

Effects of Integrative PTSD Treatment in a Military Health Setting

Libretto S, Hilton L, Gordon S and Zhang W. **Effects of Integrative PTSD Treatment in a Military Health Setting.** *Energy Psychology.* 2015; 7(2):33-44.

Device

Alpha-Stim®

Key Variables

Anxiety, Depression, Pain, PTSD

Objective

The purpose of this study was to examine the efficacy of integrative PTSD program (Warrior Combat Stress Reset Program) at Fort Hood. The examination and the article were carried out by members of The Samueli Institute.

Design

The Warrior Combat Stress Reset Program had evaluation design built into the program from the beginning. Soldiers were screened for admission then pre-evaluations were done on day 1 of the 3 week program with post-evaluations done on the final day of 3 weeks. Evaluation results were coded and saved for analysis once resources were available. In 2012, the retrospective formal analysis began and the data files were entered into a database for analysis.

The psychometric instruments used for inclusion and exclusion into the program were also used to assess outcomes. Inclusion and exclusion criteria were also flexible as this was an active treatment program rather than a research project. The program was dynamic in that it could change according to patient feedback to ensure optimal results.

Primary Effectiveness Endpoint

Each patient was given a battery of 21 psychometric instruments which assessed PTSD symptoms, anxiety, depression and pain as well as other health outcomes. The assessment included the Beck

Depression Inventory, Beck Anxiety Inventory, the Oswestry Pain Index and the Post Traumatic Growth Inventory.

Secondary Effectiveness Endpoint

Satisfaction

Key Inclusion Criteria

The evaluation team performed a retrospective analysis which included 764 de-identified patient files. These soldiers attended the reset program from August 2008 to March 2013. Admission to the reset program was flexible as it is a working treatment program. The general reset admission criteria included active-duty status, at least one deployment, moderate to severe PTSD symptoms, Axis II characteristics low and adequate readiness for intensive outpatient treatment.

Key Exclusion Criteria

Exclusion criteria included immediate suicidal or homicidal ideation, active substance abuse or unresolved legal or Uniform Code of Military Justice actions.

Protocol Summary

The warrior reset program is an intensive 3 week program broken down into 3 stages with several different CAM modalities used throughout the duration of the program. Stage 1 was designed to reduce hyperarousal, improve sleep, emotional reactivity and avoidance. In this stage CES was used in the clinic and often assigned as homework for participants. State 2 targeted further sleep disturbances, pain, headaches, avoidance and residual post-concussion symptoms. Several CAM modalities including CES were typically useful in this stage. Stage 3 focused on trauma and specific triggers.

Device Application Protocol

The CES treatments were initially carried out by the staff until patients were comfortable applying the treatment themselves.

Outcome Measures

The evaluation team included several tables in their report which illustrate the efficacy of the

program. Table 1 shows the reduction in symptoms from 2008 to 2013. Patient satisfaction with the available CAM modalities was also surveyed during that time. These results are shown on Table 2.

Table 1: Overall Health Outcomes (2008 – 2013)

Outcome measure	Pre-Tx mean	Post-Tx mean	Mean difference	P-value	N
PTSD	64.6	54.9	-10.2	<0.0001	586
Depression	30.3	21.5	-9.0	<0.0001	562
Anxiety	27.0	20.9	-6.3	<0.0001	567
Pain	34.3	32.1	-2.4	<0.0001	537

Table 2: Patient Satisfaction with Program Components

Modality	2008	2009	2010	2011	2012	2013
Alpha-Stim CES	n/a	74.1%	78.4%	76.4%	83.2%	100%
Individual Treatment	97.7%	92.6%	89.3%	91.6%	92.5%	87.5%
Acupuncture	n/a	76.5%	72.1%	72.7%	72.5%	75.0%
EFT	n/a	40.0%	40.9%	58.9%	50.9%	37.5%
Group Processing	95.5%	84.8%	65.5%	79.2%	85.6%	100%
Massage	n/a	95.2%	86.7%	90.2%	91.5%	100%
Yoga	n/a	57.7%	43.1%	41.2%	46.5%	62.5%

Analysis

In order to test the hypothesis that the soldiers treated in the reset program had fewer combat stress/PTSD symptoms compared to before participating in the program, the change in instrument scores of each patient was computed. Sample paired *t*-test was applied to compare pre- and post-intervention outcomes. Longitudinal models were used to estimate the effects of the CAM therapies. Since satisfaction and symptom relief ratings for CAM therapies were measured repeatedly, the

evaluation team was able to use generalized estimating equations (GEE) to account for correlations. A 95% confidence interval was used to assess the results.

Results

Effectiveness

All health related outcomes showed statistically significant improvements from pre to posttreatment, as seen in Table 1. The trend toward increasing effectiveness over the years is interpreted as reflecting the addition of more CAM services.

CAM Outcomes

On average, 1.7 to 2 point improvement in the NRS score for pain, anxiety and mood was shown from pre to post CAM treatment. The results are statistically significant and no adverse events were noted in the CAM treatments.

Patient Satisfaction

Soldiers rated satisfaction with treatment modalities and the overall program on a 5-point Likert-type scale ranging from “extremely helpful” to “not helpful.” A large majority of soldiers found Reset helpful or very helpful in addressing hyperarousal and their individual issues. Dropouts numbered less than 10 soldiers out of 1,400 over the life of the program.

Conclusion

The reset program appears to be very successful in meeting its stated goals and objectives. The improvements in health were both statistically and clinically significant. The improvements in PTSD, anxiety, depression and pain from pre to post treatment suggest the CAM sessions may have a positive impact on conventional behavior health treatment effectiveness.