

A Publication of the Naval Center for Combat & Operational Stress Control

Guilt and shame act as risk factors for suicidal ideation

Key Findings: Analysis of service members receiving mental health treatment revealed that self-reported levels of guilt and shame were higher among personnel with a history of suicidal ideation. The predictive relationship between guilt/shame and suicidal ideation remained after controlling for the effects of PTSD and depression. Furthermore, the relationship between PTSD/depression symptom severity and suicidal ideation was fully mediated by guilt and shame. When guilt and shame were considered together, only guilt was significantly associated with increased suicidal ideation.

Study type: Cross-sectional study with self-report measures

Sample: 69 active-duty military personnel receiving outpatient mental health treatment at a military clinic

Implications: Shame and guilt may be indicators of suicidal ideation in active-duty mental health outpatients. Guilt appears to play a particularly large role in risk for suicidal ideation. Clinical assessments and interventions that target guilt and shame might improve the accuracy of suicide risk assessment and the effectiveness of clinical interventions to prevent suicide.

Bryan, C.J., Morrow, C.E., Etienne, N., & Ray-Sannerud, B. (2013). Guilt, shame, and suicidal ideation in a military outpatient clinical sample. Depression and Anxiety, 30(1), 55-60. doi: 10.1002/da.22002

Emotion regulation skills training may enhance CBT treatment response

Key Findings: Posttraumatic stress disorder (PTSD) patients who were taught emotion regulation skills prior to cognitive behavioral therapy (CBT) reported less PTSD and anxiety as well as fewer negative appraisals six months post-treatment compared to patients who only had supportive counseling prior to CBT. High end-state functioning (defined as a CAPS score of <19 and a BDI-2 score of <10) was also achieved at follow-up more often by patients who were taught emotion regulation skills compared to those with only supportive counseling. Additionally, those taught emotion regulation skills had lower rates of treatment dropout compared to those who received supportive counseling.

Study type: Randomized controlled trial with clinician ratings and self-report measures

Sample: 70 adult civilian PTSD patients

Implications: Response to CBT among PTSD patients may be enhanced by teaching emotion regulation skills prior to beginning CBT, which could help patients manage distress elicited by CBT as well as daily stressors. The skills taught were linked with decreased treatment dropout rates, although high dropout rates overall in this study limit the conclusions.

continued on page 3

FEATURED IN THIS EDITION

- 1 Guilt and shame act as risk factors for suicidal ideation
- **1** Emotion regulation skills training may enhance CBT treatment response
- 3 MDMA-assisted psychotherapy reduces self-report but not clinician ratings of PTSD symptoms
- 3 Factors linked to psychological resilience among older veterans
- 3 PTSD treatments reveal different change patterns among PTSD and depressive symptoms
- 4 Gender differences in overall post-traumatic stress symptoms may not be as significant as expected
- 4 Greater postconcussion symptoms in veterans with a history of mTBI with loss of consciousness can be attributed to co-occurring depression and PTSD
- 4 Addressing hotspots in trauma-focused psychotherapy for PTSD may increase treatment efficacy
- **5** Veteran substance use more strongly predicted by partner substance use than mental health symptoms
- 5 Sleep problems mediate relationship between traumatic brain injury (TBI) and development of PTSD and depression
- **6** Abreactive Ego State Therapy (EST) maintains long-term decreases in PTSD symptoms
- **6** Therapists' skills key to improving cognitive processing therapy outcomes for PTSD
- **6** DSM-IV three-factor model of PTSD is superior to alternative four-factor models: Implications for DSM-5
- 7 Group Cognitive Behavioral Therapy (GCBT) for PTSD is Efficacious
- **7** Fear of repercussions and hesitance to discuss trauma details act as barriers to care in the military population
- **8** *Quarterly Highlight:* Stress related to concealing sexual orientation puts veterans at risk for mental health problems
- 8 Test Your Knowledge
- 8 Reviews to Peruse

The Combat & Operational Stress Research Quarterly is a compilation of recent research that includes relevant findings on the etiology, course and treatment of Posttraumatic Stress Disorder (PTSD). The intent of this publication is to facilitate translational research by providing busy clinicians with up-to-date findings, with the potential to guide and inform evidence-based treatment.

