CBT-E for adolescents

Riccardo Dalle Grave, MD
Department of Eating and Weight Disorders
Villa Garda Hospital- Garda (VR). Italy

DISCLOSURES
Riccardo Dalle Grave, MD

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Introduction

Background

- Anorexia nervosa (AN) has a profound impact on physical health and psychosocial functioning of adolescents
- It is important to treat it early and effectively as otherwise it can have long-lasting effects.
- A particular form of family therapy, termed Moodsley therapy or family-based treatment (FBT, Lock, Le Grange, Agras, & Dare, 2001) is the leading empirically-supported intervention for adolescents with the disorder (NICE, 2017).

Introduction (cont.)

FBT limitations

- It is not acceptable to some families and patients
- Fewer than half the patients make a full treatment response (Lock, 2011; Lock et al., 2010)

Other problems observed clinically

- When it does not work an increase of the patient's resistance to treatment may occur (external control)
- It does not help the patient to understand the psychological meanings associated with shape, weight and eating control (externalization)
Introduction (cont.)

“FBT needs to be modified to make it more acceptable and effective, or alternative treatment approaches need to be found.” (Lock, 2011)

CBT-E is the most valid alternative to FBT
- CBT-E works across the eating disorders
- Younger patients have essentially the same ED psychopathology as older patients

CBT-E and the younger patient

Topics
1. Eating disorders in younger patients
2. An overview of CBT-E for the younger patients
3. Differences and similarities between CBT-E and FBT
4. Effectiveness of CBT-E for the younger patients
5. Influence on the health policy
CBT-E and the younger patient

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Eating disorders in younger patients

Features Shared with Older Patients
- Essentially the same ED psychopathology
  - Over-evaluation of shape and weight
  - Strict dieting
  - Self-induced vomiting
  - Laxative misuse
  - Binge-eating episodes
  - Excessive exercising

These features can be addressed by CBT-E
Eating-disorder psychopathology in adults and adolescents with anorexia nervosa. 

1,275 patients with anorexia nervosa (382 adolescents and 893 adults)

1. Shape overvaluation, feeling fat and desiring weight loss are the most central and highly interconnected nodes in the network both in adults and adolescents

2. Similar structure with nodes about eating behaviours (restraint, restriction, excluded food and dietary rules) and nodes about body image concerns (body and weight dissatisfaction, discomfort seeing body, shape and weight overvaluation) forming distinct clusters

These findings support the use of similar strategies and procedures to address the eating disorder psychopathology both in adults and adolescents with anorexia nervosa.

The distribution of eating disorder diagnosis among consecutive patients with eating disorders attending an Italian outpatient CBT-E clinical service from 2016 to 2018

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Adults</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Anorexia Nervosa</td>
<td>126</td>
<td>62.4</td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td>35</td>
<td>17.3</td>
</tr>
<tr>
<td>Binge-Eating Disorder</td>
<td>11</td>
<td>5.4</td>
</tr>
<tr>
<td>Avoidant restrictive food intake disorder</td>
<td>9</td>
<td>3.3</td>
</tr>
<tr>
<td>Other Specified Eating Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atypical Anorexia Nervosa</td>
<td>7</td>
<td>2.6</td>
</tr>
<tr>
<td>Bulimia nervosa (of low frequency and/or limited duration)</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Binge-Eating Disorder (of low frequency and/or limited duration)</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Purging Disorder</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Night Eating Syndrome</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Unspecified Eating Disorders</td>
<td>9</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Eating disorders in younger patients

Distinctive Features

• Most adolescent patients are highly concerned about issues of control and autonomy
  • This is not a problem as CBT-E is designed to enhance patients’ sense of control and autonomy. CBT-E is collaborative with the therapist and patient working together to overcome the eating problem
• Many adolescent patients are highly ambivalent about treatment
  • This is not a problem as CBT-E is designed to be engaging and to address ambivalence
• Some patients have over-evaluation of control over eating per se
  • This is not a problem as this form of over-evaluation can be addressed using an adaptation of the “body image” module of CBT-E

Distinctive Features (cont.)

