

Treatment compliance in prolonged exposure therapy

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Supported by a grant from the Anxiety Disorders Association of America



INTRODUCTION

Prolonged exposure (PE) is an empirically-supported treatment for PTSD that utilizes not only in-session exposure exercises, but also homework (e.g., breathing skills and exposure) outside of treatment sessions, which is an integral component of the treatment plan (Foa & Rothbaum, 1998). Compliance with homework assigned is theoretically important to the treatment model in that both prolonged and repeated exposure to feared stimuli are thought to produce habituation. However, few studies have examined compliance with the homework assigned as part of PE, or whether compliance may be related to treatment outcome. Despite the strong empirical support for PE, clinicians express reservations about using this treatment (Becker, Zayfert, & Anderson, 2004), and some have suggested that the burden of homework in PE is one barrier to the use of this efficacious treatment (Scott & Stradling, 1997). Thus, the clinical implications of the impact of homework are relevant from both the client and therapist perspective. The purpose of the current study was to examine treatment compliance in PE for PTSD.

METHOD

Participants

•Female assault survivors with chronic PTSD were enrolled in a treatment outcome study (N=31) in which they could choose prolonged exposure (PE) or sertraline (an SSRI). Only those who chose PE were examined in the current study (N=23).
•Exclusion criteria included no PTSD diagnosis or PTSD not primary, current psychosis or suicidality, unstable bipolar disorder, pregnancy, and current substance or alcohol dependence.

Measures

•**PTSD Symptom Scale - Interview (PSS-I;** Foa, et. al, 1993). PSS-I is a 17-item interview measure of PTSD symptoms, corresponding to DSM-IV criteria. Scores for each item range from 0 (not at all) to 3 (very much).
•**Utility of Techniques Inventory (UTI;** Foa, Hembree, Dancu, 2002). The UTI is a measure of homework compliance in which items (i.e. "How often did you do in vivo exercises since the last session?") are answered on a five point scale from "not at all" to "more than 7 times".

Procedure

•PE consists of (1) breathing retraining (a form of relaxation) implemented during session 1; (2) psychoeducation about common reactions to trauma implemented during session 2; (3) imaginal exposure, or repeated reliving of the trauma memory initiated during session 3; and (4) in-vivo exposure, or real-life confrontation with feared, avoided trauma-related situations or activities initiated during session 2.

•Participants were encouraged to complete several tasks for homework each week, including exposure to feared situations (in-vivo) and listening to the tape of the in-session imaginal exposure.
•The PSS-I was completed at pre- and post-treatment.
•The UTI was completed at the beginning of each treatment session X as a report of homework completed between session X-1 and session X.

ANALYTIC PLAN

•Compliance was defined for the current study as a total sum score of UTI items assessing completion of exposure-based homework between sessions 3-10.
•Hierarchical regression was used to determine the relationship between treatment compliance and posttreatment PTSD severity while controlling for pretreatment PTSD severity scores.
•Participants were also categorized as compliant/non-compliant based on an average score on UTI exposure items. Those with an average score of 2 or greater (i.e., the patient engaged in the activity at least one time per activity per week) were rated as compliant (N=10) whereas those with an average rating of less than 2 (did not engage in homework) were rated as non-compliant (N=13).

RESULTS

Demographics & Scale Variables

	M	SD
Age	29.57	9.09
PTSD Severity (Pre)	27.78	7.43
	%	
Ethnicity (% African-American)	21.7	
Income (% <\$20,000)	50	
Employment (% Full-time)	34.8	
Education (% College)	39.1	
Primary Trauma (% Sexual Assault)	72.7	

Correlation & Regression

	1	2	3
1. PTSD Severity (Pre)	1.00		
2. UTI - Exposure	.18	1.00	
3. PTSD Severity (Post)	.65	-.56**	1.00

**p < .01.

Step 2	Beta	P-value
PTSD Severity (Pre)	.21	.27
UTI - Exposure	-.60	.01

Compliance vs. Non-Compliance

	PTSD Severity at Post	
	M	SD
Compliant	7.00	3.16
Non-Compliant	17.92	12.57

F(1,21) = 17.67, p < .01

DISCUSSION

The results of the current study suggest that repetition of exposure appears to be an important predictor of treatment outcome, supporting the theoretical underpinnings of PE. Pre-treatment PTSD scores were unrelated to overall treatment compliance—pre-treatment severity did not predict whether a participant would comply with the demands of homework. This is an important finding, in that clinicians may not be able to presume a priori which patients will comply with treatment based on severity, and is counter to clinical lore. However, treatment compliance is related to posttreatment PTSD severity, after controlling for pretreatment severity, with greater compliance scores predicting lower posttreatment PTSD. Thus, many patients do comply with treatment, and those who do stand to gain significantly more benefit from treatment. Clinicians should consider these results cautiously but carefully when making homework recommendations to patients, and this preliminary data could be used to support the rationale for homework in exposure therapy. Future research should examine the relationship between compliance and treatment outcome in a larger sample, and the impact of comorbid depression on compliance with homework assigned in PTSD treatment.

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