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# Intensive Outpatient Cognitive Behaviour Therapy for Eating Disorder

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#### **Abstract**

The aim of this paper is to describe a novel model of intensive outpatient cognitive-behaviour therapy (CBT) indicated for eating disorder patients who are having difficulty modifying their eating habits in response to conventional outpatient CBT. Intensive outpatient CBT is a manual based treatment derived by the CBT-Enhanced (CBT-E) for eating disorders. The treatment has four features that distinguish it from the conventional outpatient CBT-E: (1) it is designed to be suitable for both adult and adolescent patients, (2) it is delivered by a multidisciplinary non-eclectic team trained in CBT, (3) there is assistance with eating, (4) there is a family therapy module for patients under the age of 18 years. Preliminary outcome of intensive outpatient CBT-E are encouraging. The treatment has been applied to 20 consecutive underweight eating disorder patients (age  $18.2 \pm 6.5$  years; BMI  $14.6 \pm 1.5$  kg/m<sup>2</sup>). Thirteen patients (65%) concluded the treatment, five (25%) were admitted at an eating disorder inpatient unit, and two (10%) prematurely interrupted the treatment. Completers obtained significant weight regain and improvement of eating disorder and general psychopathology. Most of the improvements were maintained at six-month follow-up.

**Keywords:** eating disorders, cognitive behavioural treatment, anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified, psychotherapy

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#### INTRODUCTION

The efficacy of cognitive behaviour therapy for bulimia nervosa (CBT-BN), a specifically adapted form of CBT, is supported by over 20 randomized controlled trials. Among treatment completers (typically 80 to 85%), 40–50% achieve a full and lasting remission from the disorders (Fairburn, Norman, Welch, O'Connor, Doll, & Peveler, 1995; Wilson & Fairburn, 2002). The other patients obtain an outcome that goes from substantially improved to not improve at all (Wilson & Fairburn, 2002). CBT-BN is more effective than delayed treatment, pharmacotherapy, and other psychological treatments (Wilson & Fairburn, 2002). These data lead the National Clinical Practice Guideline to indicate CBT-BN as the treatment of choice to offer to adults with bulimia nervosa (National Institute of Clinical Excellence, 2004).

Unfortunately, CBT-BN suffers of two main shortcomings. First, it is not effective enough (only 40-50% of the patients recover from the disorder). Second, it has been designed only for patients with bulimia nervosa and not for other eating disorder patients (e.g. anorexia nervosa and eating disorder not otherwise specified) which represent about 75% of the cases treated in a specialist outpatient setting (Ricca, Mannucci, Mezzani, Di Bernardo, Zucchi, Paionni et al., 2001).

An improved form of CBT (CBT-Enhanced - CBT-E) has been recently designed to address these two shortcomings (Fairburn, Cooper, & Shafran, 2003). The treatment can be applied with minimal adaptations to all clinical eating disorders and includes new strategies to potentially improve the outcome of CBT-BN (Fairburn et al., 2003). CBT-E is described in a manual (Fairburn, 2008) and is under evaluation in a large randomized control trial.

Another shortcoming of CBT for eating disorders is the lack of effective available strategies for non-responders to the conventional treatment. These patients are usually shifted toward a different outpatient therapy or to a more intensive treatment, such as day-hospital or inpatient treatment (Dalle Grave, Ricca, & Todesco, 2001). Unfortunately, both these solutions have problems. Non-responders to CBT-BN assigned to other evidence-based treatment (e.g. interpersonal psychotherapy or antidepressant) had a high dropout and low response rates (Mitchell, Halmi, Wilson, Agras, Kraemer, & Crow, 2002). Day-hospital and inpatient treatment may help to get some patients to a state such that they can benefit from outpatient treatment and in a minority of cases may save their life. These intensive treatments, however, are aggravated by elevated costs, by the necessity to interrupt the school or work, by the removal from family, friends and psychosocial stressors, and by the high risk of relapse after discharge (Dalle Grave et al., 2001).