• In the great majority of cases the patient’s parents need to be involved in treatment
  • This requires modifying CBT-E
• The youngest patients require a treatment that matches their cognitive development
  • This is easily managed in CBT-E as it is not a complex treatment to receive
• The patient’s physical health is of particular concern in younger patients
  • This necessitates careful assessment and monitoring, and a lower threshold for providing patients with a more intensive intervention (e.g., hospitalization)
CBT-E and the younger patient

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An overview of CBT-E for the younger patients

Lecture
An overview of CBT-E for the younger patients

Design and implementation of the treatment

- The Department of Eating and Weight Disorders of Villa Garda Hospital, Italy adapted CBT-E for adolescents in collaboration with C.G. Fairburn (CREDO - Oxford University, UK)

The transdiagnostic perspective

Eating disorders share an evolving psychopathology
The transdiagnostic perspective

Theoretical implications
• The eating disorder psychopathology is likely to be maintained by a common set of processes, whatever the DSM eating disorder diagnosis

Treatment implications
• The treatment should be able to address the eating disorder psychopathology, whatever the DSM eating disorder diagnosis

An overview of CBT-E for the younger patients

Main Points
• It uses similar strategies and procedures as the adult form of CBT-E
• There are some differences
  1. Particular effort is made to engage patients from the very outset
  2. Treatment tends to be shorter as change often occurs more quickly (e.g., with underweight patients 30 sessions may be sufficient)
  3. Parents are involved in treatment
An overview of CBT-E for the younger patients

Goals
1. To engage patients in the treatment and involve them actively in the process of change
2. To remove the eating disorder psychopathology, i.e. the dietary restraint and restriction (and low weight if present), extreme weight control behaviours, and preoccupation with shape, weight, and eating
3. To correct the mechanisms maintaining the eating disorder psychopathology
4. To ensure lasting change

General strategies
- It never adopts "prescriptive" or "coercive" procedures
  - Patients are never asked to do things that they do not agree to do
  - The key strategy is to collaboratively create a personal formulation of the main processes maintaining the patient’s individual psychopathology, as these will become the targets of treatment
  - Patients are educated about the processes in their personal formulation, and actively involved in the decision to address them
  - If they do not reach the conclusion that they have a problem to address, the treatment cannot start or must be suspended, but this is not a common occurrence
An overview of CBT-E for the younger patients

General strategies (cont.)

- The eating disorder psychopathology is addressed via a flexible and personalized set of sequential cognitive and behavioural strategies and procedures, integrated with progressive patient education.
- To achieve cognitive change, patients are encouraged to observe, using real-time self-monitoring, how the processes in their personal formulation operate in real life.
- Patients are asked to make gradual behavioural changes and analyse their effects and implications on their way of thinking.
- In the later stages of CBT-E, the treatment focuses on helping patients recognise the early warning signs of eating disorder mind-set reactivation, and to decentre from it quickly, thereby avoiding relapse.

Structure

- Treatment duration
  - 2 pre-treatment assessment
  - 30–40 fifty-minute individual sessions in patients with a BMI between the 3rd and 25th centile
  - 3 post-treatment review sessions (after 4, 12, 20 weeks)
An overview of CBT-E for the younger patients

Eight Core procedures (CBT-Ef)
1. Engage the patient
2. Help patients identify and analyze relevant phenomena using real-time recording
3. Help patients establish a stable pattern of regular eating
4. Help underweight patients choose to regain weight, and then do so
5. Help patients identify and address shape and weight concerns
6. Help patients recognize that their dieting is a problem and address it
7. Help patients deal effectively with difficult events and moods
8. Help patients identify setbacks and respond promptly to them

An overview of CBT-E for the younger patients

Four modules (CBT-Eb)
1. Clinical perfectionism
2. Core low-self-esteem
3. Interpersonal difficulties
4. Mood intolerance

When they
1. Are pronounced
2. Appear to be maintaining the eating disorder
3. Seem likely to interfere with the response to treatment
CBT-E Map for younger underweight patients

