# Group Cognitive Behavioural Therapy for Chronic Fatigue Syndrome: A Pilot Study

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**Abstract.** The purpose of this paper is to report a pilot of Group Cognitive Behavioural Therapy (CBT) for Chronic Fatigue Syndrome (CFS). The cognitive behavioural approach to the management of CFS has been proven effective and group therapy is often seen as a cost effective approach where possible. Six patients with CFS who met the inclusion criteria were taken from a waiting list for CBT and entered the group. Treatment involved 10 sessions of one hour spread over 18 weeks. Using questionnaire analysis, measures of pre, post, and follow-up scores were used. Analysis, comparing medians with the Wilcoxin Signed Ranks Test reached statistical significance on the Fatigue Questionnaire and the Work and Social Adjustment Scale (p < .05) between pre and post-treatment levels. The authors conclude that these results may represent a useful approach to the management of CFS, but that a controlled trial is now required to establish this.

Keywords: Cognitive therapy, group therapy, chronic fatigue, ME, liaison psychiatry.

#### Introduction

Chronic fatigue syndrome (CFS) is a persistent or relapsing fatigue that is disabling and also features self-reported impairments in concentration and short-term memory, sleep disturbance and musculoskeletal pain, and as yet is medically unexplained (Fukuda et al., 1994). Its prevalence is more common than previously thought, affecting 2.6% of a representative sample from primary care practice (Wessely, Chalder, Hirsch, Wallace and Wright, 1997).

Cognitive behavioural therapy (CBT) has been shown to be an effective treatment for chronic fatigue syndrome (Sharpe et al., 1996, Deale, Chalder, Marks and Wessely, 1997). Improvement was maintained in one of these studies at 5-year follow-up (Deale, Husain, Chalder and Wessely, 2001). Review of the literature has not revealed any reports of applying CBT in a therapy group setting with CFS patients. Other somatic problems that have responded to CBT have been treated within group settings with some success. These include chronic pain (Puder, 1988; Skinner et al., 1990), irritable bowel syndrome (Toner et al., 1998) and hypochondriasis (Stern and Fernandez, 1991). Group therapy is an increasingly popular form of treatment because of its relatively low cost (Abbey, 1996) and may be helpful in reducing waiting times for treatment. Soderberg and Evengard (2001) treated patients with CFS (n = 14) with short-term group therapy using a supportive and goal-oriented format. Results did not provide conclusive evidence of the treatment being effective although patients in the

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study reported that sharing experiences had been valuable. When evaluating the treatment, participants expressed the wish for a more active role from the group leader and having themes for each session.

Group therapy can have advantages over one-to-one therapy where there is a significant psycho-educational component, and in a condition that is not well understood within medical professions, let alone the general population, peer support may have therapeutic benefits. Due to the above research findings and considerations, and to meet the growing local demand for CBT for the patient group, a trial of a group therapy approach was devised to explore if this treatment approach was viable and likely to be effective. Here we report the results of a small pilot study.

#### Method

As CBT group therapy is as yet a novel treatment, approval was sought from the Local Research Ethics Committee to offer group therapy to patients referred to the service with CFS using a CBT treatment model as described by Chalder (1995). Participants gave written consent for data collected from them to be used for the purposes of this paper.

#### Patient population

Our service accepts tertiary referrals from hospital physicians who have carried out routine investigations to rule out possible organic explanations. Patients are then assessed by a liaison psychiatrist to exclude current psychiatric disorder before a request for CBT is made. Participants were recruited from the CBT waiting list who met the Centre for Disease Control (CDC) criteria for chronic fatigue syndrome (Fukuda et al., 1994). All participants had experienced medically unexplained, disabling fatigue for a period of at least 6 months, and with a definite onset. As per the criteria, patients had previously undergone routine investigations to rule out possible organic explanations for their fatigue. Four women and two men were selected from the list and assessed by the liaison nurse therapist. They were given an explanation of the treatment model and rationale, and what was expected from them regarding attendance and homework assignments. All the patients agreed to participate in the CBT group.

