CLINICIAN'S TRAUMA UPDATE

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ASSESSMENT

A caution against overusing the PCL-5 to diagnose PTSD

The PCL-5 was designed as a self-report measure of PTSD symptoms but has increasingly been used to determine a PTSD diagnosis based on predetermined cutoff scores. National Center for PTSD investigators recently commented on a meta-analysis of PCL-5 psychometric studies and raised three main concerns about using the PCL-5 to diagnose PTSD: patients can easily misinterpret items; cutoff scores vary across populations and intended uses of the scale; and using cutoff scores with the PCL-5 may encourage clinicians to see PTSD as an "all-or-nothing" diagnosis versus a continuum of distress.

Alhough it would be ideal to use a CAPS-5 along with other sources of information to establish a diagnosis, in practice, this is not always possible. The PCL-5 can still play an important role in PTSD assessment, but clinicians can take steps to enhance its usefulness. For instance, they can work to ensure that patients understand the PCL-5 items, either by first providing cues to the trauma-relatedness and time frame of the items or after by clarifying how patients interpreted items and adjusting scoring as appropriate. The PCL-5 score offers only one piece of a diagnostic puzzle that should incorporate both clinical judgment and the patient's reporting style. Reliance on a cutoff score alone, or even a range of scores, is not optimal for diagnosing PTSD.

Read the article: http://www.ptsd.va.gov/professional/articles/article-pdf/id1618482.pdf

Bovin, M. J., & Marx, B. P. (2023). The problem with overreliance on the PCL–5 as a measure of PTSD diagnostic status. *Clinical Psychology: Science and Practice, 30*(1), 122-125. PTSDpubs ID: 1618482

TREATMENT

Progress toward possible biomarkers of PTSD treatment response

A key goal of personalized medicine for PTSD is to identify who is most– or least– likely to benefit from particular PTSD treatments (see April 2022 *CTU-Online*). A multi-site team of investigators applied machine learning to neurophysiological data and compared this with clinical outcome data to identify possible biomarkers of treatment response.

Participants included 135 Veterans (17% female) who provided EEG data and participated in either PE or CPT at their local VA PTSD clinic. Participants and their providers chose the treatment; 91 engaged in CPT. The investigators collected EEG data from participants at rest at baseline and assessed PTSD symptoms at pre- and posttreatment using the CAPS. They then used machine learning to identify baseline connectivity patterns linked with greatest symptom reduction. A particular set of theta brain wave features distinguished those who responded to treatment (≥30% CAPS score reduction) from those who did not (AUC = .7, sensitivity = 72%). The model outperformed predictions based solely on demographic and clinical characteristics, and results were comparable among Veterans who received CPT versus PE.

The findings are promising, especially given the low cost of EEG relative to other brain imaging techniques. However, the results must be replicated in larger, more diverse samples before translating the technique to broader clinical practice or to predicting who will be generally treatment-resistant.

Read the article: https://doi.org/10.1038/s44220-023-00049-5

Zhang, Y., Naparstek, S., Gordon, J., Watts, M., Shpigel, E., Ei-Said, D., . . . Wu, W. (2023). Machine learning-based identification of a psychotherapy-predictive electroencephalographic signature in PTSD. *Nature Mental Health, 1*(4), 284-294. PTSDpubs ID: 1620164

Treatment discontinuation is similar in PTSD and depression

Dropout is generally assumed to represent a poor outcome that is particularly common in PTSD treatment. However, a prior study found that many patients who dropped out of PTSD treatment had already significantly improved (see February 2017 *CTU-Online*). A team lead by investigators at the National Center for PTSD and Milwaukee VA examined whether these findings would generalize to a VA psychotherapy clinic.

This study examined outcomes for 128 Veterans who started treatment in a clinic offering time-limited evidence-based psychotherapies for either PTSD (n = 87 in CPT or PE) or depression (n = 41 in CBT, ACT, or Interpersonal Therapy). Most participants were White (71.1%) and had served since the Persian Gulf War era (67.2%). Just over half of the participants (52.3%) did not complete treatment, with no difference in discontinuation between PTSD and depression treatments. Of participants who discontinued PTSD treatment, 51.1% had no change in PTSD symptoms prior to discontinuation, 12.8% had a symptom increase, and 27.7% had a symptom decrease. For depression treatments, 55% had no change, 15% a symptom increase, and 30% a symptom decrease.

