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# Cognitive behavioral therapy for adolescents with eating disorders, with particular regard to clinical perfectionism

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#### Summary

Eating disorders are a considerable and prevalent problem among adolescents. Due to their significant adverse health consequences, it is of key importance to examine available treatment options and their effects. Despite the shared criteria for eating disorders in adolescents and adults, the diagnostic and therapeutic processes in the former require distinct specialist interventions, including the entire family environment. Available research suggests that family-based treatment (FBT) and enhanced cognitive behavioral therapy (CBT-E) are particularly beneficial in the management of eating disorders and prevention of relapse in young patients. Since clinical perfectionism is postulated to be an important mechanism underlying the development and maintenance of eating disorders, its consideration in therapy may contribute to faster and long-term recovery. This article presents available evidence on the effectiveness of psychosocial interventions in adolescents with eating disorders and clinical perfectionism, with a particular focus on differences in the use of CBT-E and FBT. The presented knowledge may facilitate clinical decisions concerning selection of the most effective methods and forms of intervention adapted to case conceptualisation in adolescents with eating disorders.

**Slowa klucze:** adolescencja, zaburzenia odżywiania, terapia poznawczo-behawioralna **Key words:** adolescence, eating disorders, cognitive behavioral therapy

#### Introduction

For years, eating disorders (ED) have been considered a significant diagnostic and therapeutic challenge. The International Statistical Classification of Diseases and Related Health Problems, eleventh revision (ICD-11), distinguishes eight types of eating disorders: anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), avoidant-restrictive food intake disorder, pica, rumination-regurgitation disorder, other specified feeding or eating disorders, and feeding or eating disorders, unspecified [1].

Despite the contemporary knowledge about the symptoms and course of ED, prevalence estimations still prove elusive, especially among adolescents. This is due to their relatively low incidence and the attitude of patients, who tend to avoid seeking professional help, either denying the illness or taking advantage of the benefits it provides [2]. Analyzes show that about a half of AN cases go undetected within the healthcare system and that only a third of patients seek specialist help [3].

European data indicate that the prevalence of anorexia nervosa (AN) among women reaches 1–4% and bulimia nervosa (BN) 1–2% [4]. The mean age of onset for AN is estimated at 17 years [5]. About 40% of anorexia cases are reported in females between the ages of 15 and 19 [2]. Adolescence is indicated to be the common age of onset for eating disorders and as many as 13% of women under the age of 20 experience some ED symptoms [6]. This suggests a significant need to investigate the phenomenon in this particular age group and warrants the search for interventions of scientifically proven effectiveness.

### Diagnosis and treatment of eating disorders in adolescents

The course and specificity of eating disorders in adolescents seem to be key factors to consider in the diagnostic and therapeutic approaches. Despite the parallel criteria for anorexia nervosa in children and adults, the diagnosis in the former should be based on data from different sources, i.e. interview, observation and collateral information, usually collected from a parent [7]. A comprehensive assessment of a child or adolescent should include a thorough medical, nutritional and psychiatric history alongside a detailed physical examination [8].

Of note, eating disorders in pre-teens are associated with different premorbid symptoms (e.g. depression, obsessive-compulsive disorders or anxiety disorders) compared to older adolescents, and are less likely to result in occurrence of behaviors such as binge eating or purging [9]. In the treatment of children and adolescents, a multidisciplinary psychiatric team approach is recommended, composed of specialists such as a psychiatrist, family therapist, psychologist, pediatrician, nurse, and nutritionist [10]. At the initial stage, a pediatrician's role is of particular importance, involving general health assessment or referral to hospital treatment in the case of medically unstable patients [11].

Treatment of teenage patients requires consideration of developmental tasks typical of adolescence and inclusion of their family into the therapeutic process [12]. In recent years, a leading first-line approach in the treatment of eating disorders in children has become a specialized family-based treatment (FBT), the effectiveness of which has been postulated in numerous analyzes [13–15]. At the same time, there is evidence of good effects of other interventions, such as enhanced cognitive behavioral therapy (CBT-E) [16].

When the first-line approach does not bring the expected results, it is suggested to extend the treatment plan to include intensive parental coaching, aimed at strengthening communication skills [17], and cognitive remediation therapy (CRT), based on neuropsychological research and designed to improve cognitive flexibility, challenge rigid thinking and preoccupation with details that are typical of anorexia [18].

In the case of bulimia nervosa and binge eating disorder, it is cognitive behavioral therapy (CBT) that is considered to be the primary evidence-based treatment [19].

### International guidelines for the treatment of eating disorders in adolescents

In their work, psychotherapists, psychologists, psychiatrists, and other mental health specialists dealing with adolescents, follow the guidelines of several important organizations. The first one is the National Institute for Health and Care Excellence (NICE), an agency of the UK Department of Health and Social Care responsible for evaluations of medical procedures and recommendations for their financing. The second one is the world's largest professional association of psychiatrists and students of psychiatry, i.e. the American Psychiatric Association (APA). The American Academy of Child & Adolescent Psychiatry (AACAP) also plays an important role in guiding psychosocial interventions for the youth. As a professional association, the AACAP aims to facilitate provision of psychiatric care to children and adolescents in the United States. The recommendations of these three organizations were created not only for mental healthcare professionals, but above all for the benefit of teenage patients, their guardians and families.

