



This is a repository copy of *New developments in cognitive-behavioural therapy for eating disorders (CBT-ED)*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/177906/>

Version: Published Version

Article:

Mulkens, S. and Waller, G. orcid.org/0000-0001-7794-9546 (2021) New developments in cognitive-behavioural therapy for eating disorders (CBT-ED). *Current Opinion in Psychiatry*, 34 (6). pp. 576-583. ISSN 0951-7367

<https://doi.org/10.1097/YCO.0000000000000745>

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>



New developments in cognitive-behavioural therapy for eating disorders (CBT-ED)

Sandra Mulkens^{a,b} and Glenn Waller^c

Purpose of review

This review summarizes recent developments in cognitive-behavioural therapy for eating disorders (CBT-ED). More specifically, the past five years were covered, with the latest UK and Dutch guidelines for eating disorders as a starting benchmark, and with special consideration of the past 18 months.

Recent findings

The new research can be divided into findings that have: (1) reinforced our existing understanding of CBT-ED's models and impact; (2) advanced our understanding and the utility of CBT-ED, including its application for the 'new' disorder Avoidant/Restrictive Food Intake Disorder (ARFID); (3) suggested new directions, which require further exploration in clinical and research terms. These include learning from the circumstances of the COVID-19 pandemic.

Summary

CBT-ED has developed substantially in the past 5 years, with consolidation of its existing evidence base, further support for real-life implementation, extension of methods used, and the development of new approaches for working with younger people – particularly in the form of treatments for ARFID. Over the past 18 months, even more promising changes in delivery occurred in response to the COVID19 pandemic, showing that we can adapt our methods in order to work effectively via remote means. Challenges remain regarding poor outcomes for anorexia nervosa.

Keywords

Avoidant/Restrictive Food Intake Disorder, cognitive-behavioural therapy for eating disorders, cognitive-behavioural therapy, eating disorders, recent developments

INTRODUCTION

In 2017, both the UK's National Institute for Health and Care Excellence (NICE) [1] and the Dutch Foundation for Quality Development in Mental Healthcare (AkwaGGZ) [2] published their updated guidance on the treatment of eating disorders, based on the evidence to that point. Those findings were broadly supported in the Academy for Eating Disorders (2020) [3] summary. The guidelines recommended cognitive-behavioural therapy for eating disorders (CBT-ED) as the key therapy for nonunderweight adults, and as one of a number of options for underweight adults. However, it was not recommended as the first choice treatment for younger patients, as family based methods had the strongest value.

CBT-ED is a generic term that encompasses all of the evidence-based forms of CBT that have been developed for such disorders, reflecting the fact that those different methods share a common core of encouraging nutritional and behavioural change as key to addressing the cognitions and emotions that

underpin eating pathology and body image issues. It is noteworthy that these revised NICE and Dutch guidelines had more of an emphasis on CBT-ED than the original guidance, published in 2004 [4] and 2006 [5], respectively. Indeed, there had been

^aDepartment of Psychiatry and Neuropsychology, Faculty of Health, Medicine, and Life Sciences, School for Mental Health and Neuroscience, ^bDepartment of Clinical Psychological Science, Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands and ^cClinical and Applied Psychology Unit, Department of Psychology, University of Sheffield, Sheffield, UK

Correspondence to Sandra Mulkens, Maastricht University, dept. of Psychiatry and Neuropsychology, PO Box 616, 6200 MD Maastricht, The Netherlands. Tel: +31 0 43 3875443; e-mail: s.mulkens@maastrichtuniversity.nl

Curr Opin Psychiatry 2021, 33:000–000

DOI:10.1097/YCO.0000000000000745

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

KEY POINTS

- CBT-ED had built on its existing evidence base in recent years.
- CBT-ED for ARFID is an exciting new development in the field.
- There are still gaps in clinicians' delivery of CBT-ED.
- Further research is needed to develop CBT-ED, particularly with reference to anorexia nervosa and less well-studied subtypes of eating disorders (e.g., pica and rumination disorder).

substantial development in the evidence base for CBT-ED in the intervening decade, meaning that its effectiveness was demonstrably greater than that of the other therapies by the 2017 updates. Importantly, the Dutch guidelines addressed the treatment of Avoidant/Restrictive Food Intake Disorder (ARFID), a recently acknowledged DSM5 [6] feeding/eating disorder which is characterized by eating too little/too selectively, which is not driven by fear of weight gain or body image disturbance. As detailed below, our understanding of CBT for ARFID is one of the most important recent developments in CBT-ED.

This review paper will outline developments in CBT-ED over the past 5 years, detailing our greater understanding of the role of CBT-ED in treating individuals across the age span. The new research in the field can be divided into recent findings that have:

- (1) reinforced our existing understanding of CBT-ED's models and impact
- (2) advanced our understanding and the utility of CBT-ED, including its application for the newly acknowledged feeding/eating disorder ARFID
- (3) suggested new directions, which require further exploration in clinical and research terms. These include learning from the peculiar circumstances of the COVID-19 pandemic.

RECENT FINDINGS FURTHERING THE EXISTING EVIDENCE REGARDING COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS

The core value of CBT-ED – addressing eating disorder pathology and body image – has long been established [1,7]. Similarly, CBT-ED was already known to have an impact on comorbidity [8,9], and difficulties in its delivery had been identified [10]. However, there has been additional evidence to support each of those points, adding to those well-established findings.

