Should antipsychotics be prescribed for chronic PTSD?

Key Findings: Adjunctive treatment of veterans with chronic, antidepressant-resistant PTSD using the antipsychotic risperidone for six months did not significantly reduce overall PTSD symptoms compared to placebo. In addition, risperidone treatment did not result in improvements in depression, anxiety or quality of life. However, risperidone was associated with more adverse side effects than placebo.

Study type: Randomized, placebo-controlled clinical trial

Sample: 247 veterans with chronic military-related PTSD

Implications: Antipsychotics are commonly prescribed to treat antidepressant-resistant PTSD with limited evidence to support this practice, and data presented here demonstrate that this practice may not be beneficial. Adjunctive risperidone treatment did not reduce PTSD symptoms compared to placebo among patients with military-related PTSD in this rigorous trial, and these findings should motivate a thorough review of the use of these medications in patients with chronic PTSD.


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Female OEF/OIF veterans may be as resilient to combat-related stress as male veterans

**Key Findings:** Of service members recently returned from OEF/OIF deployments, men reported more combat-related stressors than women (including combat exposure, exposure to aftermath of battle and difficult living/working environment) and women reported more deployment sexual harassment, although differences were relatively small. There was no gender difference in perceived threat in the war zone and few differences in self-reported post-deployment mental health. Contrary to the authors’ hypothesis, the post-deployment mental health of females was not more negatively impacted by combat-related stressors as compared to males.

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

**Sample:** 340 female and 252 male U.S. service members recently deployed to OEF/OIF

**Implications:** Findings suggest that female OEF/OIF veterans may be as resilient to combat-related stress as male veterans, although further research, including clinician-administered mental health assessments and longitudinal study design, should be conducted to confirm these results. As noted by the authors, these findings could potentially be explained by the lack of gender difference in perceptions of war zone threat and/or level of deployment preparedness in this study, which may be more important factors than gender in determining the impact of combat exposure on mental health.


Deployment suicide prevention plan may reduce in-theater suicides

**Key Findings:** During the 15-month deployment of a U.S. Army infantry division to Iraq in which a new suicide prevention plan was utilized, five soldiers completed suicide. This is equivalent to an annual suicide rate of 16/100,000 within the trial cohort, which is lower than the theater rate of all service members at that time (24/100,000). Peaks in suicidal ideation were observed at two, six and 12 months during the deployment.

**Study type:** Evaluation of deployment cycle-specific suicide prevention plan, which included education, early detection, intervention, communication, command/leader emphasis, and treatment within the various phases of the deployment cycle for all unit members and their significant others

**Sample:** One U.S. Army infantry division deployed to Iraq for 15 months in 2007

**Implications:** Although the number of completed suicides was too low to determine if the trial cohort suicide rate was statistically lower than the overall theater rate, the suicide prevention program utilized for this cohort holds potential for decreasing rates of suicide in the combat environment. Further research is needed to determine which components of this program are the most beneficial and if this program is more effective than other intervention programs.


Differences in PTSD-associated symptom profiles in individuals with multiple traumas or childhood traumas

**Key Findings:** PTSD patients with multiple traumas reported more dissociation, guilt, shame, anger and interpersonal sensitivity than those with single traumas. However, only dissociation and shame were still greater in multiple trauma patients after controlling for PTSD severity. Anger of single trauma patients was more often directed at others, whereas anger in multiple trauma individuals was more often directed toward themselves. Individuals who experienced childhood trauma reported more dissociation and state anger compared to individuals who experienced trauma as an adult.

**Study type:** Cross-sectional study with clinician-interview and self-report assessments

**Sample:** 110 PTSD patients referred to a civilian anxiety disorders clinic

**Implications:** Trauma experienced at a young age or multiple times may lead to differences in PTSD-associated symptom profiles that are, with the exception of dissociation and shame, dependent on PTSD severity. This study reinforces the need for a thorough history and assessment, based on the potential for different presentations.

Dispositional optimism may protect combat veterans from negative impact of combat and operational stressors

Key Findings: Soldiers who experienced higher levels of war zone stressors reported fewer mental health symptoms if they had higher dispositional optimism. Further, PTSD and depressive symptoms were less likely to impact work performance for soldiers with higher dispositional optimism compared to those with low dispositional optimism.

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

Sample: 2,439 soldiers previously deployed to Iraq

Implications: Dispositional optimism should be further examined as a moderator of the relationships between chronic to acute stressors and PTSD/depressive symptoms and between PTSD/depressive symptoms and work impairment, as it may serve as a protective factor for high-risk active-duty service members.


