

AD_____

Award Number: W81XWH-05-1-0171

TITLE: Treatment of PTSD-Related Anger in Troops Returning From Hazardous Deployments

PRINCIPAL INVESTIGATOR: M. Tracie Shea, Ph.D.

CONTRACTING ORGANIZATION: Brown University
Providence, RI 02912

REPORT DATE: March 2008

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

REPORT DOCUMENTATION PAGE				<i>Form Approved</i> OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-03-2008		2. REPORT TYPE Annual		3. DATES COVERED (From - To) 1 MAR 2007 - 28 FEB 2008	
4. TITLE AND SUBTITLE Treatment of PTSD-Related Anger in Troops Returning From Hazardous Deployments				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER W81XWH-05-1-0171	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) M. Tracie Shea, Ph.D. E-Mail: m_shea@brown.edu				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Brown University Providence, RI 02912				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT Objective: The long-term goal of the research is to provide an effective intervention for the prevention of secondary and escalating effects of poor anger control associated with trauma-related anger problems. The specific objectives are to adapt an existing evidenced-based cognitive-behavioral intervention (CBI) for the treatment of anger to specific needs of military personnel returning from hazardous deployments, and to conduct a pilot study providing preliminary data on the adapted intervention. Design: There are two phases in this project. In Phase 1, protocol therapists gained experience with the cognitive-behavioral intervention (CBI) for anger control, and the manual adapted to the needs of the population. In Phase 2, participants are randomly assigned to CBI or a Supportive Therapy Control (supportive intervention, SI) condition. Each condition includes a maximum of 14 sessions, 75 minutes in length. Progress: Phase I of the study has been completed with 14 participants (12 in CBI and 2 in SI) entering treatment. Of the 12 starting CBI treatment, 8 completed all sessions. Of the 2 SI participants, 1 completed and 1 did not. Termination and 3 months follow up assessments have been completed for phase I completers. Phase II is in progress. Fifteen subjects have been assessed, 13 have been randomized, 12 started treatment (6 CBI and 6 SI). Of the 6 CBI subjects, 4 have completed and 2 are in progress. Of the 6 SI subjects, 3 have completed, one dropped after 5 sessions, and 2 are in progress. Termination and 3 month follow-up assessments are completed as they are due. Findings: Phase I CBI participants who completed treatment showed significant improvement on the four anger indices. Although very preliminary, findings are encouraging for the efficacy of CBI for the treatment of anger symptoms following deployment related trauma.					
15. SUBJECT TERMS PTSD, Trauma, Anger, Treatment					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (include area code)
			UU	6	

Table of Contents

Introduction 5

Body 5

Key Research Accomplishments 7

Reportable Outcomes 7

Conclusions 7

References N/A

Appendices N/A

INTRODUCTION: The long-term goal of the research is to provide an effective intervention for the prevention of secondary and escalating effects of poor anger control associated with trauma-related anger problems. The specific objectives are to 1) adapt an existing evidenced-based cognitive-behavioral intervention (CBI) for the treatment of anger to specific needs of military personnel returning from hazardous deployments, and 2) conduct a randomized pilot study providing preliminary data on the efficacy and acceptability of the adapted intervention in this population. The first phase involved administering the adapted CBI to 12 participants, and a supportive intervention (SI) to two participants. Our experience in Phase I led to further revisions to the manual. The second phase targets 50 male and female participants, randomly assigned to receive either CBI or SI.

BODY: Since our last progress report, we have completed Phase I of the study. Of the 17 participants who signed consent forms, 3 did not enter treatment (either not returning further calls or changing mind due to job constraints). Of the 14 who started treatment, 12 were assigned to CBI and 2 to SI. Of the 12 CBI participants, 8 completed and 4 were non-completers. Two of the 4 non-completers dropped due to high levels of anxiety, making it difficult to sit through sessions and focus on the material (both were referred for alternative treatment). Of the two SI participants, one completed and one discontinued after 10 sessions due to obtaining a job. Post-treatment and follow-up assessments have been completed for Phase I.

As noted in our previous progress report we made a change to our inclusion criteria to target individuals who we believe are most appropriate for the treatment. Phase II excludes subjects with severe PTSD and also requires evidence that clinically significant anger problems have persisted for at least 3 months. Additionally, we made extensive changes to the CBI manual and smaller changes to the Supportive Intervention Manual as needed based on our phase I experiences.

Phase II is in progress. Fifteen subjects have met criteria. One was deferred due to desire to start on medication and was not randomized. One is about to be randomized. Thirteen have been randomized; of these 12 started treatment including 6 CBI and 6 SI. Of the 6 CBI subjects, 4 have completed and 2 are in progress. Of the 6 SI subjects, 3 have completed, one dropped after 5 sessions, and 2 are in progress. Termination and 3 month follow-up assessments have been completed for all treatment completers as they are due. The SI participant who dropped out after 5 sessions was sent to training and redeployed, and has not completed post treatment assessments.

