

BRIGHT LIGHT: A NOVEL TREATMENT FOR POSTTRAUMATIC STRESS DISORDER

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Objectives: Posttraumatic stress disorder (PTSD) is the most common mental health diagnosis of veterans of current military conflicts in Iraq and Afghanistan. Bright light has had very positive effects on depression, anxiety, insomnia, and cognitive impairment, which are hallmark symptoms of PTSD. The aim of our 2 pilot studies was to assess whether bright light exposure could alleviate clinical and self-reported symptoms of combat PTSD.

Methods: **Study #1** was an uncontrolled trial of veterans with PTSD (n=3). Following baseline, subjects received bright light (5,000 lux, 45 min/day) for 2 weeks. At baseline and post treatment, subjects were assessed on Clinical Global Impressions Scale (CGI), and subjects completed the PTSD symptom checklist (PCL-M), Spielberger State-Trait Anxiety Inventory (STAI Form Y-2), Beck Depression Inventory (BDI-II), Pittsburgh Sleep Quality Inventory (PSQI), and SAFTEE side effects questionnaire.

For **Study #2**, 9 combat PTSD subjects were randomized (following baseline) to two 2-week treatments (45 min/day): (1) bright light or (2) deactivated negative ion exposure. Blinded clinical interviews included the Clinician Administered PTSD Scale (CAPS-2) and the CGI. At baseline and post-treatment, PCL-M, STAI, BDI-II, PSQI, and SAFTEE were also assessed.

Results: Study 1: Remarkable improvements in clinical assessment and/or self-reported symptoms were observed following bright light treatment (**Table 1**).

Table 1. Selected Data from Pilot Study #1

Subject	CGI		PCL-M		STAI		BDI	
	SEV	IMP	Base	Final	Base	Final	Base	Final
1.	4	1	70	35	61	35	20	5
2.	3	3	56	26	32	26	13	5
3.	4	---	59	---	53	42	32	18

CGI: Clinical Global Impression Scale. **SEV:** Baseline Severity (1=normal; 2-7= borderline, mildly, moderately, markedly, severely, and extremely ill, respectively). **IMP:** =improvement (1-3=very much, much, minimally improved, respectively; 4=no change; 5-7=worse).

Study 2: Compared with placebo, bright light elicited a greater improvement in CAPS-2 (**Figure 1**) and the CGI (**Figure 2**). Mean improvements in the other measures also favored bright light.

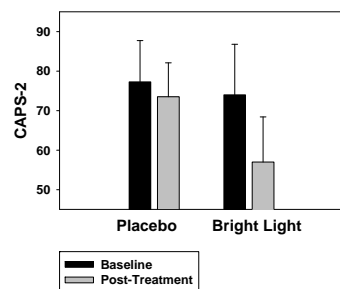


Figure 1.

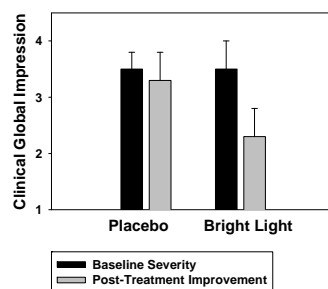


Figure 2.

Conclusions: The data suggest that bright light is an effective treatment for combat PTSD.

Keywords: PTSD, Phototherapy, Randomized Controlled Trial

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