Low psychosocial dysfunction, high perception of control/purpose, and family support linked to resilience among OEF/OIF veterans

Key Findings: OEF/OIF veterans classified as part of the resilient group (high combat exposure, low PTSD symptoms) were more likely to be in a relationship, have fewer psychosocial difficulties, and report better perceptions of purpose/control and family support and understanding than those in the PTSD group (high combat exposure, high PTSD symptoms).

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

Sample: 272 OEF/OIF veterans

Implications: Implementation of programs that aim to decrease psychosocial challenges, improve perceptions of purpose/control, and strengthen family support and understanding may help foster resilience to combat-related PTSD among OEF/OIF veterans.


Reducing PTSD and depression by adding aripiprazole

Key Findings: When veterans with PTSD and major depression were given the antipsychotic aripiprazole in addition to current psychiatric medications, PTSD and depression severity significantly decreased after 12 weeks. Ten of the 27 patients had at least a 20% decrease in PTSD symptom checklist (PCL) scores, and five patients had at least a 50% decrease in Beck Depression Inventory (BDI) scores.

Study type: Retrospective chart review of a 12-week course of adjunctive aripiprazole

Sample: 27 military veterans with comorbid PTSD and depression who had been minimally or partially responsive to their existing medications

Implications: Augmenting current psychiatric medications with aripiprazole may be a viable treatment option to reduce PTSD and depression symptoms in veteran patients, although findings should be confirmed with randomized, controlled trials.


REVIEWS TO PERUSE


Predictors of alcohol use disorder differ according to pre- or post-deployment onset

Key Findings: OIF combat veterans who developed new-onset alcohol use disorders (AUDs) post-deployment had more severe PTSD symptoms, a greater degree of avoidance-specific PTSD symptoms and reduced levels of positive emotionality compared to both veterans with pre-deployment AUD onset and those with no AUDs. AUDs with pre-deployment onset were predicted by such personality traits as negative emotionality and disconstraint.

Study type: Prospective study with clinical and self-report assessments

Sample: 346 National Guard soldiers deployed to Iraq from March 2006 to July 2007

Implications: Combat veterans with AUDs should be assessed for time of AUD onset (pre- or post-deployment), due to different factors and potentially different mechanisms involved in these disorders. PTSD symptoms may be the most significant factor contributing to AUD onset after a combat deployment, and veterans with post-deployment AUD onset should be assessed for PTSD symptoms and if appropriate, receive concurrent PTSD and AUD treatment.


Postconcussion syndrome not related to mTBI

Key Findings: The authors found that mild traumatic brain injury (mTBI) did not predict postconcussion syndrome (PCS). A pre-injury depressive or anxiety disorder and acute posttraumatic stress were early markers for PCS detected at three months post-injury. The relationship between the severity of PTSD symptoms and PCS strengthened over time. In addition, pain was related to PCS, and females were more likely than males to have PCS.

Study type: Prospective, longitudinal study with clinical and self-report assessments

Sample: 62 mTBI patients and 58 non-brain injured trauma controls admitted to a Level I trauma hospital

Implications: PCS was found in almost half of trauma patients three months post-injury, regardless of whether they sustained a TBI, and PCS should not be seen as a condition only affecting those with TBI. Symptoms of mental health problems, such as PTSD and depression, were predictors of PCS at follow-up. These should be seen as early markers of PCS in injured individuals.


Effectiveness of residential treatment program for veterans with PTSD and TBI

Key Findings: A residential treatment program involving psychoeducational groups and cognitive skill building augmented with a modification of standard cognitive processing therapy was shown to be an effective treatment approach for PTSD and depression in veterans with comorbid PTSD and TBI. Large effect size reductions were found on PTSD and depression measures after completion of the seven-week program.

Study type: Treatment evaluation of a VA TBI-PTSD residential program with clinical and self-report assessments

Sample: 42 male veterans with current PTSD and a history of TBI

Implications: A comprehensive residential treatment program, including cognitive processing therapy – cognitive only (CPT-C), may be a viable treatment option for veterans with PTSD and TBI.


Unexpected relationship between anxiety sensitivity, alcohol use and PTSD

Key Findings: Anxiety sensitivity (AS), a construct defined as the fear of anxiety, was strongly associated with PTSD and moderately associated with drinking behavior in individuals with comorbid PTSD and alcohol dependence. Contrary to the hypothesis that AS would moderate the PTSD-alcohol consumption association such that PTSD and alcohol use would be more strongly related among those with high AS, the authors actually found the opposite result. PTSD
symptoms were more strongly associated with drinking behavior among individuals with relatively low AS. The highest levels of drinking were found among individuals with low AS and high PTSD symptoms.