DETERMINING COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS'S BENEFITS IN BROADER USE

Delivery of CBT-ED can enhance outcomes, but broad implementation of empirically supported treatments can be slow [11]. De Jong *et al.* [12[■]] demonstrated that Fairburn *et al.*'s [13] enhanced CBT for eating disorders (CBT-E) can be delivered more quickly and via less intensive interventions than treatment as usual, and was more effective in increasing self-esteem. Van den Berg *et al.* [14[■]] proved that CBT-E could be well implemented in a routine inpatient and outpatient setting, which also resulted in lower costs. Therefore, we should be encouraged that CBT-ED can be implemented in routine clinical practice. However, it is obviously important to consider the growing evidence that CBT-ED works under those conditions.

DETERMINING COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS'S BENEFITS IN REAL LIFE SETTINGS

The recommendations of the NICE [1] guideline regarding CBT-ED were based primarily on the outcome of well controlled and supported research trials [8,15]. Although there were also studies that indicated the effectiveness of those therapies in routine clinical practice [9,16,17], that evidence has been supported by several further studies, which broadly demonstrate that CBT-ED delivered in routine clinical settings can have the same impact as when it is delivered in research settings, though the attrition rate tends to be higher [18–20].

DETERMINING COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS'S BENEFITS IN SELF-HELP SETTINGS

Self-help approaches are lower intensity interventions, which can have substantial benefits in terms of accessibility and cost, as long as they are relatively effective. Therefore, it is positive that recent research has enhanced the evidence that CBT-ED guided self-help can be effective, in specific forms and for certain eating disorders [21[■],22,23].

PREVENTION METHODS

The most widely used prevention-oriented CBT-ED approach is the Body Project, which was well established by 2017 [24]. Since that time, the Body Project has been widely rolled out in a number of studies. Most importantly, it is beginning to establish its effectiveness in a range of countries and in non-Western cultures [25[■],26]. Other CBT-based body

image prevention methods have also been shown to be effective, but with smaller effect sizes [27].

COMORBIDITY

Studies such as Fairburn *et al.* [8] and Turner *et al.* [9] had already shown that CBT-ED has positive impacts on other, comorbid aspects of psychopathology, such as depression and anxiety. That finding has been extensively consolidated in the past five years, with evidence that CBT-ED has a particular impact on comorbid depression, anxiety, self-esteem, and quality of life [12[■],28–30].

CLINICIAN ADHERENCE TO COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS PROTOCOLS

The evidence above shows that that CBT-ED can be delivered in nonresearch settings [31,32], indicating that it is viable in all settings, as long as the clinician delivers the core techniques that effect change. Unfortunately, preliminary evidence that many clinicians do not deliver core tasks of CBT-ED [10] has been replicated very closely [33], confirming that clinicians' emotions, beliefs and reactions to patients play a part in whether patients receive key elements, such as exposure therapy, weighing, etc. [34]. In particular, it appears that apparently inflated beliefs about the therapeutic power of the working alliance results in lower adherence to core CBT-ED methods [35].

ADVANCES IN THE FIELD OF COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS

As detailed above, some of the new evidence regarding CBT-ED has reinforced our existing understanding of the role of this therapy. However, there is also a substantial amount of new research, which allows us to develop new understanding and clinical practice.

IMPACT OF COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS ON YOUNGER PEOPLE

CBT-ED was not recommended as a first choice treatment for nonadults in NICE [1] and Dutch guidelines [2], due to a lack of evidence to support its use. However, since that time there has been promising research on the treatment of the eating disorders that are most commonly associated with children, and on when CBT-ED might be the appropriate choice for young people.

Comparison with family based treatments

Dalle Grave *et al.* [36,37[■]] indicate strong conceptual reasons for using CBT-ED with adolescents and children. Although Le Grange *et al.* [38] have shown that FBT is superior to CBT-ED for bulimia nervosa (at least in the short-term), not all cases are suitable for FBT. Craig and colleagues [39] have shown that CBT-ED is a strong alternative to family based therapies in this age group, where the family or patient fail to engage in FBT or where FBT has not been effective. Therefore, it appears that CBT-ED is a suitable approach where FBT is not viable or does not work.

Impact on Avoidant/Restrictive Food Intake Disorder in younger cases

The development in 2013 of a new diagnostic structure for eating disorders [6] provided us with a new category (ARFID), but no treatments to offer to the many parents who wanted help with their children once they heard about this new diagnosis [40]. Moreover, the diagnosis of ARFID is also applicable to adults, for whom no RCTs have been conducted, as yet. The 2017 NICE guidelines [1] had no recommendations about what to offer this group, due to the lack of evidence at that time. The Dutch guidelines [2] recommended a behavioural 12-step program (SLIK) [41] for very young children, but unfortunately that was not published internationally. For older children (and adults), those guidelines suggested using a form of CBT as applied in the field of anxiety disorders - a focus on exposure combined with expectancy violation.

Since then, there has been considerable progress in the development of measures [42] and cognitive-behavioural approaches [43[■],44[■]] that appear to offer very positive outcomes for young people. Although more definitive RCTs are needed to support these early developments, it is clear that CBT-ED (in the form of CBT-AR) is a very promising potential means of treating a wide range of younger cases. The principles (e.g., focus on exposure) can also be extended to working with adults, though we are still awaiting evidence for these forms of CBT-ED for ARFID beyond childhood years.

DEVELOPMENT OF THERAPEUTIC METHODS IN COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS

Different CBT-ED models emphasise specific CBT elements to different degrees. For example, Fairburn's CBT-E [13] does not use exposure therapy, whereas it is central to other approaches [43[■],45,46]. However, a number of methods have come to

prominence in recent years, and are likely to be important in CBT-ED training.

Inhibitory learning approach to exposure

This approach is based on developments in the field of CBT for anxiety disorders, but has begun to be used effectively in the field of CBT-ED [30,43[■],46,47–49]. This approach requires pushing for more substantial change than many clinicians are used to, in order to achieve the necessary expectancy violation and positive learning, but the outcomes are likely to be more positive and sustained than the graded exposure method.