Intensive outpatient CBT-E has been recently developed in Italy for engaged patients non-responsive to conventional CBT-E as an alternative to day-hospital or inpatient treatments. Aims of the paper are to describe this new treatment and the

preliminary results obtained with 20 underweight eating disorder patients not improved with conventional CBT-E.

## **Intensive outpatient CBT-E**

Intensive outpatient CBT-E retains most of the core characteristics and strategies of conventional CBT-E. However, it introduces also some new procedures to facilitate the behaviour change and/or weight regain in patients not responding to conventional CBT-E.

# The transdiagnostic cognitive behavioural theory of eating disorders

Intensive outpatient CBT-E stems from the transdiagnostic cognitive behaviour theory of eating disorders (Fairburn et al., 2003). The theory has been developed to explain the processes, which maintain eating disorders (Fairburn et al., 2003). According to the theory, the over-evaluation of control over eating, shape and weight is central in the maintenance of all clinical eating disorders (anorexia nervosa bulimia nervosa, and eating disorder not otherwise specified). The other clinical features stem directly (e.g. unhealthy weight control behaviours, compensatory behaviours, low weight and starvation syndrome, body checking and avoidance, concerns about eating, shape and weight) or indirectly (e.g. binge eating) by the "core psychopathology". These clinical features, in turn, maintain and intensify the over-evaluation of control over eating, shape and weight. The new theory proposes that in certain patients one or more of four additional external maintaining mechanisms interact with the core eating disorder psychopathology creating an additional obstacle to change. The four proposed external maintaining mechanisms are (Fairburn et al., 2003): clinical perfectionism, core low selfesteem, mood intolerance, and interpersonal problems.

#### Goals and indications

The main goal of intensive outpatient CBT-E is to get patients to a state such that they can benefit from conventional CBT-E (Dalle Grave, Bohn, Hawker, & Fairburn, 2008).

The treatment has been principally designed for underweight patients failing in eating more and regaining body weight with conventional CBT-E. There are not simple rules to decide when underweight patients do not respond to CBT-E. Many patients start to regain weight after six-to-eight week of conventional CBT-E (Fairburn & Cooper, 1993). Therefore, a reasonable clinical guideline is to indicate intensive outpatient CBT-E when there is not a significant weight regain by week 12. The treatment can take place earlier in severely underweight patients losing more than 1 kg per week during the conventional CBT-E or after the 12 weeks in case of incomplete weight regain (e.g. a BMI remained below 17.5 kg/m²).

Intensive outpatient CBT-E is also indicated for not-underweight patients with frequent binge eating and vomiting if they are unable to modify their eating habits by week eight (of their 20-week treatment) (Dalle Grave et al., 2008).

Contraindications to intensive outpatient CBT-E are daily substance abuse (intermittent drug abuse of alcohol, cocaine or ecstasy is not considered a contraindication), acute psychotic disorders, and severe medical complications not manageable in an outpatient setting.

# Preparation for intensive outpatient CBT-E

The aim of the preparation phase is to help the patients not improved with conventional CBT-E to make the decision to intensify the treatment (Dalle Grave et al., 2008).

The first step is to evaluate the potential reasons of conventional CBT-E failure. Common reasons are barriers to the treatment (e.g. clinical depression, significant substance abuse, major distracting life problems, and competing commitments), lack of engagement, excessive anxiety associated with eating or weight regain, and difficulties in reducing the frequency of binge eating and purging. If the problem seems to be potentially addressable in the context of conventional CBT-E, it is appropriate to dedicate some sessions to deal with it (e.g. in case of clinical depression adding antidepressants to the psychotherapy). If this is not the case, therapist should provide to the patients the rationale that conventional CBT-E is not proving sufficient, and that intensive outpatient CBT-E might help them make the necessary changes (Dalle Grave et al., 2008).

The second step is to describe the intensive outpatient CBT-E and to evaluate with patients the pro and cons to intensify the treatment. The explanation should include a discussion about aims, duration, organization, procedures, and results of intensive outpatients CBT-E. During this discussion, it is underlined that the decision to intensify the treatment is voluntary, ant that patients should put the maximum commitment to address the various tasks of the treatment.

