CTU

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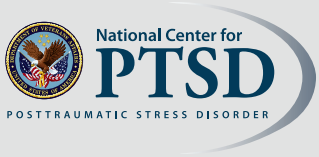

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TREATMENT

Preventive intervention targets intimate partner violence in military couples

A previous randomized clinical trial showed that Strength at Home, a trauma-informed group intervention, was effective in reducing intimate partner violence (IPV) in male Servicemembers and Veterans. The investigators at the National Center for PTSD who developed the intervention have now tested a new couples version of Strength at Home designed to prevent IPV before it starts. Participants included 69 male Servicemembers and Veterans and their female partners who were experiencing relationship difficulties but who had not engaged in IPV. Couples were randomized to 10 weekly sessions of the Strength at Home Couples Program (SAH-C) or a supportive prevention group and assessed at posttreatment and 6- and 12-month follow-up. Couples who received SAH-C engaged in less physical IPV (Hedges's *g* = -.06 to -.32) and psychological IPV (-.34 to -.57) at all time points than those receiving the supportive intervention. At the 12-month follow-up, 22% of Servicemembers and Veterans and 19% of partners who received SAH-C were physically violent, compared with 41% and 44% in the supportive condition. Relationship satisfaction did not differ between conditions. Nearly twice as many participants completed SAH-C (8 or more sessions) than the supportive intervention (60% vs. 34%, respectively), suggesting that SAH-C is a tolerable and preferred treatment. Although the sample and effect sizes were small, these findings indicate SAH-C is a promising treatment for preventing IPV in military couples.

Read the article: http://www.ptsd.va.gov/professional/articles/article-pdf/id45454.pdf

Taft, C. T., Creech, S. K., Gallagher, M. W., Macdonald, A., Murphy, C. M., & Monson, C. M. (2016). Strength at home couples program to prevent military partner violence: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*. Advance online publication. PILOTS: 45454

Veterans' PTSD symptom presentation may determine which medication they receive

According to the VA/DoD PTSD practice guideline, SSRIs and SNRIs are the only medications recommended as first-line treatments for PTSD. In practice, however, providers prescribe a much wider variety of pharmacological treatments for PTSD. Investigators with the National Center for PTSD recently examined whether prescribing patterns varied according to the severity of different PTSD symptom clusters. Investigators identified 105,819 Iraq and Afghanistan Veterans newly diagnosed with PTSD between 2008 and 2011. By examining VA medical records, the investigators tracked Veterans' psychotropic medication prescriptions for one year after diagnosis. Of the 42,936 Veterans who received any medication, most (92%) were first treated with an SSRI or SNRI. More severe numbing symptoms were associated with increased odds that a Veteran would receive an SSRI, SNRI, or other antidepressant (*OR* = 1.17). Prescription of anxiolytics, sedatives or hypnotics (received by 42% of the sample) was associated with more severe re-experiencing (*OR* = 1.13) and sleep (*OR* = 1.07) symptoms. Antipsychotics, which are not recommended for PTSD, were prescribed to 20% of the sample, most commonly to Veterans with heightened re-experiencing (*OR* = 1.28) and numbing (*OR* = 1.10) symptoms. Although there is little evidence that patients with PTSD may be differentially responsive to certain classes of medication based on the unique presentation of their PTSD

symptoms, these results suggest that the severity of specific symptoms is guiding prescribing practices.

Read the article: http://www.ptsd.va.gov/professional/articles/article-pdf/id45449.pdf

Harpaz-Rotem, I., Rosenheck, R., Mohamed, S., Pietrzak, R., & Hoff, R. (2016). Initiation of pharmacotherapy for post-traumatic stress disorder among veterans from Iraq and Afghanistan: A dimensional, symptom cluster approach. *British Journal of Psychiatry Open*, *2*, 286–293. PILOTS: 45449

Results of trial of CBT for PTSD in schizophrenia at odds with prior research

The February 2015 issue of *CTU-Online* described the results of a randomized controlled trial showing that PE and EMDR were effective for PTSD in patients with serious mental illness. Recently, investigators from the United Kingdom examined whether a different intervention using cognitive restructuring to target PTSD is also effective in this population. The study enrolled 61 community-dwelling adults (60% men) diagnosed with full or subthreshold PTSD and either schizophrenia or schizoaffective disorder. Participants were randomized to treatment as usual (TAU) or TAU plus up to 16 sessions of a manualized, cognitive-behavioral intervention for PTSD that taught cognitive restructuring skills. CAPS scores improved in both groups and gains were maintained over the 1-year follow-up period. There was no advantage for the CBT group on any outcomes, including symptoms of PTSD, schizophrenia, anxiety and depression as well as functioning and quality of life. The investigators did not describe whether TAU targeted PTSD specifically, so it is not clear why TAU participants improved so much (averaging a 24 point reduction on the CAPS.) These results differ from a prior trial by the same authors showing that the CBT intervention outperformed TAU for participants with PTSD and comorbid serious mental illness (mostly severe mood disorders). Further study is needed to determine whether only some types of CBT are effective in PTSD patients with comorbid schizophrenia and schizoaffective disorder.

