Published in final edited form as:

J Trauma Stress. 2013 December ; 26(6): 776–779. doi:10.1002/jts.21858.

Written Exposure Therapy for Veterans Diagnosed with PTSD: A Pilot Study

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Abstract

There is a need to identify alternative treatment options for posttraumatic stress disorder (PTSD), especially among veterans where PTSD tends to be more difficult to treat and dropout rates are especially high. One potential alternative is written exposure therapy, a brief intervention shown to treat PTSD among civilians effectively. This study investigated the feasibility and tolerability of written exposure therapy in an uncontrolled trial with a sample of 7 male veterans diagnosed with PTSD. Findings indicated that written exposure therapy was well tolerated and well received. Only 1 of the 7 veterans dropped out of treatment, no adverse events occurred during the course of treatment, and veterans provided high treatment satisfaction ratings. Clinically significant improvements in PTSD symptom severity were observed for 4 veterans at posttreatment and 6 veterans at the 3-month follow up. Moreover, 5 of the 7 veterans no longer met diagnostic criteria for PTSD 3 months following treatment. These findings suggest that written exposure therapy holds promise as a brief, well tolerated treatment for veterans with PTSD. However, additional research using randomized controlled trial methodology is needed to confirm its efficacy.

To ensure that all veterans receive evidence-based care for posttraumatic stress disorder (PTSD), the Department of Veterans Affairs (VA) has disseminated cognitive processing therapy (CPT; Resick & Schnicke, 1992) and prolonged exposure (PE; Foa, Hembree, & Rothbaum, 2007) throughout the VA health care system. Even with these efforts, many veterans experience long waits to receive these treatments (Maguen, Madden, Cohen, Bertenthal, & Seal, 2012) and when they do receive treatment, as many as 35% of treated veterans may be unresponsive or do not complete treatment (e.g., Gros, Yoder, Tuerk, Lozano, & Acierno, 2011). Given the apparent barriers to accessing and benefiting from evidence-based treatments for PTSD, the VA needs to identify, disseminate, and implement alternative methods that are tolerable to patients and by which clinicians can swiftly and easily deliver the presumed active ingredients (i.e., repeated confrontation of feared memories, images, and situations; Institute of Medicine, 2008) of these evidence-based treatments (Sloan, Marx, & Keane, 2011).

Written exposure therapy (Sloan, Marx, Bovin, Feinstein, & Gallagher, 2012), one possible alternative, is a brief, easy to administer, exposure-based intervention in which individuals write repeatedly about their identified traumatic stressor. This intervention is a modification of Pennebaker and Beall's (1986) written disclosure procedure, which Sloan and colleagues (Sloan & Marx, 2004; Sloan, Marx, & Epstein, 2005; Sloan, Marx, Epstein, & Lexington,

2007) found to significantly reduce PTSD symptom severity, but not be significantly different than a control writing condition in the extent to which it altered PTSD diagnostic status among trauma survivors (Sloan, Marx, & Greenberg, 2011). To enhance its potency, the investigators subsequently modified the written disclosure procedure to include psychoeducation, a treatment rationale, and a greater number of writing sessions to increase the dose of therapeutic exposure (Sloan et al., 2012). This modified protocol is now referred to as written exposure therapy to differentiate it from the earlier protocol.

The modified protocol was investigated in a recent randomized controlled trial with motor vehicle accident survivors with PTSD. Written exposure therapy was associated with significant reductions in PTSD symptom severity, relative to a wait-list comparison condition, with large between-group effect sizes observed (Sloan et al., 2012). Treatment gains were also maintained at a 6-month follow-up assessment. In addition, participants reported high levels of satisfaction with the treatment, with only 9% of participants dropping out. Although written exposure therapy shows promise, it has not yet been tested with veterans.

The current study examined the efficacy of written exposure therapy with a small sample of veterans diagnosed with PTSD in an uncontrolled trial. We expected that veterans treated with written exposure would show significant reductions in PTSD symptom severity. We also expected treatment dropout rates to be low and treatment satisfaction to be high.