These findings replicate the prior findings of improvement in some treatment dropouts and suggest that measurement-based care could help patients and therapists understand whether further treatment is needed.

Read the article: https://www.ptsd.va.gov/professional/articles/article-pdf/id1618716.pdf

Larsen, S. E., Hamrick, L. A., Thomas, K. B., Hessinger, J. D., Melka, S. E., Khaled, M., . . . Maieritsch, K. (2023). Symptom change prior to treatment discontinuation (dropout) from a naturalistic Veterans Affairs evidence-based psychotherapy clinic for PTSD and depression. *Psychological Services.* Advance online publication. PTSDpubs ID: 1618716

Varying treatment mechanisms for PTSD and prolonged grief disorder

Prolonged grief disorder (PGD) was added to the Trauma and Stressor-Related Disorders category in DSM-5-TR. PGD is characterized by persistent grief, longing for the deceased, and impaired identity, mood, and/or functioning following the loss of a loved one. PGD and PTSD share some diagnostic features (e.g., avoidance) and treatment components (e.g., imaginal exposure). Investigators at the University of New South Wales sought to determine if imaginal exposure had similar functions and outcomes for individuals with PGD or PTSD.

Civilians with PTSD (n = 55) and PGD (n = 45) participated in 12 (PTSD) or 14 (PGD) sessions of CBT. PTSD and PGD treatments had shared elements (imaginal exposure, cognitive restructuring, and relapse prevention), although PGD treatment included only 4 imaginal exposure sessions. Both groups reported similar symptom benefit over the course of treatment (on clinician-rated interview measures). However, those in PGD treatment showed less between-session SUDS habituation. Also, between-session SUDS habituation predicted better outcome for PTSD but not PGD. Also, between-session SUDS habituation predicted better outcome for PTSD but not for PGD.

For those whose traumatic event includes traumatic loss, differential diagnosis is important to determine which treatment approach will be most beneficial. Clinicians can expect that less habituation in imaginal exposure in PGD treatment is not problematic.

Read the article: https://doi.org/10.1080/20008066.2023.2193525

Bryant, R. A., Azevedo, S., Yadav, S., Keyan, D., Rawson, N., Dawson, K., . . . Hadzi-Pavlovic, D. (2023). Habituation of distress during exposure and its relationship to treatment outcome in post-traumatic stress disorder and prolonged grief disorder. *European Journal of Psychotraumatology, 14*(2), Article 2193525. PTSDpubs ID: 1619725

New data on the "point of diminishing returns" in psychotherapy for PTSD

For measurement-based care to be useful, clinicians must determine whether patients are showing enough improvement that they should continue treatment or switch to a different treatment. Previous work suggests that patients who have not shown a response by 8 or so sessions are unlikely to achieve a good outcome in trauma-focused psychotherapy for PTSD (see October 2019 *CTU-Online*).

Investigators from the Massachusetts Veterans Epidemiological Research and Information Center examined VA PTSD specialty clinic data in 2,182 Veterans receiving individual psychotherapy for PTSD to see whether session-by-session PCL-5s could predict treatment nonresponse. The probability of reaching clinically significant change was calculated at each session. Non-responders could be identified by a PCL-5 change <8 points by session 6 (sensitivity 80%; specificity 74%). Session 9 was identified as the average point of diminishing returns. However, those with more severe initial symptoms needed more sessions to achieve clinically significant change, often much longer than 12 sessions.

Multiple studies suggest that session 8 or 9 is a suitable time to determine where a patient is likely to continue benefiting from the current treatment. These studies also show that some patients will benefit if given more sessions. As always, shared decision making guided by measurement-based care should guide treatment decisions, including ongoing conversations about symptom change over the course of treatment.

