigma in US soldiers between 2002 and 2011. These trends were evident in soldiers with and without posttraumatic stress disorder (PTSD), major depressive disorder (MDD), or PTSD and MDD. Despite the improving trends, more than half of soldiers with mental health problems did not report seeking care.

CONCLUSIONS:

Mental health services utilization increased and stigma decreased over the course of the wars in Iraq and Afghanistan. Although promising, these findings indicate that a significant proportion of US soldiers meeting criteria for PTSD or MDD do not utilize mental health services, and stigma remains a pervasive problem requiring further attention.

Curr Psychiatry Rep. 2014 Sep;16(9):467. doi: 10.1007/s11920-014-0467-7.

Advances and controversies in military posttraumatic stress disorder screening.

Lee DJ[1], Warner CH, Hoge CW.
Author information

Comment: This article could be helpful in determining the usefulness of certain screening tools we use, given recent research on their efficacy.

Abstract
As the longest war in American history draws to a close, an unprecedented number of service members and veterans are seeking care for health challenges related to transitioning home and to civilian life. Congressionally mandated screening for mental health concerns in the Department of Defense (DoD), as well as screening efforts Veterans Affairs (VA) facilities, has been established with the goal of decreasing stigma and ensuring service members and veterans with depression and posttraumatic stress disorder (PTSD) receive needed treatment. Both the DoD and VA have also developed integrated behavioral health in primary-care based initiatives, which emphasize PTSD screening, treatment, and care coordination. This article discusses the rationale for population-level deployment-related mental health screening, recent changes to screening frequency, commonly used screening instruments such as the primary care PTSD screen (PC-PTSD), PTSD checklist (PCL), and Davidson Trauma Scale (DTS); as well as the strengths/limitations of each, and recommended cut-off scores based on expected PTSD prevalence.

J Anxiety Disord. 2014 Jun;28(5):446-53. doi: 10.1016/j.janxdis.2014.04.004. Epub 2014 Apr 26.

Military unit support, postdeployment social support, and PTSD symptoms among active duty and National Guard soldiers deployed to Iraq.

Han SC[1], Castro F[1], Lee LO[2], Charney ME[3], Marx BP[4], Brailey K[5], Proctor SP[6], Vasterling JJ[7].
Author information

Comment: This study might be relevant for the paper, in that examines the effect that social support from one's peers in the military has on PTSD symptoms.

Abstract
Research suggests that military unit support and community postdeployment social support are associated with fewer PTSD symptoms following military deployment. This study extended prior research by examining the associations among predeployment unit support and PTSD symptoms before Iraq deployment as well as unit support, PTSD

symptoms, and postdeployment social support after deployment among 835 U.S. Army and 173 National Guard soldiers. Multiple regression analyses indicated that predeployment unit support was not significantly associated with postdeployment PTSD severity in either group of soldiers, whereas higher unit support during deployment was significantly associated with lower postdeployment PTSD severity among active duty soldiers only. Among both groups, higher levels of postdeployment social support were associated with lower levels of postdeployment PTSD symptom severity. These findings suggest that postdeployment social support is a particularly strong buffer against postdeployment PTSD symptoms among both groups of soldiers whereas the effects of unit support may be limited.

Psychiatr Serv. 2014 Aug 1;65(8):997-1004. doi: 10.1176/appi.ps.201300307.

PTSD treatment for soldiers after combat deployment: low utilization of mental health care and reasons for dropout.

Hoge CW, Grossman SH, Auchterlonie JL, Riviere LA, Milliken CS, Wilk JE.

Comment: This study could be relevant for any statements we make in the paper about inadequate/insufficient mental health services.

Abstract

OBJECTIVE:

Limited data exist on the adequacy of treatment for posttraumatic stress disorder (PTSD) after combat deployment. This study assessed the percentage of soldiers in need of PTSD treatment, the percentage receiving minimally adequate care, and reasons for dropping out of care.

METHODS:

Data came from two sources: a population-based cohort of 45,462 soldiers who completed the Post-Deployment Health Assessment and a cross-sectional survey of 2,420 infantry soldiers after returning from Afghanistan (75% response rate).