Current guidelines for proper and effective psychosocial interventions for adolescents diagnosed with eating disorders are available from, among others, NICE. The last AACAP recommendations date back to 2015 and, according to the information on their website, became outdated after 5 years. The APA guidelines that mental health professionals use today were issued in 2023. They include screening for eating disorders during the initial psychiatric assessment. In the treatment of anorexia, bulimia and BED, psychotherapies focused on eating disorders, such as cognitive behavioral therapy or interpersonal therapy, are recommended. In the case of adolescents with anorexia nervosa or bulimia nervosa, an important part of the therapy is the inclusion of the family in the treatment process. It is recommended to set individual goals for the patient's weight, adapted to their health needs [20]. According to the latest NICE recommendations, the first-line treatment of AN in children and adolescents is family therapy (family therapy for anorexia nervosa – FT-AN) [21, 22]. FT-AN can be carried out both as single-family and multi-family therapy. It covers 18 to 20 sessions throughout the year and focuses on the role of the family in the recovery of children

and adolescents with AN. In the first phase, treatment includes dietary education, as well as education on the scope and form of support that caregivers can provide to their children with regard to nutrition. The second phase focuses on supporting the child throughout the process of recovery. During family therapy, it is critical to determine a young patient's level of independence that is age-appropriate and adequate to their developmental stage, as well as to establish plans for treatment closure, taking into account the concerns of all family members. FT-AN should conclude with work on relapse prevention [21].

When implementation of FT-AN is impossible, contraindicated or ineffective in the management of AN in children and adolescents, cognitive behavior therapy for eating disorders (CBT-ED) or adolescent-focused therapy (AFP-AN) are two recommended alternatives [21, 23]. Individual CBT for children and adolescents with AN consists, as in the case of CBT for adults, in up to 40 sessions delivered over 40 weeks, with additional 8 to 12 family sessions, including nutritional education and guidance on the role of family support in the recovery of the young patient. Alongside the change of the eating habits, the goals of CBT-ED are cognitive restructuring, improving social skills, regulating emotions, developing a positive body image, strengthening self-esteem, and ultimately – preventing relapse. An essential part of CBT-ED for children and adolescents is taking into account their developmental needs [21].

NICE recommendations for the treatment of binge eating disorder (BED) in adolescents include the use of the same therapeutic interventions as in the case of adult populations. They suggest using CBT self-help material on eating disorders, backed up by several 20-minute sessions over a period of 16 weeks. If implementation of self-help measures is impossible, contraindicated or ineffective, after 4 weeks CBT-ED should be introduced and delivered over the following 4 months in the form of 90-minute group sessions. Binge eating group program focuses on psychoeducation, alteration of eating habits and analysis of the problems and goals communicated by the patients. It includes body exposure training and changing underlying negative beliefs about the body, counteracting relapse, and developing crisis coping strategies linked to food intake (including learning to deal with the socalled triggers). If the patient is unable or unwilling to participate in group therapy (e.g. due to the lack of availability of such therapy in his place of residence or lack of motivation for such work), 16 to 20 individual CBT-ED sessions should be considered. Individual CBT for BED includes psychoeducation on proper nutrition (regular meals, avoiding hunger), work on emotional triggers as part of cognitive restructuring, behavioral experiments and exposure, as well as work on body image. During therapy, it is recommended to constantly self-monitor eating-related, overeating and weighting behaviors. It is also necessary to prevent relapse and strive to maintain the introduced changes [21].

In the case of bulimia nervosa in children and adolescents, NICE recommends family and multi-family therapy for bulimia nervosa (FT-BN). FT-BN consists of 18 to 20 sessions over the period of 6 months. If a young patient, for various reasons, does not want to or cannot participate in FT-BN (e.g. due to lack of availability, lack of qualified specialists conducting this form of therapy, lack of consent of other family members to participate in a systematic process), they are recommended to participate in individual cognitive behavioral therapy focused on eating disorders (CBT-ED) in the form of 18 sessions over 6 months, combined with 4 additional sessions with their parents/guardians. Individual work with bulimia nervosa in children and adolescents should focus on motivation to change, psychoeducation about eating disorders, alteration of eating habits, continuous self-monitoring and coping with own thoughts, feelings and behaviors, problem solving, and relapse prevention [21].

