Behaviour Research and Therapy 51 (2013) R2–R8

Contents lists available at SciVerse ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Enhanced cognitive behaviour therapy for adults with anorexia nervosa: A UK–Italy study

Christopher G. Fairburn [a,*], Zafra Cooper [a], Helen A. Doll [b], Marianne E. O'Connor [a], Robert L. Palmer [c], Riccardo Dalle Grave [d]

[a] Oxford University Department of Psychiatry, Warneford Hospital, Oxford OX3 7JX, UK
[b] Norwich Medical School, University of East Anglia, Norwich NR4 7TJ, UK
[c] Department of Health Sciences, Leicester University, 22-28 Princess Road West, Leicester LE1 6TP, UK
[d] Villa Garda Hospital, Department of Eating and Weight Disorder, I-37016 Garda, VR, Italy

ARTICLE INFO

Article history:
Received 3 August 2012
Accepted 21 September 2012

Keywords:
Anorexia nervosa
Treatment
Cognitive behaviour therapy
Eating disorder

ABSTRACT

Anorexia nervosa is difficult to treat and no treatment is supported by robust evidence. As it is uncommon, it has been recommended that new treatments should undergo extensive preliminary testing before being evaluated in randomized controlled trials. The aim of the present study was to establish the immediate and longer-term outcome following "enhanced" cognitive behaviour therapy (CBT-E). Ninety-nine adult patients with marked anorexia nervosa (body mass index $\leq$ 17.5) were recruited from consecutive referrals to clinics in the UK and Italy. Each was offered 40 sessions of CBT-E over 40 weeks with no concurrent treatment. Sixty-four percent of the patients were able to complete this outpatient treatment and in these patients there was a substantial increase in weight (7.47 kg, SD 4.93) and BMI (2.77, SD 1.81). Eating disorder features also improved markedly. Over the 60-week follow-up period there was little deterioration despite minimal additional treatment. These findings provide strong preliminary support for this use of CBT-E and justify its further evaluation in randomized controlled trials. As CBT-E has already been established as a treatment for bulimia nervosa and eating disorder not otherwise specified, the findings also confirm that CBT-E is transdiagnostic in its scope.

Introduction

Anorexia nervosa in adulthood has been described as "one of the most difficult psychiatric disorders to treat" (Halmi et al., 2005). Reluctance to engage in treatment is common, and in those who do accept treatment the outcome is often poor. Hospitalization is essential in some cases and it generally results in weight gain, but it is expensive and disruptive and often followed by weight loss (Carter et al., 2009; Kaplan et al., 2009; Walsh et al., 2006). A treatment that produced enduring change would be of great value, especially if it were deliverable on an outpatient basis (Bulik, Berkman, Brownley, Sedway, & Lohr, 2007).

Anorexia nervosa is also difficult to study (Agras et al., 2004; Bulik et al., 2007; Fairburn, 2005; Halmi, 2008; Lock et al., 2012). This is because of its relative rarity, the associated medical risks, the lengthy duration of treatment, and the importance of follow-up to determine whether treatment effects persist over time. Nine studies of psychosocial treatments have been published (Bulik et al., 2007) and several have run into major difficulties (Halmi et al., 2005; Lock et al., 2012). Almost all the studies have been small in size, the average number of patients per condition being less than 20. These methodological challenges, together with the disappointing or inconclusive results of the studies to date, have led to the suggestion that new treatments for anorexia nervosa should undergo extensive preliminary testing before being considered eligible for evaluation in randomized controlled trials (Agras et al., 2004; Fairburn, 2005; Halmi et al., 2005; Lock et al., 2012). Alternatively it has been proposed that the focus of research should shift away from adults and on to the treatment of adolescents as they appear to be easier both to treat and to study (Halmi, 2008).

Cognitive behaviour therapy is a potential candidate as an outpatient treatment for anorexia nervosa since it is the leading empirically supported treatment for bulimia nervosa (National Institute for Clinical Excellence, 2004; Shapiro et al., 2007), a disorder with overlapping psychopathology. The cognitive

DOI of original article: 10.1016/j.brat.2012.09.005, 10.1016/j.brat.2012.09.008.
* Corresponding author. Tel.: +44 1865 226479.
E-mail addresses: credo@medsci.ox.ac.uk (C.G. Fairburn), H.Doll@uea.ac.uk (H.A. Doll), rlp@leicester.ac.uk (R.L. Palmer), rdalleg@tin.it, sim-cal@libero.it (R. Dalle Grave).
URL: http://www.credo-oxford.com

http://dx.doi.org/10.1016/j.brat.2012.09.010
0005-7967/

behavioural treatment for bulimia nervosa has recently been adapted with the goal of making it suitable for any form of eating disorder, including anorexia nervosa (Fairburn, 2008; Fairburn, Cooper, & Shafran, 2003). To this end, the new "enhanced" form of the treatment (CBT-E) focuses on modifying the mechanisms thought to perpetuate all forms of eating disorder psychopathology (Fairburn et al., 2003). The treatment has been shown in two independent studies (combined $N = 245$) to produce sustained change in those eating disorder patients who are not significantly underweight, whatever their DSM diagnosis (Byrne, Fursland, Allen, & Watson, 2011; Fairburn et al., 2009). The utility of the treatment with the remaining eating disorder patients, those with anorexia nervosa, has yet to be established.

In light of the recommendation that new treatments for adults with anorexia nervosa undergo extensive preliminary evaluation, we studied the effects of CBT-E in two representative, markedly affected, patient samples. Many of these patients would ordinarily have been hospitalised. We chose to include patients who were significantly underweight in order to test the full potential of the new treatment.