# Nature of intensive outpatient CBT-E

Intensive outpatient CBT-E maintains three core characteristics of conventional CBT-E. First, it is designed to be suitable for all forms of clinical eating disorder (anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified). Second, the psychopathological features present dictate the content of the treatment and by the processes that appear to be maintaining them. Third, the treatment addresses these processes using CBT-E strategies and procedures.

Compared to conventional CBT-E, intensive outpatient CBT-E introduces the following main adaptations:

- it is delivered by a multidisciplinary non-eclectic team,

- patients are assisted by a therapist during eating,
- it is suitable for both adult and adolescent patients with the introduction of family therapy module in younger patients.

# Intensive outpatient unit

The intensive outpatient CBT-E is ideally provided in a specialized outpatient unit for the treatment of eating disorder patients (Dalle Grave et al., 2008). The centre atmosphere should be psychological and not medical. The centre should includes standard treatment offices, a kitchen (with microwaves, refrigerator with a large freezer, sink, and dishwasher), a dining room where assisted eating can take place, a recreational room and facilities for patients to study.

## Multidisciplinary non-eclectic team

A multidisciplinary non-eclectic teams (Dalle Grave, 2005) composed of physicians, psychologists, and dieticians conducts the intensive outpatient CBT-E. The dietician addresses the modification of eating habits and weight. The psychologist principally focuses on the modification of the over-evaluation of control over eating, shape and weight, and implements the "broad" CBT-E modules. The physician treats the medical complication of the patients and is responsible for the medications prescription. A distinctive aspect of the multidisciplinary team of intensive outpatient CBT-E is that all the therapists are trained in cognitive behaviour theory and therapy for eating disorders during a one-year course ("First Certificate of Professional Training in Eating Disorder and Obesity"). All therapists share the same treatment philosophy (the cognitive behavioural theory and treatment), follow the guidelines of a manual, and use similar language with patients, while maintaining their specific professional role in the treatment.

## General organization of intensive outpatient CBT-E

Intensive outpatient CBT-E lasts from 12.45am to 7.45pm every weekday for 12 weeks. In not underweight patients with frequent bulimic episodes, the treatment can be shorter (two to four weeks) (Dalle Grave et al., 2008). The treatment includes the following procedures (Dalle Grave, 2005) (Table 1):

- three meals a day supervised by a dietician (lunch, snack and dinner),
- two individual CBT-E sessions a week with a psychologist,
- two individual sessions a week with a dietician,
- two psychoeducational groups a week,
- periodic medical examinations,

- a weekly review meeting with therapists and patient.

In the last four weeks, patients gradually consume the meals outside of the outpatient unit, and the treatment gradually evolves into conventional outpatient CBT-E.

Table 1. Organization of intensive outpatient CBT-E

	Monday	Tuesday	Wednesday	Thursday	Friday
12:45 - 13:00	Body weight measurement				Body weight measurement
13:00 - 14:00	Assisted lunch	Assisted lunch	Assisted lunch	Assisted lunch	Assisted lunch
14:00 - 15:00	Review meeting	Psychoeducational group	Free time for studying or doing other activities	Free time for studying or doing other activities	Psychoeducatio nal group
15:00 - 16:00	Individual session with dietician (week- end revision and meal planning)	Individual session with psychologist	Medical examination <sup>1</sup>	Individual session with psychologist	Individual session with dietician (week- end preparation)
16:30 - 17:00	Assisted snack	Assisted snack	Assisted snack	Assisted snack	Assisted snack
17:00 - 18:30	Free time for studying or doing other activities	Free time for studying or doing other activities	Free time for studying or doing other activities	Free time for studying or doing other activities	Free time for studying or doing other activities
18:30 - 19:30	Assisted dinner	Assisted dinner	Assisted dinner	Assisted dinner	Assisted dinner
19:30 - 19:45	Food provision for breakfast	Food provision for breakfast	Food provision for breakfast	Food provision for breakfast	Food provision for week-end

<sup>&</sup>lt;sup>1</sup> Weekly in severe underweight patients (BMI<16 kg/m<sup>2</sup>) and/or with medical complications (e.g. low serum potassium levels), every two or three weeks in those treated with antidepressant.