According to the AACAP guidelines, the treatment of choice of ED is outpatient psychosocial care. In the case of adolescents with AN, the most effective therapy is Family-based Treatment (FBT), including 10 to 20 family sessions over a period of 6 to 12 months. Among individual therapies which can be effective in the management of AN in adolescents, AACAP lists adolescent-focused psychotherapy (AFP) and cognitive behavioral therapy (especially its enhanced version – CBT-E). In the case of adolescents with BN, family therapy, CBT, as well as interpersonal psychotherapy (IPT) and dialectical behavior therapy (DBT) are recommended treatment options. IPT and CBT may also be effective in binge eating disorder. Of note, the authors of the recommendation point to the fact that there is insufficient research on the effectiveness of various psychosocial interventions involving adolescents with eating disorders, and hence the current proposals concerning the role of various therapeutic modalities in the treatment of adolescents with ED are significantly limited [24].

According to the APA [24], family therapy and CBT are recommended for children and adolescents with AN. Treatment recommendations concerning bulimia nervosa include the use of family therapy, while the so-called eating disorders not otherwise specified (EDNOS) in the form of binge eating may be best managed with the use of individual and group CBT, self-help (based on CBT, also via the Internet), ITP (including also psychodynamic therapies) or DBT. In the case of early onset of severe AN in children and adolescents, family therapy is recommended, while in the case of later onset, it is rather individual therapy [4]. When young patients suffer from severe bulimia, the APA recommends the use of CBT and FBT [4, 24].

Recommendations for the use of CBT in eating disorders in children and adolescents are based on the results of studies showing satisfactory effectiveness, especially of the enhanced version of CBT (CBT-E).

According to Polish standards, the treatment of eating disorders is carried out both as outpatients and in specialist day centers offering individual therapy, group activi-

ties and elements of art therapy (e.g. psychodrama, music therapy, psychodrawing, choreotherapy or occupational therapy) [25]. Psychotherapy conducted in Polish day centers is often integrative in nature, drawing on, among others, cognitive behavioral, humanistic or psychodynamic therapy [26].

Guidelines for the treatment of eating disorders in Poland were developed on the initiative of a national specialist in psychiatry, Professor Marek Jarema [26], indicating that most patients can be treated on an outpatient basis, as long as they are motivated to be treated and do not additionally suffer from depression, bipolar disorder, obsessive-compulsive disorder or addiction to psychoactive substances (including drugs), their current BMI (Body Mass Index) is not lower than 15, there are no serious complications or additional somatic conditions requiring constant monitoring. The authors describing treatment standards in relation to Polish conditions [26] recommend that patients seeking treatment use psychoeducation and various forms of psychotherapy, especially CBT and family psychotherapy. In the case of treatment of children and adolescents, it is always recommended to include the family in the treatment process.

The programs of comprehensive education, which are carried out by recommended centers training in psychotherapy and preparing to obtain a psychotherapist certificate, include lecture and practical blocks on methods of helping people with a diagnosis of eating disorders. In addition, Polish specialists who want to improve their therapeutic workshop in the field of assistance addressed to patients with ED have the opportunity to participate in short-term supplementary training.

#### Efficacy of CBT in children and adolescents with eating disorders

Most contemporary studies on the effectiveness of cognitive behavioral therapy in eating disorders concern adults. In turn, global reports on the effectiveness of CBT for adolescents with eating disorders are scarce and only few are free from numerous methodological limitations, indicating the need to considerably refine the methodology and extend the analyzes.

In 2015, Lock [27] updated a 2008 review of research on psychosocial treatments for eating disorders in children and adolescents. Apart from cognitive behavioral therapy, it included family therapy, individual therapy, interpersonal psychotherapy, cognitive training, and dialectical-behavioral therapy. In the course of his analysis, he concluded that FBT is the only well-established method of treating adolescents with AN. He also pointed out that systemic family therapy and insight-oriented individual psychotherapy can be effective forms of treatment. Quite importantly, no well-established treatments emerged for adolescents with bulimia nervosa or those reporting overeating, although FBT and supportive individual therapy were considered promising candidates. Incidentally, CBT, also conducted online, was put forward as an effective treatment of

eating disorders, although the results of many of the described studies were not clear at the time. Some of the findings on the use of CBT-E, DBT or cognitive training in the treatment of adolescents with eating disorders were promising, but their effectiveness was not well-established and required further investigation.

Elsewhere, in a study from 2015 [28] comparing the effects of FBT and CBT in the treatment of bulimia nervosa carried out in two centers – Chicago and Stanford. The study included 130 participants aged 12–18 years divided into 2 groups: (1) individuals with bulimia or partial bulimia nervosa and (2) healthy controls. Participants were assessed at 4 different time points (baseline, endpoint, 6 and 12 month followups). The therapeutic interventions involved 18 outpatient sessions spread over the period of 6 months. Family therapy for adolescent bulimia nervosa (FBT-BM) proved superior to CBT at endpoint and after 6 months post-treatment. Interestingly, 12 months after treatment no statistically significant differences between the two forms remained.