Read the article: https://doi.org/10.1017/S0033291716002117

Steel, C., Hardy, A., Smith, B., Wykes, T., Rose, S., Enright, S., . . . Mueser, K. T. (2016). Cognitive–behaviour therapy for post-traumatic stress in schizophrenia. A randomized controlled trial. *Psychological Medicine*. Advance online publication. PILOTS: 45487

Antioxidants for treating PTSD and substance use disorder

N-acetylcysteine, an antioxidant used for acetaminophen overdose and other medical problems, has shown promise for improving emotion regulation and executive functioning in people with addiction or impulse control disorders. Researchers at the Medical University of South Carolina investigated whether the drug may have similar benefits in patients with comorbid PTSD and substance use disorder (SUD). The trial enrolled 35

Take NOTE

Review and meta-analysis of meditation for PTSD

A systematic review and meta-analysis by investigators with RAND Corporation pooled results from 10 randomized controlled trials of meditation interventions (such as yoga, mindfulness based stress reduction, and mantram repetition) for PTSD.

Read the article: https://doi.org/10.1037/tra0000180

Hilton, L., Maher, A. R., Colaiaco, B., Apaydin, E., Sorbero, M. E., Booth, M., . . . Hempel, S. (2016). Meditation for posttraumatic stress: Systematic review and meta-analysis. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. PILOTS: 45482

Meta-analysis synthesizes research on prazosin for PTSD

Investigators from the University of North Dakota recently published the results of a systematic review and meta-analysis of 6 randomized controlled trials examining the efficacy of prazosin for global PTSD symptoms, nightmares, and sleep impairment.

Read the article: https://doi.org/10.4088/PCC.16r01943

Singh, B., Hughes, A. J., Mehta, G., Erwin, P. J., & Parsaik, A. K. (2016). Efficacy of prazosin in posttraumatic stress disorder: A systematic review and meta-analysis. *The Primary Care Companion for CNS Disorders, 18*. PILOTS: 45486

Systematic review of medical marijuana for mental health

Investigators with Abraham Ribicoff Research Facilities reviewed 13 studies examining the efficacy of marijuana for psychiatric symptoms. The review did not identify any randomized trials of marijuana for PTSD, but did include trials of nabilone (a synthetic drug that mimics THC) among patients with PTSD.

Read the article: https://doi.org/10.4088/JCP.15r10036

Wilkinson, S. T., Radhakrishnan, R., & D'Souza, D. C. (2016). A systematic review of the evidence for medical marijuana in psychiatric indications. *The Journal of Clinical Psychiatry*, *77*, 1050-1064. PILOTS: 45484

Veterans diagnosed with SUD (80% had alcohol use disorder) and full or subthreshold PTSD. Participants were recruited from a VA clinic where they were receiving intensive outpatient group cognitive behavioral therapy for SUD. They were randomized to receive *N*-acetylcysteine (2,400mg/day) or placebo for 8 weeks. At the end of treatment, Veterans who received *N*-acetylcysteine had more improvement than Veterans who received placebo in self-reported PTSD symptoms (measured with the PCL-M; $d = -.36$), but not clinician-rated PTSD symptoms (measured with the CAPS). Compared with placebo, *N*-acetylcysteine was also associated with greater reductions in amount ($d = .41$) and frequency ($d = .39$) of alcohol or drug cravings, but not craving intensity. At the 1-month follow-up, group differences in PTSD symptoms and cravings were no longer significant. Whether *N*-acetylcysteine would have more durable effects on comorbid PTSD/SUD symptoms if Veterans had continued to take it is a question that remains to be answered.

Read the article: https://doi.org/10.4088/JCP.15m10239

Back, S. E., McCauley, J. L., Korte, K. J., Gros, D. F., Leavitt, V., Gray, K. M., ... & Kalivas, P. W. (2016). A double-blind randomized controlled pilot trial of N-acetylcysteine in veterans with posttraumatic stress disorder and substance use disorders. *The Journal of Clinical Psychiatry*. Advance online publication. PILOTS ID: 45625

No differential effect of exposure and cognitive therapy on PTSD symptom clusters

Although evidence suggests that different trauma-focused psychotherapies have similar effectiveness, clinicians may expect that some protocols will be better than others at reducing certain PTSD symptoms. To test this theory, a team of investigators from Bar-Ilan University and New York University compared the effect of Prolonged Exposure and cognitive therapy on specific PTSD symptom clusters. The study used data from the Jerusalem Trauma Outreach and Prevention Study (see the October 2011 *CTU-Online*), a randomized trial that recruited 756 adult trauma survivors from emergency rooms between 2003-2007. This secondary analysis included only those participants who received Prolonged Exposure ($n = 63$) or cognitive therapy ($n = 41$). The investigators expected that PE would be better at targeting avoidance whereas cognitive therapy would have an advantage for re-experiencing symptoms. However, the treatments were similarly effective for each PTSD symptom cluster. In addition, there was no evidence that participants with more severe symptoms in any given cluster did better in one treatment versus the other. One important caveat is that this trial focused on preventing PTSD in recently traumatized participants, so results may not generalize to patients with diagnosed PTSD. The findings, however, suggest that although PE and cognitive therapy use different therapeutic techniques, they are equally effective in reducing PTSD symptoms across the board.

