

# Cognitive behavior therapy improved function in the chronic fatigue syndrome

Sharpe M, Hawton K, Simkin S, et al. *Cognitive behaviour therapy for the chronic fatigue syndrome: a randomised controlled trial. BMJ. 1996 Jan 6;312:22-6.*

## Objective

To evaluate the effectiveness and acceptability of adding cognitive behavior therapy (CBT) to the medical care of patients with the chronic fatigue syndrome.

## Design

Randomized controlled trial with 12-month follow-up.

## Setting

An infectious diseases outpatient clinic in Oxford, UK.

## Patients

60 consecutively referred patients (mean age 36 y, 68% women) with the chronic fatigue syndrome were included out of 123 patients assessed for eligibility. Exclusion criteria were currently receiving psychotherapy or antidepressant drugs that reduced symptoms; meeting criteria for severe depression or a history of bipolar affective disorder, schizophrenia, or substance misuse; unwillingness to participate or unavailability for follow-up; or at risk for suicide or in

need of urgent psychiatric treatment. Follow-up was 98%.

## Intervention

30 patients were allocated to medical care alone. These patients were reassured that there was no evidence of serious organic disease, and they were advised to increase their level of activity as much as they felt able. 30 patients were allocated to medical care plus CBT. CBT was done by experienced therapists during 16 1-hour individual treatment sessions over 4 months. The treatment had a cognitive emphasis and was tailored for patients with the chronic fatigue syndrome.

## Main Outcome Measures

The proportion of patients who achieved normal functioning (Karnofsky score  $\geq 80$ ) or a clinically significant improvement in functioning (Karnofsky score improved  $\geq 10$  points).

## Main Results

Analysis was by intention to treat. At 12 months, more patients who received CBT had attained normal functioning than did those who received medical care alone (73% vs 27%,  $P < 0.001$ ). (This absolute risk improvement (ARI) of 46% means that 2 pa-

tients would need to be treated (NNT) with CBT (rather than medical care alone) to have 1 additional patient attain normal functioning, 95% CI 2 to 5; the relative risk improvement (RRI) was 175%, CI 54% to 432%.)<sup>\*</sup> Similar differences were observed in subsidiary outcome measures. More patients who received CBT also reported greater improvement subjectively than did those who received medical care alone (60% vs 23%,  $\{P = 0.004\}$ )<sup>\*</sup> (ARI 37%, NNT 3, CI 2 to 8; RRI 157%, CI 33% to 434%)<sup>\*</sup>. More patients who received CBT reported a reduction in illness beliefs and behaviors previously associated with a poor outcome ( $P < 0.05$ ).

## Conclusion

The addition of cognitive behavior therapy to the medical care of patients with the chronic fatigue syndrome was accepted by the patients and led to improved function.

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<sup>\*</sup>Numbers calculated from data in article.

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## Commentary

Management of the chronic fatigue syndrome has, until recently, been plagued by anecdote and speculation. There are few randomized controlled trials of treatment for this condition. CBT is helpful in several similar disorders such as chronic pain, irritable bowel syndrome, and somatization disorder in which patients present with physical symptoms but with little evidence of disease. Common sense, therefore, suggests that it should be helpful in the chronic fatigue syndrome.

Trials of psychotherapy have the problem of what to use as a comparison intervention. In this study, it was "normal medical care." This is reasonable if trying to determine whether adding CBT to normal care helps. Whether it is specifically the CBT

or something more subtle that helps, such as the time spent with each patient, is a different question and a different study.

The patients in this study were likely representative of those who are referred to hospital-based outpatient clinics. It would have been useful to know how many were referred by general practitioners and by other specialists.

An interesting and perhaps counter-intuitive feature of this study is that immediately after the treatment had finished, almost no difference existed between the CBT group and the normal medical care group. Clinically significant differences only appeared 8 months after the treatment had finished.

This study provides evidence for the usefulness of CBT in the chronic fatigue syndrome. The problem for clinicians is that seeing patients for 1 hour a week for 16 sessions is often difficult. Clinicians need to know whether they have to buy into the whole package or whether they can get by with providing just a few essential elements. Determining which parts of this treatment are important and which can be dropped is the next part of the puzzle.

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