## Treatment

The therapy group was conducted in the Psychiatry Outpatient Department at Addenbrooke's Hospital. It ran for 10 sessions of one hour, meeting weekly for the first 4 sessions, then every 2 weeks for the next 5, with a final meeting 4 weeks later. The therapy group was facilitated by the liaison nurse therapist, who is a senior psychiatric nurse with CBT training, experience of treating patients with CFS on an individual basis and prior experience of group work. A CBT trainee on placement within the liaison psychiatry service co-facilitated the group.

The treatment protocol was adapted, with permission, for group use from the one produced by Deale, Chalder and Wessely for their study of cognitive behavioural treatment for chronic fatigue syndrome (Deale et al., 1997). Copies of the handouts had been obtained from the study team and were also used with permission.

Treatment was split into three phases: engagement and treatment planning; active treatment; ending treatment and preparing for the future. Some group sessions overlapped phases and

some components were present throughout the course of therapy. Sessions included a mix of an educative approach, and group discussion to explore problems, strategies for change, and the facilitation of mutual support amongst group members. There was an expectation that patients were motivated to attend sessions and attempt homework tasks. At the start of each session, homework tasks were reviewed and any problems carrying out the tasks addressed. This was followed by one of the group facilitators covering the topic planned for that particular session, group discussion and feedback. Homework tasks were discussed and planned before the end of the session. A summary of group therapy sessions can be found in Appendix 1.

#### Measurements

Patients were assessed at the first group session, at the final session, and 3 months after the final session. Measurement scales included:

*Fatigue Questionnaire* (Chalder et al., 1993). Eleven fatigue symptoms are each rated on a 4-option continuum from "less than usual" to "much more than usual". Scoring is bimodal with a range of 0–11; scores of 4 or more indicate excessive fatigue, "caseness". The questionnaire has been used in a number of previous CFS studies.

*Work and Social Adjustment Scale (SAS)* (Marks, 1986). This is a widely used scale. Impairment in work, home management, social activities, and private leisure are rated on 0–8 scales. A score of 8 indicates maximum impairment.

*General Health Questionnaire (GHQ–12 item)* (Goldberg, 1972). The 12 depression and anxiety related items are rated on a 4-option continuum. Bimodal scoring gives a range of 0–12. Scores of 4 or more represent "psychological caseness".

*Global self-ratings* (at end of treatment only). Overall improvement, fatigue and handicap were measured on 6-point scales from "very much better" to "very much worse". Satisfaction with treatment on a 7-point scale from "very satisfied" to "very dissatisfied". Usefulness of treatment on a 5-point scale from "very useful" to "no use at all".

## Statistics

Measures on each of the scales were compared at pre-treatment, post-treatment and at 3-month follow-up using standard statistical methods, and differences were analysed using the Wilcoxin Signed Ranks Test.

## Results

When the therapy group started none of the six patients met the criteria for depression or any other psychiatric disorder. One patient had been treated for a depressive episode in the past and one other patient had previous experience of CBT for a depressive episode. One patient was taking an SSRI and another was taking St John's Wort during the treatment programme. The participants were aged between 32.25–55.08 years, median of 41.67 years. Duration of illness was from 1.17–5.25 years, median of 4.58 years. One member of the group was working full-time, three were working part-time and two were unable to work due to their illness. All the participants completed the course of group sessions, with an overall attendance rate of 86.67%.

| (n - 0)       |                |                           |                             |                                |  |  |
|---------------|----------------|---------------------------|-----------------------------|--------------------------------|--|--|
|               |                | Pre-treatment<br>(week 0) | Post-treatment<br>(week 18) | 3-month follow-up<br>(week 30) |  |  |
| Fatigue Ques. | Median (range) | 9.5 (8–11)                | 7 (0-10)*                   | 5 (3–10)                       |  |  |
| SAS           | Median (range) | 5.25 (2.75-6.5)           | 3.63 (1.75-4.25)*           | 4 (3–5)                        |  |  |
| GHQ           | Median (range) | 1.5 (1-4)                 | 0.5 (0–7)                   | 1 (0-4)                        |  |  |