Method

Participants

Of the nine veterans who were initially assessed, eight met eligibility criteria for the study. One declined to enroll in the treatment due to restricted available time. The seven veterans who enrolled in the treatment study were all White men with a primary diagnosis of PTSD. The average age was 54.29 years (range 29–66 years; $SD = 13.88$). All participants were service connected for mental health and/or physical health conditions. Service connection ranged from 30%–100%, with two participants receiving 100% service connection for PTSD. Six participants reported PTSD resulting from combat trauma (four Vietnam era, one Gulf War era, one Operation Iraqi Freedom) and one reported PTSD related to a military sexual trauma. The average number of years since the trauma exposure was 30.85 (range 7.30–42.50 years; $SD = 15.45$). All but one participant was receiving psychotropic medication, and those receiving medication had been on a stable dose for at least 2 months. All participants had an extensive outpatient psychosocial treatment history, and four also reported a psychiatric inpatient treatment history. Two of the seven participants were working at least part-time.

Measures

The Clinician-Administered PTSD Scale (CAPS; Weathers, Keane, & Davidson, 2001) was used to assess PTSD diagnosis and symptom severity. The CAPS assesses the 17 core symptoms of PTSD as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) and allows the interviewer to rate along 5-point ordinal scales the frequency and intensity of each symptom, the impact of symptoms on the patient's social and occupational functioning, the overall severity of the symptom complex, and the global validity of ratings obtained. The CAPS has a sensitivity of .81, a specificity of .95, and a test-retest reliability of between .90 and .96 over a 1-week period (Weathers et al., 2001). The CAPS was administered at each assessment period to assess treatment outcome.

The Structured Clinical Interview for DSM-IV Axis I Disorders with Psychotic Screen (SCID; Spitzer, Williams, Gibbon, & First, 1994) is a semistructured interview used to assess major Axis I disorders as well as to screen for the presence of psychotic symptoms. In the current study, the SCID mood disorders, substance use disorders, and psychotic screen modules were administered during the initial assessment to assess for study eligibility.

The Client Satisfaction Questionnaire (CSQ-8; Larsen, Attkisson, Hargreaves, & Nguyen, 1979) was administered on the last treatment session to examine satisfaction with the treatment. The CSQ-8 has good test-retest reliability, internal consistency, and sensitivity to treatment (Nguyen, Attkisson, & Stegner, 1983).

Procedure

The study was approved by the VA Boston Healthcare System Institutional Review Board. Veterans were recruited through clinic referrals and flyers posted throughout the local VA medical center. To participate, individuals had to have a current diagnosis of PTSD and be at least 18 years of age. Individuals with a current psychotic disorder, current substance dependence, or who were currently receiving psychosocial treatment for PTSD were excluded from the study. Individuals receiving medication were allowed to participate as long as their regimen was stabilized 2 months prior to study entry. All participants provided written, informed consent. Two doctoral-level clinicians conducted the diagnostic assessments. The clinician assessors did not serve as study therapists.

Written exposure therapy consists of five treatment sessions. The first session is 1 hour in duration and the remaining four sessions are 40 minutes in duration. The first session includes psychoeducation about PTSD and provides the treatment rationale. This information is followed by general instructions for writing about the traumatic experience during each session and specific instructions for the written narrative during the first session. The therapist reads the instructions and then leaves the printed instructions with the participant who completes writing alone. Briefly, participants are instructed to write about their index trauma during each writing session, providing as much detail as possible; participants are also instructed to include details on what they were thinking and feeling as the event occurred. Participants are instructed that they may write about the event as they look back upon it. The instruction to write about the traumatic event from a distance perspective was included based on research indicating that taking a distance perspective allows individuals to better engage in trauma recounting (e.g., Kross & Ayduk, 2011). At the conclusion of 30 minutes of writing, the therapist re-enters the room, instructs the participant to stop writing, and then inquires how the writing session went. Typically, a few minutes are spent discussing the participants' reaction to their writing session. Contact with the study therapist is minimal, with approximately 30 minutes of total contact during the first session and approximately 10–15 minutes of total contact time for the remaining four sessions. See Sloan et al. (2012) for additional details of the treatment. The first author served as the study therapist.

Results

One participant (14%) dropped out after three sessions, although he returned for all subsequent assessments. This participant indicated that he stopped treatment because he did not believe it would benefit him. No adverse events occurred during the course of treatment. Moreover, the participants reported high levels of satisfaction with written exposure therapy ($M = 30.00$, $SD = 2.60$, range 25–32).