Virtual reality methods

Another promising direction is the use of virtual reality methods, which become more viable as technological costs fall. For example, Nameth *et al.* [50] have shown that virtual reality can be used to deliver cue exposure among patients who binge. Similarly, Porrás-García *et al.* [51[■]] have demonstrated that virtual reality body exposure has positive effects on body image.

Imagery

Although imagery is a very broad church in CBT, the evidence to date appears to support the use of imagery rescripting in body image work and in working with emotional states more broadly [30,52]. It appears to be related to working with the ‘anorexic voice’ in CBT-ED [53].

Progress and routine outcome measures

The use of Progress and routine outcome measures is well established as key to enhanced outcomes in psychotherapy [54[■]]. The ability to use the weekly information provides feedback that the clinician and patient can use collaboratively. Although this has still to be shown to be effective in CBT-ED, a key step has been the development of measures that allow eating pathology to be measured weekly [55[■],56,57], rather than monthly, as before [58].

THE ROLE OF TEMPORAL FACTORS IN COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS

The duration of therapies for eating disorders is comparatively long, relative to that for other disorders. Such long durations might be necessary, but that issue needs to be considered, as it makes therapy relatively costly in a number of ways. Time is an important issue in three interlinked areas of treatment for eating

disorders – the treatment dose effect, the benefits of early change, and speed of access to therapies. These issues will be considered with particular reference to recent CBT-ED findings, before considering the potential value of briefer therapies.

Treatment dose effect

Clinicians routinely act as if adding more therapy will enhance the treatment benefits (the ‘treatment dose effect’), though the evidence for this is limited. For example, Delgadillo *et al.* [59] have shown that treatment effects tail off substantially after six sessions of CBT for depression. More recent evidence has supported that conclusion in treatment of eating disorders, both across therapies [60] and specifically for CBT-ED [31]. Rose and Waller [31] found that the impact of therapy tended to plateau after the 8th–12th session, for a range of eating disorders (including underweight patients). This finding stresses the need for early change, before the treatment becomes less potent.

The benefits of early change

As with other disorders [61], early change has been proposed to be key to longer-term treatment outcome. There have been several meta-analyses demonstrating that early change is a key predictor (possibly the key predictor) of treatment outcome across eating disorders [62[■],63,64]. Although these reviews have not been specific to CBT-ED, the papers that they review indicate very clearly that early change is critical in the outcome of eating disorders when using CBT-ED [62[■]].

Early access to treatment

It is reasonable to assume that shortening waiting times will enhance outcomes for patients with eating disorders, as they do for other mental health problems [65]. In the UK, the First Rapid Early Intervention for Eating Disorders (FREED) has been set up to address this issue, to ensure that patients get treatment as quickly as possible. Although the results to date are promising [66[■]], there are no data that specifically relate to CBT-ED at present. The impact of early access to CBT-ED requires further research, to determine whether this specific therapy is more beneficial if accessed early in the eating disorder and after a short waiting time.

BRIEF COGNITIVE-BEHAVIOURAL THERAPIES FOR EATING DISORDERS

Given the impact of these temporal factors, it can be suggested that a brief, effective therapy is important,

to reduce waiting times and to ensure rapid access. NICE [1] made the specific research recommendation that briefer treatments should be explored. In part, this was due to the cost of treating eating disorders relative to other disorders, and in part it was in response to the fact that treatments that are longer than necessary result in extended waiting times for patients who might otherwise benefit from that treatment, with potential long-term negative impacts for those with eating disorders of relatively recent onset.

Since that time, there has been considerable evidence for the benefits of brief forms of CBT-ED for nonunderweight patients, along with evidence that a brief form of group dialectical behaviour therapy (DBT) can be as effective as longer versions [67]. The development of a 10-session version of CBT-ED (CBT-T) [68] has been supported by case series and cohort comparison studies showing that this approach is as effective as 20-session therapy (e.g., CBT-E), with comparable outcomes at the end of treatment and at follow-up [30,69,70,71^{*}]. However, while these brief therapies offer rapid access to effective treatment for the majority of patients with eating disorders, there remains a very pressing need for further research into effective brief therapies for anorexia nervosa, speeding access and implementing effective treatments that take less than the current recommendation of up to 40 sessions of CBT-ED.

‘SEVERE AND ENDURING’ EATING DISORDERS

A different issue relating to temporal factors is the proposal that individuals with ‘severe and enduring’ eating disorders (particularly anorexia nervosa) are less likely to recover from their eating disorder, and hence should be treated in a way that is more about supporting quality of life than aiming for recovery. The research in this field is limited by inconsistent definitions of severity and duration [72–74] and poor methodological quality [75], meaning that there is no clear evidence of a distinct syndrome of ‘severe and enduring’ disorders. However, a meta-analysis [76] has shown no evidence of any impact of duration on treatment outcomes. In keeping with that conclusion, recent studies have shown that severity and duration have no impact on the outcome of CBT-ED for anorexia nervosa, whether in intensive or outpatient settings [77–79]. Therefore, whether or not there is a syndrome of ‘severe and enduring’ eating disorders (and the evidence is very weak at present), there is no evidence that CBT-ED needs to be adapted to work successfully with such patients. Indeed, it could simply be the case that the patients who we label as ‘severe and enduring’ only

receive that label because they have never had access to good therapy before (either receiving nonevidence-based therapies or receiving therapies where the evidence-based elements have been omitted – see above). Hence, any future definition of this ‘syndrome’ (which remains hypothetical at present) would have to take account of whether or not the patient had had evidence-based treatments in the past.