Any opinion(s) expressed in this publication are those of the respective author(s) and do not reflect upon the official policy of the Bureau of Medicine and Surgery (BUMED), U.S. Navy, or the Department of Defense. The appearance of the previously published material does not constitute endorsement by the Bureau of Medicine and Surgery (BUMED), U.S. Navy, or the Department of Defense for a commercial or private organization.

NCCOSC COMBAT & OPERATIONAL STRESS RESEARCH QUARTERLY VOLUME 5 . NUMBER 4 FALL 2013

Published by:



Navy Bureau of Medicine and Surgery Naval Center for Combat & Operational Stress Control (NCCOSC) (M95)

Views expressed in this publication are not necessarily those of the Department of Defense.

Research Quarterly is written and produced by the NCCOSC Research Facilitation Department and Strategic Communications Department.

Research Facilitation Dept. Head Jennifer Webb-Murphy, PhD

Asst. Dept. Head/Content Assistance

Eileen Delaney, PhD

Editor and Writer Erin Miggantz, PhD

Writers

Vasudha Ram, MPH Kimberly Schmitz, MS

Strategic Communications Dept. Head/ Public Affairs Officer

Amy Rohlfs

Editor and Writer Margery Farnsworth

Senior Graphic Designer

Joe Griffin

All issues of the *Combat & Operational Stress Research Quarterly* are available online.

Contact us at nmcsd.nccosc@med.navy.mil to receive this publication in your inbox, need assistance pursuing a research study involving combat and operational stress or have a submission you would like to have included in an edition.

www.nccosc.navy.mi



Follow us on:









continued from page 1

Further research with larger sample sizes is needed to validate the utility of emotion regulation training to maintain patients in treatment and promote treatment response in those who may otherwise not improve with CBT.

Bryant, R.A., Mastrodomenico, J., Hopwood, S., Kenny, L., Cahill, C., Kandris, E., & Taylor, K. (2013). Augmenting cognitive behaviour therapy for post-traumatic stress disorder with emotion tolerance training: a randomized controlled trial. Psychological Medicine, 43(10), 2153-60. doi: 10.1017/S0033291713000068

MDMA-assisted psychotherapy reduces self-report but not clinician ratings of PTSD symptoms

Key Findings: Participants were assigned to either a "full dose" group (i.e., three psychotherapy sessions that include full doses of MDMA, plus 12 individual therapy sessions without MDMA) or an "active placebo" group (i.e., three psychotherapy sessions that include 20% of the full dose of MDMA, plus 12 sessions of individual therapy without MDMA). At post-treatment, half of the full-dose participants showed clinically significant decreases in PTSD symptoms via the clinician- administered PTSD scale (CAPS). The other half who did not respond to full-dose treatment were given another three full or even higher-dose MDMA sessions depending on the participant. None of these participants responded to the additional treatment. For the active placebo group, none of the participants responded to treatment, and two actually showed increased PTSD symptoms after treatment. All of the active placebo participants then received the full-dose protocol. Participants who were able to be contacted for the one-year follow-up assessment showed no significant changes in CAPS scores, but they did show statistically and clinically significant decreases in self-reported posttraumatic diagnostic scale (PDS) scores. This included one of the participants who did not initially respond to the higher-dose protocol.

Study type: Randomized, double-blind, active-placebo controlled pilot with self-report and clinician-rating measures

Sample: Twelve adult men and women with noncombat-related, treatment-resistant PTSD

Implications: While clinician ratings of PTSD at the one-year follow-up did not significantly decrease, participants' self-reports of PTSD symptoms did significantly decrease at post-treatment and at follow-up. Results also showed that MDMA-assisted therapy could be administered safely in a clinical setting. However, more research is needed to develop

conclusions about the efficacy of this treatment.

Oehen, P., Traber, R., Widmer, V., & Schnyder, U. (2013). A randomized, controlled pilot study of MDMA-(±3,4-Methylenedioxymethamphetamine) assisted psychotherapy for treatment of resistant, chronic Post-Traumatic Stress Disorder (PTSD). Journal of Psychopharmacology, 27(1), 40-52. doi: 10.1177/0269881112464827.

