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TREATMENT

Risperidone improves sleep in Veterans with PTSD, but not quickly

VA Cooperative Study 504 was a multisite randomized controlled trial that showed risperidone (a second-generation antipsychotic) was no better than placebo for reducing symptoms of chronic PTSD in Veterans (see [August 2011 CTU-Online](#)). Recently, investigators from the National Center for PTSD and Yale University took another look at data from this trial, this time examining whether risperidone had an impact on sleep problems. Veterans ($N = 267$) with chronic military-related PTSD who had not responded to a prior trial of standard pharmacotherapy for PTSD (a serotonin reuptake inhibitor) were randomized to 24 weeks of risperidone (1-4mg) or placebo. Most participants (88%) had clinically significant sleep problems at base-line, defined as a score of 5 or more on the Pittsburgh Sleep Quality Index (PSQI). Compared with the placebo group, Veterans who received risperidone showed greater improvement in overall sleep ($d = .24$), sleep quality ($d = .24$), and sleep duration ($d = .48$) on the PSQI and nightmares ($d = .26$) on the Clinician-Administered PTSD Scale. However, the advantages of risperidone did not emerge until 24 weeks, or approximately 6 months. The authors suggest that although risperidone appears efficacious for difficult-to-treat sleep symptoms associated with PTSD, the time delay is a significant limitation.

Read the article: <http://www.ptsd.va.gov/professional/articles/article-pdf/id44673.pdf>

Krystal, J. H., Pietrzak, R. H., Rosenheck, R. A., Cramer, J. A., Vessicchio, J., Jones, K. M., ... & Krystal, A. D. (2016). Sleep disturbance in chronic military-related PTSD: Clinical impact and response to adjunctive risperidone in the Veterans Affairs Cooperative Study #504. *Journal of Clinical Psychiatry*. Advance online publication. PILOTS ID: 44673

Evidence mounts on the effectiveness of the PTSD Coach app

A preliminary evaluation of the [PTSD Coach](#) mobile phone app indicated high user satisfaction and perceived helpfulness, but did not examine whether the app reduced PTSD symptoms (see [February 2014 CTU-Online](#)). Now, two small RCTs examined the app's efficacy in very different contexts. One, by investigators from Palo Alto University, the National Center for PTSD, and VA Palo Alto, tested the app in a community civilian sample. The other, by investigators from the National Center for PTSD and the VA Center for Integrated Healthcare, tested the app in VA primary care patients.

The first study involved 49 community-dwelling adults with PTSD symptoms (≥ 30 on PCL-C) but who were not in PTSD treatment. Participants were randomized to a PTSD Coach condition in which they could use the app as often as they would like or to a waitlist condition. After one month, reduction in PTSD symptoms was larger for the app group ($d = -.59$) than waitlist ($d = -.31$). However, the groups did not differ on PTSD improvement in either intention-to-treat (between-group $d = -.25$) or completer ($d = -.33$) analyses. Participants in the waitlist group were subsequently given the app to use for a month and reported a level of PTSD improvement similar to that observed within the first group given the app. Data on app use, convenience, and helpfulness suggest the app was feasible and acceptable.

Read the article: <http://www.ptsd.va.gov/professional/articles/article-pdf/id44676.pdf>

The second study included 20 Veterans engaged in a VA primary care clinic who scored ≥ 40 on the PCL-S and did not intend to begin specialty PTSD care. Veterans were allocated to 8 weeks of either self-managed PTSD Coach or clinician-supported PTSD Coach. The clinician-supported intervention (CS-PTSD Coach) is a manualized CBT developed by the investigators and delivered in four 20-minute sessions over 8 weeks. Sessions include guidance on app use, symptom monitoring, setting symptom reduction goals, between-session homework, and practice of the app's self-help tools. Both approaches to using PTSD Coach in primary care led to reductions in PTSD, with no group differences. But the effect size change in PTSD was larger for CS-PTSD Coach ($d = 1.40$) than for the self-managed approach ($d = .41$), as was the percentage of Veterans who reported a decrease of at least 10 points on the PCL (70% vs. 38%). Moreover, compared with the self-managed condition, Veterans who received clinician support were more likely to accept a referral for mental health treatment and attend at least one PTSD-focused treatment session.

