

**Optimizing Treatment Response in VA Specialized Intensive/Inpatient PTSD Programs**  
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**Scientific Narrative**  
**Group Prolonged Exposure**  
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**Abstract**

**Objectives:** Prolonged Exposure therapy (PE) is a first-line treatment for posttraumatic stress disorder (PTSD); however few VA patients receive this treatment. One of the barriers to PE receipt is that this treatment is only available in an individual (one-on-one) format, whereas many VA mental health clinics provide the majority of their psychotherapy services in group format. In particular, VA PTSD residential rehabilitation programs (RRTPs) offer most programming in a group format. Thus, the current study was designed to pilot test a group format of PE in RRTPs.

**Research Plan:** We recruited 39 veterans who were engaged in care at the Battle Creek VA PTSD RRTP to participate in a Group PE protocol.

**Methods:** Participants engaged in twelve 90-minute sessions of Group PE over the course of 6 weeks. Treatment consisted of psychoeducation, rationale for treatment, and in vivo exposure to reduce trauma-related avoidance and thereby improve PTSD symptoms. PTSD symptoms were measured via the PTSD Checklist for DSM-5 (PCL-5) and depression symptoms were measured via the Patient Health Questionnaire (PHQ-9).

**Statistical Analysis Plan:** We measured PTSD symptoms and depression symptoms at baseline, endpoint (6 weeks), and at 2-month follow-up.

## **Background and Significance**

Prolonged Exposure therapy (PE) is a first-line treatment for posttraumatic stress disorder with the highest level of recommendation from the VA/DoD Clinical Practice Guidelines.<sup>1</sup> Despite its efficacy, very few VA patients with PTSD receive this treatment. In residential PTSD programs, an average of 8% received PE in fiscal year 2012 (range 0–67%).<sup>2</sup>

One of the barriers to PE receipt is that PE is only available in an individual (one-on-one) format, whereas many VA mental health clinics provide the majority of their psychotherapy services in group format. In particular, PTSD residential rehabilitation programs (RRTPs) offer most programming in group format. Perhaps as a result, cognitive processing therapy (CPT), a comparable trauma-focused treatment that is available in a group format, is provided 6 times more frequently than PE in residential care.<sup>2</sup> In order to improve access to PE, the current study was designed to pilot test a group format of PE in RRTPs.

## **Preliminary Studies and Current Status of the Field**

Promising preliminary evidence suggests that group PE is effective in outpatients.<sup>3,4</sup> Co-Investigator Dr. Erin Smith demonstrated that Group PE effectively reduced PTSD symptoms among 67 outpatient veterans.<sup>4</sup> Group PE may enhance treatment response in several ways. A group format may provide unique validation and normalization from a group of peers who have experienced similar types of traumatic experiences.<sup>4,5</sup> Group members may be motivated by improvement in their peers,<sup>4</sup> or may feel more accountable to complete exposure homework assignments when they report homework completion in front of a peer group instead of reporting just to their individual therapist.<sup>4</sup> A qualitative study of group PTSD treatment found that feedback and support from the group members was rated as the single most helpful component of therapy.<sup>6</sup> Group PE may also be a more efficient way to utilize specialty trained staff resources.<sup>3</sup> This could be particularly useful in PTSD-RRTPs, where PE offerings may be limited due to the scheduling constraints of staff. Thus, the current study was designed to test the feasibility of conducting this treatment in residential treatment participants.

## **Research Design and Methods**

**Sample.** Thirty-nine veterans who were receiving treatment in the PTSD RRTP at the Battle Creek VA were recruited to participate in a Group PE protocol. It should be noted that N=30 was the median sample size per arm for trials with continuous outcome measures in a review of 79 feasibility trials.<sup>7</sup> Thus, a sample size of 39 provides adequate feasibility data for a fully-powered randomized controlled trial to be performed at the conclusion of this pilot.

**Inclusion/Exclusion Criteria.** Inclusion and exclusion criteria were minimized and included only those factors that prevented the Veteran from benefiting from the current program. Inclusion criteria were current RRTP enrollment. Exclusion criteria were level of suicidal risk or severe cognitive impairment that in the judgment of the investigator made it unlikely that the patient could adhere to the study regimen. Eligible participants were offered participation in the study and those who agreed to participate reviewed consent forms with study staff.

**Goals and objectives.** Consistent with recommendations for feasibility studies,<sup>8,9</sup> the objectives of this study were to determine feasibility and acceptability of the intervention. We measured PTSD symptoms (PCL-5) and depression symptoms (PHQ-9) at baseline, endpoint (6 weeks), and at 2-month follow-up.

**Location of resources.** The treatment was provided by existing RRTP providers.

**Staff training.** Staff were trained in-person and through the provision of a treatment manual. All therapists had previously completed VA rollout training for PE. In addition to this training, Co-

Investigator Erin Smith provided an in-person therapist training session on Group PE. Therapists also received training on handling potential crisis situations and adverse events. Ongoing consultation was provided as needed.

**Treatment Manual.** The RRTP Group PE treatment manual was adapted from the manual used in Smith et al., 2015.<sup>4</sup> Therapists were provided with this manual to refer to after training. Therapists demonstrated proficiency via role play practice prior to delivering sessions to study participants.

**Treatment implementation and monitoring.** Protocol adherence and participant-rated acceptability were monitored during the treatment. All group sessions were audiotaped for the purposes of fidelity monitoring. 25% of tapes were randomly selected and coded by two independent raters on treatment adherence and therapist competence. Participant safety was continuously monitored. Participation in the study was discontinued if a participant experienced intolerable exacerbation of PTSD.

**Procedure.** Participants engaged in twelve 90-minute sessions of Group PE over the course of 6 weeks. Treatment consisted of psychoeducation, rationale for treatment, and in vivo exposure to reduce trauma-related avoidance and thereby improve PTSD symptoms.

**Participant process/feedback measures.** Participants were administered the PCL-5 and PHQ-9 at baseline, 6-weeks, and 2-month follow-up.

**Expected Outcomes.** The primary outcome measure was the PTSD Checklist (PCL-5) – a 20-item self-report measure.<sup>10</sup>

**Statistical Analysis Plan** As recommended in the feasibility study literature,<sup>11,12</sup> descriptive statistics were performed to study the feasibility of the adapted treatment. Effect size estimates from small developmental studies generally have large standard errors and are unstable.<sup>13</sup> Therefore, analyses were limited to the calculation of means and standard deviations for primary outcome (PCL-5) and secondary outcome (PHQ-9) at baseline, endpoint, and 2-month follow-up.

**Future Directions.** Determination of the feasibility of Group PE will enable a full-scale randomized controlled trial to test the effectiveness of this treatment.

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