Factors linked to psychological resilience among older veterans

Key Findings: Among older veterans who experienced a high number of lifetime traumas, nearly 70% were classified as resilient (high number of lifetime traumas, low current psychological distress) and roughly 30% were classified as distressed (high number of lifetime traumas, high current psychological distress). Older resilient veterans were more likely than older distressed veterans to be educated, married or living with a partner, and emotionally stable with social connections and community involvement that foster a sense of purpose in life. However, resilient veterans were more likely than controls to have struggled with psychiatric or substance issues in the past and were more likely to have received previous mental health treatment.

Study type: Cross-sectional study with self-report assessments

Sample: 2,025 U.S. veterans aged 60 and older enrolled in the National Health and Resilience in Veterans Study

Implications: The results suggest that efforts focusing on social and community integration to foster a sense of purpose in life may help promote psychological resilience among veterans exposed to significant traumas throughout their lives. Results also suggest that overcoming hardship and receipt of mental health care may increase resilience later in life. Prospective studies should be considered to better understand the causal agents between these relationships. Further research also is warranted to determine how biological factors interact with psychosocial factors in defining various psychological symptom trajectories in trauma-exposed individuals.

Pietrzak, R.H. & Cook, J.M. (2013). Psychological resilience in older U.S. veterans: results from the national health and resilience in veterans study. Depression and Anxiety, 30(5), 432-43. doi: 10.1002/da.22083

PTSD treatments reveal different change patterns among PTSD and depressive symptoms

Key Findings: Analysis of PTSD patients treated with

continued on page 4

continued from page 3

prolonged exposure revealed that changes in PTSD symptoms accounted for 80% of changes in depressive symptoms, while changes in depressive symptoms only accounted for 45% of the changes in PTSD symptoms. When cognitive restructuring was added to prolonged exposure, changes in PTSD symptoms accounted for about half of the changes in depressive symptoms, while depressive symptoms accounted for about half of the changes in PTSD symptoms.

Study type: Randomized controlled trial with clinician ratings and self-report measures

Sample: 153 female assault survivors with PTSD

Implications: Findings suggest that prolonged exposure affects PTSD symptoms primarily, which then influence depressive symptoms. However, adding cognitive restructuring to prolonged exposure results in a more reciprocal relationship between PTSD and depressive symptoms. Although adding cognitive restructuring to prolonged exposure did not change the overall effect for PTSD and depressive symptom reductions, there seems to be a different pattern of symptom changes between the two treatment conditions.

Aderka, I.M., Gillihan, S.J., McLean, C.P., & Foa, E.B. (2013). The relationship between posttraumatic and depressive symptoms during prolonged exposure with and without cognitive restructuring for the treatment of posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 81(3), 375-82. doi: 10.1037/a0031523

Gender differences in overall post-traumatic stress symptoms may not be as significant as expected

Key Findings: Analysis of PTSD symptom reporting among military veterans who had completed combat deployments revealed small gender differences. Among service members with the same overall PTSD symptom severity, women more frequently reported concentration difficulties and distress from trauma reminders, while men more frequently reported nightmares, emotional numbing and hypervigilance. However, these differences had little impact on expected total scores and severity estimates between genders and had similar reliability.

Study type: Cross-sectional study with self-report measures

Sample: 2,341 U.S. military veterans who completed deployments in support of OEF/OIF

Implications: Results suggest that male and female veterans show overall similar profiles of PTSD symptoms following military-related stress exposure. In addition, the PCL-M (instrument used to measure PTSD symptoms) appears to

be measuring PTSD severity with similar reliability for both male and female OEF/OIF veterans.