RESULTS:

Of 4,674 cohort soldiers referred to mental health care at a military treatment facility, 75% followed up with this referral. However, of 2,230 soldiers who received a PTSD diagnosis within 90 days of return from Afghanistan, 22% had only one mental health care visit and 41% received minimally adequate care (eight or more encounters in 12 months). Of 229 surveyed soldiers who screened positive for PTSD (PTSD Checklist score ≥50), 48% reported receiving mental health treatment in the prior six months at any health care facility. Of those receiving treatment, the median number of visits in six months was four; 22% had only one visit, 52% received minimally adequate care (four or more visits in six months), and 24% dropped out of care. Reported reasons for dropout included soldiers feeling they could handle problems on their own, work interference, insufficient time with the mental health professional, stigma, treatment ineffectiveness, confidentiality concerns, or discomfort with how the professional interacted.

CONCLUSIONS:

Treatment reach for PTSD after deployment remains low to moderate, with a high percentage of soldiers not accessing care or not receiving adequate treatment. This study represents a call to action to validate interventions to improve treatment engagement and retention.

J Am Assoc Nurse Pract. 2014 Jul;26(7):364-9. doi: 10.1002/2327-6924.12085. Epub 2013 Nov 21.

The invisible wounds of war: caring for women veterans who have experienced military sexual trauma.

Rossiter AG[1], Smith S.
Author information

Comment: This study might potentially be useful for the paper if we mention the prevalence of military sexual trauma female veterans have experienced.

Abstract

PURPOSE:
The purpose of this case study is to raise awareness about military sexual trauma (MST) and posttraumatic stress disorder (PTSD), and the physical and psychological comorbidities associated with MST.

DATA SOURCES:
Health Science Data Sources-PubMed and authors' experiences.

CONCLUSIONS:
Women veterans are the fastest growing segment of the veteran population. Approximately 200,000 of the 2.6 million veterans who have deployed in support of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) are women. Many are seeking care in both the Veteran Administration and the civilian sector. It is estimated that upwards of 26,000 women have experienced some form of sexual assault in the military. MST can lead to multiple deleterious physical and psychological comorbidities. It is imperative that nurse practitioners (NPs) ask women about military service and utilize the Military Health History Pocket Card for Clinicians to ascertain service-connected health risks, primarily MST and PTSD. Prompt identification and intervention is key to reducing physical and psychological comorbidities.

IMPLICATIONS FOR PRACTICE:
This case study emphasizes the need for NPs to ask all women about military service and potential exposure to sexual trauma. It provides guidance on how to incorporate the Military Health History Pocket Card for Clinicians into practice.

J Trauma Stress. 2014 Feb;27(1):116-9. doi: 10.1002/jts.21888.

Posttraumatic stress and stigma in active-duty service members relate to lower likelihood of seeking support.

Blais RK[1], Renshaw KD, Jakupcak M.
Author information

Comment: This study found that service members with PTSD and/or anticipated stigma from family and friends were less likely to seek support. Could be helpful in noting cultural/social norms that preempt many soldiers from seeking support.

Abstract

Posttraumatic stress disorder (PTSD) is a common mental health concern for returning service members. Social support is a robust predictor of resiliency and recovery from PTSD; however, barriers to seeking support are understudied. PTSD and anticipated enacted stigma from family and friends were explored as correlates of the likelihood of seeking support among 153 Iraq/Afghanistan U.S. service members. Results showed that PTSD ($r = -.31$, $p < .001$) and anticipated enacted stigma ($r = -.22$, $p \leq .01$) were negatively associated with likelihood of seeking support. Post hoc analyses showed that only dysphoria ($r = -.32$, $p < .001$) was significantly related to the likelihood of seeking support after accounting for anticipated enacted stigma and other PTSD clusters. Implications of these findings and ways to increase likelihood of seeking support are discussed.

J Trauma Stress. 2014 Feb;27(1):58-65. doi: 10.1002/jts.21890. Epub 2014 Jan 24.

Impact of combat deployment on psychological and relationship health: a longitudinal study.

Cigrang JA[1], Talcott GW, Tatum J, Baker M, Cassidy D, Sonnek S, Snyder DK, Balderrama-Durbin C,Heyman RE, Smith Slep AM.

Author information

Comment: Similar to the article mentioned just above this one, these authors found that the negative effects of deployment related to traumatic experience do not spontaneously resolve as readily for service members reporting lower levels of social support.