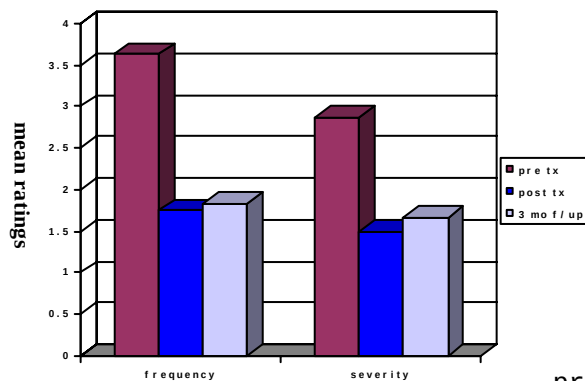
Data entry is in progress. Preliminary analyses of Phase I CBI completers showed significant improvement on the four anger indices examined (see table). Pre to Post Treatment Effect Sizes ranged from 1.1(Aggression Subscale from the Overt Anger Scale or OAS) to 2.9 (OAS irritability). Pre Treatment to follow-up Effect Sizes tended to be smaller but still ranged from 1.1 to 1.7. The figure below shows the change in mean scores from pretreatment to termination and 3 month follow-up for the CBI completers on the CAPS anger / irritability item.

Mean Scores at Pre and Post Treatment and 3 month f/up

	CAPS Anger*		OAS-M*	
	Frequency	Severity	Aggression	Irritability
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Pre	3.62	2.87	19.62	6.5
n=8	(.52)	(.35)	(14.52)	(.92)
Post	1.75	1.5	5.62	2.87
n=8	(1.03)	(.75)	(9.98)	(1.55)
ES**	2.3	2.3	1.1	2.9
f/up	1.83	1.66	2.0	3.83
n=6	(1.4)	(.97)	(2.13)	(3.3)
ES***	1.7	1.7	1.7	1.1

*Structured Interview; CAPS=Clinician Administered PTSD Scale;
OAS-M=Overt Aggression Scale Modified; **ES=pre to post treatment effect size (Cohen's d); ***pre treatment to follow-up effect size

**CAPS Anger Rating: mean
frequency and severity
Treatment of Trauma Related Anger Study**



These preliminary findings show promise for the efficacy of CBI for the treatment of anger symptoms following deployment related trauma. Limitations include the small sample size, absence of follow up data on four participants not completing treatment, and absence of a randomized control condition in this early phase. Phase II will provide data from a randomized sample including a supportive therapy control. Other concerns include a slower rate of recruitment than we envisioned. We believe this has been partially influenced by the hiring of additional clinicians at the VAMC, our primary source of recruitment. We have increased recruitment efforts with distribution of pamphlets and posters throughout military demobilizations and facilities, and by advertising the study in military newsletters. Another concern is that we have been unsuccessful in recruiting women. Only 1 woman has entered the study (Phase I), and dropped out after 2 sessions. We are considering ways to increase recruitment of women.

KEY RESEARCH ACCOMPLISHMENTS:

- Preliminary findings show CBI treatment to be acceptable to military personnel reporting anger problems following deployment. Initial results of pre to post treatment change on our target measures of outcome are encouraging with regard to effectiveness of CBI in this population.

REPORTABLE OUTCOMES:

- Shea MT, Lambert JF, Sevin E, Howard J, Davis N. Treatment of PTSD-Related Anger in Troops Returning From Hazardous Deployments. Poster presentation, ISTSS (International Society for Traumatic Stress Studies) Annual Meeting, Baltimore MD, November 2007.
- Shea MT. Treatment of Anger Problems: Strategies and Effectiveness. Grand Rounds presentation, St. Luke's Hospital, New Bedford, MA, February 2008.
- Shea MT, Lambert JF, Sevin E, Howard J, Davis N. Treatment of PTSD-Related Anger in Troops Returning From Hazardous Deployments. Brown University 12th Annual Research Symposium on Mental Health Sciences, Providence RI, March 2008.
- Shea MT, Lambert JF, Sevin E, Howard J, Davis N. Treatment of PTSD-Related Anger in Troops Returning From Hazardous Deployments. To be presented at the annual meeting of the Society for Psychotherapy Research, Barcelona Spain, June 2008.

CONCLUSIONS:

CBI appears to be acceptable, and preliminary findings show promise in terms of effectiveness in treating anger problems in military personnel following return from hazardous deployment. Ongoing recruitment, particularly of women, will remain a priority over the next year. Increased knowledge regarding the treatment of trauma related anger in veterans following war-zone trauma will be important in addressing this common problem and preventing secondary consequences.

APPENDICES:

None.