King, M.W., Street, A.E., Gradus, J.L., Vogt, D.S., & Resick, P.A. (2013). Gender differences in posttraumatic stress symptoms among OEF/OIF veterans: An item response theory analysis. Journal of Traumatic Stress, 26(2),175-83. doi: 10.1002/jts.21802

Greater postconcussion symptoms in veterans with a history of mTBI with loss of consciousness can be attributed to co-occurring depression and PTSD

Key Findings: Veterans' postconcussion symptoms (PCS) such as cognitive deficits and emotional distress were evident even years after blast exposure. Veterans with mild traumatic brain injury (mTBI) and loss of consciousness (LOC) experienced greater PCS compared to those reporting mTBI without LOC and those without mTBI. However, after PTSD and depression symptoms were controlled for, this group difference in PCS was no longer significant. Yet, even after controlling for depression and PTSD, veterans with mTBI and LOC showed more limitations in psychosocial functioning when compared to the other two groups,

Study Type: Cross-sectional study with self-report and clinician-rating assessments

Sample: 95 OEF/OIF veterans recruited via the VA Boston Polytrauma Network who reported blast exposure within 100 m, and had been seen at least 6 months post-exposure

Implications: Results suggest that greater PCS in veterans with mTBI and LOC may be attributable to co-occurring depression and PTSD. However, regardless of co-occurring depression and PTSD, veterans reporting mTBI with LOC reported more limited psychosocial functioning than those with mTBI without LOC, and those without mTBI, Future studies may benefit from the use of a more objective measure of TBI (e.g., clinician ratings).

Verfaellie, M., Lafleche, G., Spiro, A., Tun, C., & Bousquet, K. (2013). Chronic postconcussion symptoms and functional outcomes in OEF/OIF veterans with self-report of blast exposure. Journal of the International Neuropsychological Society, 19(1), 1-10. doi: 10.1017/S1355617712000902

Addressing hotspots in trauma-focused psychotherapy for PTSD may increase treatment efficacy

Key Findings: Analysis of audio recordings of imaginal

exposure with PTSD patients revealed that the mean number of hotspots (traumatic memories re-experienced with high emotional distress) was similar in those who did and did not successfully complete treatment. However, the frequency with which each hotspot was addressed in therapy was significantly higher in the successfully treated group compared to the unsuccessfully treated group. Results also indicated that audible changes in affect, dissociation and changes from present to past tense during the exposures were significantly higher for those who successfully completed treatment compared to those who did not.

Study type: Retrospective treatment component study

Sample: 20 PTSD patients completing trauma-focused therapy (10 of the most successful and 10 of the least successful treatment completers based on self-report PTSD symptom decreases via the Impact of Event Scale-Revised)

Implications: Addressing hotspots more frequently and focusing on certain characteristics during psychotherapy may help patients process the traumatic experience more effectively, thereby enhancing treatment outcomes. A larger sample size is needed to replicate the findings and determine which of the individual hotspot factors predict treatment success.

Nijdam, M.J., Baas, M.A., Olff, M., & Gersons, B.P. (2013). Hotspots in trauma memories and their relationship to successful trauma-focused psychotherapy: a pilot study. Journal of Traumatic Stress, 26(1), 38-44. doi: 10.1002/jts.21771

Veteran substance use more strongly predicted by partner substance use than mental health symptoms

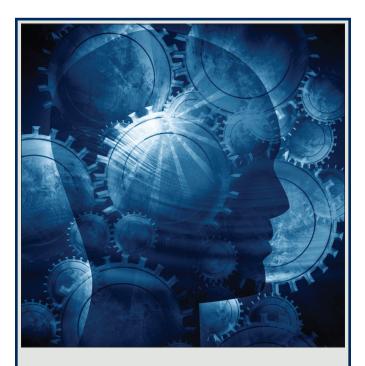
Key Findings: Analysis of trauma-exposed veterans living with an intimate partner revealed that the partner's level of substance use explained more variance in veteran substance use than did veteran symptoms of PTSD, depression or antisocial personality disorder (ASPD) combined. Regarding psychopathological predictors of substance use in the veterans, alcohol use was predicted by symptoms of PTSD, depression and ASPD, whereas ASPD was the only significant predictor of veteran drug use.

Study type: Cross-sectional study with clinician-rating measures

Sample: 484 trauma-exposed veterans who had been living with their intimate partner for at least 12 months (242 couples)

Implications: Findings suggest that substance use by the partners of veterans may be a stronger predictor of veteran

continued on page 6



Sleep problems mediate relationship between traumatic brain injury (TBI) and development of PTSD and depression

Key Findings: Service members who simultaneously screened positive for TBI and sleep problems post-deployment reported delayed onset of PTSD and/or depression (e.g., several months later). These results remained the same even after controlling for combat exposure. Analyses revealed that sleep difficulties significantly mediated the relationship between TBI and development of PTSD and/or depression.