STEP ONE: STARTING WELL AND DECIDING TO CHANGE
- Engaging the patient in treatment and change
- Establishing real-time self-monitoring
- Establishing collaborative in-session weighing
- Providing education
- Jointly creating the personal formulation
- Introducing a pattern of regular eating
- Thinking about addressing weight regain
- Involving parents

STEP TWO: ADDRESSING THE CHANGE
Focused CBT-E modules
- Underweight & Undereating
- Body Image
- Dietary Restraint
- Events and Mood Changes
- Setbacks & Mindsets

Broad CBT-E modules
- Clinical Perfectionism
- Core Low Self-Esteem
- Interpersonal Difficulties
- Mood Intolerance

STEP THREE: ENDING WELL
- Ensuring that progress is maintained
- Minimizing the risk of relapse

REVIEW SESSIONS*
- Conducting a joint review of progress
- Identifying emerging barriers to change
- Reviewing the formulation
- Deciding whether to use the broad form of CBT-E
- Planning the rest of treatment

*One after Step One in non-underweight patients; every 4 weeks in underweight patients

POST-REVIEW SESSIONS
After 4, 12 and 20 weeks

An overview of CBT-E for the younger patients

Structure

- Parent involvement
  - One 50-minute session only with parents
    a. To educate on eating disorders and their role in the treatment
       - The cognitive behavior theory of how eating disorders are maintained
       - Instill hope
       - Nature, style and practicalities of the treatment
       - Role of parents in the treatment
An overview of CBT-E for the younger patients

Structure

• Parent involvement
  • One 50-minute session only with parents (cont.)
    b. To create an optimal family environment
      • Avoid following a restrictive diet
      • Avoid keeping junk food in the house
      • Avoid comments about the patient’s eating during meals
      • Avoid conversations that emphasize thinness
      • Create an environment that does not encourage concerns about shape and weight
      • Create a warm and serene home environment
      • Create a ‘new’ home environment
      • Be reliable and instill hope

An overview of CBT-E for the younger patients

Structure

• Parent involvement
  • One 50-minute session only with parents (cont.)
    c. To assess and address parental barriers to change
      • Logistical and work barriers
      • Cultural barriers
      • Disagreement about the nature of the treatment proposed
      • Disagreement between the parents about the need for treatment
      • Parents with clinical depression or other mental disorders
An overview of CBT-E for the younger patients

Structure

• Parent involvement
  • Eight to ten 15–20 minute jointly sessions with patient and parents
    a. To inform parents about what is happening and the patient’s progress
    b. To discuss, with the patient’s prior agreement, how they might help the patient make changes

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Principal differences between FBT and CBT-E

<table>
<thead>
<tr>
<th></th>
<th>FBT</th>
<th>CBT-E</th>
</tr>
</thead>
</table>
| **Conceptualization of eating disorders** | • The problem belongs to the entire family  
• The illness is separated from the patient | • The problem belongs to the individual  
• It does not separate the illness from the patient |
| **Adolescent’s involvement** | • Not actively involved | • Actively involved |
| **Parents’ involvement** | • Vitally important | • Useful but not essential |
| **Treatment team** | • Multidisciplinary | • Single therapist |
| **Sessions (n)** | • 18 family sessions  
• Sessions with the consulting team (paediatrician or nurse) | • 20 individual sessions (not underweight patients)  
• 30-40 individual sessions (underweight patients) |


Similarities between FBT and CBT-E

• Both address the maintaining mechanism of the eating disorder psychopathology
• A major focus of both treatments is to help the adolescent patient to normalize body weight
• Both FBT and CBT-E, although using different procedures, include regular weighing of the patients within each session
• Potential common mechanism of actions of the two treatments
  • Exposure (and habituation) to feared food and its consumption (Hildebrandt et al 2012)
  • Indirect reduction of the over-evaluation of shape and weight
    • CBT-E enhancing the importance of other domains of life (e.g., school, social life, hobbies, etc.),
    • FBT working toward increased personal autonomy for the adolescent.
• Both manage comorbid psychiatric diagnoses by involving a psychiatrist as part of the care team. Hospitalization, for psychiatric or medical acuity, is recommend only when the patients presents with clinical severity that cannot or should not be managed in an outpatient setting