Abstract

Although previous research has indicated an elevated prevalence of posttraumatic stress disorder (PTSD) and other mental health problems among veterans of Operations Iraqi Freedom and Enduring Freedom following deployment, most of this research has been cross-sectional and has focused on a limited range of military groups and outcome criteria. This investigation was a longitudinal study of U.S. Air Force security forces assigned to a year-long high-threat ground mission in Iraq to determine the degree to which airmen's emotional and behavioral health and committed relationships were adversely impacted by an extended deployment to a warzone. Participants were a cohort of 164 security forces airmen tasked to a 365-day deployment to train Iraqi police. Airmen completed study measures both prior to and 6-9 months following deployment. Rates of deterioration in individual and interpersonal adjustment were both significant and medium to large in magnitude of effect, $d = 0.43$ to 0.90. Results suggest that the negative effects of deployment are related to levels of traumatic experiences and do not spontaneously remit within the first 6-9 months following return from deployment-particularly among those service members having relatively lower levels of social support.

J Trauma Dissociation. 2014;15(2):133-52. doi: 10.1080/15299732.2014.867563.

Victims' psychosocial well-being after reporting sexual harassment in the military.

Bell ME[1], Street AE, Stafford J.
Author information

Comment: This article might be helpful for the paper: it found that perception and satisfaction of the reporting process for sexual harassment may impact well-being more strongly than whether the victim reported the harassment to the authorities or not.

Abstract

Given the importance of reporting to sexual harassment prevention and intervention efforts, it is not surprising that an extensive scientific literature has developed on predictors of victims' decisions about making a formal report to authorities about their experiences. In contrast, little empirical work has focused on how reporting affects victims, particularly their psychosocial well-being. This study used a national sample of 1,562 former military Reservists who had experienced sexual harassment during their service to examine the relationship between reporting; experiences reporting; and psychosocial well-being, as indicated by post-harassment functioning, worst symptoms of posttraumatic stress disorder (PTSD) following the harassment, and current symptoms of depression. Making a formal report was not associated with well-being, but among those who did report, perceiving that the report had resulted in the harassment being addressed by authorities was associated with better post-harassment functioning and fewer symptoms of PTSD. Satisfaction with the reporting process showed the strongest association with well-being, demonstrating small but meaningful associations with depression and medium-to-large and medium associations with post-harassment functioning and PTSD, respectively. Although findings did not vary by gender, predictors accounted for more variance in well-being for men than women. In the whole sample, satisfaction with the reporting process mediated the relationship between victims' perceptions of system responsiveness to the report and post-harassment functioning and PTSD. Findings suggest that a victim's perceptions of and satisfaction with the reporting process may impact well-being more strongly than whether the victim made a report to authorities. Men may be even more strongly impacted by their experiences with the reporting process than women.

Psychol Serv. 2014 May;11(2):229-34. doi: 10.1037/a0034892. Epub 2013 Dec 23.

Perceived organizational support, posttraumatic stress disorder symptoms, and stigma in soldiers returning from combat.

Kelley CL[1], Britt TW[1], Adler AB[2], Bliese PD[3].
Author information

Comment: This study found that a supportive environment may also create a climate of reduced stigma in which soldiers may be comfortable addressing PTSD symptoms.

Abstract

Research has shown that perceived organizational support (POS), or how much employees believe their organizations value their contributions and well-being, is an

important predictor of employee mental health outcomes. To support employee mental health in high-risk occupations, organizations may want to identify variables that explain the relationship between POS and posttraumatic stress disorder (PTSD). Using a longitudinal design and a military sample, the present study found a relationship between POS and stigma as well as PTSD symptoms. Stigma partially mediated the relationship between POS at Time 1 and PTSD symptoms at Time 2. The partial mediation indicates that a supportive environment may also create a climate of reduced stigma in which soldiers may be comfortable addressing PTSD symptoms. Both results suggest positive actions that organizations can take to support employee mental health.

JAMA Psychiatry. 2014 Feb;71(2):149-57. doi: 10.1001/jamapsychiatry.2013.3080.

Association between traumatic brain injury and risk of posttraumatic stress disorder in active-duty Marines.

