

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

# Providers in a supportive work environment are more likely to use evidence-based treatments

**Key Findings:** The VA started a national initiative to implement Evidence-Based Treatments (EBTs) for PTSD such as Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). This initiative applied the Rogers-Greenhalgh implementation framework to the use of CPT and PE in the VA residential treatment system. It was hypothesized that the use of CPT and PE would be associated with variables such as provider characteristics, receptive context for change, influence and communication, potential for reinvention, and provider's impression of the therapies (all constructs from the Rogers-Greenhalgh framework). Results found that implementation of PE and individual CPT was associated with higher level of support (e.g., time, resources and incentives directed toward program implementation), higher level of openness, and having a positive impression of PE. Implementation of group CPT was related to level of support and positive view of the therapy. Notably, many aspects of the framework were not significantly associated with implementation of EBTs.

**Study Type:** Cross-sectional study with online self-report questionnaires

**Sample:** Providers (*n* = 201) from 38 PTSD VA residential treatment programs

Implications: This is the first study to analyze the implementation of PE and CPT in the VA residential treatment setting in order to test the Rogers-Greenhalgh framework. Overall, results suggest that institutional support may be a key factor in successful implementation of EBTs. The lack of relationships found between the use of PE and CPT and the constructs in the Rogers-Greenhalgh framework may indicate that the framework has too many variables, that each construct was not adequately measured in this study, or that there is something unique about the VA system that causes the variables to respond differently than in other settings. The authors suggest that patient characteristics be added as a construct in the framework. Future research is needed to replicate the current findings with use of more objective measures, confirmatory factor analyses, and an examination of validity.

Cook, J.M., Dinnen, S., Thompson, R., Ruzek, J., Coyne, J.C., Shnurr, P.P. (2014). A Quantitative test of an Implementation Framework in 38 VA Residential PTSD Programs. *Admin Policy Mental Health*. Advance online publication. doi: 10.1007/s10488-014-0590-0

## Dissociative-PTSD found to be a distinct subtype in line with DSM-5

**Key Findings:** The current study examined whether certain covariates played a significant role in differentiating those with PTSD only, and those with the new dissociative sub-

continued on page 3

#### FEATURED IN THIS EDITION

- Providers in a supportive work environment are more likely to use evidence-based treatments
- Dissociative-PTSD found to 1 be a distinct subtype in line with DSM-5
- Group-based treatment for traumatized veterans is effective in decreasing depression and PTSD symptoms
- Efficiency of inhibitory neural network activation may predict PTSD treatment outcome
- Neurobiological differences found between those with PTSD only, and those with PTSD and comorbid Alcohol Use Disorder
- Lower drop-out rate found for individuals with PTSD when treatment is integrative
- Demographics and symptom severity predict outcome and level of treatment
- Resilience may be a unidimensional construct when measured in traumaexposed veterans

- Alexithymia moderates relationship between number of traumas and PTSD symptoms
- Optimism strongly predicts physical and psychological health in prior POW detainees
- Three distinct causes of anger identified in OEF/OIF veterans
- PTSD is associated with lower risk for suicide after accounting for other mental health disorders
- 7 Cognitive processing therapy with or without written trauma account in a residential setting have similar treatment outcomes
- 7 Moral injury may be a risk factor for self-injurious thoughts and behaviors
- 8 Complex PTSD found to be distinct from borderline personality disorder in women
- Few veterans receive evidence-based treatments for PTSD within their first six months at a VA specialty clinic

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-todate findings, with the potential to guide and inform evidence-based treatment.

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continued from page 1

type of PTSD. Covariates included demographics, trauma experiences, anxiety, and depression. Five different subtypes of PTSD were identified including two low severity PTSD groups, an intermediate PTSD group, a severe PTSD group, and a dissociative-PTSD group. Among the current sample, 13.7% met criteria for dissociative-PTSD. None of the demographic, clinical, or trauma covariates that were included were found to significantly predict PTSD subtype.