Read the article: https://doi.org/10.1037/ser0000761

Darnell, B. C., Benfer, N., Vannini, M. B. N., Grunthal, B., Rusowicz-Orazem, L., Fielstein, E., & Litz, B. T. (2023). Expected symptom change trajectories for the early identification of probable treatment nonresponse in VA PTSD specialty care clinics: A proof-of-concept. *Psychological Services.* Advance online publication. PTSDpubs ID: 1619576

CPT and PE are both effective among Veterans in residential treatment for PTSD

The largest RCT of psychotherapy for PTSD found no clinically significant difference between outcomes for CPT and PE delivered in an outpatient format (see the February 2022 *CTU-Online*). Investigators at the VA Northeast Program Evaluation Center have now replicated these findings in Veterans treated in VA residential care for PTSD.

Using administrative data from the VA medical record and surveys, the investigators examined changes in PCL-5 scores among 1,130 Veterans with PTSD who completed at least 7 hours of individual CPT (n = 832) or PE (n = 297). PTSD severity did not differ by treatment group at program admission, discharge, and 4- and 12-month follow-up. Veterans in both groups reported large reductions in PTSD severity from baseline to 12-month follow-up (CPT d = 1.41, PE d = 1.51). These results suggest that PE and CPT are effective in this population of Veterans, who often have severe PTSD and comorbid conditions. While the large effect sizes are encouraging, it is important not to compare them directly to effect sizes in other studies because of differences in methodologies. For example, this study only included Veterans who received multiple sessions of treatment, whereas RCTs typically include all patients who were randomized—including those who dropped out.

Read the article: https://www.ptsd.va.gov/professional/articles/article-pdf/id1619013.pdf

Sippel, L. M., Gross, G. M., Spiller, T. R., Duek, O., Smith, N., Hoff, R., & Harpaz-Rotem, I. (2023). Comparative effectiveness of evidence-based psychotherapies for PTSD delivered in VA residential PTSD treatment. *Psychological Medicine.* Advance online publication. PTSDpubs ID: 1619013

Financial incentives for attendance improve PE completion for those with opioid use disorder

Preventing dropout from PTSD treatment is an active topic of investigation. Research on patients with comorbid PTSD and SUD has even examined financial incentives, a strategy typically used in SUD populations. A small study found that paying patients to attend PE treatment improved attendance and enhanced outcomes in individuals with OUD and PTSD (see June 2017 *CTU-Online*).

Building on these findings, investigators from the University of Vermont examined the effect of financial incentives on attendance and outcomes in 30 individuals with co-occurring PTSD and OUD (63.3% female, 96.7% White) who were randomized to 12 weeks of PE with a financial incentive, standard PE, or medication treatment as usual (either buprenorphine or methadone). Participants who received PE with an incentive could receive up to $920 for continued treatment attendance. In the PE conditions, participants who received an incentive were more likely than those in standard PE to complete ≥8 treatment sessions (90% vs. 20%, respectively). Both PE groups (but not the medication group) had a significant reduction in PTSD symptoms. No serious adverse events occurred. Results suggest that incentives may improve treatment engagement in this population and provide evidence for PE being safe and effective without prompting relapse in individuals with OUD.

Read the article: https://doi.org/10.1016/j.addbeh.2023.107688

Peck, K. R., Badger, G. J., Cole, R., Higgins, S. T., Moxley-Kelly, N., & Sigmon, S. C. (2023). Prolonged exposure therapy for PTSD in individuals with opioid use disorder: A randomized pilot study. *Addictive Behavior, 143,* Article 107688. PTSDpubs ID: 1618957

Sleep problems impact CPT treatment response in active duty servicemembers

Sleep problems are prevalent in active duty servicemembers and are often comorbid with PTSD. Although PTSD treatments improve insomnia and nightmares, these symptoms often remain clinically significant. The question of whether preexisting sleep problems actually affect treatment outcome has largely been unexplored. Investigators from the STRONG STAR Consortium examined the presence of baseline sleep problems and their impact on treatment outcome in CPT.