Study type: Prospective study with self-report measures

Sample: 29,640 U.S. Navy and Marine Corps men screening positive for blast-related TBI

Implications: Military service men screening positive for TBI who also report sleep difficulties immediately post-deployment may be at higher risk for PTSD or depression than those not experiencing sleep difficulties. Future research should include objective measures of sleep to more accurately identify the time of onset and the nature of the sleep problems.

Macera, C.A., Aralis, H.J., Rauh, M.J., & MacGregor, A.J. (2013). Sleep problems mediate the relationship between traumatic brain injury and development of mental health symptoms after deployment? Sleep, 36(1), 83-90. doi: 10.5665/sleep.2306



Abreactive Ego State Therapy (EST) maintains long-term decreases in PTSD symptoms

Key Findings: Participants in two different treatment groups significantly decreased in PTSD symptoms at post-treatment. The experimental group received one five- to six-hour session of abreactive EST (reliving the trauma with hypnosis while working on building ego strength). In the comparison group, participants received a placebo treatment (watching a VA-approved video treatment that provided psycho-education and information about the Ochberg counting method). Although both groups reported significant reductions in PTSD symptoms at the end of treatment, EST participants maintained PTSD symptom decreases at both the four- and 16- to 18-week follow-up assessments, while placebo participants did not.

Study type: Placebo-controlled treatment study with self-report and clinician rating measures

Sample: Thirty-six volunteers from the Northwest United States who met DSM-IV criteria for PTSD via the posttraumatic checklist (PCL) and the clinician- administered PTSD scale (CAPS)

Implications: Abreactive EST is efficacious in treating PTSD, combat stress and acute stress disorder. While both EST and placebo treatment decrease symptoms, only EST maintains the therapeutic gains post-treatment.

Barabasz, A., Barabasz, M., Christensen, C., French, B., & Watkins, J.G. (2013). Efficacy of Single-Session Abreactive Ego State Therapy for Combat Stress Injury, PTSD, and ASD. International Journal of Clinical and Experimental Hypnosis, 61(1), 1-19. doi: 10.1080/00207144.2013.729377

continued from page 5

substance use than the veterans' own mental health symptoms. This highlights the need for couples-oriented treatments of substance abuse and other comorbid mental health problems in the veteran population.

Miller, M.W., Reardon, A.F., Wolf, E.J., Prince, L.B., & Hein, C.L. (2013). Alcohol and drug abuse among U.S. veterans: comparing associations with intimate partner substance abuse and veteran psychopathology. Journal of Traumatic Stress, 26(1), 71-6. doi: 10.1002/jts.21773

Therapists' skills key to improving cognitive processing therapy outcomes for PTSD

Key Findings: Among veterans undergoing cognitive processing therapy (CPT) for PTSD, 12% of the variance in treatment outcome was attributable to the therapist after accounting for initial PTSD symptom severity. Characteristics of effective therapists identified by the therapists' supervisors included developing a strong therapeutic alliance with the patient, effectively addressing patient avoidance, using a particular language style when discussing patient progress with the supervisor (open to discussion and non-defensive to feedback) and having a flexible interpersonal style.

Study type: Retrospective analysis of treatment characteristics using VA clinical data

Sample: 192 veterans with PTSD who received 12 sessions of CPT by one of 25 therapists

Implications: Improving quality of care with evidence-based treatments is a priority for stakeholders involved in psychological health of service members. These findings suggest that clinical outcomes can be improved by not only providing evidenced-based training and supervision to therapists but also focusing on techniques that are characteristic of effective therapists: addressing avoidance effectively, being open to describing their therapy progress and receptive to feedback, building rapport and having a flexible interpersonal style.

