

Other psychological management strategies for anorexia nervosa

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Abstract

In addition to having the highest rate of mortality among all psychiatric disorders and causing profound negative effects on quality of life, anorexia nervosa (AN) remains challenging to address. Apart from cognitive behavioural therapy and family therapy (FT), the current National Institute for Health and Care Excellence guidelines recommend several types of psychological therapy as first-line treatment for AN, including the Maudsley Model of Anorexia Nervosa Treatment for Adults, specialist supportive clinical management, and focal psychodynamic therapy for adults and adolescent-focused psychotherapy for young people. This article aims to describe these treatments and the existing evidence base. Research suggests that all recommended treatments for AN are equally effective at addressing core eating disorder psychopathology and increasing body mass index (BMI) in adults, while FT appears to be more effective at increasing BMI in young people. However, the evidence base remains very limited, and relapse rates can range from 9% to 52%. Barriers to conducting trials of interventions for AN include broader factors, such as lack of statistical power due to recruitment challenges, and illness-specific factors, such as patient resistance to change, cognitive rigidity and avoidance. Non-specific therapy-related factors, particularly therapeutic alliance, might play an important role in overall treatment outcomes. More longitudinal evidence and research into the effects of comorbidities is needed to draw stronger conclusions regarding the effectiveness of psychological management strategies for AN.

Keywords: anorexia nervosa, evidence-based treatments, first-line treatments, NICE guidelines

Abbreviations: AN = anorexia nervosa; AFP-AN = adolescent-focused psychotherapy for anorexia nervosa; BFST = behavioural family systems therapy; BMI = body mass index; CBT-ED = cognitive behavioural therapy for eating disorders; ED = eating disorder; EOIT = ego-oriented individual therapy; FBT = family-based therapy; FPT = focal psychodynamic therapy; FT = family therapy; IPT = interpersonal therapy; MANTRA = Maudsley Model of Anorexia Nervosa Treatment for Adults; NHS = National Health Service; NICE = National Institute for Health and Care Excellence; SSCM = specialist supportive clinical management; TAU = treatment as usual

Introduction

Anorexia nervosa (AN) is a debilitating mental health condition characterised by significantly low body weight and restrictive eating due to fear and concerns around weight, size, and shape (1). AN affects people of all ages, genders, sexual identities and ethnicities, with peak incidence in early adolescence; it is more prevalent among females (2). In addition to having the highest mortality rate among all psychiatric disorders (2, 3), it also appears to be particularly hard to manage, with relapse rates ranging between 9% and 52% (4), as people with AN tend to lack insight into the extent of their difficulties, be resistant to change and find it difficult to engage in treatment (5, 6).

The current National Institute for Health and Care Excellence (NICE) guidelines recommend several types of psychological therapy as first-line treatment for AN in adults, including eating disorder-focused cognitive behavioural therapy (CBT-ED), the Maudsley Model of Anorexia Nervosa Treatment for Adults (MANTRA) and specialist supportive clinical management (SSCM) (7). If one of the above options is ineffective, the recommendation is to offer a treatment option from the list that the patient has not tried before, or to consider eating disorder-focused focal psychodynamic therapy (FPT); however, due to its training requirements, FPT is not currently widely available outside Germany, where it was developed.

For addressing AN in children and young people, the guidelines recommend AN-focused family therapy (FT-AN) with the possibility for the young person to receive occasional separate sessions. In cases where FT-AN is not possible (e.g., due to family breakdown) or ineffective, individual CBT-ED or adolescent-focused psychotherapy for AN (AFP-AN) should be considered.

CBT-ED appears to be the most common first-line treatment option offered by the National Health Service (NHS) in the UK for adults, while FT-AN is the predominating treatment option for young people. These two therapeutic modalities are described in detail elsewhere in this issue (pages 183 and 194). This review aims to describe the other NICE-recommended psychological interventions for adults and young people, including the focus of treatments, key principles, specific factors and the evidence base for MANTRA, SSCM, and FPT for adults, and AFP-AN for young people.