In recent years, research has increasingly focused on the effectiveness of CBT-E in adolescents, offering very promising results. In a study on adolescents with AN aged 11–19 years who underwent CBT-E, as many as 60% of those who completed the therapy managed to maintain proper weight [29]. In another study, of 68 non-underweight adolescents with eating disorders, 75% completed 20 therapy sessions. At the end of therapy, as many as 68% manifested only mild ED-related psychopathology, and 50% of those with a history of binge eating or purging did not report further symptoms [30].

In a study by Dalle Grave et al. [31] out of 49 adolescent AN outpatients, as many as 35 completed therapy and manifested both significant weight gain and reduced symptoms of eating disorders or general psychopathology. Quite remarkably, the outcomes remained stable even after 20 weeks from treatment cessation.

Two studies conducted in 2015 and 2020 compared the efficacy of CBT-E in adolescent and adult AN patients [32, 33]. The first one included 46 teenagers and 49 adults, suggesting better treatment effects in the younger group, and a shorter time required to achieve them compared to adults [33]. The second comparative study involved 150 patients, including 74 adolescents and 81 adults whose previous outpatient treatment did not bring the expected improvement. The protocol consisted in a 20-week intensive CBT-E program (13 weeks of hospitalization followed by 7 weeks of daycare treatment). The number and intensity of symptoms were recorded on admission, at the end of treatment and after 20 and 60 weeks of follow-up. At the end of treatment, Body Mass Index (BMI) in adults and/or the percentile BMI (depending on age) in adolescents significantly improved and remained stable at 20 weeks of follow-up, with a slight decrease observed at 60 weeks. ED symptoms and general psychopathology decreased significantly at the end of treatment, with only a slight increase recorded at follow-ups. No differences between adults and adolescents were observed in terms of treatment acceptance, dropout ratio, or any other aspect concerning intervention.

Findings from this study may therefore validate the use of CBT-E in the treatment of adolescents with severe AN symptoms.

Further evidence from a systematic review by Dalle Grave et al. [34] assessing the efficacy of CBT-E in adolescents with AN indicates that this form of outpatient treatment is well tolerated by young patients. According to the authors, approximately two thirds of the participants completed this type of therapy. The use of CBT-E resulted in improvements related to ED symptoms and general psychopathology. About 50% of patients achieved remission after 12 months of follow-up, suggesting that enhanced cognitive behavioral therapy may be more effective in adolescents than in adults, especially in an inpatient setting (approximately 80% of patients restored their weight at 12 months of follow-up). The authors presented further evidence that the use of CBT-E in adolescents might provide effects such as weight gain, improved ED symptoms and reduced general psychopathology, which are comparable to those observed in the use of FBT at 6 and 12 months of follow-up. Of note, given that some of the presented results were unclear and sometimes came from single studies, they should be treated with caution as preliminary evidence and groundwork for further investigation of the effectiveness of CBT-E in the treatment of adolescents with ED.

## Perfectionism as an important aspect of the treatment of eating disorders in children and adolescents

In seeking to find treatment methods that warrant long-term reduction of symptoms, it is critical to consider those factors that support psychopathology or hinder recovery. Rigid thinking and preoccupation with details observed in patients with AN are common components of perfectionism, whose inclusion, among others, in the treatment process seems to be of key importance for the prevention of relapse.

Maladaptive perfectionism, which can be diagnosed in people with eating disorders (called clinical perfectionism), is "excessive dependence of self-esteem on the determined pursuit of self-imposed high standards in at least one very important area of life, despite adverse consequences" [35, p. 778]. In adolescents with AN or BN, the "essential areas of life" are primarily food, figure, weight, and appearance, on which, according to the transdiagnostic model of eating disorders, their self-esteem is based [12]. Perfectionism contributes to their very critical assessment of their appearance and weight, excessive focus on these features and the fact that people judge them through the prism of weight and appearance [36]. Teenagers with eating disorders can never feel thin or attractive enough, because according to the model of Shafran et al. (2010) [37], even if they achieve success in this matter, they immediately reduce it and immediately raise their standard, which makes them unable to feel satisfaction and self-satisfaction.

Typical cognitive behavioral work on clinical perfectionism should take the form of individual or group psychotherapy, and may also take the form of assisted work with a self-help manual. Individual therapy usually follows a structured or personalized protocol (8–10 sessions) and may address perfectionism alone or with another disorder (half-and-half sessions on coexisting issues). The therapist-assisted self-help workbook consists of 8 individual sessions [37]. Currently, two Polish-language text-books dedicated to CBT work on perfectionism have been developed – by Antony and Swinson (2008) with the Polish title: *When Perfection Is Not Enough. How to deal with perfectionism* [38] and by Martin (2023) with the Polish title: *Perfectionism. How to free yourself from self-criticism, build a stable self-esteem and find inner balance* (using techniques of the third wave of CBT) [39]. Until now, CBT psychotherapists working with children and adolescents do not have separate materials for working with perfectionism. Perfectionism group CBT includes eight two-hour sessions for up to 8 people. It is possible to use self-help textbooks on them [37].