Read the article: https://doi.org/10.1111/papt.12103

Horesh, D., Qian, M., Freedman, S., & Shalev, A. (2016). Differential effect of exposure-based therapy and cognitive therapy on post-traumatic stress disorder symptom clusters: A randomized controlled trial. *Psychology and Psychotherapy: Theory, Research and Practice*. Advance online publication. PILOTS: 45483

Study examines benefits of online intervention for comorbid PTSD and substance use

Internet interventions may be an effective way to deliver treatment for PTSD and comorbid substance use disorders in Veterans. A prior randomized trial showed that VetChange, a web-based intervention for hazardous drinking, led to significant improvements in drinking and self-reported PTSD symptoms in OEF/OIF Veterans (see the August 2013 *CTU-Online*). Investigators from the National Development and Research Institutes, Inc. recently tested Thinking Forward, an online treatment targeting both PTSD and substance use. Thinking Forward is a self-administered cognitive behavioral intervention consisting of 24 online modules that include interactive exercises and Veteran stories illustrating common symptoms and coping strategies. The study included 162 Iraq and Afghanistan Veterans (93% male) enrolled in VA primary care who reported hazardous drinking and at least subthreshold PTSD symptoms. Participants were randomized to either TAU or TAU plus Thinking Forward for 12 weeks. The groups showed similar improvements in PTSD symptoms during treatment, with 41% in the intervention group and 31% in the TAU group reporting a ≥10 point decrease in PCL score. The only group difference was that Thinking Forward participants reported fewer heavy drinking days (but not total drinking days) compared with TAU participants during the intervention and three months later. It is not clear why VetChange had positive effects on PTSD and Thinking Forward did not. However, the smaller sample size in the Thinking Forward study, different comparison conditions (TAU in Thinking Forward and delayed intervention for VetChange), and different study populations (VA primary care patients vs. community Veterans) make direct comparisons difficult.

Read the article: https://doi.org/10.1016/j.beth.2016.09.001

Acosta, M. C., Possemato, K., Maisto, S. A., Marsch, L. A., Barrie, K., Lantinga, L., . . . Rosenblum, A. (2016). Web-delivered CBT reduces heavy drinking in OEF-OIF veterans in primary care with symptomatic substance use and PTSD. *Behavior Therapy*. Advance online publication. PILOTS: 45481

Does the use of virtual reality technology enhance prolonged exposure?

Virtual reality has been used in the treatment of anxiety disorders to enhance engagement in exposure, but it is unknown if it improves outcomes compared with traditional exposure therapy. Investigators from VA Puget Sound led the first randomized controlled trial comparing virtual reality exposure (VRE) and standard prolonged exposure (PE) for PTSD. In the trial, 162 active-duty military personnel (96% male) were randomized to 10 sessions of VRE, PE, or a minimal attention waitlist. The VRE condition consisted of standard PE, except that imaginal exposures were conducted in a customized, computer-generated environment. PTSD symptoms were assessed with the Clinician-Administered PTSD Scale. Both PE and VRE resulted in significant decreases in PTSD symptoms at posttreatment compared with waitlist (ES= -1.33 and -.81, respectively). Although the investigators predicted that VRE would be superior to PE at posttreatment, the treatments did not differ at that time point. In fact, PE participants had signifi-

cantly greater PTSD symptom reductions than VRE participants at the 3- and 6-month follow-ups. Dropout was similar across treatment groups (44% for VRE and 41% for PE). These findings show that exposure therapy is an effective treatment for PTSD in active-duty military personnel. Although VRE was not as effective as standard PE in promoting sustained treatment effects, it is possible that further developments in VR technology will enhance treatment outcome.

Read the article: https://doi.org/10.1037/ccp0000134

Reger, G. M., Koenen-Woods, P., Zetocha, K., Smolenski, D. J., Holloway, K. M., Rothbaum, B. O., . . . Gahm, G. A. (2016). Randomized controlled trial of Prolonged Exposure using imaginal exposure vs. virtual reality exposure in active duty Soldiers with deployment-related posttraumatic stress disorder (PTSD). *Journal of Consulting and Clinical Psychology*. Advance online publication. PILOTS: 45485

Veterans Health Administration

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