Read the article: <http://www.ptsd.va.gov/professional/articles/article-pdf/id44682.pdf>

Investigators of both studies are planning larger RCTs to determine the efficacy of PTSD Coach as a PTSD intervention. Although the effect of PTSD Coach on PTSD symptoms may prove modest, the app could have public health value given its reach, help fill a gap in primary care for PTSD, and improve treatment engagement among patients who need more than self-help.

Miner, A., Kuhn, E., Hoffman, J. E., Owen, J. E., Ruzek, J. I., & Taylor, C. B. (2016). Feasibility, acceptability, and potential efficacy of the PTSD Coach app: A pilot randomized con-

trolled trial with community trauma survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. PILOTS ID: 44676

Possemato, K., Kuhn, E., Johnson, E., Hoffman, J. E., Owen, J. E., Kanuri, N., ... & Brooks, E. (2016). Using PTSD Coach in primary care with and without clinician support: A pilot randomized controlled trial. *General Hospital Psychiatry*, 38, 94-98. PILOTS ID: 44682

Improving too slowly (or too quickly) predicts dropout from PTSD and SUD treatment

Treatment dropout is a problem for patients receiving concurrent treatment for PTSD and substance use disorders. Recently, investigators with the University of Pennsylvania examined whether the rate at which the patient recovers impacts dropout in this comorbid population. This secondary analysis used data from 165 participants in a prior randomized controlled trial evaluating the efficacy of Prolonged Exposure, naltrexone, or their combination for co-occurring PTSD and alcohol dependence (see [August 2013 CTU-Online](#)). For those with low PTSD severity at baseline, rapid reductions in PTSD predicted much higher dropout (over 80%). Among participants with high PTSD severity at baseline, both fast and slow rates of improvement were linked with higher dropout. Rapid reduction in drinking behavior also predicted higher dropout, but only for participants who received PE or PE+naltrexone. The study did not evaluate why participants dropped out, but it may be that participants with rapid improvement discontinued treatment because they achieved desired improvements, whereas participants with slower improvement may have become discouraged or doubtful of the treatments' effectiveness. The au-

Take NOTE

Journal special issue: Veterans aging

The February 2016 issue of *The Gerontologist* features 15 articles that highlight topics related to the health and healthcare of aging Veterans.

Read the issue: <https://gerontologist.oxfordjournals.org/content/56/1.toc>

Pruchno, R. (Ed.). (2016). Veterans aging [Special issue]. *The Gerontologist*, 56(1).

Meta-analysis examining prevalence of subthreshold PTSD

Investigators with the VA Mid-Atlantic Region Mental Illness Research, Education, and Clinical Center conducted a meta-analytic review of 81 studies that reported subthreshold DSM-IV PTSD prevalence.

Read the article: <http://doi.org/10.1037/tra0000078>

Brancu, M., Mann-Wrobel, M., Beckham, J. C., Wagner, H. R., Elliott, A., Robbins, A. T., ... Runnals, J. J. (2016). Subthreshold posttraumatic stress disorder: A meta-analytic review of DSM-IV prevalence and a proposed DSM-5 approach to measurement. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8, 222-232. PILOTS ID: 44671

Meta-analysis of gender differences in trauma-focused treatment outcomes

A recent review and meta-analysis led by investigators with Phoenix Australia examined whether men and women respond differently to trauma-focused psychotherapy for PTSD.

Read the article: <http://doi.org/10.1037/tra0000110>

Wade, D., Varker, T., Kartal, D., Hetrick, S., O'Donnell, M., & Forbes, D. (2016). Gender difference in outcomes following trauma-focused interventions for posttraumatic stress disorder: Systematic review and meta-analysis. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. PILOTS ID: 44679

thors suggest possible strategies to reduce risk of dropout in this population, including educating patients about the potential for slow improvement, monitoring and discussing symptom changes, and variable-length approaches where treatment length is determined by patient response.

