

SUMMARY

BRIEF TARGETED TREATMENT CAN IMPROVE HEALTH-RELATED QUALITY OF LIFE IN SYMPTOMATIC GULF WAR VETERANS

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Study Introduction. The Gulf War ended over eight years ago, but Gulf War veterans continue to report health problems at double the rate of their non-deployed peers. The cluster of commonly reported symptoms, fatigue, headache, musculo-skeletal pains and memory loss and skin rash, does not fall into a known diagnostic disease category. Even though specific etiologies for these symptoms have been proposed none is yet compelling, and some investigators even question whether these symptoms have a medical etiology.

A broad-based, multidisciplinary Gulf War demonstration treatment clinic that used treatment modalities similar to those in chronic pain treatment programs, has been described. A meta-analysis of efficacy of multidisciplinary pain treatment centers shows that these programs are effective, however, there is, to our knowledge, no efficacy data for any comparable Gulf War veteran treatment program.

Objectives. The goal of this study is to determine treatment efficacy and efficiency of a demonstration treatment project for Gulf War veterans with multiple physical symptoms. The approach is to compare treatment similar to that described by Engel, et al., to standard treatment of Gulf War veterans, as performed in a Gulf War veteran demonstration clinic. This project was a 2-site, clinical demonstration project, with three study groups. Comparisons were made on functional status, health care service utilization and clinical outcome between groups at baseline, 3, 6, 12, and 18 months. This included between-site comparisons of health status and service utilization for various study groups, along with demographic data, to evaluate similar patient populations and health care delivery systems at the two study sites.

Methods. A treatment comparison group (Group I) will have 100 participants at each site, and will consist of Gulf War veterans with multiple physical symptoms who have been thoroughly medically assessed, and who have no serious, explanatory medical diagnosis. Gulf War veterans in Group I receiving care at the Cincinnati VAMC will participate in the demonstration treatment clinic and those receiving care at the Cleveland VAMC will comprise the standard care group. Secondary study groups with 50 participants, each (Groups II and III) will be recruited at each site. Group II consists of Gulf War veterans with significant medical diagnoses, such as hepatitis C, diabetes, AIDS, cancer, etc., and Group III consists of Gulf War veterans who had neither a medical diagnosis nor significant health complaints. Members of these Group II and III will be equally divided between the two sites. Group I will be used to determine the effect of the demonstration clinic treatment (at Cincinnati) versus standard care (at Cleveland) and will be statistically compared by site over time on health status, clinical outcome and health service utilization. All study groups will be compared across health

status, site and time to determine functional health status and health care utilization. These comparisons will be used along with demographic data for Groups II and III to demonstrate that the two study sites are similar and comparable, i.e., that they have similar patient populations and medical management.

Cleveland's clinic functions as a Gulf War primary care clinic include a physician. Psychological assessments and laboratory tests are administered by study research assistants as soon as possible following the physical examination. Information from these tests is used on follow up visits. Cincinnati's Gulf war clinic functions as a multi-disciplinary team. Assessments are completed in an 8-hour day, or on 2 days (4-hour appointments), by a team of practitioners including a physician, nurse practitioner, psychologist, nurse care manager, and physical therapist. Any treatment recommendations for follow-up care are made in a separate appointment after this assessment.

Results. During the past two years of this project screened 176 Gulf War veterans. At the Cincinnati VAMC, 122 Gulf War veterans were screened and 98 veterans were enrolled. Of these veterans, 96 were active participants and 24 withdrew from the study. Veterans withdrew from study participation for reasons including lack of interest in research (n=6), work schedule conflicts (n=5) and too far to travel for follow-up assessments (n=3). A few were excluded because they met exclusion criteria for active drug or alcohol use (n=4); current Axis I disorder other than anxiety or depressive disorder (n=4) or non-deployment to Gulf War (n=2).

At the Cleveland VAMC, fifty-four veterans were screened and forty-four have been enrolled in the DTP. No statistical difference by site emerged for rate of attrition.

Only four participants have experienced adverse events. These four veterans from Cincinnati were all hospitalized for psychiatric treatment for depressive-spectrum disorders, including bipolar affective disorder.

Conclusion. The Cincinnati / Cleveland data suggests that Gulf War veterans seeking care at the VA because they are symptomatic. Preliminary findings from this study suggest that:

- Approximately one half of Gulf War veteran's seeking treatment has diagnosable medical conditions, and one half has diagnosable medical and psychiatric conditions.
- Veterans tend to show improvement in health related quality of life when the treatment is targeted to their presenting problems.
- A multi-disciplinary team model, which includes mental health professionals, yields slightly higher patient satisfaction scores than a primary-care model. Across Ohio (VISN 10), Gulf War veterans seeking VA care are similar in demographic composition.
- Based on this study, quality of life and patient satisfaction data, a multi-disciplinary team approach is more effective than a primary care model in treating Gulf War veteran's. Even with a relatively small N in Cleveland, they found statistical difference by site on target questions of the patient satisfaction questionnaire.

Exportability to Other VAMCs. Any effective treatment for these veterans must adequately address the problem that about half of them have co-morbid anxiety and affective disorder. Thus, clinics must be ready to diagnose and treat patients with mental health problems. However, with targeted treatment, veterans improve within six months on quality of life measures. As a practical measure, the selected treatments must be efficient and tailored to busy schedules of these working veterans, since the veterans do not make themselves available for time-consuming treatment regimens. When treatment is tailored and time efficient, Gulf War veterans rate VA care as good.

The detailed Cincinnati & Cleveland Demonstration Project Report is available on-line. For additional information contact Dewleen G. Baker, MD Cincinnati VAMC 3200 Vine Street, Cincinnati, Ohio 45220.