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

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## Table of Contents

Cover	1
SF 298	2
Introduction	4
Body	4
Key Research Accomplishments	6
Reportable Outcomes	6
Conclusions	6
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 evidence-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 of 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 continued Phase II of the study. During the period of this progress report (March 31, 2008 to March 31 2009), we signed consent forms and assessed 12 new participants. Of those 12 individuals, 8 were considered eligible and accepted into the study. Of these 8, one declined to enroll for unknown reasons, and one was redeployed. In total as of March 31, 2009, we had randomized 20 participants; 18 of these entered treatment. Nine either completed the full 14 sessions or stopped early because they felt they no longer needed treatment, 2 did not complete as they were redeployed, one failed to improve and was referred to other treatment, one dropped due to time pressures, and two dropped for unknown reasons. Three participants are in progress.

Data entry is in progress. As reported in last year's progress report, analyses of Phase I CBI completers showed significant improvement on the four anger indices examined. The table (see Table 1) below shows pre to post treatment and pretreatment to 3 month follow-up effect sizes on STAXI-II scales for 8 phase I and 10 Phase II participants. The Phase I participants are all CBI, whereas the Phase II includes both CBI and control (SI) participants (we do not want to break the blind on outcome until we have completed the study). The effect sizes are larger for the Phase I participants, which would be expected if control (SI) participants are changing less than CBI participants, although whether this is the case is unknown at this point. The figure below(see Figure 1) shows the change in mean scores from pretreatment to termination and 3 month follow-up for the Phase I CBI completers and the Phase II CBI and SI participants on the CAPS anger/irritability item.

These preliminary findings show promise for the efficacy of CBI for the treatment of anger symptoms following deployment-related trauma, although examination of the effect sizes for CBI and SI separately for Phase II participants is needed. These analyses will be conducted following assessment of final study participants. The findings to date, however, are not showing strong support for widespread acceptability and feasibility, as the number of participants completing the full 14 sessions is less than desired. Of the 18 entering treatment in Phase II, 9 (50%) had either completed all sessions or stopped because they had improved; 3 of the remaining 5 non-completers dropped due to logistical reasons (including redeployment). The two unknown reason cases plus the one failure to improve appear to be treatment related reasons for non-completion. These findings may suggest that for many of these veterans, shorter and perhaps more targeted treatments may be needed. On the other hand, dropping out of treatment is not uncommon in this population, and we cannot conclude that this is a limitation of the treatment per se.

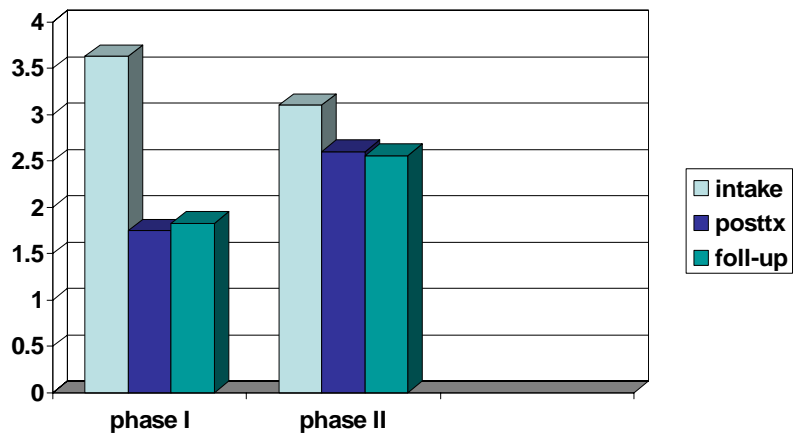
The sample size remains small, and we have experienced a slower rate of recruitment than we envisioned. One factor affecting recruitment is the number of participants recently starting medications or changing dosages of medications, making them ineligible for participation. We are actively recruiting through VA clinics, and are currently receiving between two and five referrals from these clinics each month.

**Table 1: Phase I and II effect sizes: Staxi-2**

	Phase I*	Phase II**
Trait ang	n=8	n=10
pre-post tx	1.1	.48
pre-follup	1.1	.91
Ang express out		
pre-post tx	.54	.17
pre-follup	1.3	.80
Ang control out		
pre-post tx	.83	.51
pre-follup	1.0	.70

#CBI only; \*\*CBI and SI cases

**Figure 1: CAPS Anger Item Mean Score for Frequency**



**KEY RESEARCH ACCOMPLISHMENTS:**

□

- Preliminary findings are encouraging with regard to effectiveness of CBI for some OIF / OEF veterans. Completion of the full 14 sessions appears to be difficult in this population, suggesting the need to modify the treatment to be more efficient and targeted.

**REPORTABLE OUTCOMES:**

Shea MT et al. Treatment of Trauma Related Anger in Troops Returning from Hazardous Deployments. Association for Behavioral and Cognitive Therapy Annual Meeting, Orlando FL, November 2008

Shea MT et al. Treatment of Trauma Related Anger in OIF/OEF Veterans. Society for Psychotherapy Research Annual Meeting, Barcelona, Spain, June 2008

**CONCLUSIONS:**

CBI appears to be acceptable to some returning OEF/OIF veterans with anger problems, and preliminary findings show promise in terms of effectiveness. Ongoing recruitment remains a priority in order to enroll as many participants as possible during the remaining time in the study. Increased knowledge regarding the treatment of trauma related anger in veterans following war-zone trauma remains important in addressing this common problem and preventing secondary consequences.

**APPENDICES:**

None