**Study Type:** Retrospective file review of data previously collected during a clinical assessment, with self-report and clinician-rated data

**Sample:** Canadian veterans referred to the VA or a community mental health clinic for a psychiatric assessment (n = 432)

*Implications:* Results support the existence of a distinct dissociative-PTSD subtype. These findings suggest that treatments could be tailored to each PTSD patient depending on their subtype. Future research is needed to examine other factors that may decrease or increase the likelihood of dissociative PTSD group membership.

Armour, C., Karstoft, K.I., & Richardson, J.D. (2014). The co-occurrence of PTSD and dissociation: Differentiating severe PTSD from dissociative-PTSD. *Social Psychiatry Psychiatric Epidemiology, 49*(8), 1297-1306. doi: 10.1007/s00127-014-0819-y

# Group-based treatment for traumatized veterans is effective in decreasing depression and PTSD symptoms

**Key Findings:** The Veterans Transition Program (VTP) is a group-based treatment focused on reducing posttraumatic stress, and promoting adjustment to civilian life. VTP consisted of weekend-long group retreats taking place on three different weekends, with four weeks in between each retreat. The first phase of treatment involved building camaraderie, learning active listening, writing activities, psycho-education on trauma, and development of attainable goals. The second phase involved a recreation of the target trauma, and receipt of feedback from group members. The third phase involved solidifying goals, job search skills, communication skills, and an educational workshop for significant others. Following participation in VTP, veterans with a history of military-related trauma reported significantly decreased PTSD and depression symptoms. Additionally, none of the participants in the current study dropped out of treatment.

**Study Type:** Pre-post treatment study with self-report measures

**Sample:** Male veterans whose lives were negatively impacted by a military-related trauma (n = 56)

*Implications:* VTP may be efficacious in reducing posttraumatic stress and depression for veterans with a history of military-related trauma. Considering the high dropout rate for PTSD treatments, the absence of treatment dropout in this study further supports its use with veterans who have dropped out of other treatment modalities. Future research with a control group and a randomized design is needed to examine the efficacy of VTP compared to other existing treatments.

Cox, D.W., Westwood, M.J., Hoover, S.M., Chan, E.K.H., Kivari, C.A., Dadson, M.R., & Zumbo, B.D. (2014). Evaluation of a group intervention for veterans who experienced military-related trauma. *International Journal of Group Psychotherapy*, *64*(3), 367-380.

# Efficiency of inhibitory neural network activation may predict PTSD treatment outcome

Key Findings: Participants performed a "Go/No-Go" task procedure measuring executive inhibitory control, while simultaneously undergoing functional magnetic resonance imaging (fMRI). Participants then received cognitive behavioral therapy (CBT) sessions once a week for two months. Six months post-treatment, participants were assessed again with clinician-rating measures. Results showed that seven participants responded to treatment (pre-treatment scores reduced by 50%), and six participants did not respond to treatment. Results of the fMRI showed that the efficiency of one's inhibitory neural network activation at baseline predicted response to CBT. Specifically, better response to CBT was related to activation of a more discrete fronto-striatal network while performing an inhibitory task. In contrast, more dispersed and greater activation of cortical and subcortical regions of the brain at pre-treatment was associated with poor response to CBT treatment.

**Study Type:** Longitudinal study with self-report, clinician-rating, and behavioral measures, and fMRI

**Sample:** Treatment-seeking individuals meeting DSM-IV criteria for PTSD were recruited through the Traumatic Stress Clinic in Australia between October 2003 and May 2005 (n = 13)

*Implications:* Results suggest that one's response to CBT may be predicted by the level and extent of activation in fronto-striatal networks during neural inhibition. Results may also identify a potential mechanism of treatment. More research with a larger sample is needed to further examine how the effi-

continued on page 4

continued from page 3

ciency of fronto-striatal networks is associated with treatment outcome.

Falconer, E., Allen, A., Felmingham, K.L., Williams, L.M., & Bryant, R.A. (2013). Inhibitory neural activity predicts response to cognitive-behavioral therapy for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 74(9), 895-901.