Clinical perfectionism in people with eating disorders is considered a risk factor and one that maintains symptoms whilst hindering the treatment process [40]. Research suggests that focusing on the therapy and prevention of maladaptive, i.e. clinical, perfectionism and conditional self-esteem (depending, among others, on satisfaction with physical appearance), can reduce both the risk of development and symptom severity of eating disorders [41], also in adolescent girls [42]. This seems particularly important considering that adherence to strictly defined "nutritional principles" is a mediator between self-oriented perfectionism and eating disorders [43]. Some analyzes suggest that adolescents with AN who display features of maladaptive perfectionism might particularly benefit from a combination of family-based treatment (FBT) and cognitive behavioral therapy for Perfectionism (CBT-P) [44]. There is also evidence of effective use of enhanced cognitive behavioral therapy (CBT-E) based on a transdiagnostic model of eating disorders, in which perfectionism is one of the four factors maintaining pathology [45]. Research shows that CBT-E may be a significant alternative to inpatient treatment of severe anorexia nervosa [46] and a recent systematic review suggests the effectiveness of CBT-E in the treatment of the entire spectrum of eating disorders, helping to reduce ED-related behaviors and increasing BMI [47].

Given the well-established role of perfectionism in the treatment of eating disorders, it seems justified to use therapeutic approaches that take it into account, including cognitive behavioral therapy techniques.

### Efficacy of CBT in the treatment of clinical perfectionism in adolescents

Although perfectionism is a key contributor to the emergence and maintenance of symptoms of eating disorders, there is a relative paucity of data on the effectiveness of

CBT, especially in adolescent populations. Most available research in this area presents findings on adult female patients.

In a study by Zetterberg et al. [48], internet-based cognitive behavioral therapy (iCBT) in the form of add-on continuous or occasional support (on request) for adult patients proved beneficial in the treatment of clinical perfectionism. Similar findings were reported by Valentine et al. [49], who demonstrated reduced severity of perfectionism and ED symptoms also at three and six month follow-ups in response to the use of iCBT. In a systematic review, Galloway et al. [50] assessed the effectiveness of self-help and face-to-face CBT for perfectionism, concluding that the latter is an efficacious treatment of perfectionism, depression, anxiety, and eating disorders in adults (mean age of the participants – 23 years).

Existing evidence on young patients also corroborates the importance of perfectionism in the management of eating disorders. Hurst and Zimmer-Gembeck [51] examined the effectiveness of FBT augmented with a module focusing on perfectionism in three adolescents diagnosed with AN, achieving symptom remission, reduced perfectionism, obsessional and rigid thinking. In a later project, the same research team focused on assessing changes in symptoms in 21 adolescents diagnosed with AN who entered FBT combined with the CBT-P module on perfectionism. 19 participants completed therapy, with an average of 32 sessions. Over the period of one year, they completed four repeated assessments of ED symptom severity and perfectionism, including selforientated (SOP) and socially prescribed perfectionism (SPP). Compared to baseline, significant increases in weight and reduced symptoms of SOP emerged at the third assessment (following CBT-P) and endpoint (following FBT + CBT-P). Of those who completed treatment, more than a half improved on all investigated measures (except SPP), and all improved in weight. In the presented study, the use of FBT + CBT-P was associated with average declines in the symptoms of eating disorders and perfectionism, and the improvement in perfectionism was associated with improvements in the symptoms of eating disorders [44].

A study by Shu et al. [52] on a group of teenage girls (14–19 years old) demonstrated the greatest effects of online CBT-P observed immediately after treatment and at 3 and 6 month follow-ups. This study examined adolescents who struggled with perfectionism but did not have a clinical diagnosis of ED, allocating them to two groups: unguided ICBT for nonspecific stress management (ICBT-S), or to the control group waiting for therapy. Based on the obtained results, the applied treatment was reported to prevent symptom increases at 6-month follow-up, with ICBT-P proving superior to ICBT-S in preventing clinical perfectionism and depression. ICBT-P was also superior to control in preventing the symptoms of eating disorders among adolescents.

The above studies suggest that cognitive behavioral therapy may be effective in the treatment of perfectionism in adolescents, including those diagnosed with eating disorders. These predictions, however, require further verification based on reliable research in the adolescent populations.

# Recapitulation: enhanced cognitive behavioral therapy or family-based treatment, which way to go?

Considering the current treatment recommendations, and the therapy approaches dedicated to young ED patients, as well as available body of evidence on the effects of various interventions, including the role of perfectionism in the development and maintenance of symptoms, it seems reasonable to focus on the comparison of the most frequently administered forms of therapy: FBT and CBT-E.