WHERE TO NEXT? EVOLVING RESEARCH INTO COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS, AND GAPS THAT NEED TO BE ADDRESSED

The material presented above has shown that CBT-ED has developed substantially over the past 5 years, with both consolidations of existing knowledge and development of exciting new areas such as CBT-ED for ARFID. However, there are other developments that are under way, and other areas that need to be addressed.

ONLINE DELIVERY OF COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS

The impact of online/telehealth treatment methods in eating disorders has previously been very limited [11]. However, since the onset of COVID-19, online/telehealth methods of delivery have received considerable attention, with detailed clinical recommendations being made for the delivery of CBT-ED [80,81^{*}]. Although it is too early to conclude whether these new recommendations make online CBT-ED, viable, current data collection should allow us to reach that conclusion, to guide planning for the future. This approach offers the important possibility of widening access to evidence-based treatments to populations where there are no local services.

‘THIRD WAVE’ THERAPIES

Third wave therapies include a relatively diverse set of developments of CBT, often characterised by a focus on approaches such as mindfulness, self-compassion and metacognition. Some are well established as being moderately effective compared to CBT-ED, such as DBT, and include elements that have been incorporated into existing CBT-ED approaches. Recent developments have been limited, though Blood *et al.* [82] and Adams *et al.* [67] have shown that DBT can be delivered in routine clinical settings, and in a briefer form. Furthermore, Lammers *et al.* [83] showed comparable results in clinically meaningful changes for DBT-ED and CBT in obese patients with binge eating disorder. It is also

clear that self-compassion is effective in reducing body and eating concerns [84], though this has largely been shown in nonclinical groups rather than clinical samples, so further application to clinical settings is needed. Although there is similar emergent evidence for other third-wave and emerging therapies for eating disorders (e.g., Integrative Cognitive-Affective Therapy), the data remain limited [85], and more comprehensive evidence is needed before one can be conclusive about their effects.

DIVERSITY

In other areas of mental health, CBT's suitability for diverse populations has been addressed to a greater degree than in CBT-ED. Although there have been a small number of studies demonstrating the effectiveness of CBT-ED with nontraditional clients [25,86], this is an area where substantially more work is required, and where potentially necessary adaptations are considered and tested in groups with different ethnicity, race, sexual identity, gender, gender identity, religion and more.

THE NEED FOR EVIDENCE-BASED SUPERVISION

Case-focused supervision is established as ensuring that supervisees deliver more effective CBT [87]. However, the value of such supervision has yet to be tested in the field of eating disorders. To do so will require the development of disorder-specific measures of supervisor and clinician competence, to ensure that such supervision can be rolled out widely.

COGNITIVE-BEHAVIOURAL THERAPY FOR EATING DISORDERS FOR RARER EATING DISORDER VARIANTS

Understandably, the eating disorders literature has tended to focus on the development of treatments for the more commonly presenting disorders. However, there are a number of less common presentations that merit further attention. Further research is required to build on existing preliminary evidence regarding the use of CBT-ED for disorders such as pica [88], rumination disorder [89], purging disorder [90], and night eating syndrome [91].

THE THORNY ISSUE OF ANOREXIA NERVOSA

Finally, it is important that all therapies – CBT-ED included – face the fact that our effectiveness with

underweight cases is far too limited. This review has shown that we have made considerable advances in working with nonunderweight adults and with younger patients with ARFID. However, our outcomes when treating anorexia nervosa remain far poorer, whatever the therapy. Based on a review of the evidence to date, Waller and Raykos [46] have suggested that a focus on a more behavioural approach might be the necessary element that needs to be enhanced in CBT-ED for anorexia nervosa.

CONCLUSION

CBT-ED has developed substantially in the past 5 years, with consolidation of its existing evidence base, further support for real-life implementation, extension of methods used, and the development of new approaches for working with younger people – particularly in the form of much-needed treatments for ARFID. Over the past 18 months, there have been even more promising changes in delivery in response to the COVID-19 pandemic, showing that we can adapt our methods in order to work effectively via remote means. There remains a real need for improvement, especially as we roll out our treatments for ARFID and young people in general and towards adults with ARFID, and tackle the problem of comparatively poor outcomes for anorexia nervosa. However, it is certainly important to acknowledge how far CBT-ED has advanced in recent years.

Acknowledgements

None.

Financial support and sponsorship

None.

Conflicts of interest

S.M.'s Chair in 'Feeding and eating disorders' is endowed and financially supported by SeysCentra (specialized treatment centre for youth with ARFID).

G.W. is co-author on and receives royalties from three text books cited in the work (Becker et al., 2020; Waller et al., 2007; Waller et al., 2019).

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

1. National Institute for Health and Care Excellence (NICE). Eating disorders: recognition and treatment. NICE guideline. Published: 23 May 2017. www.nice.org.uk/guidance/ng69.
2. Dutch Foundation for Quality Development in Mental Healthcare (Akwa GGZ). Zorgstandaard Eetstoornissen. 2017; <https://www.ggzstandaarden.nl/zorgstandaarden/eetstoornissen/>.