### Neurobiological differences found between those with PTSD only, and those with PTSD and comorbid Alcohol Use Disorder

Key Findings: Brain metabolite concentrations were compared among patients with PTSD and comorbid Alcohol Use Disorder (PAUD), patients with PTSD only, and trauma-exposed control participants with no PTSD symptoms. Results found that in comparison to PTSD-only patients, PAUD participants had normal glutamate and GABA levels in the temporal and parieto-occipital cortices respectively, yet lower glutamate levels, and GABA approaching higher levels in the anterior cingulate cortex. In the temporal lobe, N-acetylaspartate and choline-containing metabolites and myo-inositol levels were lower in PAUD participants compared to that of PTSD only and control participants. Within the PAUD participants, higher levels of cortical GABA and glutamate were associated with better neurocognitive abilities.

**Study Type:** Cross-sectional study with magnetic resonance spectroscopy

**Sample:** Patients with PTSD and comorbid AUD (n = 10), patients with PTSD only (n = 28), and trauma-exposed control participants without PTSD (n = 20)

Implications: Results suggest that significant differences in neurotransmitters can be found between individuals with comorbid PTSD and AUD, and those with PTSD only. Specifically, individuals with both PTSD and AUD may be drinking in an attempt to regulate these GABAergic and glutamatergic deficits in the temporal and parieto-occipital cortices, thereby causing damage to these systems and causing neuronal injury. Given these differences found in neurobiology, results suggest that individuals with comorbid PTSD and AUD may benefit from different treatments than those with PTSD only. Results should be replicated with a larger sample size.

Pennington, D.L., Abé, C., Batki, S.L., & Meyerhoff, D.J. (2014). A preliminary examination of cortical neurotransmitter levels associated with heavy drinking in posttraumatic stress disorder. *Psychiatry Research: Neuroimaging, 224*(3), 281-287. doi: 10.1016/j.psychresns.2014.09.004

## Lower drop-out rate found for individuals with PTSD when treatment is integrative

**Key Findings:** Treatment drop-out rates of patients with 12 different psychological disorders were examined. Disorders included bereavement, borderline personality disorder, generalized anxiety disorder, obsessive-compulsive disorder, other personality disorders, panic disorder, psychotic disorders, social phobia, somatoform disorders, Posttraumatic Stress Disorder (PTSD), eating disorders, and depression. While no significant differences were found in drop-out rates between treatments for nine out of 12 diagnostic categories, significant differences were found in drop-out rates between types of treatments for depression, eating disorders, and PTSD. Integrative treatments had the lowest dropout rates for PTSD and depression, while Dialectical-Behavioral Therapy (DBT) had the lowest dropout rate for eating disorders. Integrative treatments were defined in this study as those including multiple methods of treatment together, such as DBT that includes behavioral, cognitive, mindfulness and interpersonal techniques.

**Study Type:** Meta-analysis of treatment studies focused on a specific diagnostic category

**Sample:** Treatment studies (n = 587)

Implications: The lack of differences found in treatment drop-out rates for nine out of 12 diagnostic categories suggests that the common factors between treatments (e.g., therapeutic alliance, rationale for problem, and belief in treatment method), and not the actual techniques, may be enough to prevent dropout. Results also suggest that integrative treatments for individuals with depression and PTSD, and DBT for those with eating disorders, may be the best approaches to minimize patient dropout. Future prospective research is needed to examine the actual causes of dropout among different types of therapies and diagnostic categories.

Swift, J.K., & Greenberg, R.P. (2014). A treatment by disorder meta-analysis of dropout from psychotherapy. *Journal of Psychotherapy Integration*, 24(3), 193-207. doi: 10.1037/a0037512

## Demographics and symptom severity predict outcome and level of treatment

**Key Findings:** A comparison of demographics and pre-treatment symptoms among veterans receiving VA outpatient treatment (individual Cognitive Processing Therapy; CPT) versus those receiving VA residential treatment (combined group and individual CPT) found that the inpatient and outpatient samples were different from each other on all demographic and pre-treatment symptom variables. Specifically, patients in residential treatment reported significantly

higher scores on all measures (PTSD and depression symptoms), while outpatients were more likely to be male, white, employed, married, younger, to have fewer years of education, and to be from a more recent era of service than those in residential treatment. While symptoms improved for all participants over time, outpatients consistently reported lower symptom scores than inpatients.