The study was designed to address four key clinical questions. First, among adults with marked anorexia nervosa, what proportion is able to complete this outpatient treatment? Second, among those patients who can complete the treatment, what is their outcome? Third, are the changes sustained? And fourth, are there baseline variables that predict treatment completion? By studying two independent patient samples we were also able to determine whether there is consistency in these patients' response to CBT-E.

Method

Design

Two samples of patients were recruited, one from the UK and the other from Italy. Both comprised patients with anorexia nervosa who had a body mass index (BMI; weight in kg/height^2 in m) of 17.5 or below, a commonly used threshold for anorexia nervosa. All the patients were offered CBT-E and, if they accepted, were provided with 40 sessions of treatment over 40 weeks. This was the only psychological or behavioural intervention that they received. The patients were then entered into a closed follow-up period lasting 60 weeks during which they received no further treatment unless it was judged necessary on clinical grounds. The studies were approved by the local human subjects committees.

Setting and participants

The UK sample was recruited from consecutive referrals by family doctors and other clinicians to two well-established National Health Service eating disorder clinics, one serving central Oxfordshire and the other serving Leicestershire. Each referral was assessed by a senior clinician who established the patient's diagnosis and eligibility for the study. The Italian sample was recruited in a similar way. It comprised consecutive referrals to an eating disorder clinic serving the Verona area.

The UK patients had to fulfil the DSM-IV diagnostic criteria for anorexia nervosa (American Psychiatric Association, 1994), bar the amenorrhoea criterion, and to have a BMI between 15.0 and 17.5. In addition, they had to be aged between 18 and 65 years and provide written informed consent after receiving a complete description of the study. The entry criteria for the Italian sample were the same except that there was no lower BMI limit. The exclusion criteria for both samples were as follows: i) the patient being unsafe to manage on an outpatient basis ($N = 4$ and 0; UK and Italian samples respectively); ii) having received in the previous year a specialist treatment for anorexia nervosa ($N = 4$ and 0); iii) having a co-existing Axis 1 psychiatric disorder that precluded immediate eating disorder-focused treatment, such as psychosis or drug dependence ($N = 11$ and 4); and iv) not being available for the 40 week period of treatment ($N = 4$ and 4). If it was thought that there was a comorbid major depressive disorder in addition to the eating disorder, this was treated with antidepressant medication prior to starting CBT-E. Patients who were already receiving psychotropic medication were weaned off this prior to entering the study ($N = 2$ and 2), an exception being clinically warranted antidepressant medication ($N = 22$ and 17) which was kept stable during treatment with CBT-E.

Patients who met the study entry criteria at the initial assessment were offered two further appointments in order to describe the treatment and obtain consent. Fig. 1 shows the recruitment and retention figures for the UK and Italian participants.

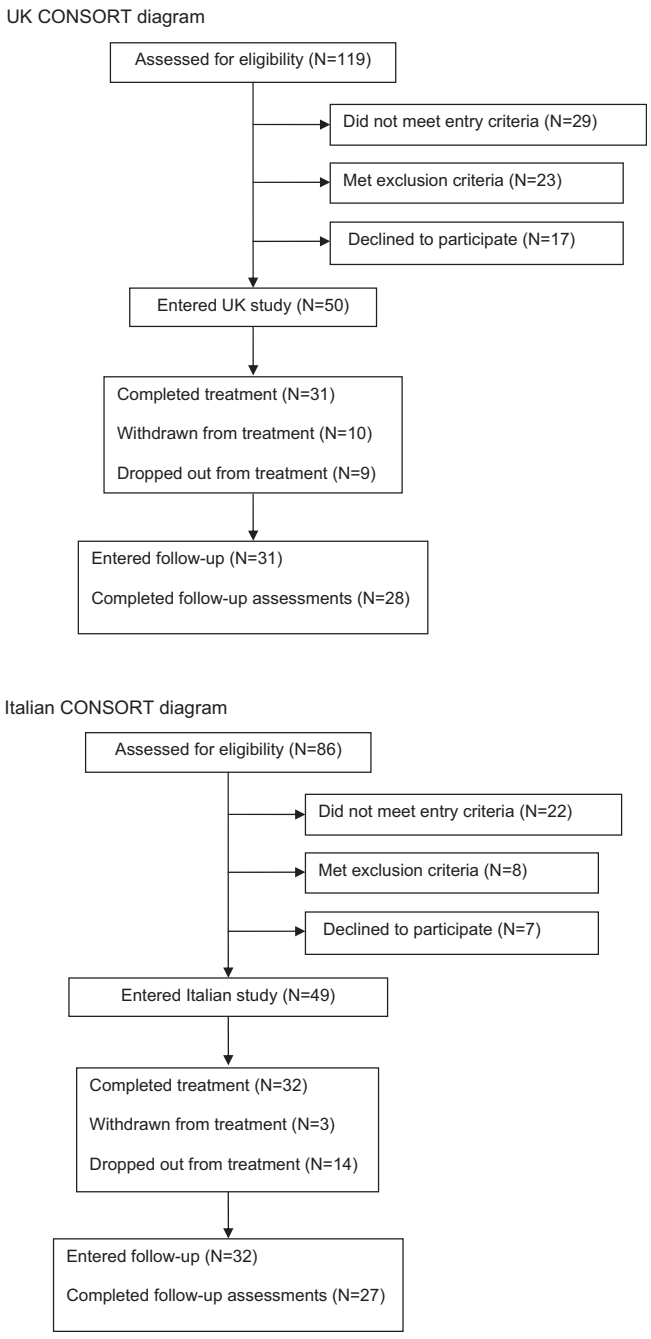

Fig. 1. CONSORT diagrams for the UK and Italian samples.