Laska, K.M., Smith, T.L., Wislocki, A.P., Minami, T., & Wampold, B.E. (2013). Uniformity of evidence-based treatments in practice? Therapist effects in the delivery of cognitive processing therapy for PTSD. Journal of Counseling Psychology, 60(1), 31-41. doi: 10.1037/a0031294

DSM-IV three-factor model of PTSD is superior to alternative four-factor models: Implications for DSM-5

Key Findings: Previous studies using confirmatory factor

analysis (CFA) have concluded that two different four-factor models of PTSD symptoms [(a) re-experiencing, avoidance, emotional numbing and hyperarousal, and (b) re-experiencing, avoidance, dysphoria and hyperarousal] were a better fit to the data than the three-factor model in the Diagnostic and Statistical Manual of Mental Disorders (DSM) (re-experiencing, avoidance and hypervigilance). Taking into account that assessments of PTSD typically present questions in the same order as the diagnostic criteria listed in the DSM, the current study controlled for order effects and showed through CFA that the DSM-IV three-factor conceptualization fits the data significantly better than alternative four-factor models. Results showed that over half of the findings supporting the four-factor models can be attributed to the lack of control for order effects.

Study type: Retrospective analysis of 29 datasets using self-report and clinician-report measures

Sample: Adults from 29 different studies, with a history of multiple types of trauma, including warzone exposure and interpersonal violence

Implications: Order effects of PTSD assessments have significantly influenced CFA results when examining symptom clusters in PTSD. Thus, controlling for order effects showed that the three-factor model in the DSM-IV is indeed a better fit to the data (reflected by significant chi-square improvement) than are alternative four-factor models. Order effects should be considered in light of recent changes to PTSD criteria in the DSM-5.

Marshall, G.N., Schell, T.L., & Miles, J.N.V. (2013). A multi-sample confirmatory factor analysis of PTSD symptoms: What exactly is wrong with the DSM-IV structure? Clinical Psychology Review, 33(1), 54-66. doi: 10.1016/j.cpr.2012.10.004

Group Cognitive Behavioral Therapy (GCBT) for PTSD is Efficacious

Key Findings: Group Cognitive Behavioral Therapy (GCBT) for PTSD was comparable in effectiveness to GCBT for other anxiety disorders. However, for PTSD treatment, GCBT was less effective than individually administered cognitive behavioral therapies. No significant differences were found between the effectiveness of GCBT that incorporated exposure and GCBT that did not.

Study type: Meta-analytic review

Sample: 651 adult veterans, women and motor vehicle accident survivors meeting DSM-III or DSM-IV criteria for PTSD

Implications: GCBT is as effective in treating PTSD as it is in treating other anxiety disorders. However, individual CBT

treatment is more effective than GCBT in decreasing PTSD symptoms. Results may be related to a lower dose of therapy per person when using group versus individual format. Future research is indicated to examine the effect of an increased dose of GCBT.

Barrera, T.L., Mott, J.M., Hofstein, R.F., & Teng, E.J. (2013). A meta-analytic review of exposure in group cognitive behavioral therapy for post-traumatic stress disorder. Clinical Psychology Review, 33(1), 24-32. doi: 10.1016/j.cpr.2012.09.005

Fear of repercussions and hesitance to discuss trauma details act as barriers to care in the military population

Key Findings: Four themes were found to influence mental health treatment- seeking behaviors in the military, including (a) concerns about treatment, (b) emotional readiness for treatment, (c) stigma and (d) logistical issues. Regarding concerns about treatment, many feared that seeking help would result in loss of one's security clearance, affect future deployments and elicit adverse reactions from commanding officers. Others feared that future employment would be limited as a result of seeking treatment and that providers would simply prescribe medications without listening to them. Some believed that only a provider who had been deployed would understand their problems. Regarding emotional readiness, service members believed it would be too difficult to talk about their traumas. Stigma and logistical issues were less reported as barriers to care than were concerns about treatment and lack of emotional readiness. Notably, more than one-half of participants did not believe they needed treatment.

Study type: Qualitative study with psychoeducation and standard thematic analysis

Sample: 143 military personnel (from all branches of service), including men and women who served in OEF or OIF, screening positive for PTSD on the PCL-M and who had never sought treatment

Implications: Overall, campaigns targeting stigma and inaccessibility of mental healthcare have been fairly efficacious. To further increase mental health treatment use by veterans with PTSD symptoms, providers should (a) clarify realistic expectations of treatment, (b) educate patients regarding available treatment options, and (c) address concerns about readiness for treatment.