**Study Type:** Pre-post treatment study with self-report and clinician-administered measures

**Sample:** Veterans (n = 992) who met diagnostic criteria for PTSD and received at least one session of Cognitive Processing Therapy (CPT), who were admitted to either outpatient (n = 514) or residential (n = 478) VA treatment

*Implications:* Results may aid clinicians in selecting the appropriate level of care for their patients based on pre-treatment symptoms and demographics. Additionally, demographics and pretreatment symptoms may help predict expectations for treatment outcome. Future research is needed to examine how demographic and symptom severity scores influence treatment choice, treatment outcome, and changes in policies. Additionally, future research should compare the efficacy of individual CPT to that of combined individual and group CPT in decreasing PTSD and depression symptoms.

Walter, K.H., Varkovitzky, R.L., Owens, G.P., Lewis, J., & Chard, K.M. (2014). Cognitive processing therapy for veterans with posttraumatic stress disorder: A comparison between outpatient and residential treatment. *Journal of Consulting and Clinical Psychology*, 82(4), 551-561. doi: 10.1037/a0037075

### Resilience may be a unidimensional construct when measured in traumaexposed veterans

Key Findings: During the initial validation of the 25-item CD-RISC, exploratory factor analysis identified five different factors. However, replication studies have not found further support for this five-factor model. The goal of this study was to examine the factor structure of the 25-item CD-RISC in a sample of trauma-exposed veterans. Results of an exploratory factor analysis did not support the five-factor structure, but suggested that a two-factor model was the best fit. The two factors were adaptability and self-efficacy. However, only the adaptability factor was consistent with the authors' conceptualization of resilience: "A factor of protection against the development of psychopathology following trauma exposure."

**Study Type:** Cross-sectional study with self-report and clinician-administered measures

**Sample:** U.S. veterans who served post-9/11 (n = 1981).

continued on page 6



### Alexithymia moderates relationship between number of traumas and PTSD symptoms

Key Findings: Level of alexithymia was significantly and positively associated with level of PTSD symptoms after controlling for age, gender, and depression. The number of traumas was also significantly and positively correlated with PTSD symptoms, but not with alexithymia, after controlling for age, gender, and level of depression. Alexithymia scores moderated the relationship between number of traumas experienced, and level of PTSD symptoms. Among refugees high in alexithymia, those with more trauma exposure showed higher level of PTSD. Among refugees with lower levels of alexithymia, PTSD symptoms were not significantly different between those with high number of traumas versus low number of traumas.

**Study Type:** Cross-sectional study with self-report measures

**Sample:** North Korean refugees (n = 199)

*Implications:* Results suggest that the more traumatic events an individual experiences, being able to identify and express emotions becomes more important in preventing or reducing symptoms of PTSD. Considering that alexithymia has been associated with dissociation (a symptom of PTSD), future prospective research is needed to examine the moderating role of alexithymia in the relationship between number of traumas and dissociation.

Park, J., Jun, J.Y., Lee, Y.J., Kim, S., Lee, S.H., Yoo, S.Y., & Kim, S.J. (2015). The association between alexithymia and posttraumatic stress symptoms following multiple exposures to traumatic events in North Korean refugees. *Journal of Psychosomatic Research*, 78(1), 77-81. doi: 10.1016/j.jpsychores.2014.09.007



# Optimism strongly predicts physical and psychological health in prior POW detainees

Key Findings: Analysis of the United States' longest detained Prisoners Of War (POWs) from Vietnam found that those with higher levels of optimism post-repatriation were physically and psychologically healthier than those with low levels of optimism. Optimism predicted physical health and fewer sleep disturbances. Overall positive health post-repatriation was negatively associated with elevated PTSD symptoms, higher MMPI-Psychopathic Deviate (PD; indicating antisocial traits) scores, and lower levels of optimism.