## Main procedures of intensive outpatient CBT-E

Many procedures overlaps with the outpatient form of the treatment (for a detailed description of CBT-E strategies see Fairburn, 2008) and will not be described here, but some have been adapted or developed specifically for the particular nature of the intensive nature of the treatment.

# Body weight and Weekly Eating Disorder Check List

Dietician measures body weight in the first eight weeks and thereafter by the patients themselves. A weighing scale with 0.5 kg division to help patients reduce their preoccupation with minimal weight changes measures body weight.

Patients fill once a week the *Weekly Eating Disorder Check List* which reports the frequency of key eating disorder behaviours (e.g. binge eating, self-induced vomiting, laxative and diuretic misuse) and the intensity of body checking and avoidance, feeling fat, concerns about shape, weight and eating control in the last seven days.

Both body weight and *Weekly Eating Disorder Check List* are discussed during the review meeting.

## Individual CBT-E sessions with the psychologist

The individual sessions with psychologist are similar to those of conventional CBT-E (see Fairburn, 2008), but with some adaptations due to the nature of intensive outpatients setting. The most important differences are the frequency of sessions (twice a week for the entire duration of the treatment), and a major focus on accepting the rapid changes in eating, weight and shape. After the first four weeks, as conventional CBT-E, the content of the sessions gradually evolves in addressing the over-evaluation of control over eating, shape and weight, together with food avoidance and other dietary rules. In a subgroup of patients, one or more of the external maintaining mechanisms (mood intolerance, clinical perfectionism, core low self-esteem and interpersonal problems) may also be tackled using the broad CBT-E modules.

#### Individual sessions with the dietician

The individual sessions with the dietician are fixed on Monday and Friday. Monday session is mostly dedicated to the revision of the weekends and to organize the assisted meals. Friday session is devoted to review the problems met in the week and to plan the meals during the weekends.

#### Medical examinations

A physician once a week examines patients with medical complication (e.g. severe weight loss, electrolyte abnormalities, refeeding syndrome, gastrointestinal symptoms) until they achieve a stable medical condition. Patients in treatment with antidepressant are usually examined every two weeks.

## Review meeting

Once a week therapists (psychologist, dietician, and physician) and patients meet each other to discuss the various elements of the treatment (Dalle Grave et al., 2008).

Patients are encouraged to interpret their BMI graphic. Therapists use patients' interpretation to educate them on weight regulation and to restructure cognitive bias on weight changes. Underweight patients are asked to plan the caloric content of the diet for the next seven days in line with the established rules discussed at the beginning of the treatment. Again, therapists' use the patients plan to restructure any cognitive bias regarding the caloric content of the diet. Then, therapists and patients evaluate the progresses achieved and the obstacle to address discussing the patients' personal formulation about the mechanisms operating in the maintenance of the disorder (e.g. binge eating, unhealthy weight control behaviours, body checking and avoidance, feeling fat and the degree of concerns about the control of shape, weight and eating).

# Assisted eating

The principal indication for intensive treatments is the inability of eating disorder patients to changes their eating. To address the problem intensive outpatient CBT-E adopts a procedure called "assisted eating". Patients eat three meals and a snack each day (breakfast, lunch, mid-afternoon snack and dinner). The food is frozen or pre-packaged so that it does not require preparation. During the meals, the dietician who uses cognitive behavioural procedures assists patients to help them eat. Patients are encouraged to consider food like a "medication", and to eat mechanically, without being influenced by any external (e.g. food availability) and internal (hunger, anxiety and thoughts) cues (Garner, Vitousek, & Pike, 1997). This new form of eating is continued until patients can eat without being influenced by anxiety and preoccupations about control over shape, weight and eating. Other therapeutic techniques adopted are support, education, distraction, and in patients who are not too preoccupied decentring from problematic thoughts and urges (Dalle Grave et al., 2008). Dietician addresses some ritualistic ways of eating (e.g. eating slowly or cutting the food in small pieces) (Keys, Brozek, Henschel, Mickelsen, & Taylor, 1950) if patients adopt these behaviours to increase the control over eating. After eating, patients do not have access to a bathroom for one hour.