Due to the small sample size, as well as the fact that we only had one group of participants who all received treatment, we examined the extent to which written exposure therapy

changed PTSD symptom severity for each participant using the clinically significant change score approach (Jacobson & Truax, 1991). CAPS total score served as the dependent variable. Prior research (e.g., Monson et al., 2008) suggests that a clinically significant change in the CAPS total score is represented by a reduction equal to or greater than 20 points. We also examined changes in participants' PTSD diagnostic status.

As displayed in Table 1, clinically significant reductions in PTSD symptom severity at posttreatment were observed for four of the seven participants. By the 3-month follow up, all but one participant displayed clinically significant improvements. In addition, five of the seven participants no longer met diagnostic criteria for PTSD both at posttreatment and follow-up. The two who continued to meet PTSD diagnostic criteria had the highest PTSD symptom severity at baseline (CAPS total scores of 88 and 90).

Discussion

Our findings suggest that written exposure therapy may be a promising treatment option for veterans with PTSD. Specifically, written exposure therapy was well tolerated, as only one participant dropped out of treatment. Additionally, none of the veterans requested or required therapist contact outside of the study for increased distress while engaged in the treatment, a common concern of therapists when clients engage in trauma exposure (Becker, Zayfert, & Anderson, 2004). Veterans also reported high levels of satisfaction with the treatment. Although two of the seven veterans continued to meet PTSD diagnostic criteria following treatment, all but one veteran displayed a clinically significant reduction in PTSD symptoms at the follow-up assessment.

Notably, there are other PTSD treatments that include the use of writing in their protocols. For instance, as part of the CPT protocol, individuals provide a written account of their trauma. Resick et al. (2008) showed that participants who only completed this portion of the CPT protocol displayed improvements in their PTSD symptoms that were comparable to participants who received the full CPT protocol and participants who received a version of CPT that did not include the written accounts. Another treatment for refugee trauma survivors that involves the writing of patients' trauma-focused autobiographies has been shown to reduce PTSD symptoms (for a review, see Robjant & Fazel, 2010). Coupled with these findings, our results further suggest that written narratives provide a potent method by which trauma survivors may recover from their experiences.

Our findings should be interpreted cautiously given the uncontrolled nature of the study, small sample size, and the homogeneity of the sample. In future work, we hope to address these limitations as well as examine for whom written exposure therapy may be most beneficial. Given the growing number of veterans presenting to VA and non-VA facilities for PTSD treatment, gaining a better understanding of what factors affect treatment efficacy will be increasingly important. In addition, written exposure therapy may be particularly useful within a stepped care approach environment. For example, written exposure therapy may be used with veterans endorsing PTSD symptoms who present to a primary care clinic. Written exposure therapy might also be used as an initial treatment for PTSD, followed by a determination as to whether or not the veteran requires additional treatment. The use of telehealth care approaches has substantially increased in VA health care settings in recent years (Sloan et al., 2011), and written exposure therapy may work particularly well as a telehealth approach given its format.

The findings of this study underscore the importance of understanding how much therapy constitutes a sufficient dose for effective PTSD treatment. Although limited research on this topic exists, that which does indicates that patients may need fewer treatment sessions for

effective PTSD treatment outcome than what is included in PTSD evidence-based treatments (e.g., van Minnen & Foa, 2006). As suggested by others (e.g., Institute of Medicine, 2008), additional investigation is needed regarding sufficient dose for PTSD treatment.

Acknowledgments

This study was supported by a National Institute of Mental Health grant (R34MH077658–02) awarded to Denise M. Sloan.

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Table 1

PTSD Symptom Severity Score as a Function of Participant and Assessment Period

Participant	Pretreatment	Posttreatment	3-month follow-up
Participant 1	90	80	63 ^b
Participant 2	49	27 ^b	13 ^b
Participant 3 ^a	63	44	15 ^b
Participant 4	45	23 ^b	16 ^b
Participant 5	45	44	25 ^b
Participant 6	88	53 ^b	69
Participant 7	64	23 ^b	20 ^b

Note. PTSD = posttraumatic stress disorder.

^a Participant dropped out of treatment, but returned for all subsequent assessments.

^b Clinically significant reduction in PTSD symptom severity from pretreatment.