**Study Type:** Cross-sectional study with self-report measures

**Sample:** Vietnam-era repatriated United States POWs (n = 128)

*Implications:* Results suggest that optimism significantly predicts higher levels of physical and psychological health, and acts as a buffer against stress in the long term. Considering that level of optimism can be altered via intervention, treatments focused on fostering optimism may prove to be effective for service members as a preventative measure. Future research is needed to examine the effects of optimism on physical and mental health.

Segovia, F., Moore, J.L., Linnville, S.E., and Hoyt, R.E. (2014). Optimism predicts positive health in repatriated prisoners of war. *Psychological Trauma: Research, Practice, and Policy*. Advance online publication, doi: 10.1037/a0037902

continued from page 5

Initial sample (n = 990); Replication sample (n = 991)

*Implications:* Results suggest that the construct of resilience is unidimensional in a sample of trauma-exposed veterans. While results shed light on the complexity of measuring resilience in this population, use of the adaptability factor may be helpful in measuring resilience in post-9/11 military veterans. Future research is needed to identify additional factors that may be related to having an adaptive response to stress and trauma in a military population.

Green, K.T., Hayward, L.C., Williams, A.M., Dennis, P.A., Bryan, B.C., Taber, K.H., Davidson, J.R.T....Calhoun, P.S. (2014). Examining the factor structure of the Connor-Davidson Resilience Scale (CD-RISC) in a post-9/11 U.S. military veteran sample. *Assessment*. Advance online publication. doi: 10.1177/1073191114524014

### Three distinct causes of anger identified in OEF/OIF veterans

Key Findings: A qualitative analysis of anger among OEF/OIF veterans found that 50% of participants reported difficulty with anger following their separation from the military. Three distinct patterns of anger were identified in this study including anger as a result of loss of structure during civilian reintegration, anger associated with moral injury during wartime, and anger related to Posttraumatic Stress Disorder (PTSD). Among those only struggling with the loss of structure, anger problems tended to be short lived. However, those with moral injury or PTSD experienced anger problems that lasted for years. Overall, veterans who experienced anger problems reported that their reintegration into civilian life was negatively impacted as a result.

**Study Type:** Qualitative longitudinal study with semi-structured, open-ended interviews

**Sample:** Afghanistan and Iraq war veterans surveyed between 2009 and 2011 (n = 24)

*Implications:* Results suggest that there may be three distinct types of anger problems among veterans. This is the first study to identify the causes of the anger problems experienced by veterans, and to link these causes with long-term or short-term difficulties. Clinicians are encouraged to identify the cause of the anger in veteran patients in order to provide more specialized services for those with PTSD or moral injury. Future research with a larger sample size and structured measures is needed to replicate these results.

Worthen, M., & Ahern, J. (2015). The causes, course, and consequences of anger problems in veterans returning to civilian life. *Journal of Loss and Trauma: International Perspectives on Stress & Coping, 19*(4), 355-363. doi: 10.1080/15325024.2013.788945

## PTSD is associated with lower risk for suicide after accounting for other mental health disorders

Key Findings: Among veterans who received services at the VA, 0.6% died of suicide, 12% of whom were diagnosed with PTSD. While initial analyses revealed that PTSD was significantly associated with risk for suicide, after accounting for the influence of other comorbid psychiatric diagnoses (Major depressive disorder [MDD], non-MDD, drug use disorder [DUD], and alcohol use disorder [AUD]), PTSD was associated with lower risk for suicide. PTSD was significantly and positively associated with MDD, non-MDD DUD, and AUD, yet MDD most significantly influenced the relationship between PTSD and suicide.