**Study type:** Serial cross-sectional data from a larger prospective study with clinician-administered and self-report assessments

**Sample:** 151 general population adults with comorbid alcohol dependence and PTSD

**Implications:** The authors found that the interaction of AS with PTSD symptoms on drinking behavior was strongest for the PTSD avoidance cluster. Therefore, one of the explanations given for the unexpected finding was that these individuals with high avoidance symptoms and alcohol use may appear to have low AS because of repression or avoidance of their AS. Further study is needed to uncover the mechanism behind this unexpected finding.


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**Gender, relationships and military appraisal affect post-deployment onset of PTSD symptoms**

**Key Findings:** Female soldiers were 2.5 times more likely than males to screen positive for PTSD following a combat deployment. Pre-deployment screening rates of anxiety, depression, dangerous alcohol consumption and PTSD increased significantly after deployment for both males and females; PTSD symptoms showed the strongest increase. Additionally, decreases in the strength of intimate relationships from pre- to post-deployment were linked to an increased likelihood of post-deployment PTSD symptom onset at higher levels of combat exposure, but this relationship was only found for females. Positive appraisal of military service was a protective factor against PTSD symptom development.

**Study type:** Retrospective cohort study with self-report assessments

**Sample:** 167 treatment-seeking OEF/OIF veterans

**Implications:** Interventions that target maladaptive coping strategies and strengthen social support (especially understanding from others) may help reduce combat-related PTSD symptoms in this veteran population.


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**Coping strategies may help explain link between social support and PTSD**

**Key Findings:** OEF/OIF veterans with combat-related PTSD were more likely to engage in maladaptive coping strategies, such as worry, self-punishment, social control, behavioral distraction and avoidance (social and non-social), than veterans without PTSD. In addition, these maladaptive coping strategies were negatively related to post-deployment social support, suggesting these coping strategies may partially mediate the association between post-deployment social support and combat-related PTSD symptoms. Greater perceptions of understanding from others were negatively correlated with PTSD symptoms.

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

**Sample:** 167 treatment-seeking OEF/OIF veterans

**Implications:** Interventions that target maladaptive coping strategies and strengthen social support (especially understanding from others) may help reduce combat-related PTSD symptoms in this veteran population.


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**Pathway from combat exposure to suicidal thoughts**

**Key Findings:** Past-month suicidal ideation was endorsed by 7% of male Sailors and Marines transitioning to civilian life (Sailors=5.3%, Marines=9%). Suicidal ideation risk factors, such as PTSD and substance abuse, and protective factors, such as resilience, appeared to ultimately impact suicidal
thoughts by influencing depression symptoms. The strongest predictive model for suicidal ideation involved combat exposure predicting PTSD, which then predicted depression, which in turn predicted suicidal ideation.

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

**Sample:** 3,069 male Navy and Marine Corps personnel separating from the military

**Implications:** Suicidal ideation is a major problem among service members, including those leaving the military. Given the strong association between depression and suicidal ideation, regular screening and early intervention for depressive symptoms, as well as related issues such as PTSD and substance abuse, could prevent suicides in this population. In addition, programs that would build resilience among service members, such as facilitating social support through peer networks both during and after military service, could help to stem the rising tide of suicide rates in this population.


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**Key Findings:**

Telehealth is an effective method of administering exposure therapy for PTSD

**Study type:** Treatment evaluation study of 12 exposure therapy sessions (telehealth or in-person, both including imaginal and situational/behavioral exposure) with self-report assessments

**Sample:** Veterans with PTSD who received exposure therapy in person (n=27) or via telehealth (n=62)

**Implications:** Exposure therapy via telehealth may be an effective treatment option for PTSD patients, especially those who may not be able to complete exposure therapy in person. The telehealth option could result in substantially greater treatment utilization, especially among service members and veterans, by reducing access- and stigma-based barriers to care. Future studies should repeat this evaluation using larger samples randomized to treatment condition to determine if a real difference exists between telehealth and in-person exposure therapy modalities.


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**Gaze bias predicts PTSD and depression symptoms in deployed soldiers**

**Key Findings:** Average eye fixation time on fearful faces moderated the relationship between war zone stress exposure and PTSD symptoms among deployed soldiers, in that shorter eye fixation times on fearful faces predicted higher PTSD symptoms as war zone stress exposure increased. In contrast, longer eye fixation time on sad faces predicted higher depressive symptom scores as war zone stress exposure increased.