Read the article: <http://doi.org/10.1016/j.brat.2016.02.005>

Zandberg, L. J., Rosenfield, D., Alpert, E., McLean, C. P., & Foa, E. B. (2016). Predictors of dropout in concurrent treatment of posttraumatic stress disorder and alcohol dependence: Rate of improvement matters. *Behaviour Research and Therapy*, 80, 1–9. PLOTS ID: 44681

Adding collaborative care does little to enhance usual care for PTSD in low income patients

Collaborative care models in which care managers assist with the coordination of medical and mental health care are proven to improve treatment for depression. But, two prior trials conducted in VA have yielded mixed findings for PTSD. Recently, investigators from RAND Corporation examined whether collaborative care can enhance PTSD treatment in low resource settings where patients may have limited access to integrated care. The study took place at six Federally Qualified Healthcare Centers serving low income or uninsured patients. Adults with PTSD ($N = 404$) were randomized to usual care or to PTSD care management (PCM). Usual care participants received education and evidence-based medication. PCM participants received usual care and were also assigned to a care manager who provided additional education, motivational interviewing, and linkages to community resources. PCM showed no advantage over usual care with respect to PTSD symptoms or quality of life. After one year, participants in both conditions had improved substantially with scores on the Clinician-Administered PTSD Scale dropping an average of 24.2 (usual care) and 26.8 (PCM) points. The results suggest that collaborative care may not be an effective strategy for treating PTSD in low resource settings, but one caveat is that patients in the PCM condition met with their care manager for an average of only 4 of 14 intended visits.

Read the article: <http://doi.org/10.1007/s11606-016-3588-3>

Meredith, L. S., Eisenman, D. P., Han, B., Green, B. L., Kaltman, S., Wong, E. C., . . . Tobin, J. N. (2016). Impact of collaborative care for underserved patients with PTSD in primary care: A randomized controlled trial. *Journal of General Internal Medicine*. Advance online publication. PLOTS ID: 44675

Perfect homework adherence not a requirement to benefit from Prolonged Exposure

Evidence-based psychotherapies for PTSD usually involve homework, but most clinicians know it is rare for patients to complete all assignments. Recently, investigators with Case Western Reserve University took a close look at how homework completion and perceived helpfulness relate to treatment outcome. Participants were 116 adults with chronic PTSD who received Prolonged Exposure as part of a prior randomized controlled trial comparing PE and sertraline (see [August 2014 CTU-Online](#)). At each session, participants reported their adherence to and rated the helpfulness of two kinds of homework: imaginal (listening to a recording of the trauma narrative) and *in vivo* (approaching avoided situations). Adherence to imaginal (but not *in vivo*) homework was associated with greater improvement in PTSD. Patients who completed a moderate amount of imaginal exposure homework fared as well as the most adherent patients, and better than those with poor adherence ($d = .51$). Perceived helpfulness of both imaginal and *in vivo* homework was related to better treatment outcome. These results, which show that patients do not need to complete all PE homework assignments to get better, are good news for clinicians whose patients struggle with homework compliance. This study also highlights the important role of perceived helpfulness of homework. Clinicians should consider how they can best enhance patient perceptions of the benefits of homework, rather than just encouraging homework completion.

Read the article: <http://doi.org/10.1016/j.beth.2016.02.013>

Cooper, A. A., Kline, A. C., Graham, B. P. M., Bedard-Gilligan, M., Mello, P. G., Feeny, N. C., & Zoellner, L. A. (2016). Homework "dose," type, and helpfulness as predictors of clinical outcomes in prolonged exposure for PTSD. *Behavior Therapy*. Advance online publication. PLOTS ID: 44672

ASSESSMENT

A new measure to assess functioning and well-being in PTSD

PTSD symptoms can impact daily life, leading to impaired functioning at work or in social relationships. For accurate assessment and treatment planning, it is important for clinicians to know which impairments are related to PTSD versus other co-occurring conditions. This is why investigators with the National Center for PTSD and San Francisco VA developed a measure to assess the impact of PTSD on functioning. The Posttraumatic Stress Related Functioning Inventory (PRFI) includes 27 items that measure functioning in three domains: work/school, relationships,

and quality of life. Each domain has a *Symptom Cluster Impact* subscale that assesses the impact of each PTSD cluster on the domain. This score can tell clinicians, for example, how much the patient perceives that re-experiencing symptoms are affecting work functioning. Each domain also has a *Total Symptom Impact* subscale that measures the impact of all PTSD symptoms. Investigators evaluated the psychometric properties of the PRFI in 251 Iraq and Afghanistan Veterans with full or subthreshold PTSD. The PRFI had good internal consistency (as $\geq .80$) and, as expected, correlated more strongly with *DSM-IV* PTSD symptoms than measures of depression or alcohol use. Among the subset of Veterans ($n = 109$) who completed the PRFI again a year later, test-retest reliability was acceptable (.71-.75). This preliminary

evaluation suggests that the PRFI has utility as a measure of PTSD-related functional impairment, though the authors note that revision for DSM-5 PTSD criteria may be needed.