Yurgil KA[1], Barkauskas DA[2], Vasterling JJ[3], Nievergelt CM[4], Larson GE[5], Schork NJ[6], Litz BT[3], Nash WP[7],Baker DG[4]; Marine Resiliency Study Team.
Collaborators (7)
Author information

Comment: TBI found to be the greatest predictor of PTSD symptoms.

Abstract

IMPORTANCE:
Whether traumatic brain injury (TBI) is a risk factor for posttraumatic stress disorder (PTSD) has been difficult to determine because of the prevalence of comorbid conditions, overlapping symptoms, and cross-sectional samples.

OBJECTIVE:
To examine the extent to which self-reported predeployment and deployment-related TBI confers increased risk of PTSD when accounting for combat intensity and predeployment mental health symptoms.

DESIGN, SETTING, AND PARTICIPANTS:
As part of the prospective, longitudinal Marine Resiliency Study (June 2008 to May 2012), structured clinical interviews and self-report assessments were administered approximately 1 month before a 7-month deployment to Iraq or Afghanistan and again 3 to 6 months after deployment. The study was conducted at training areas on a Marine Corps base in southern California or at Veterans Affairs San Diego Medical Center. Participants for the final analytic sample were 1648 active-duty Marine and Navy servicemen who completed predeployment and postdeployment assessments. Reasons for exclusions were nondeployment (n = 34), missing data (n = 181), and rank of noncommissioned and commissioned officers (n = 66).

MAIN OUTCOMES AND MEASURES:
The primary outcome was the total score on the Clinician-Administered PTSD Scale (CAPS) 3 months after deployment.

RESULTS:

At the predeployment assessment, 56.8% of the participants reported prior TBI; at postdeployment assessment, 19.8% reported sustaining TBI between predeployment and postdeployment assessments (ie, deployment-related TBI). Approximately 87.2% of deployment-related TBIs were mild; 250 of 287 participants (87.1%) who reported posttraumatic amnesia reported less than 24 hours of posttraumatic amnesia (37 reported ≥ 24 hours), and 111 of 117 of those who lost consciousness (94.9%) reported less than 30 minutes of unconsciousness. Predeployment CAPS score and combat intensity score raised predicted 3-month postdeployment CAPS scores by factors of 1.02 (P < .001; 95% CI, 1.02-1.02) and 1.02 (P < .001; 95% CI, 1.01-1.02) per unit increase, respectively. Deployment-related mild TBI raised predicted CAPS scores by a factor of 1.23 (P < .001; 95% CI, 1.11-1.36), and moderate/severe TBI raised predicted scores by a factor of 1.71 (P < .001; 95% CI, 1.37-2.12). Probability of PTSD was highest for participants with severe predeployment symptoms, high combat intensity, and deployment-related TBI. Traumatic brain injury doubled or nearly doubled the PTSD rates for participants with less severe predeployment PTSD symptoms.

CONCLUSIONS AND RELEVANCE:
Even when accounting for predeployment symptoms, prior TBI, and combat intensity, TBI during the most recent deployment is the strongest predictor of postdeployment PTSD symptoms.

Psychol Assess. 2014 Mar;26(1):321-5. doi: 10.1037/a0034889. Epub 2013 Nov 4.

Diagnostic accuracy of the posttraumatic stress disorder checklist-civilian version in a representative military sample.

Karstoft KI[1], Andersen SB[2], Bertelsen M[2], Madsen T[2].
Author information

Comment: This study might be helpful for the CMRN. It examined the usefulness of the PCL-C checklist against the PCL checklist for service members.

Abstract
This study aimed to assess the diagnostic accuracy of the Posttraumatic Stress Disorder Checklist-Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) and to establish the most accurate cutoff for prevalence estimation of posttraumatic stress disorder (PTSD) in a representative military sample compared to a clinical interview. Danish soldiers (N = 415; 94.4% male, mean age 26.6 years) were assessed with the PCL-C and the Structured Clinical Interview for the DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 2002) 2.5 years after their return from deployment to Afghanistan. Diagnostic accuracy of the PCL-C was assessed through receiver operating characteristic curve analysis. The PCL-C displayed high overall accuracy (area under the curve = .95, confidence interval [.92, .98]) and performed well (sensitivity > .70 and specificity ≥ .90), with cutoff scores ranging from 37 to 44. When including sensitivity values a little below .70 (.69), the PCL-C performed well for cutoff levels up to 53. Prevalence of PTSD varied considerably with the application of different cutoff values and scoring methods. Our results show that the PCL-C is a relevant and valid tool for screening for probable PTSD in active military samples. However, it is of

great importance that cutoff scores be chosen based on the sample and the purpose of the particular study or screening.