Developed in the late 1970s, family-based therapy for patients with AN is an integration of various therapeutic approaches, drawing on, inter alia, systemic or structural family therapy. Its fundamental assumptions differ significantly from other approaches, for FBT assumes that young patients are unable to control their behavior, as they are under the control of eating disorders. This highlights the essential role of parental support as well as their varied levels of involvement in therapy depending on the stage thereof [53]. The course of FBT includes 3 stages. During the first 3–4 months the sessions are held weekly and the parents are responsible for the change of their child's abnormal eating behavior and weight restoration. In the second stage, control over recovery is gradually given to the child to whatever extent is age-appropriate. The last, third stage of FBT begins when the young patient's body weight is restored. Sessions are then held less frequently, every three or four weeks, and therapeutic interventions focus on strengthening the autonomy of the young patient, setting boundaries in family relationships, and learning to recognize and express their own needs [54].

Studies on the effectiveness of FBT in adolescents with AN show a high remission rate in terms of ED-related symptoms [29, 55]. Interestingly, FBT is relatively rarely compared with individual psychotherapies such as CBT-E. Nevertheless, available analyzes suggest superiority of FBT compared to CBT, indicating a longer duration of treatment effects [28].

On the other hand, the undoubted strength of CBT-E is the patient's involvement in the treatment at all its stages, encouraging their active participation in the process of change, related to both behavior and thinking [16]. An important difference between the two approaches is that CBT-E also focuses (in the second stage of treatment) on broad mechanisms related to the emergence and maintenance of eating disorders, including low self-esteem, difficulties in dealing with changing moods, marked interpersonal difficulties, or clinical perfectionism. Tackling them is possible via CBT-E add-on modules, which allow for the extension of treatment and are absent in FBT [23]. It is also worth remembering that as part of individual cognitive behavioral psychotherapy

for children and adolescents, the role of the parent is never overlooked, because the treatment usually includes parents' psychoeducation, their involvement in the process, as well as direct participation in sessions (the frequency and extent of this participation depending on the age of the child).

Taking into account the differences between the two discussed modalities of therapy for young patients, it can be predicted that CBT-E-based interventions will appeal primarily to older adolescents who, in developmental terms, strive for autonomy and control of their actions, and who have a pronounced form of one of the maintaining mechanisms external to core ED psychopathology [23].

To conclude, selection of the most effective treatment strategy of eating disorders in adolescents with comorbid clinical perfectionism requires precise case conceptualization and thorough understanding of the patient's difficulties, including the mechanisms underlying the development and maintenance of symptoms, as well as their family context. The value of identification and consideration of the family system in the process of adolescent recovery is beyond doubt. Incidentally, if, after restoring a safe weight, the supporting mechanisms such as overestimating the importance of the body image, low self-esteem or perfectionism are neglected in the course of therapeutic interventions, it may lead to the onset of other disorders or diagnostic migrations [12, 56]. Therefore, based on the available body of evidence, it seems that cognitive behavioral therapy, and especially its enhanced version, may be effective in the treatment of ED, as well as identification and management of the underpinning and maintaining mechanisms in adolescent patients, thus reducing the likelihood of relapse or occurrence of other type of psychopathology.

#### References

- 1. Al-Adawi S, Bax B, Bryant-Waugh R, Claudino AM, Hay P, Monteleone P et al. *Revision of ICD-status update on feeding and eating disorders*. Adv. Eat. Disord. 2013; 1(1): 10–20.
- 2. Smink FRE, Hoeken von D, Hoek WH. *Epidemiology of eating disorders: Incidence, prevalence and mortality rates*. Curr. Psychiatry Rep. 2012; 14(4): 406–414.
- 3. Jagielska B, Kacperska I. *Outcome, comorbidity and prognosis in anorexia nervosa.* Psychiatr. Pol. 2017; 51(2): 205–218.
- 4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 5<sup>th</sup> ed. Washington, DC: American Psychiatric Association; 2013.
- 5. Batista M, Žigić Antić L, Žaja O, Jakovina T, Begovac I. *Predictors of eating disorder risk in anorexia nervosa adolescents*. Acta Clinica Croatica 2018; 57(3): 399–410.
- Stice E, Marti CN, Rohde P. Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women.
  J. Abnorm. Psychol. 2013; 122(2): 445–457.