During the first four weeks, the dietician carries out the meal planning. From week 5, patients plan meals by themselves. All foods are given to the patients by the dietician 10 minutes before the meals and are defrosted by the patients. At 19:00, the dietician gives patients the foods for breakfasts and on Friday evening the pre-packaged and frozen foods for the weekend.

A key strategy of assisted eating is helping underweight patients to reduce their anxiety and to feel in control during eating and the process of weight regain. The patients' anxiety associated with eating and weight regain is usually sustained by the belief that certain foods or certain amounts of food will lead to loss of control and unpredictable weight gain. The eating approach used in intensive outpatient CBT-E challenges the patient's belief providing "precision, exactness, and certainty" about quality and quantity of food intake so that clear data can be collected about the effects of food on weight (Garner et al., 1997). Patients establish collaboratively with their therapists the BMI goal range (which is generally between a 19 and 20 kg/m<sup>2</sup>). In addition, they are informed about the caloric content of the diet that is determined by the BMI status. The first week the energy intake is set at 1500 kcal per day, and then it is increased at 2000 kcal per day in the second week, and to 2500 kcal per day in the third week. Subsequently, the energy intake is adjusted based on the body weight variations to maintain a weight gain comprised between 1 to 1.5 kg per week. Over the 2500 kcal per day patients have the option to use normal food or high-energy drinks. Once patients reach a BMI of 18.5 kg/m<sup>2</sup> threshold, the caloric content of diet is gradually reduced to maintain the body weight in the range of 3 kg.

Assisted eating is used also with normal weight patients with binge eating and purging that did not reduced these behaviours with conventional outpatient CBT-E. In these cases, assisted eating is designed to show them that they can eat a normocaloric diet comprising three meals and a snack without gaining weight and that they can eat these meals without binge eating or purging (Dalle Grave et al., 2008). The interruption of binge eating and purging in the intensive outpatient setting is used as evidence that some processes operating at home in encouraging these behaviours will need to be addressed later during the treatment to avoid a relapse.

## Non assisted eating

During the first eight weeks of intensive outpatient CBT-E, patients are encouraged to adopt the same eating approach outside of the outpatient unit during weekends and the morning breakfast. In these occasions, they should consume the pre-packaged and frozen foods given them by the dietician.

In the last four weeks patients are gradually exposed to eat all meals with natural foods outside of the unit and to maintain the weight addressing dietary restraint (cognitive restraint) and dietary rules with procedures of conventional CBT-E (see Fairburn, 2008). In this phase patients self-manage the period after the meals and have a free access to bathrooms.

# The involvement of significant others

Significant others are people who have a major influence on the patient's eating. With adult patients significant others participates at three sessions if the patient is willing. The aims of these sessions are to discuss how to create a home environment that is likely to support the patients' efforts to change their eating, and how to use problem solving to address everyday difficulties and more significant family crises.

Patients under the age of 18 years and their significant others participate in a "family module". This consists of six sessions with the psychologist, and four sessions with the dietician to plan meals at home and to address two family meals in the unit. The module has three components:

- 1. Education. Parents and significant others are educated about the cognitive behavioural theory of eating disorders, patients' personal formulation, strategies used to assist patients' eating, and the expression of emotion within the family.
- 2. Eating as a family. Parents consume two meals in the unit with the patients with the assistance of the dietician. The first meal is prepared by the dietician and the second by parents. After every family meal, there is a debriefing meeting with parents and patient. Any disagreement on the organization of the family meal at home are addressed using problem solving techniques.
- 3. Creating the optimal family environment. As with adult patients, parents are helped to create a positive home to facilitate patients' eating change and how to use problem solving to address everyday difficulties and more significant family crises.