**Study Type:** Retrospective cross-sectional analysis of clinical database with clinician diagnosis

**Sample:** Veterans (*n* = 5,913,648) receiving treatment at the VA from 2007 to 2008. Data obtained by linkage of the VA Patient Care and the Center for Prevention's National Death Index database

*Implications:* Results suggest that it may not be the diagnosis of PTSD, but the comorbid diagnoses, especially MDD, that lead to suicide. Results emphasize the importance of identifying veterans with PTSD and co-morbid mental health disorders, especially MDD, in an effort to reduce suicide risk. Future prospective research is needed to examine variables that mediate the relationship between PTSD and suicide.

Conner, K.R., Bossarte, R.M., He, H., Arora, J., Lu, N., Tu, X.M., Katz, I.R. (2014). Posttraumatic stress disorder and suicide in 5.9 million individuals receiving care in the veterans health administration health system. *Journal of Affective Disorders*, 166, 1-5. doi: 10.1016/j.jad.2014.04.067

### Cognitive processing therapy with or without written trauma account in a residential setting have similar treatment outcomes

**Key Findings:** Veterans who were admitted to an eightweek residential treatment program for TBI and PTSD received one of two types of treatment: Cognitive Processing Therapy (CPT; cognitive therapy plus written account of trauma) or Cognitive Processing Therapy – Cognitive (no written component). Previous research found that CPT-C resulted in more rapid symptom reduction and lower dropout rate compared to standard CPT. This study sought to further examine these findings. Analysis of symptom scores in the current sample revealed a significant decrease in PTSD and depressive symptoms from pre- to post-treatment in individuals receiv-

ing both types of treatment. While patients receiving standard CPT experienced a greater decrease in depressive symptoms than those receiving CPT-C, after an experiment-wise correction was applied, this finding was no longer significant. No significant differences were found between treatment groups in PTSD symptoms or drop-out rate (17% overall).

**Study Type:** Retrospective cross-sectional analysis with self-report and clinician-rated data

**Sample:** Male veterans (n = 86) with PTSD and history of TBI receiving either CPT-C (n = 46) or CPT (n = 40) in an eight-week PTSD/TBI residential program

Implications: Results suggest that both CPT and CPT-C delivered in a residential program significantly decrease symptoms of PTSD and depression in military veterans with PTSD and TBI, and may be good treatment options for other veterans with similar diagnoses. Additionally, depression and PTSD may respond differently to cognitive therapies, emphasizing the importance of assessing for comorbid disorders before choosing a treatment plan. The overall low drop-out rate may be due to better access to social/supportive care in the current setting. Future research should include a randomized study design, larger sample size, more time-points, and outpatient settings in order to further examine whether CPT-C and CPT patients differ in symptom reduction.

Walter, K.H., Dickstein, B.D., Barnes, S.M., Chard, K.M. (2014). Comparing effectiveness of CPT to CPT-C among veterans in an Interdisciplinary residential PTSD/TBI treatment program. *Journal of Traumatic Stress.* 27(4), 438-445. doi: 10.1002/jts.21934

## Moral injury may be a risk factor for self-injurious thoughts and behaviors

**Key Findings:** Service members with a history of suicide attempts reported higher levels of self-transgressions (acting in ways that violate one's moral code) and other-transgressions (witnessing others act in ways that violate one's moral code) than those with no history of self-injurious thoughts and behaviors. Those with a history of suicide attempts also reported higher levels of self-transgressions and other-transgressions compared to those who had previous suicidal ideation. Participants with a history of suicide attempts were significantly more likely to have experienced other-transgressions compared to those without a history of suicide attempts. Self-transgressions were significantly correlated with severity of current suicidal ideation.

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

continued on page 8

### RESEARCH OUARTERLY

continued from page 7

**Sample:** Air Force and Army personnel (n = 151) who were currently receiving outpatient mental health treatment

Implications: Results suggest that certain aspects of moral injury place service members at risk for self-injurious thoughts and behaviors. Specifically, psychological distress associated with witnessing immoral acts and/or the troubling consequences of others' actions may be an important factor to consider when addressing self-injurious thoughts and behaviors among military personnel. Additionally, service members endorsing high levels of self-transgressions should be carefully assessed for current suicidality. Future prospective research with a larger sample and the addition of clinician-rated measures is needed to replicate the current findings.