- 7. Mairs R, Nicholls D. *Assessment and treatment of eating disorders in children and adolescents*. Arch. Dis. Child. 2016; 101(12): 1168–1175.
- 8. Academy for Eating Disorders. Medical Care Standards Committee. *Eating Disorders: A Guide to Medical Care*, 3rd ed. Reston, VA: Academy for Eating Disorders; 2016. https://www.aedweb.org/learn/publications/medical-care-standards (dostep: 26.09.2022).
- 9. Peebles R, Wilson JL, Lock JD. *How do children with eating disorders differ from adolescents with eating disorders at initial evaluation?* J. Adolesc. Health 2006; 39(6): 800–805.
- 10. House J, Schmidt U, Craig M, Landau S, Simic M, Nicholls D et al. *Comparison of specialist and nonspecialist care pathways for adolescents with anorexia nervosa and related eating disorders*. Int. J. Eat. Disord. 2012; 45(8): 949–956.
- 11. Norris ML, Hiebert JD, Katzman DK. Determining treatment goal weights for children and adolescents with anorexia nervosa. Paediatr. Child Health 2018; 23(8): 551–552.
- Fairburn CG. Terapia poznawczo-behawioralna i zaburzenia odżywiania. Krakow: Jagiellonian University Press; 2013.
- 13. Rienecke RD. Family-based treatment of eating disorders in adolescents: Current insights. Adolesc. Health Med. Ther. 2017; 8: 69–79.
- Lock J, La Via MC; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter for the assessment and treatment of children and adolescents with eating disorders. J Am Acad Child Adolesc Psychiatry. 2015;54(5):412-425. doi:10.1016/j.jaac.2015.01.018
- 15. Forsberg S, Lock J. *Family-based treatment of child and adolescent eating disorders*. Child Adolesc. Psychiatr. Clin. N. Am. 2015; 24(3): 617–662.
- Dalle Grave R, Calugi S, Doll HA, Fairburn, CG. Enhanced cognitive behaviour therapy for adolescents with anorexia nervosa: An alternative to family therapy? Behav. Res. Ther. 2013; 51(1): R9–R12.
- 17. Treasure J, Rhind C, Macdonald P, Todd G. *Collaborative care: The New Maudsley Model*. Eat. Disord. 2015; 23(4): 366–376.
- 18. Tchanturia K, Davies H, Campbell IC. Cognitive remediation therapy for patients with anorexia nervosa: Preliminary findings. Ann. Gen. Psychiatry 2007; 6: 14.
- 19. Agras WS. *Cognitive behavior therapy for the eating disorders*. Psychiatr. Clin. North Am. 2019; 42(2): 169–179.
- 20. American Psychiatric Association. Practice guideline for the treatment of patients with eating disorders. 2023. Retrieved from https://www.psychiatry.org
- National Institute for Clinical Excellence. Eating disorders: Recognition and treatment. London; 2017.
- Starzomska M, Wilkos E, Kucharska K. Modern approaches to the treatment of anorexia nervosa. "The third wave" of cognitive behavioral therapy. Psychiatr. Pol. 2018; 52(4): 651–662.
- 23. 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.

- 24. Yager J, Devlin MJ, Halmi KA, Herzog DB, Mitchell III JE, Powers P et al. *Guideline Watch* (August 2012): Practice Guideline for the Treatment of Patients With Eating Disorders, 3rd edition. FOCUS 2014; 12(4): 416–431.
- Kucharska K. Model leczenia zaburzeń odżywiania w Klinice Nerwic, Zaburzeń Osobowości i Odżywiania Instytutu Psychiatrii i Neurologii w Warszawie. In: Kucharska K, editor. Profilaktyka i leczenie zaburzeń odżywiania. Institute of Psychiatry and Neurology; 2017. Pp. 50–62.
- 26. Rabe-Jabłońska J, Pawełczyk T, Żechowski C, Jarema M. *Standardy leczenia zaburzeń odżywiania*. Psychiatr. Psychol. Klin. 2008; 8(1): 20–40.
- 27. Lock J. An update on evidence-based psychosocial treatments for eating disorders in children and adolescents. J. Clin. Child Adolesc. Psychol. 2015; 44(5): 707–721.
- 28. Le Grange D, Lock J, Agras WS, Bryson SW, Jo B. *Randomized clinical trial of family-based treatment and cognitive-behavioral therapy for adolescent bulimia nervosa*. J. Am. Acad. Child Adolesc. Psychiatry 2015; 54(11): 886–894.
- Fairburn CG, Cooper Z, O'Connor M. Eating disorder examination. In: Fairburn CG, editor. Cognitive behavior therapy and eating disorders. New York: Guilford Press; 2008. Pp. 265–308.
- 30. Dalle Grave R, Calugi S, Sartirana M, Fairburn CG. *Transdiagnostic cognitive behaviour therapy for adolescents with an eating disorder who are not underweight.* Behav. Res. Ther. 2015; 73: 79–82.
- 31. 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(9): 1042–1046.
- 32. Calugi S, Dalle Grave R, Sartirana M, Fairburn CG. *Time to restore body weight in adults and adolescents receiving cognitive behaviour therapy for anorexia nervosa*. J. Eat. Disord. 2015; 3: 21.
- 33. Dalle Grave R, Conti M, Calugi S. *Effectiveness of intensive cognitive behavioral therapy in adolescents and adults with anorexia nervosa*. Int. J. Eat. Disord. 2020; 53(9): 1428–1438.
- 34. Dalle Grave R, Conti M, Sartirana M, Sermattei S, Calugi S. *Enhanced cognitive behaviour therapy for adolescents with eating disorders: A systematic review of current status and future perspectives*. IJEDO 2021; 3(3): 1–11.
- 35. Shafran R, Cooper Z, Fairburn CG. *Clinical perfectionism: A cognitive-behavioural analysis*. Behav. Res. Ther. 2002; 40(7): 773–791.
- 36. Hewitt PL, Flett GL, Mikail SF. *Perfectionism: A relational approach to conceptualization, assessment, and treatment hardcover.* New York: The Guilford Press; 2017.
- 37. Egan SJ, Wade TD, Shafran R, Antony MM. *Cognitive-behavioral treatment of perfectionism*. New York: Guilford Press; 2014.
- 38. Antony MM, Swinson RP. Kiedy doskonałość nie wystarcza. Jak sobie radzić z perfekcjonizmem. Warsaw: Czarna Owca; 2008.
- 39. Martin S. *Perfekcjonizm. Jak uwolnić się od samokrytyki, zbudować stabilne poczucie własnej wartości i odnaleźć wewnętrzną równowagę*. Sopot: Gdańskie Wydawnictwo Psychologiczne; 2023.