3. Academy for Eating Disorders' (AED) Psychological Care Guidelines Task Force. A Guide to Selecting Evidence-based Psychological Therapies for Eating Disorders. First edition, 2020. https://higherlogicdownload.s3.amazonaws.com/AEDWEB/27a3b69a-8aae-45b2a04c2a078d02145d/Uploads/dlmages/Publications_Slider/FINAL_AED_Psychological_book.pdf.
4. National Collaborating Centre for Mental Health (UK) & Leicester (UK): British Psychological Society (UK); 2004. National Institute for Health and Clinical Excellence: Guidance. PMID: 23346610. Eating disorders: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. National Clinical Practice Guidelines Number (CG9). Published: January 2004. https://www.ncbi.nlm.nih.gov/books/NBK49304/pdf/Bookshelf_NBK49304.pdf.
5. Kwaliteitsinstituut voor de Gezondheidszorg CBO & Trimbos-instituut. Multidisciplinaire richtlijn eetstoornissen. Richtlijn voor de diagnostiek en behandeling van eetstoornissen; 2006.
6. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5). Washington, DC: APA; 2013.
7. Atwood ME, Friedman AA. Systematic review of enhanced cognitive behavioral therapy (CBT-E) for eating disorders. *Int J Eat Disord* 2020; 53:311–330.
8. Fairburn CG, Cooper Z, Doll HA, *et al.* Transdiagnostic cognitive-behavioral therapy for patients with eating disorders: a two-site trial with 60-week follow-up. *Am J Psychiatry* 2009; 166:311–319.
9. Turner H, Marshall E, Stoppa L, Waller G. Cognitive-behavioural therapy for outpatients with eating disorders: effectiveness for a transdiagnostic group in a routine clinical setting. *Behav Res Ther* 2015; 68:70–75.
10. Waller G, Stringer H, Meyer C. What cognitive behavioral techniques do therapists report using when delivering cognitive behavioral therapy for the eating disorders? *J Consult Clin Psychol* 2012; 80:171–175.
11. Kazdin AE, Fitzsimmons-Craft EE, Wifley DE. Addressing critical gaps in the treatment of eating disorders. *Int J Eat Disord* 2017; 50:170–187.
12. de Jong M, Spinhoven P, Korrelboom K, *et al.* Effectiveness of enhanced cognitive behavior therapy for eating disorders: a randomized controlled trial. *Int J Eat Disord* 2020; 53:447–457.
- This study shows CBT-E has many advantages over the use of TAU, indicating it should be offered more widely than it is, currently. With broader use of CBT-E, the efficiency, accessibility and effectivity (on self-esteem) of treatment for EDs could be improved.
13. Fairburn CG. Cognitive behavior therapy and eating disorders. New York: Guilford Press; 2008.
14. van den Berg E, Schlochtermeyer D, Koenders J, *et al.* Implementing cognitive behavioral therapy-enhanced in a routine inpatient and outpatient setting: Comparing effectiveness and treatment costs in two consecutive cohorts. *Int J Eat Disord* 2020; 53:461–471.
- This study provides evidence that it is quite possible to implement CBT-E in routine practice, with even lower costs. This should encourage us further in the use and implementation of CBT-E for eating disorders.
15. Fairburn CG, Bailey-Straebl S, Basden S, *et al.* A transdiagnostic comparison of enhanced cognitive behaviour therapy (CBT-E) and interpersonal psychotherapy in the treatment of eating disorders. *Behav Res Ther* 2015; 70:64–71.
16. Byrne SM, Fursland A, Allen KL, Watson H. The effectiveness of enhanced cognitive behavioural therapy for eating disorders: an open trial. *Behav Res Ther* 2011; 49:219–226.
17. Knott S, Woodward D, Hoefkens A, Limbert C. Cognitive behaviour therapy for bulimia nervosa and eating disorders not otherwise specified: translation from randomized controlled trial to a clinical setting. *Behav Cogn Psychother* 2015; 43:641–654.
18. Frostad S, Danielsen YS, Røkkedal GÅ, *et al.* Implementation of enhanced cognitive behaviour therapy (CBT-E) for adults with anorexia nervosa in an outpatient eating disorder unit at a public hospital. *J Eat Disord* 2018; 6:12. 1–8.
19. Jenkins PE, Morgan C, Houllhan C. Outpatient CBT for underweight patients with eating disorders: effectiveness within a national health service (NHS) eating disorders service. *Behav Cogn Psychother* 2019; 47:217–229.
20. Signorini R, Sheffield J, Rhodes N, *et al.* The effectiveness of enhanced cognitive behavioural therapy (CBT-E): a naturalistic study within an outpatient eating disorder service. *Behav Cogn Psychother* 2018; 46:21–34.
21. Fitzsimmons-Craft EE, Taylor CB, Graham AK, *et al.* Effectiveness of a digital cognitive behavior therapy-guided self-help intervention for eating disorders in college women: a cluster randomized clinical trial. *JAMA Netw Open* 2020; 3:e2015633. doi: 10.1001/jamanetworkopen.2020.1563.
- This cluster RCT including 690 college women with binge-purge EDs from 27 universities showed support for the efficacy of a coached, digital CBT intervention over treatment in usual care, and for improved access to treatment. Thus, CBT-ED guided self-help has a potential to bridge the treatment gap for young adult women with binge-purge EDs.
22. Hildebrandt T, Michaeledes A, Mayhew M, *et al.* Randomized controlled trial comparing health coach-delivered smartphone-guided self-help with standard care for adults with binge eating. *Am J Psychiatry* 2020; 177:134–142.
23. Wade TD, Ghan C, Waller, G (under consideration). A randomized controlled trial of two 10-session cognitive behaviour therapies for eating disorders: an exploratory investigation of which approach works best for whom. *Behaviour Research and Therapy*.
24. Becker CB, Stice E. From efficacy to effectiveness to broad implementation: evolution of the Body Project. *J Consult Clin Psychol* 2017; 85:767–782.