## Maintaining the changes of eating outside the unit

Intensive outpatient CBT-E adopts several strategies to help patients to maintain the changes of eating outside the unit. First, in the first part of treatment, patients consume during weekends at home the same food frozen and pre-packaged foods they eat in the unit. With this strategy, patients and their parents have not to buy and cook the food, two typical situations that often trigger preoccupations about the control of eating, shape, and weight. Second, patients with binge eating are encouraged to remove from their environment foods that could trigger bulimic episodes. Third, sessions with the dietician are mainly dedicated to prepare and review weekends and eating outside of the unit. Fourth, patients are supported more intensively than conventional CBT-B. Fifth, the involvement of significant others is used to create a home environment that is likely to support patients' efforts to change their eating.

The high rate of relapse usually observed in the patients after the discharge from eating disorder inpatient treatments (Walsh et al., 2006) is likely to derive by two main facts: first, the eating and weight changes occurs while the patient is in the protected environment of hospital; second because of the major disruption of treatment that typically occurs on discharge (Dalle Grave et al., 2008). These problems do not apply to intensive outpatient CBT-E: eating and weight changes occur while the patient is living at home, and individual CBT-E sessions continue after the end of the intensive treatment with the same therapist.

#### **METHODS**

### **Participants**

Twenty underweight eating disorder patients (age  $18.2 \pm 6.5$  years; BMI  $14.6 \pm 1.5$  kg/m<sup>2</sup>; 19 females and one male; 19 with anorexia nervosa and one with eating disorder not otherwise specified diagnosis) participated in the study. Thirteen of twenty patients (65%) were under 18 years of age. All patients failed to weight regain with conventional outpatient CBT-E and were consecutively admitted at the intensive outpatient CBT-E.

#### Measures

Assessment took place the first day of intensive outpatient CBT-E, at the end of treatment, and at six-month follow-up.

Weight was measured on a medical balance and height by a stadiometer. Patients were weighted with underwear and without shoes.

The Eating Disorder Examination (EDE.12.0D) (Fairburn & Cooper, 1993) was used to evaluate the specific psychopathology of eating disorders and to elicit a correct diagnosis. The EDE is an investigator-based interview that assesses the frequency of key behavioural and attitudinal aspects of eating disorders during the preceding four weeks (28 days). EDE evaluates the major areas of eating disorder psychopathology on four subscales: Restraint, Eating Concern, Shape Concern, and Weight Concern. Inter-ratter reliability has been estimated to be 0.97–0.99 (Wilson & Smith, 1989). The four subscales have good discriminant validity in distinguishing between individuals with eating disorders and controls (Cooper, Cooper, & Fairburn, 1989; Fairburn & Cooper, 1993), and the Weight Concern and Shape Concern subscales have good discriminant validity in distinguishing between women with eating disorders and restrained eaters (Wilson & Smith, 1989). In addition to providing severity ratings of eating disorder pathology, the EDE diagnostic version can be used to diagnose eating disorders according to DSM-IV. When the interview is used to elicit diagnoses, events of note in the preceding two

months (months 2 and 3 respectively) should be noted together with their boundaries. In the present study, we used a validated Italian translation of EDE (Mannucci, Ricca, Di Bernardo, & Rotella, 1996).

The Symptom CheckList-90R (SCL-90) (Derogatis & Cleary, 1977) was used to identify psychological distress. For each item, patients scored how much that problem has distressed them during the last week, with responses ranging from 0 (not at all) to 4 (extremely). The 90 items of the test were used to compute the general symptom index (GSI), an indicator of the overall psychological distress (Derogatis & Cleary, 1977). A value  $\geq 1$  in SCL-GSI or in a specific subscale is suggestive of psychopathology (1.00–1.49, mild; 1.50–1.99, moderate;  $\geq$  2.00, severe).

#### RESULTS

#### Treatment outcome

Thirteen of twenty patients (65%) concluded the treatment. Five patients (25%) were admitted at an eating disorder inpatient unit as they failed to regain weight, and two (10%) prematurely interrupted the treatment.

Completers obtained significant weight regain and significant improvement of eating disorder and general psychopathology (see Table 2). At six months follow-up, BMI was significant higher than basal BMI, EDE eating concern and SCL-GSI scores were significant lower than basal scores, while the other EDE subscales and EDE Global scores were lower but not significant different than basal scores. At follow-up 11 (91.7%) completers had a BMI greater than 17.5 kg/m<sup>2</sup>.