This secondary analysis of an RCT included 233 servicemembers with PTSD (90% male) receiving CPT in a group or individual format. At baseline, most participants had clinically significant sleep problems (82% insomnia, 75% nightmares, 64% excessive daytime sleepiness, and 68% probable sleep apnea). Although there were significant reductions in insomnia, nightmares, and daytime sleepiness following treatment, pre-post effect sizes were small (ds = -.16 to -.27), and 53%-73% of participants reported clinically significant symptoms at posttreatment. Servicemembers had significant improvements in PTSD symptoms regardless of baseline sleep problems, but those with insomnia had higher PTSD symptoms throughout treatment. Participants with sleep apnea or daytime sleepiness had greater PTSD symptom improvement when treated in the individual (vs. group) format. These findings suggest that sleep problems may hinder optimal response to PTSD treatment and suggest that addressing comorbid sleep disorders within the context of PTSD treatment could improve treatment outcomes.

Read the article: https://www.ptsd.va.gov/professional/articles/article-pdf/id1618968.pdf

Pruiksma, K. E., Taylor, D. J., Wachen, J. S., Straud, C. L., Hale, W. J., Mintz, J., . . . Resick, P. A. (2023). Self-reported sleep problems in active-duty US army personnel receiving PTSD treatment in group or individual formats: secondary analysis of a randomized clinical trial. *Journal of Clinical Sleep Medicine.* Advance online publication. PTSDpubs ID: 1618968

Intermittent theta burst stimulation may improve PTSD symptoms when used to treat Veterans with depression

Transcranial magnetic stimulation (TMS) may improve comorbid PTSD symptoms when used to treat depression, but other data suggest that comorbid PTSD lowers the antidepressant efficacy of TMS. Intermittent theta burst stimulation (iTBS) is a newer, more efficient form of TMS that has shown efficacy in depression, although its effect on comorbid PTSD symptoms is unknown. Using a retrospective case series, investigators at the VA San Diego Healthcare System assessed the efficacy of iTBS vs. TMS for treating PTSD symptoms in patients with depression and whether

the presence of PTSD symptoms diminished the antidepressant treatment effect of either.

Outcomes were compared between Veterans enrolled in a clinical TMS program receiving either standard TMS ($n = 47$) or iTBS ($n = 51$). Both treatments were associated with a decrease in depressive (PHQ-9) and PTSD (PCL-5) symptom severity, and there was no difference between treatments. Baseline PCL-5 score did not predict PHQ-9 change with treatment.

This study was limited by the relatively small, retrospective, nonrandomized design. However, these findings provide additional support for the clinical utility of iTBS and suggest it may have benefit for PTSD symptoms. Additionally, this study suggests neither a comorbid diagnosis of PTSD nor pretreatment severity of PTSD symptoms negatively impacts the antidepressant effects of TMS or iTBS.

Read the article: https://doi.org/10.1016/j.neurom.2023.02.082

Shenasa, M. A., Ellerman-Tayag, E., Canet, P., Martis, B., Mishra, J., & Ramanathan, D. S. (2023). Theta burst stimulation is not inferior to high-frequency repetitive transcranial magnetic stimulation in reducing symptoms of posttraumatic stress disorder in veterans with depression: A retrospective case series. *Neuromodulation, 26*(4), 885-891. PTSDpubs ID: 1619244

Take NOTE

Review of PTSD meta-analyses

An umbrella review of meta-analyses examined the quality of existing meta-analyses of PTSD treatment in specific populations.

Read the article: https://doi.org/10.1016/j.cpr.2022.102239

Kip, A., Iseke, L. N., Papola, D., Gastaldon, C., Barbui, C., & Morina, N. (2023). Efficacy of psychological interventions for PTSD in distinct populations - An evidence map of meta-analyses using the umbrella review methodology. *Clinical Psychology Review, 100,* Article 102239. PTSDpubs ID: 1614108

The effect of trauma on eating disorder treatment outcomes

A systematic review examined whether the experience of traumatic events or a diagnosis of PTSD affected treatment outcomes for patients with an eating disorder.

Read the article: https://doi.org/10.1002/eat.23933

Convertino, A. D., & Mendoza, R. R. (2023). Posttraumatic stress disorder, traumatic events, and longitudinal eating disorder treatment outcomes: A systematic review. *International Journal of Eating Disorders. 56*(6), 1055-1074. PTSDpubs ID: 1618552

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