25. AlShehali M, Becker C, Kellett S, *et al.* Adapting the body project to a nonwestern culture: a dissonance-based eating disorders prevention program for Saudi women. *Eat Weight Disord* 2021. <https://doi.org/10.1007/s40519-021-01104-9>. [Epub ahead of print]
- This study shows potential for a specific dissonance-based eating disorders prevention program (the Body Project) in a nonwestern culture. Although the effectiveness has yet to be confirmed, this study shows that the project is feasible, and therefore promising to further investigate.
26. Hudson TA, Amaral ACS, Stice E, *et al.* Dissonance-based eating disorder prevention among Brazilian young women: a randomized efficacy trial of the Body Project. *Body Image* 2021; 38:1–9.
27. Diedrichs PC, Atkinson MJ, Garbett KM, Leckie G. Evaluating the 'Dove Confident Me' five-session body image intervention delivered by teachers in schools: a cluster randomized controlled effectiveness trial. *J Adolesc Health* 2021; 68:331–341.
28. Linardon J, Brennan L. The effects of cognitive-behavioral therapy for eating disorders on quality of life: a meta-analysis. *Int J Eat Disord* 2017; 50:715–730.
29. Linardon J, Wade T, de la Piedad Garcia X, Brennan L. Psychotherapy for bulimia nervosa on symptoms of depression: a meta-analysis of randomized controlled trials. *Int J Eat Disord* 2017; 50:1124–1136.
30. Waller G, Tatham M, Turner H, *et al.* A 10-session cognitive-behavioral therapy (CBTT) for eating disorders: outcomes from a case series of non-underweight adult patients. *Int J Eat Disord* 2018; 51:262–269.
31. Rose C, Waller G. Cognitive-behavioral therapy for eating disorders in primary care settings: Does it work, and does a greater dose make it more effective? *Int J Eat Disord* 2017; 50:1350–1355.
32. Dalle Grave R, Sartirana M, Calugi S. Enhanced cognitive behavioral therapy for adolescents with anorexia nervosa: outcomes and predictors of change in a real-world setting. *Int J Eat Disord* 2019; 52:1042–1046.
33. Mulken S, de Vos C, de Graaff A, Waller G. To deliver or not to deliver cognitive behavioral therapy for eating disorders: replication and extension of our understanding of why therapists fail to do what they should do. *Behav Res Ther* 2018; 106:57–63.
34. Daglish A, Waller G. Clinician and patient characteristics and cognitions that influence weighing practice in cognitive-behavioral therapy for eating disorders. *Int J Eat Disord* 2019; 52:977–986.
35. D'Souza Walsh K, Davies L, Pluckwell H, *et al.* Alliance, technique, both, or more? Clinicians' views on what works in cognitive-behavioral therapy for eating disorders. *Int J Eat Disord* 2019; 52:278–282.
36. Dalle Grave R, Eckhardt S, Calugi S, Le Grange D. A conceptual comparison of family based treatment and enhanced cognitive behavior therapy in the treatment of adolescents with eating disorders. *J Eat Disord* 2019; 7:42. 1–9.
37. Dalle Grave R, Sartirana M, Sermattei S, Calugi S. Treatment of eating disorders in adults versus adolescents: similarities and differences. *Clin Ther* 2021; 43:70–84. doi: 10.1016/j.clinthera.2020.10.015.
- This article discusses the fact that CBT-E, adjusted for adolescents, could well be used as an alternative for FBT, as adolescents and adults share common ED-psycho pathology. Implementing CBT-E for adolescents might help overcome some issues related to service use of younger versus older patients, although direct comparisons with FBT still should be done.
38. Le Grange D, Lock J, Agras WS, *et al.* Randomized clinical trial of family based treatment and cognitive-behavioral therapy for adolescent bulimia nervosa. *J Am Acad Child Adolesc Psychiatry* 2015; 54:886–894. e2.
39. Craig M, Waiane J, Wilson S, Waller G. Optimizing treatment outcomes in adolescents with eating disorders: the potential role of cognitive behavioral therapy. *Int J Eat Disord* 2019; 52:538–542.
40. Thomas JJ, Wons OB, Eddy KT. Cognitive-behavioral treatment of avoidant/restrictive food intake disorder. *Curr Opin Psychiatry* 2018; 31:425–430.
41. Dumont E, Huskens B, Seys, *et al.* Het SLIK-programma: Behandelprotocol voor de vermijdende/restrictieve voedselname-stoornis (ARFID) bij jonge kinderen. In: Braet C, Bögels S, editors. Protocolaire behandelingen voor kinderen en adolescenten met psychische klachten. Amsterdam: Uitgeverij Boom; 2020. . p.153-200.
42. Bryant-Waugh R, Micali N, Cooke L, *et al.* Development of the Pica, ARFID, and Rumination Disorder Interview, a multiinformant, semi-structured interview of feeding disorders across the lifespan: A pilot study for ages 10-22. *Int J Eat Disord* 2019; 52:378–387.
43. Dumont E, Jansen A, Kroes D, *et al.* A new cognitive behavior therapy for adolescents with avoidant/restrictive food intake disorder in a day treatment setting: a clinical case series. *Int J Eat Disord* 2019; 52:447–458.
- This is the first study on CBT treatment for adolescents with ARFID, based on exposure principles. This systematic case series provides a protocolized, intensive day treatment for (12 to 18-year-old) adolescents with ARFID, who were referred to a specialized (last resort) treatment center.
44. Thomas JJ, Becker KR, Kuhnle MC, *et al.* Cognitive-behavioral therapy for avoidant/restrictive food intake disorder: feasibility, acceptability, and proof-of-concept for children and adolescents. *Int J Eat Disord* 2020; 53:1636–1646.
- This is the first study of an outpatient manualized psychosocial treatment for ARFID in older adolescents. Findings provide evidence of feasibility, acceptability, and proof-of-concept for CBT-AR. Still, randomized controlled trials are needed.
45. Waller G, Cordery H, Corstorphine E, *et al.* Cognitive behavioral therapy for eating disorders: a comprehensive treatment guide. Cambridge: Cambridge University Press; 2007.