Bryan, A.O., Bryan, C.J., Morrow, C.E., Etienne, N., & Ray-Sannerud, B. (2014). Moral injury, suicidal ideation, and suicide attempts in a military sample. *Traumatology*, 20(3), 154-160. doi: 10.1037/h0099852

## Complex PTSD found to be distinct from borderline personality disorder in women

Key Findings: Among women with a history of childhood abuse, latent class analysis identified four distinct categories of participant symptoms including a "Low Symptom" group (those with low symptoms on all measures), a "PTSD" group (those only scoring high on measure of PTSD), a "Complex PTSD" group (CPTSD; those scoring high on PTSD and experiencing lack of self-organization), and a "BPD" group (scoring high on measure of BPD, PTSD, and experiencing lack of self-organization). No significant demographic differences were found among groups. Symptoms found to be unique to the BPD group included frantic efforts to avoid perceived or real abandonment, unstable sense of self, intense interpersonal relationships, and impulsiveness. Additionally, the BPD group was significantly higher than the CPTSD group in self-injurious and suicidal behaviors.

**Study Type:** Retrospective analysis of archival dataset with self-report and clinician-administered measures

**Sample:** Women with a history of childhood abuse enrolled in a clinical trial for PTSD (n = 280)

*Implications:* Results support that CPTSD is an empirically separate diagnosis from BPD. The distinct profiles of BPD versus CPTSD symptoms may indicate that different treatments are needed for each diagnosis. Specifically, treatment for BPD should focus on self-injurious behaviors, issues with dependency, and strengthening the sense of self, while treatment for CPTSD should focus on reduction of avoidance.

improvement of self-concept, and processing of traumatic memories. Future research is needed to develop a recommended duration of treatment for CPTSD, as no current recommendations yet exist. Additionally, future research is needed to develop a valid measure of CPTSD.

Cloitre, M., Gervert, D.W., Weiss, B., Carlson, E.B., & Bryant, R.A. (2014). Distinguishing PTSD, complex PTSD, and borderline personality disorder: A latent class analysis. *European Journal of Psychotraumatology, 5*. Advance online publication. doi: 10.3402/ejpt.v5.25097

# Few veterans receive evidence-based treatments for PTSD within their first six months at a VA specialty clinic

Key Findings: Analysis of treatment of PTSD patients during their first six months at a VA specialty clinic revealed that only 4% to 14% received an evidence-based therapy. Additionally, those who did receive evidence-based therapy had a median of only five sessions, while a typical course of CPT includes 12 sessions and a full course of PE ranges from eight to 18 sessions. Further analyses used a minimum threshold of eight sessions to constitute an adequate dose of therapy, revealing that only 2% of veterans with PTSD received a sufficient dose of PE or CPT during their first six months of treatment. Several factors influenced whether or not providers used evidence-based treatments, including previous experience with or use of such treatments, customized training experiences, and prolonged contact with the facilitation team.

**Study Type:** Cross-sectional, mixed-methods study of treatment provided at VA PTSD specialty clinics

**Sample:** Patients from VA PTSD specialty clinics receiving any evidence-based therapy sessions during the first six months of fiscal year 2010 (n = 1924)

*Implications:* Results suggest that VA efforts to utilize evidence-based treatments have not been fully successful. Therefore, customized trainings for providers that include exposure to evidence-based treatments and prolonged contact with the facilitation team may increase the likelihood that veterans will receive evidence-based therapy. Additional research is needed to examine the implementation of evidence-based therapies in VA specialty clinics located in different regions of the country, and with a larger sample size.

Watts, B.V., Shiner, B., Zubkoff, L., Carpenter-Song, E., Ronconi, J.M., & Coldwell, C.M. (2014). Implementation of evidence-based psychotherapies for posttraumatic stress disorder in VA specialty clinics. *Psychiatric Services*, *65*(5), 648-653.