- 40. Levinson CA, Brosof LC, Vanzhula IA, Bumberry L, Zerwas S, Bulik CM. *Perfectionism Group Treatment for Eating Disorders in an Inpatient, Partial Hospitalization, and Outpatient Setting*. Eur. Eat. Disord Rev. 2017; 25(6): 579–585.
- 41. Bardone-Cone AM, Lin SL, Butler RM. *Perfectionism and contingent self-worth in relation to disordered eating and anxiety*. Behav. Ther. 2017; 48(3): 380–390.
- 42. Wade TD, Wilksch SM, Paxton SJ, Byrne SM, Austin SB. *How perfectionism and ineffective-ness influence growth of eating disorder risk in young adolescent girls*. Behav. Res. Ther. 2015; 66: 56–63.
- 43. Brown AJ, Parman KM, Rudat DA, Craighead LW. *Disordered eating, perfectionism, and food rules*. Eat. Behav. 2012; 13(4): 347–353.
- 44. Hurts K, Zimmer-Gembeck M. Family-based treatment with cognitive behavioral therapy for anorexia. Clin. Psychol. 2019; 23(1): 61–70.
- 45. Fairburn CG, Cooper Z, Shafran R. Cognitive behaviour therapy for eating disorders: A "transdiagnostic" theory and treatment. Beh. Res. Ther. 2003; 41(5): 509–528.
- 46. Frostad S, Calugi S, Engen CBN, Dalle Grave R. Enhanced cognitive behaviour therapy (CBTE) for severe and extreme anorexia nervosa in an outpatient eating disorder unit at a public hospital: A quality-assessment study. J. Eat. Disord. 2021; 9(1): 143.
- 47. Atwood ME, Friedman A. A systematic review of enhanced cognitive behavioral therapy (CBTE) for eating disorders. Int. J. Eat. Disord. 2020; 53(3): 311–330.
- 48. Zetterberg M, Carlbring P, Andersson G, Berg M, Shafran R, Rozental A. *Internet-based cognitive behavioral therapy of perfectionism: Comparing regular therapist support and support upon request.* Internet Interv. 2019; 17: 100237.
- 49. Valentine EG, Bodill KO, Watson HJ, Hagger MS, Kane RT, Anderson RA et al. *A randomized controlled trial of unguided internet cognitive-behavioral treatment for perfectionism in individuals who engage in regular exercise*. Int. J. Eat. Disord. 2018; 51(8): 984–988.
- 50. Galloway R, Watson H, Greene, D, Shafran R, Egan SJ. *The efficacy of randomize controlled trials of cognitive behaviour therapy for perfectionism: A systematic review and meta-analysis*. Cogn. Behav. Ther. 2022; 51(2): 170–184.
- 51. Hurst K, Zimmer-Gembeck M. Focus on perfectionism in female adolescent anorexia nervosa. Int. J. Eat. Disord. 2015; 48(7): 936–941.
- 52. Shu CY, Watson HJ, Anderson RA, Wade TD, Kane RT, Egan SJ. *A randomized controlled trial of unguided internet cognitive behaviour therapy for perfectionism in adolescents: Impact on risk for eating disorders*. Behav. Res. Ther. 2019; 120: 103429.
- 53. Minuchin S. Families and family therapy. London: Tavistock Publications; 1974.
- Lock J, Le Grange D. Treatment manual for anorexia nervosa: A family-based approach, 2<sup>nd</sup> ed. New York: Guilford Press; 2013.
- 55. Lock J, Le Grange D. Family-based treatment: Where are we and where should we be going to improve recovery in child and adolescent eating disorders. Int. J. Eat. Disord. 2019; 52(4): 481–487.

56. Dalle Grave R. *Cognitive-behavioral therapy in adolescent eating disorders*. In: Hebebrand J, Herpertz-Dahlmann B, editors. *Eating disorders and obesity in children and adolescents*. Philadelphia: Elsevier; 2019. Pp. 111–116.

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