**Study type:** Prospective, longitudinal study with eye-tracking task and self-report assessments

**Sample:** 139 U.S. Army soldiers with no prior deployments who were given an eye-tracking task prior to deployment and assessed for stress exposure and PTSD/depressive symptoms during deployment to Iraq

**Implications:** Gaze bias, which measured biased processing of emotional stimuli, could potentially be used to predict which soldiers are vulnerable to developing more severe PTSD and depressive symptoms when exposed to war zone stressors.


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**Cognitive-behavioral therapy and behavioral activation effective for comorbid PTSD and MDD**

**Key Findings:** This study examined a treatment for comorbid PTSD and major depressive disorder (MDD) incorporating behavioral activation for depression in early sessions and exposure therapy and cognitive
restructuring for PTSD in later sessions. PTSD and depression severity significantly decreased between pre- and post-treatment assessments, and remained significantly lower than pre-treatment levels at 3-month follow-up.

**Study type:** Treatment evaluation of a cognitive-behavioral treatment program for comorbid PTSD and MDD with clinical and self-report assessments

**Sample:** 20 self-referred civilians meeting criteria for PTSD and MDD

**Implications:** Treatment programs which incorporate behavioral activation and trauma-focused cognitive-behavioral treatment may be effective in treating comorbid PTSD and depression, although further study using randomized, controlled designs are needed to confirm the efficacy of this treatment.


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**Dysphoria model of PTSD consistent over time among combat veterans**

**Key Findings:** Analysis of the structure of PTSD among combat veterans supports a four-factor intercorrelated dysphoria model of PTSD that remains stable over time (prior to, during and following combat deployment to Iraq) and across two different samples. This four-factor model includes intrusive memories, trauma-specific effortful avoidance, hyperarousal and dysphoria (nonspecific distress symptoms).

**Study type:** Prospective, longitudinal study with self-report assessments

**Sample:** 1,459 U.S. Army National Guard brigade combat team members who deployed to Iraq

**Implications:** In this sample of combat-exposed soldiers, PTSD is best represented by a model that includes dysphoria, but not emotional numbing, and this model remains consistent over time. PTSD was found to be best represented by separate and distinct, but moderately to highly correlated symptom clusters, that when grouped together form PTSD.


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**Factors associated with suicidal ideation among U.S. Air Force members**

**Key Findings:** The past-year rate of suicidal ideation among Air Force members was approximately 4%. When analyzed together, it was found that depressive symptoms, alcohol problems, relationship satisfaction, intimate partner victimization, hours worked and social support were all factors impacting suicidal ideation in this population.

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

**Sample:** 52,780 active-duty U.S. Air Force members

**Implications:** Suicide prevention programs should focus on multiple factors at different ecological levels (individual, family, workplace and community), taking into account the target population’s needs.


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**CONFERENCE SUBMISSIONS WANTED!**

The Navy and Marine Corps Combat & Operational Stress Control Conference 2012 will be held May 22-24, 2012, at the Town & Country Resort and Convention Center in San Diego. The deadline to submit a paper or poster is December 9, 2011. Registration opens January 2012. To submit a proposal for a paper or poster, please visit our website: [www.nccosc.navy.mil](http://www.nccosc.navy.mil)

[COMBAT & OPERATIONAL STRESS RESEARCH QUARTERLY]

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Predictors of acute stress symptoms among military personnel

**Key Findings:** Perceived stress, passive coping and emotion-focused coping assessed at baseline in Navy personnel predicted greater acute stress symptoms in response to a realistic military survival training. However, active coping and problem-focused coping did not predict lower acute stress symptoms (no significant relationship was found between these coping styles and stress symptoms).

**Study type:** Prospective study with self-report assessments

**Sample:** 35 healthy, male active-duty Navy personnel

**Implications:** Perceived stress levels and coping styles during everyday life appear to predict how an individual will respond to acute traumatic stress. Interventions should be designed to target and modify these stress perceptions and coping styles. Further research should investigate the role that active or problem-focused coping plays in mitigating acute stress responses and PTSD development.


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**Test Your Knowledge!**

According to the summary “Should antipsychotics be prescribed for chronic PTSD?” (pg. 1), adjunctive treatment of veterans with chronic, antidepressant-resistant PTSD using the antipsychotic risperidone for six months resulted in which of the following:

A. A significant decrease in PTSD, depression and anxiety symptoms compared to placebo.

B. A significant decrease in PTSD and anxiety symptoms, but not depression symptoms, compared to placebo.

C. No significant change in PTSD and anxiety symptoms, but a significant decrease in depression symptoms, compared to placebo.

D. No significant change in PTSD, depression or anxiety symptoms compared to placebo.

Answer: D