Psychiatry Res. 2013 Dec 30;210(3):1042-8. doi: 10.1016/j.psychres.2013.08.039. Epub 2013 Sep 18.

Risk factors for post-deployment posttraumatic stress disorder in national guard/ reserve service members.

Tracie Shea M[1], Reddy MK, Tyrka AR, Sevin E.
Author information

Comment: Potentially informative study regarding factors associated with PTSD.

Abstract

Identification of factors that increase risk for PTSD in military personnel following deployments is critical to early intervention and prevention. The study tested hypothesized main and moderating risk factors for PTSD in National Guard/Reserve members deployed to Iraq or Afghanistan. Members of the National Guard/Reserves (n=238) completed diagnostic interviews and measures of risk factors at a post-deployment assessment conducted an average of four and a half months following return from deployment. Hierarchical multivariate logistic regression analyses were used to test hypotheses. Higher levels of combat exposure, life and family concerns during deployment, and post-deployment social support independently predicted PTSD. Life/ family concerns during deployment and perceived adequacy of training and preparation were significant moderators of the association between combat exposure and PTSD. Among those with higher levels of both combat exposure and life and family stress, 27% had PTSD in contrast to 3% of those with high exposure but lower levels of such stress during deployment. In addition to combat exposure, life and family stress during deployment is a particularly important predictor of PTSD. The findings highlight the importance of identifying and addressing such stress.

Psychol Assess. 2014 Mar;26(1):1-7. doi: 10.1037/a0034315. Epub 2013 Sep 9.

Assessing posttraumatic stress in military service members: improving efficiency and accuracy.

Fissette CL[1], Snyder DK[1], Balderrama-Durbin C[1], Balsis S[1], Cigrang J[2], Talcott GW[3], Tatum J[2], Baker M[4],Cassidy D[4], Sonnek S[4], Heyman RE[5], Smith Slep AM[5].
Author information

Comment: Potentially useful for the CMRN. This study examined the efficacy of the PCL-M checklist for diagnosing PTSD.

Abstract

Posttraumatic stress disorder (PTSD) is assessed across many different populations and assessment contexts. However, measures of PTSD symptomatology often are not tailored to meet the needs and demands of these different populations and settings. In order to develop population- and context-specific measures of PTSD it is useful first to examine the item-level functioning of existing assessment methods. One such

assessment measure is the 17-item PTSD Checklist-Military version (PCL-M; Weathers, Litz, Herman, Huska, & Keane, 1993). Although the PCL-M is widely used in both military and veteran health-care settings, it is limited by interpretations based on aggregate scores that ignore variability in item endorsement rates and relatedness to PTSD. Based on item response theory, this study conducted 2-parameter logistic analyses of the PCL-M in a sample of 196 service members returning from a yearlong, high-risk deployment to Iraq. Results confirmed substantial variability across items both in terms of their relatedness to PTSD and their likelihood of endorsement at any given level of PTSD. The test information curve for the full 17-item PCL-M peaked sharply at a value of θ = 0.71, reflecting greatest information at approximately the 76th percentile level of underlying PTSD symptom levels in this sample. Implications of findings are discussed as they relate to identifying more efficient, accurate subsets of items tailored to military service members as well as other specific populations and evaluation contexts.

J Nerv Ment Dis. 2013 Apr;201(4):259-65. doi: 10.1097/NMD.0b013e318288d302.

Unethical battlefield conduct reported by soldiers serving in the Iraq war.