Six-months Pre-treatment Post-treatment Friedman follow-up Test 2 3 15.17\*\*\* Body Mass Index  $(kg/m^2)$  $18.2 \pm 1.0_{1}$  $14.6 \pm 1.5_{23}$  $18.1 \pm 1.0_1$ EDERestraint  $4.0 \pm 1.7_{2}$  $1.0 \pm 1.2_{1}$  $2.3 \pm 2.1$ 11.40\*\* Eating Concern  $3.8 \pm 1.0_{2.3}$  $2.0 \pm 1.5_{1}$ 17.89\*\*\*  $1.2 \pm 1.1_{1}$ Weight Concern  $4.4 \pm 1.4_2$  $1.9 \pm 1.7_{1}$  $2.3 \pm 1.9$ 12.63\*\* Shape Concern  $4.6 \pm 1.5$  $3.1 \pm 2.2$  $3.3 \pm 2.2$ 3.62 Global Score  $1.8 \pm 1.4_{1}$  $2.4 \pm 1.9$ 8.98\*\*  $4.2 \pm 1.3_2$ SCL-GSI  $1.8 \pm 0.8_{23}$  $0.9 \pm 0.7_{1}$  $0.9 \pm 0.8_{1}$ 8.14\*

*Table 2.* Treatment outcome in 13 consecutive underweight eating disorder patients completing intensive outpatient CBT-E

EDE = Eating Disorder Examination (12.0D); SCL-GSI = Symptom CheckList-90R General Severity Index

Subscripts refer to significant differences between groups measured with Wilcoxon Signed Ranks Test (with Bonferroni correction)

## **DISCUSSION**

Preliminary exploratory evaluation of intensive outpatient CBT-E outcome is encouraging. The treatment obtained significant weight regain and improvement of eating disorder and general psychopathology. The improvement of BMI and general psychopathology was maintained at six month follow-up, while the mean EDE subscales scores were lower but not significant different than basal EDE scores, with the exception of EDE restraint scores. A larger sample will be necessary to evaluate the long-term impact of intensive outpatient CBT-E on eating disorder psychopathology.

The treatment was associate with a very low drop-out rate, but about 25% of patients required the admission to specialized inpatient eating disorder units. These data indicate that intensive outpatient CBT-E could become an effective and less expensive alternative to traditional inpatient treatment for a large group of severe underweight eating disorder patients not responding to conventional outpatient approaches. Instead, inpatient treatment could be reserved only to the small subgroup of patients not improved with intensive outpatient treatments.

# Concluding remarks

Intensive outpatient CBT-E is the most promising and logical extension of the rational and theoretical procedure of CBT-E. The treatment is preferred than traditional intensive approaches for economic and theoretical reasons. The structure

<sup>\*</sup>p < .05 \*\*p < .01 \*\*\*p < .001

and the meal supervision ensure the implementation of the programs with patients not able to achieve a behaviour change with the conventional CBT-E. A well organized CBT-E permits to achieve the same level of therapeutic intensity of day-hospital but at a lower cost and gives to patients an intensive support without removing them by the real life stressors, as usually happen in the typical inpatient settings.

The ideal length and intensity of intensive outpatient CBT-E has not yet established. The treatment is actually under evaluation with the structure of five days a week for three months with underweight patients. However, the treatment could be shortened to help patients unable to implement some specific procedures of CBT-E (e.g. normal weight patients to reduce the frequency of binge eating or purging after meals). A short period of intensive outpatient CBT-E could be also indicated for patients relapsing after a prolonged period of remission to regain the eating and weight control and to recuperate the confidence in their ability to cope with the eating disorder. Finally, some procedure of intensive outpatient CBT-E (e.g. assisted family meals) could be used to strengthen the CBT-E adapted for adolescents.

Preliminary results of intensive outpatient CBT-E are encouraging, but its effectiveness and its exact role in the treatment of eating disorders should be investigated by future studies including larger samples and longer follow-up.

