Journal of Anxiety Disorders 68 (2019) 102156

Contents lists available at ScienceDirect

Journal of Anxiety Disorders

journal homepage: www.elsevier.com/locate/janxdis

Commentary

Patients need to remain in treatment for PTSD to receive the full benefit

Barbara O. Rothbaum*, Lauren B. McSweeney

Department of Psychiatry & Behavioral Sciences, Emory University School of Medicine, Atlanta, GA, USA

ARTICLE INFO

Keywords:
Posttraumatic stress disorder (PTSD)
Trauma focused treatment
Exposure therapy
Intensive Outpatient Program (IOP)
Treatment retention
Treatment dropout

ABSTRACT

Despite strong evidence to support trauma-focused treatment as the gold standard in treating PTSD, many studies report elevated drop-out rates. The study by Holmes et al. (2019) examines temporal patterns of treatment non-completion and reported individuals who improved at a greater rate attended all sessions. This commentary discusses some of the factors that contribute to premature termination, including treatment modality (e.g., exposure-based), barriers to care, treatment format, motivation, treatment resistance, and lack of multimodal assessments. Future investigations comparing individual differences in response to treatment would allow for the examination of characteristics that facilitate or impede treatment response.

Posttraumatic stress disorder (PTSD) has been increasingly recognized as a public health concern. PTSD is associated with significant physical, psychosocial, and economic hardships. Trauma-focused therapies such as exposure-based and cognitive therapies, particularly prolonged exposure (PE) and cognitive processing therapy (CPT), are efficacious for the treatment of PTSD and are recommended in various professional treatment guidelines.

The recent study by Holmes et al. (2019) examines temporal patterns of treatment non-completion and the relationships among non-completion, PTSD, and overall mental health functioning outcomes in 188 individuals with PTSD engaged in CPT. Results revealed drop-out rates of 42%, primarily occurring between sessions two and five. Contrary to the hypothesis, data did not fit the dose-effect or good-enough level models. Instead, individuals who improved at a greater rate in their PTSD symptoms and overall mental health functioning attended all 12 sessions. An unusual feature of this study was the number of therapists, 80 in total, and more than in any published study of which we are aware. Of these 80 therapists, 41% had a doctorate, 41% masters degree, 7% bachelors degree, and 5% were MDs. We are also not aware of any studies using bachelors level therapists. The parent study tested different consultation methods and found that consultation and tape review achieved the best outcomes for patients, although the authors report that did not influence the results of the current study. However, with such a large cadre of therapists, and many of them relatively inexperienced, it makes sense that closer supervision with tape review helped them deliver more adherent therapy that helped patients achieve better outcomes. It is hard to understand how this did not influence the current results. The main takeaway from this report and the parent study is that patients with PTSD need a full dose of treatment delivered with fidelity.

The authors highlight an important challenge in the treatment of PTSD—retention. While recent studies have continued to demonstrate the effectiveness of trauma-focused treatment in reducing symptoms of PTSD, studies have also made note of the number of individuals who discontinue treatment prematurely. One important component to the treatment of PTSD is exposure to specific stimuli (thoughts, feelings, emotions, situations, etc.) that serve as reminders of the traumatic experiences, which some believe to be an adverse or undesirable aspect of trauma-focused treatment. As a result, research has focused on the use of exposure and whether it increases treatment drop-out rates. The current study posits that specific individuals who may pose a "relatively higher risk for discontinuing treatment" may be better suited for CPT without the written account, which subsequently occurs during the period in which this study reported the highest drop rate (i.e., sessions 2–5).