Wilk JE[1], Bliese PD, Thomas JL, Wood MD, McGurk D, Castro CA, Hoge CW.
Author information

Comment: Not sure how useful this study might be, but it's just really interesting. They examined factors associated with reported unethical conduct by soldiers (e.g. aggression, specific combat experiences)

Abstract

Research involving military service members has shown a strong relationship between combat experiences and increased risk for posttraumatic stress disorder (PTSD) and other mental health problems. Comparatively little research has examined the relationship between combat experiences, PTSD, aggression, and unethical conduct on the battlefield, although news stories sometimes suggest links between unethical conduct and disorders such as PTSD. This study systematically examined whether unethical conduct is a proxy for aggression and whether specific combat experiences and PTSD are independently associated with unethical behavior. The results of this study indicate that aggression (β = 0.30) and specific combat experiences (particularly, witnessing war atrocities [β = 0.14] and fighting [β = 0.13]) are much more strongly associated with unethical conduct than is PTSD (β = 0.04).

Psychiatr Serv. 2013 Mar 1;64(3):280-3. doi: 10.1176/appi.ps.001372012.

Treatment-seeking barriers for veterans of the Iraq and Afghanistan conflicts who screen positive for PTSD.

Stecker T[1], Shiner B, Watts BV, Jones M, Conner KR.
Author information

Comment: Could be helpful for the paper. Covers barriers for veterans screened positive for PTSD.

Abstract

OBJECTIVES:
Barriers associated with the decision not to seek treatment for symptoms of combat-related posttraumatic stress disorder (PTSD) were examined.

METHODS:
Participants were 143 military men and women who served in Operation Enduring Freedom or Operation Iraqi Freedom (OEF/OIF) and who screened positive for posttraumatic stress disorder (PTSD), as assessed by the PTSD Checklist-Military Version, and who had not sought treatment for PTSD. During a cognitive-behavioral telephone intervention, participants were asked about their beliefs concerning seeking PTSD treatment.

RESULTS:
Four categories of beliefs were associated with the decision to seek treatment, including concerns about treatment (40%), emotional readiness for treatment (35%), stigma (16%), and logistical issues (8%).

CONCLUSIONS:
This work suggests areas for intervention efforts to minimize barriers to treatment for PTSD for OEF/OIF veterans.

Deployment-related injury and posttraumatic stress disorder in US military personnel.

Macgregor AJ[1], Tang JJ, Dougherty AL, Galarneau MR.
Author information

Comment: This is another study examining the relationship between TBI and PTSD. Could be helpful for mentioning this link in the paper.

Abstract

BACKGROUND:
The current military conflicts in Iraq and Afghanistan have resulted in the most US casualties since the Vietnam War. Previous research on the association between deployment-related injury and posttraumatic stress disorder (PTSD) has yielded mixed results.

OBJECTIVES:
To examine the effect of battle injury (BI) relative to non-battle injury (NBI) on the manifestation of PTSD symptoms in military personnel and to assess the demographic, injury-specific, and pre-injury factors associated with PTSD following a BI.

PATIENTS AND METHODS:
A total of 3403 personnel with deployment-related injury (1777 BI and 1626 NBI) were identified from the Expeditionary Medical Encounter Database. Records were electronically matched to Post-Deployment Health Assessment (PDHA) data completed 1-6 months post-injury. The PTSD screening outcome was identified using a four-item screening tool on the PDHA.

RESULTS:
Compared to those with NBI, personnel with BI had more severe injuries, reported higher levels of combat exposure, and had higher rates of positive PTSD screen. After adjusting for covariates, personnel with BI were twice as likely to screen positive for PTSD compared to those with NBI (odds ratio [OR], 2.10; 95% confidence interval [CI], 1.60-2.75). In multivariable analysis among battle-injured personnel only, moderate and serious-severe injury (OR, 1.49; 95% CI, 1.12-2.00 and OR, 1.64; 95% CI, 1.01-2.68, respectively), previous mental health diagnosis within 1 year of deployment (OR, 2.69; 95% CI, 1.50-4.81), and previous BI (OR, 1.96; 95% CI, 1.22-3.16) predicted a positive PTSD screen.

CONCLUSIONS:
Military personnel with BI have increased odds of positive PTSD screen following combat deployment compared to those with NBI. Post-deployment health questionnaires may benefit from questions that specifically address whether service members experienced an injury during combat.