#### REFERENCES

- Cooper, Z., Cooper, P.J., & Fairburn, C.G. (1989). The validity of the eating disorder examination and its subscales. *British Journal of Psychiatry*, 154, 807-812.
- Dalle Grave, R. (2005). A multi-step cognitive behaviour therapy for eating disorders. *European Eating Disorders Review, 13*, 373-382.
- Dalle Grave, R., Bohn, K., Hawker, D., & Fairburn, C.G. (2008). Inpatient, day patient and two forms of outpatient CBT-E. In C.G. Fairburn (Eds.), *Cognitive Behavior Therapy and Eating Disorders* (pp. 231-244). New York: Guilford Press.
- Dalle Grave, R., Ricca, V., & Todesco, T. (2001). The stepped-care approach in anorexia nervosa and bulimia nervosa: progress and problems. *Eating and Weight Disorders*, 6, 81-89.
- Derogatis, L.R., & Cleary, P.A. (1977). Confirmation of the dimensional structure of the SCL-90: a study in construct validity. *Journal of Clinical Psychology*, *33*, 981-989.
- Fairburn, C.G. (2008). Cognitive Behavior Therapy and Eating Disorders. New York: Guilford Press.
- Fairburn, C.G., & Cooper, Z. (1993). The eating disorder examination (12th Ed.). In C.G. Fairburn, & G.T. Wilson (Eds.), *Binge eating: nature, assessment, and treatment* (pp. 317-360). New York: The Guilford Press.

- Fairburn, C.G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: a "transdiagnostic" theory and treatment. *Behaviour Research and Therapy*, 41, 509-528.
- Fairburn, C.G., Norman, P.A., Welch, S.L., O'Connor, M.E., Doll, H.A., & Peveler, R.C. (1995). A prospective study of outcome in bulimia nervosa and the long-term effects of three psychological treatments. *Archives of General Psychiatry*, *52*, 304-312.
- First Certificate of Professional Training in Eating Disorder and Obesity. Verona: Positive Press.
- Garner, D., Vitousek, K., & Pike, K. (1997). Cognitive-behavioral therapy for anorexia nervosa. In D.M. Garner, & P.E. Garfinkel (Eds.), *Handbook of treatment for eating disorders* (pp. 94–144). New York: Guilford Press.
- Keys, A., Brozek, J., Henschel, A., Mickelsen, O., & Taylor, H.L. (1950). *The biology of human starvation* (Vol. 2). Minneapolis: University of Minnesota Press.
- Mannucci, E., Ricca, V., Di Bernardo, M., & Rotella, C.M. (1996). Studio del comportamento alimentare con una intervista strutturata: la Eating Disorder Examination. *Il Diabete*, 8, 127-131.
- Mitchell, J.E., Halmi, K., Wilson, G.T., Agras, W.S., Kraemer, H., & Crow, S. (2002). A randomized secondary treatment study of women with bulimia nervosa who fail to respond to CBT. *International Journal of Eating Disorders*, *32*, 271-281.
- National Institute of Clinical Excellence (2004). *Eating disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. Clinical Guideline* 9. National Collaborating Centre for Mental Health.
- Ricca, V., Mannucci, E., Mezzani, B., Di Bernardo, M., Zucchi, T., Paionni, A., Placidi, G.P., Rotella, C.M., & Faravelli, C. (2001). Psychopathological and clinical features of outpatients with an eating disorder not otherwise specified. *Eating and Weight Disorders*, 6, 157-165.
- Walsh, B.T., Kaplan, A.S., Attia, E., Olmsted, M., Parides, M., Carter, J.C., Pike, K.M., Devlin, M.J., Woodside, B., Roberto, C.A., & Rockert W. (2006). Fluoxetine after weight restoration in anorexia nervosa: a randomized controlled trial. *Jama*, 295, 2605-2612.
- Wilson, G.T., & Fairburn, C.G. (2002). Treatments for eating disorders. In P.E. Nathan, & J.M. Gorman (Eds.), *A guide to treatments that work* (pp. 559–592). New York: Oxford University Press.
- Wilson, G.T., & Smith, D. (1989). Assessment of bulimia nervosa: An evaluation of the Eating Disorders Examination. *International Journal of Eating Disorder*, 8, 173–179.

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