While there are suggestions that adding exposure to cognitive therapy increases drop-out rates, it also appears that exposure-based therapies do not differ in drop-out rates compared to other active treatments and are, in fact, equivalent to drop-out rates for psychological interventions for other disorders such as depression. A meta-analysis by Imel, Laska, Jakupcak, and Simpson (2013) aimed to address the mixed literature by comparing drop-out rates between treatments that include exposure to trauma-related stimuli. Across 42 studies, the average drop-out rate was 18%; no differences in drop-out rates were found among trauma-focused treatments. Drop-out rates were more strongly associated with treatment modality and number of sessions than the amount of focus on trauma-related stimuli. A recent study comparing CPT to written exposure therapy (WET) in 126

* Corresponding author at: Emory University School of Medicine, 12 Executive Park Drive, 3rd Floor, Atlanta, GA 30329, USA.
E-mail address: brothba@emory.edu (B.O. Rothbaum).

https://doi.org/10.1016/j.janxdis.2019.102156

Available online 30 October 2019

Veterans concluded that WET was non-inferior to CPT and was associated with a significantly lower drop-out (6.4% in WET vs 39.7% in CPT), indicating that exposure to the traumatic material is not, *de facto*, associated with higher drop-out (Sloan, Marx, Lee, & Resick, 2018). Therefore, it is important to consider other possible causes of drop-out in trauma-focused therapies besides the inclusion of exposure.

Several patient factors have been identified as moderators of engagement (e.g., gender, race, ethnicity, age, comorbidities, stigma, logistical barriers) in trauma-focused treatment, but there is insufficient evidence to guide patient decisions about which treatment formats may work best for whom (Forman-Hoffman et al., 2018). One promising treatment format yielding strong empirical support is massed trauma-focused treatment. Although nascent, recent studies and program evaluations (Yasinski, Sherrill, Maples-Keller, Rauch, & Rothbaum, 2017) have started to examine massed treatment formats (e.g., massed PE, massed CPT) delivered via intensive outpatient programs (IOP). These effective new formats increase retention rates (90%–100%) and provide a model of care not available in traditional outpatient settings.

When an IOP may not be feasible or available, one promising modification to traditional outpatient treatment (OP) entails administering a measure of intent to complete (ITC) at the onset of therapy and a measure of intent to attend (ITA) at the end of each session. A recent study by Shulman, Buck, Gahm, Reger, and Norr (2019) found that the ITA predicted drop out and that patients who completed the ITA were less likely to drop out than those who were not administered the ITA. Indeed, as noted by Shulman et al. (2019), although the ITA does not directly assess dropout, it facilitates a discussion regarding barriers to care and assists in solution focused problem solving.

The study by Holmes et al. (2019) can also be considered to be examining what is an effective dose of CPT. The answer was not what they hypothesized—a full dose (all 12 sessions) was required for the best response. This question is important in considering treatment resistance in PTSD. The Emory Treatment Resistance Interview for PTSD (E-TRIP; Dunlop, Kaye, Youngner, & Rothbaum, 2014) is a clinician-administered scale that quantifies the level of treatment resistance in patients with PTSD. Recently modified, the Emory Treatment Resistance Interview for PTSD – Short Version (E-TRIP-S) assesses patient's prior response to efficacious PTSD psychotherapy and medication treatments that are set forth by the VA/DoD (2017 guidelines). In the E-TRIP, a minimal dose of evidence-based psychotherapy was considered at least six sessions. Perhaps this definition should be reconsidered in light of the current findings. Identifying patients with treatment-resistant PTSD may serve as a useful tool to both predict drop-out and inform clinical care. For example, if a patient endorses an elevated treatment resistance score, a higher level of care (e.g., IOP) may be recommended.

As noted by Holmes et al. (2019), although patients reported reduced PTSD symptoms through engagement in CPT, a majority failed to report favorable end-state functioning in overall mental health. Other types of outcome assessments may be useful if the desired outcome is detecting reductions in PTSD symptoms and reducing treatment drop out—assessing barriers to care, improvements in quality of life, and PTSD treatment resistance—and may provide additional information that is useful in determining which treatment format (IOP, OP) may best fit the needs of a patient. Psychophysiological assessments are very useful in PTSD and anxiety (Loucks et al., 2019), but have sometimes revealed different outcomes than clinical measures (Rothbaum et al., 2014). Future investigations comparing individual differences in response to treatment formats (IOP vs. OP) and trajectories of response to treatment would allow for the examination of characteristics that facilitate or impede treatment response and could greatly improve clinical care. For now, the message remains that patients need to remain in care for PTSD to receive the full benefit.

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