MeSH Topics
Military Personnel (“Persons including soldiers involved with the armed forces.”)
Veterans Health (“The concept covering the physical and mental conditions of VETERANS.”)
Mental Health (“The state wherein the person is well adjusted.”)
Stress Disorders, Post-Traumatic (“A class of traumatic stress disorders with symptoms that last more than one month. There are various forms of post-traumatic stress disorder, depending on the time of onset and the duration of these stress symptoms. In the acute form, the duration of the symptoms is between 1 to 3 months. In the chronic form, symptoms last more than 3 months. With delayed onset, symptoms develop more than 6 months after the traumatic event.”)
Suicide (“The act of killing oneself.”)
Depression (“Depressive states usually of moderate intensity in contrast with major depression present in neurotic and psychotic disorders.”)
Anxiety (“Feeling or emotion of dread, apprehension, and impending disaster but not disabling as with ANXIETY DISORDERS.”)
Military Psychiatry (“Branch of psychiatry concerned with problems related to the prevention, diagnosis, etiology, and treatment of mental or emotional disorders of Armed Forces personnel.”)
Deception (“The act of deceiving or the fact of being deceived.)
Guilt (“Subjective feeling of having committed an error, offense or sin; unpleasant feeling of self-criticism. These result from acts, impulses, or thoughts contrary to one's personal conscience.)

Topics Not MeSH Indexed
AWOL: absent without leave
Moral injury: Like psychological trauma, moral injury is a construct that describes extreme and unprecedented life experience including the harmful aftermath of exposure to such events. Events are considered morally injurious if they "transgress deeply held moral beliefs and expectations"

Articles (Pubmed/Medline)
Reporting methods for search strategy (similar to that of JAMA's systematic reviews):

- 150-250 words
- End date within month or two of submission
- Follow PRISMA reporting guidelines (http://www.equator-network.org/reporting-guidelines/prisma/)
- Include:
    - Bibliographic databases, other sources searched
        - PubMed so far
    - Search terms used
        - Cited with each abstract
    - Dates included in the search
        - check
    - Date the literature search was conducted
        - check
    - Screening process
    - Language limitations
    - Inclusion/exclusion criteria
- Should be described in such a way that the search could be reproduced
- JAMA's provided example (relevant portions highlighted – 150 words highlighted):
    - This systematic review was conducted according to PRISMA guidelines.[19] The National Library of Medicine through PubMed was searched for the hepatitis C (MeSH) filters *clinical trial, phase II*; *clinical trial, phase III*; and *clinical trial, phase IV*. The search was conducted for studies published between January 1, 2009, and May 30, 2014. In addition, we searched the following databases for the terms *hepatitis C* AND *clinical trial* AND *phase II* OR *phase III* OR *phase IV*: Web of Science, Scopus, Embase, Agricola, Cochrane Library, Cinahl Plus, ClinicalTrials.gov, Conference Papers Index, Gideon, PsycINFO, Google Scholar, and Oaister. Our search strategy included studies published in any language from 2009 to May 30, 2014. References of identified articles were searched for additional relevant articles. Randomized clinical trials and relevant cohort studies were included if they were published in English, used FDA-approved therapies that included SVR as a primary or

secondary end point, and defined treatment-experienced patients using American Association for the Study of Liver Diseases definitions.[15] Studies presenting information exclusively about patients undergoing liver transplant, acute HCV, and HCV genotypes other than 1 through 3 and dose-finding studies were excluded. Data including study design, participant demographics, stage of liver disease, treatment regimens and durations, and SVR were extracted by coauthors and recorded on a standardized electronic data collection sheet. The strength of clinical data and subsequent recommendations for treatment of HCV-infected patients were graded according to the Oxford Centre for Evidence-Based Medicine levels of evidence[20] by 2 authors independently, with discrepancies resolved after joint article review and discussion. Levels of evidence are as follows: level 1A, systematic reviews (with homogeneity of randomized clinical trials); level 1B, individual randomized clinical trials (with narrow confidence intervals); level 2A, systematic reviews (with homogeneity of cohort studies); and level 2B, individual cohort studies (including low-quality randomized clinical trials). Grades of recommendation are as follows: A, consistent level 1 studies; B, consistent level 2 or 3 studies or extrapolations from level 1 studies; C, level 4 studies or extrapolations from level 2 or 3 studies; and D, level 5 evidence or troublingly inconsistent or inconclusive studies of any level.