46. Waller G, Raykos B. Behavioral interventions in the treatment of eating disorders. *Psychiatr Clin N Am* 2019; 42:181–191.
47. Becker CB, Farrell NR, Waller G. Exposure therapy for eating disorders. *ABCT Clinical Practice Series*. New York: Oxford University Press; 2020.
48. Murray SB, Treanor M, Liao B, *et al.* Extinction theory and anorexia nervosa: deepening therapeutic mechanisms. *Behav Res Ther* 2016; 87:1–10.
49. Reilly EE, Anderson LM, Gorrell S, *et al.* Expanding exposure-based interventions for eating disorders. *Int J Eat Disord* 2017; 50:1137–1141.
50. Nameth K, Brown T, Bullock K, *et al.* Translating virtual reality cue exposure therapy for binge eating into a real-world setting: an uncontrolled pilot study. *J Clin Med* 2021; 10:1511. 1–17.
51. Porras-Garcia B, Ferrer-Garcia M, Serrano-Troncoso E, *et al.* A randomized controlled trial for reducing fear of gaining weight and other eating disorder symptoms in anorexia nervosa through virtual reality-based body exposure. *J Clin Med* 2021; 10:682. 1–23.
- This study shows a potentially very promising method (virtual reality) to support exposure in patients with anorexia nervosa, especially where fear of weight gain and body image disturbance cannot be tackled through in vivo ways.
52. Pennesi JL, Wade TD. Imagery rescripting and cognitive dissonance: a randomized controlled trial of two brief online interventions for women at risk of developing an eating disorder. *Int J Eat Disord* 2018; 51:439–448.
53. Hormoz E, Pugh M, Waller G. Do eating disorder voice characteristics predict treatment outcomes in anorexia nervosa? A pilot study. *Cogn Behav Ther* 2019; 48:137–145.
54. de Jong K, Conijn JM, Gallagher RAV, *et al.* Using progress feedback to improve outcomes and reduce drop-out, treatment duration, and deterioration: A multilevel meta-analysis. *Clin Psychol Rev* 2021; 85:102002. 1–19.
- This is a very interesting meta-analysis which provides evidence for the use of progress feedback in improving outcomes of psychotherapy, thereby reducing drop-out rates and reducing treatment duration. Although not yet established in eating disorders, this might well be the case here, too.
55. Accurso EC, Waller G. A brief session-by-session measure of eating disorder psychopathology for children and adolescents: Development and psychometric properties of the Eating Disorder-15 for Youth (ED-15-Y). *Int J Eat Disord* 2021; 54:569–577.
- This study has investigated a session-by-session measure, which is increasingly used to measure treatment effects. As research regarding measurements in young patients is scarce, this study is very welcome in providing evidence for its use in children as young as 8 years old.
56. Gideon N, Hawkes N, Mond J, *et al.* Development and psychometric validation of the EDE-QS, a 12 item short form of the eating disorder examination questionnaire (EDE-Q). *PLoS One* 2016; 11:e0152744. doi: 10.1371/journal.pone.0152744. Erratum in: *PLoS One* 2018 Nov 5;13(11):e0207256.
57. Tatham M, Turner H, Mountford VA, *et al.* Development, psychometric properties and preliminary clinical validation of a brief, session-by-session measure of eating disorder cognitions and behaviors: The ED-15. *Int J Eat Disord* 2015; 48:1005–1015.
58. Fairburn CG, Beglin SJ. Assessment of eating disorders: interview or self-report questionnaire? *Int J Eat Disord* 1994; 16:363–370.
59. Delgado J, McMillan D, Lucock M, *et al.* Early changes, attrition, and dose-response in low intensity psychological interventions. *Br J Clin Psychol* 2014; 53:114–130.
60. Bell C, Waller G, Shafran R, Delgado J. Is there an optimal length of psychological treatment for eating disorder pathology? *Int J Eat Disord* 2017; 50:687–692.
61. Beard JL, Delgado J. Early response to psychological therapy as a predictor of depression and anxiety treatment outcomes: a systematic review and meta-analysis. *Depress Anxiety* 2019; 36:866–878.
62. Chang PGRY, Delgado J, Waller G. Early response to psychological treatment for eating disorders: a systematic review and meta-analysis. *Clin Psychol Rev* 2021; 86:102032. 1–14.
- This review and meta-analysis shows that overall, evidence accumulated over twenty years establishes early response as the most robust predictor of treatment outcomes in the field of eating disorders. However, only half of patients show early change in this way. Interesting future pathways include research indicating whether there are patient or clinician characteristics that predict early response to psychological treatment for eating disorders.
63. Linardon J, Brennan L, de la Piedad Garcia X. Rapid response to eating disorder treatment: a systematic review and meta-analysis. *Int J Eat Disord* 2016; 49:905–919.
64. Vall E, Wade TD. Predictors of treatment outcome in individuals with eating disorders: a systematic review and meta-analysis. *Int J Eat Disord* 2015; 48:946–971.
65. Clark DM, Canvin L, Green J, *et al.* Transparency about the outcomes of mental health services (IAPT approach): an analysis of public data. *Lancet* 2018; 391:679–686.
66. Austin A, Flynn M, Shearer J, *et al.* The first episode rapid early intervention for eating disorders - upscaled study: clinical outcomes. *Early Interv Psychiatry* 2021. doi: 10.1111/eip.13139. Epub ahead of print.
- The positive findings of this study, coupled with the knowledge that early intervention significantly reduces both duration of untreated eating disorder and waiting times when delivered as intended, make a compelling case for scaling FREED further.