Read the article: <http://www.ptsd.va.gov/professional/articles/article-pdf/id44674.pdf>

McCaslin, S. E., Maguen, S., Metzler, T., Bosch, J., Neylan, T. C., & Marmar, C. R. (2016). Assessing posttraumatic stress related impairment and well-being: The Posttraumatic Stress Related Functioning Inventory (PRFI). *Journal of Psychiatric Research*, 72, 104–111. PILOTS ID: 44674

Understanding how symptom change helps patients get well

Treating the symptoms of PTSD results in improved functioning and other aspects of quality of life. A new study by the National Center for PTSD reports on how much improvement in PTSD is needed in order to have a meaningful impact. Investigators used data from a randomized controlled trial that had found Prolonged Exposure was more effective than Present-Centered Therapy for treating PTSD in a sample of women—232 Veterans and 3 Army soldiers. Participants were classified into 4 mutually-exclusive groups according to their improvement on the Clinician-Administered PTSD Scale: No Response, Response (≥ 10 points), Loss of Diagnosis (Response + no longer meeting diagnostic criteria), or Remission (Loss of Diagnosis + CAPS < 20). Outcomes were clinically meaningful improvement and good endpoints on clinician-rated and self-reported measures of functioning and quality of life. Response (vs. No Response) was generally associated with improvement but not good endpoints. Loss of Diagnosis (vs. Response) was associated with both further improvement and good endpoints, but Remission (vs. Loss of Diagnosis) was associated with very limited further gains. One interesting finding was the substantial amount of symptom improvement associated with Loss of Diagnosis: 40 points on the CAPS. Altogether, these results show how treatment that leads to clinically significant improvement in PTSD can make a real difference in patients' lives.

Read the article: <http://www.ptsd.va.gov/professional/articles/article-pdf/id44678.pdf>

Schnurr, P. P., & Lunney, C. A. (2016). Symptom benchmarks of improved quality of life in PTSD. *Depression and Anxiety*, 33, 247–255. PILOTS ID: 44678

Why some Servicemembers' PTSD diagnoses are missing from electronic health records

When a patient is diagnosed with PTSD, there may be times when the provider forgets to—or chooses not to—document this diagnosis in the medical record. Investigators with the Center for Military Psychiatry and Neurosciences surveyed 543 Army mental health providers to find out when and why providers may fail to record a PTSD diagnosis. Army providers ($N = 543$) were recruited by email to participate in an online survey about routine practice. The survey asked providers to report non-identifying information about one randomly selected patient. One third ($n = 110$) of the providers described a patient they diagnosed with PTSD. Just over half (59%) of these providers had documented the PTSD diagnosis in the patient's medical record, whereas the corresponding 41% had not. Psychiatrists (83%) were more likely than psychologists (67%), social workers (50%), and other specialties (29%) to document PTSD. Across providers, the most common reason for not recording the PTSD diagnosis was to reduce stigma and protect the patient's military career. It is not known, though, how omitting the PTSD diagnosis may impact patients' access to or use of PTSD treatment. This study suggests that PTSD goes undocumented for many Servicemembers, and that prevalence estimates based on Army records may be underestimates. It will be important to investigate whether similar results are seen in non-military settings where the employer does not have access to the medical record or where diagnostic codes may be required for insurance reimbursement.

Read the article: <http://ps.psychiatryonline.org/doi/pdf/10.1176/appi.ps.201500292>

Wilk, J. E., Herrell, R. K., Carr, A. L., West, J. C., Wise, J., & Hoge, C. W. (2016). Diagnosis of PTSD by Army behavioral health clinicians: Are diagnoses recorded in electronic health records? *Psychiatric Services*. Advance online publication. PILOTS ID: 44680



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