**Table 1.** Median scores of outcome measures for patients who attended group cognitive behaviour<br/>therapy for chronic fatigue syndrome (n = 6)

p < .05 (n = 6).

|                              | Very much<br>better | Much<br>better       | A little<br>better | About the same         | A little<br>worse     | Very much<br>worse      |                      |
|------------------------------|---------------------|----------------------|--------------------|------------------------|-----------------------|-------------------------|----------------------|
| Overall                      | _                   | 2                    | 4                  | _                      | _                     | _                       |                      |
| Fatigue                      | _                   | 1                    | 5                  | _                      | _                     | _                       |                      |
| Handicapped/<br>restricted   | _                   | 2                    | 2                  | 2                      | _                     | _                       |                      |
|                              | Very satisfied      | Moderately satisfied | Slightly satisfied | Neither                | Slightly dissatisfied | Moderately dissatisfied | Very<br>dissatisfied |
| Satisfaction<br>with outcome | 1                   | 5                    | _                  | _                      | _                     | _                       | _                    |
|                              |                     |                      |                    | Not                    |                       |                         |                      |
|                              | Very<br>useful      | Moderately<br>useful | Useful             | particularly<br>useful | No use<br>at all      |                         |                      |
| Usefulness<br>of treatment   | 1                   | 3                    | 2                  | _                      | _                     |                         |                      |

**Table 2**. Self-rated global outcome scores at end of treatment (n = 6)

## Questionnaire scores

Results are shown in Table 1. All patients showed an improvement on all questionnaire scores between pre-treatment and post-treatment, except for one patient who scored the same on the depression and anxiety related items of GHQ and another who scored worse on the post-treatment GHQ. Between pre-treatment and post-treatment analyses, comparing medians with the Wilcoxon Signed Ranks Test, reached statistical significance on the Fatigue Questionnaire and the Work and Social Adjustment Scale (p < .05).

At 3-month follow-up, four patients had maintained or improved scores on the Fatigue Questionnaire. On the General Health Questionnaire five patients recorded scores better than pre-treatment levels. The improved scores on the Work and Social Adjustment scale seen at post-treatment were not maintained at 3-month follow-up.

## Self-rated global outcome scores at end of treatment

Results are shown in Table 2. For improvement overall, two patients rated themselves as "much better" and four as "a little better". For fatigue levels, one rated themselves as "much better"

and five as "a little better". Level of handicap was rated as "much better" by two patients, "a little better" by two patients and "about the same" by two patients. One patient was "very satisfied" with the treatment programme and five were "moderately satisfied". One patient found the group programme "very useful", three found it "moderately useful" and two found it "useful".

At the end of treatment, two of the patients who were working part-time had increased their hours. The patient who was working full-time had returned to a previous activity (golf) and one patient who was not working had engaged in a new activity (gardening).

#### Group evaluation

In the final session the group was given the opportunity to feedback on what they felt had been the advantages and disadvantages of the group approach. The advantages were all related to peer support ("its helpful to be with other people that you can relate to"), particularly with reference to the advantage of seeing other people benefiting from the approach and the motivational effect that this had ("if it's not working for yourself but you see others finding benefit, it helps you to keep the faith"). Interestingly, in disadvantages it was mentioned that the group approach was difficult in that this prevented patients from "putting on a front". However, it was identified that this was part of "getting better" as "pretending in the early stages that I was O.K made me worse". Suggestions for future groups included fortnightly meetings from the start, more emphasis on the homework commitment prior to entry to the group, and more support for filling in the activity sheets.

## Discussion

From the outcomes obtained it appears that CBT group therapy may have a positive effect on function and sense of well-being of patients with CFS. The high attendance rate and satisfaction ratings suggest that it is also acceptable to patients. It is impossible to confidently draw conclusions from this pilot study due to the small sample size, the bias in the selection of patients and the lack of any control group. Nor was there an objective measure of outcome that is not self-rated.