67. Adams G, Turner H, Hoskins J, *et al.* Effectiveness of a brief form of group dialectical behavior therapy for binge-eating disorder: Case series in a routine clinical setting. *Int J Eat Disord* 2021; 54:615–620.
68. Waller G, Turner HM, Tatham M, *et al.* Brief cognitive behavioural therapy for nonunderweight patients CBT-T for eating disorders. London: Routledge; 2019.
69. Hoskins JI, Blood L, Stokes HR, *et al.* Patients' experiences of brief cognitive behavioral therapy for eating disorders: a qualitative investigation. *Int J Eat Disord* 2019; 52:530–537.
70. Pellizzer ML, Waller G, Wade TD. A pragmatic effectiveness study of 10-session cognitive behavioural therapy (CBT-T) for eating disorders: targeting barriers to treatment provision. *Eur Eat Disord Rev* 2019; 27:557–570.
71. Tatham M, Hewitt C, Waller G. Outcomes of brief and enhanced cognitive-behavioural therapy for adults with nonunderweight eating disorders: a nonrandomized comparison. *Eur Eat Disord Rev* 2020; 28:701–708.
- This study shows very promising results in the light of treatment duration for CBT-ED in non underweight adults. It appears that a 10 session CBT (CBT-T) is as effective as existing 20session CBT, and is less demanding of time and resource. Still, the findings need to be replicated in a randomized control trial.
72. Broomfield C, Stedal K, Touyz S, Rhodes P. Labeling and defining severe and enduring anorexia nervosa: a systematic review and critical analysis. *Int J Eat Disord* 2017; 50:611–623.
73. Zhu J, Yang Y, Touyz S, *et al.* Psychological treatments for people with severe and enduring anorexia nervosa: a mini review. *Front Psychiatry* 2020; 11:206. 1–8.
74. Dalle Grave R. Severe and enduring anorexia nervosa: no easy solutions. *Int J Eat Disord* 2020; 53:1320–1321.
75. Kotilahti E, West M, Isomaa R, *et al.* Treatment interventions for Severe and Enduring Eating Disorders: Systematic review. *Int J Eat Disord* 2020; 53:1280–1302.
76. Radunz M, Keegan E, Osenk I, Wade TD. Relationship between eating disorder duration and treatment outcome: systematic review and meta-analysis. *Int J Eat Disord* 2020; 53:1761–1773.
77. Calugi S, El Ghoch M, Dalle Grave R. Intensive enhanced cognitive behavioural therapy for severe and enduring anorexia nervosa: a longitudinal outcome study. *Behav Res Ther* 2017; 89:41–48.
78. Calugi S, Sartirana M, Frostad S, Dalle Grave R. Enhanced cognitive behavior therapy for severe and extreme anorexia nervosa: An outpatient case series. *Int J Eat Disord* 2021; 54:305–312.
79. Raykos BC, Erceg-Hum DM, McEvoy PM, *et al.* Severe and enduring anorexia nervosa? Illness severity and duration are unrelated to outcomes from cognitive behaviour therapy. *J Consult Clin Psychol* 2018; 86:702–709.
80. Murphy R, Calugi S, Cooper Z, Dalle Grave R. Challenges and opportunities for enhanced cognitive behavioural therapy (CBT-E) in light of COVID-19. *Cogn Behav Ther* 2020; 13:E14. doi:10.1017/S1754470X20000161.
81. Waller G, Pugh M, Mulken S, *et al.* Cognitive-behavioral therapy in the time of coronavirus: clinician tips for working with eating disorders via telehealth when face-to-face meetings are not possible. *Int J Eat Disord* 2020; 53:1132–1141.
- This was the first article to respond to the challenges of the COVID-19 pandemic in providing CBT-ED in a remote way. The article was written and published in an extremely efficient and fast way, to help clinicians worldwide to adapt their practice of CBT-ED via telehealth.
82. Blood L, Adams G, Turner H, Waller G. Group dialectical behavioral therapy for binge-eating disorder: outcomes from a community case series. *Int J Eat Disord* 2020; 53:1863–1867.
83. Lammers MW, Vroling MS, Crosby RD, *et al.* Dialectical behavior therapy adapted for binge eating compared to cognitive behavior therapy in obese adults with binge eating disorder: a controlled study. *J Eat Disord* 2020; 8:27. 1–11.
84. Turk F, Waller G. Is self-compassion relevant to the pathology and treatment of eating and body image concerns? A systematic review and meta-analysis. *Clin Psychol Rev* 2020; 79:101856. 1–19.
85. Pisetsky EM, Schaefer LM, Wonderlich SA, Peterson CB. Emerging psychological treatments in eating disorders. *Psychiatr Clin N Am* 2019; 42:219–229.
86. Cibich M, Wade TD. Treating bulimia nervosa in the context of gender dysphoria using 10-session cognitive behavior therapy. *Int J Eat Disord* 2019; 52:602–606.
87. Öst LG, Karlstedt A, Widén S. The effects of cognitive behavior therapy delivered by students in a psychologist training program: an effectiveness study. *Behav Ther* 2012; 43:160–173.
88. Thomas JJ, Murray HB. Cognitive-behavioral treatment of adult rumination behavior in the setting of disordered eating: a single case experimental design. *Int J Eat Disord* 2016; 49:967–972.
89. Murray HB, Thomas JJ. Rumination disorder in adults. In: Anderson L, Murray S, Kaye W, editors. *Handbook of complex and atypical eating disorders*. Oxford University Press; 2017.
90. Riesco N, Agüera Z, Granero R, *et al.* Other Specified Feeding or Eating Disorders (OSFED): Clinical heterogeneity and cognitive-behavioral therapy outcome. *Eur Psychiatry* 2018; 54:109–116.
91. Allison KC, Lundgren JD, Moore RH, *et al.* Cognitive behavior therapy for night eating syndrome: a pilot study. *Am J Psychother* 2010; 64:91–106.