Stecker, T., Shiner, B., Watts, B.V., Jones, M., & Conner, K.R. (2013). Treatment-seeking barriers for veterans of the Iraq and Afghanistan conflicts who screen positive for PTSD. Psychiatric Services, 64(3), 280-283. doi: 10.1176/appi.ps.001372012

QUARTERLY HIGHLIGHT

Stress related to concealing sexual orientation puts veterans at risk for mental health problems

on't Ask Don't Tell," (DADT) enacted in 1994, changed the military's policy of discharging service members on the basis of sexual orientation to discharge due to same-sex sexual behavior. DADT was repealed in 2011. Findings show that DADT created stressors for lesbian, gay and bisexual (LGB) individuals, including (a) the necessity of concealing personal information, (b) enduring harassment and (c) fear of discharge. No research to date shows the impact of DADT on LGB veterans after leaving the military.

A study published this year examined the mental health status of LGB veterans to determine if and how their mental health is still affected by their service during DADT. The entire veteran population is already at risk for mental health problems due to combat exposure, high-operational tempo, military sexual trauma (MST), and other general stressors related to a military career. Individuals in the general LGB population also are at risk for mental health problems, including anxiety, depression and substance use. Meyer's (2003) minority stress hypothesis explains that higher rates of mental disorders in the LGB community compared to the general population are related to being a member of a stigmatized community and, thus, more vulnerable to discrimination and victimization.

To measure the mental health functioning of LGB veterans, the current study developed a measure based on consultation with this specific population. The study recruited 409 veterans of sexual minorities (lesbian, gay and bisexual), and all data were collected anonymously. The comparison group consisted of 15,000 veterans whose data were reviewed retrospectively. Results showed that rates of PTSD, depression and alcohol use were significantly higher for LGB veterans than for the comparison group (general recipients of VA care). The rate of suicidal thoughts and behaviors for the LGB group was 14.7%, while comparison group data were not available regarding suicidality. This study found that negative experiences while serving, especially those related to concealing one's sexual orientation, significantly predicted depression and PTSD, yet did not predict alcohol use. Considering that both veteran and LGB populations are at risk for mental health issues, veterans who identify as LGB are specifically at high risk for PTSD, depression, and suicidal thoughts and behaviors.

Extrapolating from these findings, the authors suggest that the recent inclusion of sexual minority service members be "thoughtfully addressed" in the military, especially in terms of eradicating harassment and victimization. Implementing anti-victimization policies that are strictly enforced is given as an example of a protective measure. The study also emphasizes the importance of analyzing the effects of policy change on LGB individuals in the post-DADT era both during and after active duty.

Cochran, B.N., Balsam, K., Flentje, A., Malte, C.A., & Simpson, T. (2013). Mental health characteristics of sexual minority veterans. Journal of Homosexuality, 60(2-3), 419-435. doi: 10.1080/00918369.2013.744932

TEST YOUR KNOWLEDGE

According to the summary "Group Cognitive Behavioral Therapy (GCBT) for PTSD is Efficacious," which type of treatment is *more* efficacious for PTSD:

Group cognitive behavioral therapy Individual cognitive behavioral therapy Both are equally as effective

Answer: Individual cognitive behavioral therapy

REVIEWS TO PERUSE

Litt, L. (2013). Clinical decision making in the treatment of complex PTSD and substance misuse. *Journal of Clinical Psychology, 69*(5), 534-542. doi: 10.1002/jclp.21989

Koucky, E.M., Dickstein, D., & Chard, K.M. (2013). Cognitive behavioral treatments for posttraumatic stress disorder: empirical foundation and new directions. *CNS Spectrums*. *18*(2), 72-81. doi: 10.1017/S1092852912000995

Kerbage, H., & Richa, S. (2013). Non-Antidepressant Long-Term Treatment in Post-Traumatic Stress Disorder (PTSD). Current Clinical Pharmacology, [Epub ahead of print].