The patients who participated in this pilot group were fairly typical of out-patients with CFS being referred for CBT to our specialist service as regards their severity and duration of illness. In these respects they were similar to the sample studied by Deale et al. (1997). A disadvantage of group therapy is that some patients find it difficult to bring personal issues that may be affecting their progress to the group setting. Group leaders need to be skilled and experienced in group work in order to create the boundaries that allow patients to feel safe to disclose and explore such issues. However, for some patients individual therapy is more appropriate and for this reason it is felt important that patients are thoroughly assessed prior to entering a therapy group.

The number of sessions and duration of the pilot group was adequate to meet the authors' objectives, that of imparting information and the skills required to progress to a selfmanagement programme. We acknowledge, however, from the patients' feedback that they would have preferred meeting fortnightly rather than weekly for the first 4 sessions. There are advantages to giving participants more time between these early sessions to carry out homework assignments and read handouts, but this needs to be weighed against the role that more regular meetings have in promoting the bonding between group members. In considering the length of group sessions, we feel that some patients would benefit from longer meetings, but this would be to the disadvantage of those who have difficulty maintaining concentration, which is commonly seen in CFS. The authors tried to get a balance within each group session between time for group discussion and peer support and the educational component for that week. We started each session by asking each group member for feedback about progress or problems since the last meeting and space was given to allow themes to develop. This meant that this balance was controlled, to a certain extent, by the group itself. Participants were generally receptive to the teaching component each session and joined in the discussions. It was also evident that group members were very tolerant and supportive of each other. There was a harmonious feel to the sessions and the facilitators found the task of running the group satisfying and enjoyable.

As mentioned above, the outcome of this pilot does not provide an answer as to whether Group CBT is effective for CFS patients but the results encourage further research to assess clinical and cost effectiveness.

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## **Appendix 1: Summary of Group Therapy Sessions**

## Phase 1: engagement and treatment planning

| Session 1: | Introduction of group members                                    |  |  |  |  |
|------------|------------------------------------------------------------------|--|--|--|--|
|            | Boundary setting (duration, number of sessions, confidentiality) |  |  |  |  |
|            | Treatment model and rationale                                    |  |  |  |  |
|            | Completion of initial measurements                               |  |  |  |  |
|            | Homework: self-monitoring diaries                                |  |  |  |  |
|            | Handout: treatment model and rationale                           |  |  |  |  |
| Session 2: | Feedback from session 1 and review homework                      |  |  |  |  |
|            | Review treatment model                                           |  |  |  |  |
|            | Rationale for relaxation                                         |  |  |  |  |
|            | Homework: continue self-monitoring, start relaxation exercises   |  |  |  |  |
|            | Handout: description of CBT                                      |  |  |  |  |
| Session 3: | Review of homework                                               |  |  |  |  |
|            | Agree problems and targets for treatment                         |  |  |  |  |
|            | Devising activity schedules                                      |  |  |  |  |
|            | Homework: continue self-monitoring, devise activity schedule     |  |  |  |  |
|            | Handout: planning activity and rest                              |  |  |  |  |
|            |                                                                  |  |  |  |  |

#### Phase 2: active treatment

- Session 4: Review homework and understanding of treatment rationale Agree homework targets and activity schedules Predict problems likely to arise Homework: graded activity and rest
- Session 5: Review homework Problem solving Activity target setting Homework: graded activity and rest

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|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Session 6: | Review homework/problem solving/activity target setting<br>Homework: graded activity and rest<br>Handout: improving sleep                                                                                             |
| Session 7: | Review homework/problem solving/activity target setting<br>Role of negative automatic thoughts (NATs)<br>Homework: graded activity and rest, record negative thoughts<br>Handout: identifying negative thoughts       |
| Session 8: | Review homework/problem solving/activity target setting<br>Challenging NATs and finding rationale answers<br>Homework: graded activity and rest, record NATs and alternatives<br>Handout: modifying negative thoughts |

## Phase 3: preparation for discharge

- Session 9: Homework review/problem solving/activity target setting Relapse prevention and dealing with setbacks Action plan for lifestyle change and maintenance of gains Homework: "blueprinting" exercise sheet Handout: preparing for the future
- Session 10: Completion of measurements Review of personal "blueprints" Relapse plans Course review and evaluation Farewells