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Anorexia Nervosa Verona Study
Dalle Grave R, Calugi, S, Doll HA, Fairburn CG, BRAT 2013

- 46 patients (13-17 years) with AN
- 40 sessions of CBT-E + 1 session with parents and 8 jointly session with patient and parents
- No concomitant treatment
Significantly more adolescents reached the goal BMI than adults (65.3% vs. 36.5%; P = 0.003).

The mean time required by the adolescents to restore body weight was about **15 weeks less** than that for the adults (14.8 (SE = 1.7) weeks vs. 28.3 (SE = 2.0) weeks, log-rank = 21.5, P < 0.001)

- 68 adolescent patients with an eating disorder and BMI percentile corresponding to an adult BMI > 18.5
- 20 sessions of CBT-E + 1 session with parents and 4 jointly session with patient and parents
- Non concomitant treatment
CBT-E for adolescents in a real-world setting
Dalle Grave, Sartirana, Calugi, IJED 2019

Demographic variables (N=49)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>15.5 years (SD = 1.7, range 11–18 years)</td>
</tr>
<tr>
<td>Mean age of eating disorder onset</td>
<td>14.5 years (range 10–17, median 14 years)</td>
</tr>
<tr>
<td>Mean duration of illness</td>
<td>0.95 years (range 0–4, median 1 year)</td>
</tr>
</tbody>
</table>

96.1% agreed to address the treatment

Completers (71.4%) showed a considerable weight gain and reduced scores for clinical impairment and eating-disorder and general psychopathology. Changes remained stable at 20-week follow-up

No baseline predictors of drop-out or treatment outcomes were detected

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Treatment should include specialised community family interventions for anorexia nervosa and specifically adapted forms of CBT for bulimia nervosa, in particular CBT-E (Fairburn, 2008). Overall, current evidence for effective treatments for children and young people with an eating disorder remains limited. However, both CBT and family interventions for adolescent bulimia nervosa have some support (Fisher et al., 2010). In addition, there is emerging evidence to suggest that a specifically adapted form of CBT may be effective in anorexia nervosa in young people (Dalle Grave et al., 2013).

Recommeded psychological treatments

NICE guideline May 2017 – NG69

<table>
<thead>
<tr>
<th>Bulimia Nervosa</th>
<th>Binge-Eating Disorder</th>
<th>Anorexia Nervosa</th>
<th>OSFED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adults</strong></td>
<td>GSH If it is ineffective CBT-ED</td>
<td>GSH If it is ineffective CBT-ED</td>
<td>CBT-ED o “Mantra” o SSCM If it is ineffective FPT</td>
</tr>
<tr>
<td><strong>Young people</strong></td>
<td>FT-BN If it is ineffective CBT-ED</td>
<td>GSH If it is ineffective CBT-ED</td>
<td>FT-AN If it is ineffective CBT-ED o ANFT</td>
</tr>
</tbody>
</table>

AFN-AN = Adolescent- Focused Psychotherapy for Anorexia Nervosa; CBT-ED = Cognitive Behavior Therapy for Eating Disorders; GSH = Guided Self-Help; FPT= Focal psychodynamic therapy; MANTRA = Maudsley Anorexia Nervosa Treatment for Adults; OSFED = other specified feeding and eating disorders; SSCN = Specialist Supportive Clinical Management
Conclusions

- CBT-E is suitable for adolescent patients with anorexia nervosa
- The availability of another promising treatments for adolescents with anorexia nervosa open the opportunity to compare FBT with CBT-E in a randomised controlled trial
- Key variables of interest would include
  - the relative acceptability of the two approaches
  - their effectiveness and their ability to produce enduring change
  - their relative cost and cost-effectiveness
  - the moderators of treatment response that might allow the matching of adolescent patients to CBT-E or FBT
Questions and answers