Maudsley Model of Anorexia Nervosa Treatment for Adults

MANTRA is an outpatient treatment based on a patient manual consisting of seven core modules delivered over the

course of 20 to 30 individual sessions (8). The modules cover topics such as getting started and finding motivation for recovery, working with support including family and others, improving nutrition, understanding AN, developing treatment goals, working towards change and relapse prevention. It was developed with the involvement of patients and carers and is based on both psychological and neurobiological research on maintaining factors for AN.

Module 1 invites individuals to evaluate their reasons and ability to change, and to reflect on some of the pros and cons of AN and recovery. Module 2 focuses on the importance of social support and relationships during recovery, while module 3 covers the importance of nutrition, consequences of malnutrition and initiation of change to nutritional intake. In module 4, the maintenance model of AN is explained and an individual formulation is developed. Module 5 considers goals and goal setting, while module 6 explores the process of change, encouraging individuals to work on their emotional intelligence, thinking styles and sense of identity. Finally, module 7 covers relapse prevention.

MANTRA proposes a cognitive-interpersonal maintenance model of AN, suggesting that individuals with AN often have certain vulnerability factors, such as tendencies towards anxious avoidance and obsessive-compulsive features, which contribute to the maintenance of the disorder (9). According to this model, AN is maintained by a combination of intrapersonal factors, such as patients' beliefs about the function of their illness, and interpersonal factors, such as positive and negative reinforcement received from reactions to their illness by people close to them. The vulnerability factors might be further exacerbated by starvation. As starvation tends to be perceived as functional and valuable to those with AN, eating might become an emotional threat (9).

Importantly, the vulnerability factors, alongside profound eating disorder (ED) symptoms that are visible to others, elicit a social response that essentially reinforces the maintenance of the disorder further (10). Thus, within MANTRA, cognitive, emotional, and interpersonal aspects of one's AN are considered and addressed. Some preliminary evidence suggests that MANTRA could also be adapted to a group setting (11).

Specialist supportive clinical management

SSCM is an intervention consisting of two main components, clinical management of AN symptoms and supportive therapy (12), and is delivered across 20 sessions or longer, depending on the severity of the disorder (7). It was initially developed as an active control treatment for a research trial investigating the efficacy of psychotherapies for AN (13) and so was formulated to have minimal overlap with CBT or interpersonal therapy (IPT).

The clinical management component focuses on weight restoration, psychoeducation, normalisation of eating and other core AN symptomology. The supportive therapy aspect of SSCM is more flexible than other NICE-recommended therapies, in that it allows the patient to raise life issues that they wish to work on (12, 14). The treatment can be separated into three phases. Phase one focuses on establishing the therapeutic alliance, creating an understanding of the patient's symptoms and identifying target symptoms and a target weight range, alongside consistent psychoeducation about physical and psychosocial aspects of the illness. In the core second phase, the emphasis is placed on normalising eating and restoring weight. In the final third phase, preparation for treatment termination begins alongside continued work on the target symptoms. Maintenance of positive change is explored and a relapse prevention plan is developed.

Unlike many other psychological treatments, SSCM does not have a theoretical model of causation and maintenance of AN, nor a specific structure (12), differing significantly from manual-based treatments such as CBT and MANTRA. While establishing a regular eating pattern and weight restoration are non-negotiable in terms of clinical management in the original SSCM intervention, the component of supportive therapy is based solely on what the patient wants to address within the context of their life on a session-by-session basis, and so can be very flexible and individualised. An adapted version of SSCM for those with severe and enduring AN focuses more on quality-of-life improvement rather than mandatory weight restoration (15).

Focal psychodynamic therapy

FPT was developed as a time-limited, standardised form of psychotherapy adapted to the specific needs of people with AN (16), with NICE recommending a total of 40 sessions over 40 weeks, which is a longer duration than some other recommended psychological interventions (7).

Unlike CBT or MANTRA, in FPT, the therapist takes a less directive stance and eating behaviours, as well as central ED symptoms, might not be the central focus, although regular eating remains as one of the central goals of therapy. Instead, FPT aims to explore the unconscious and conscious meanings of ED symptoms in terms of the patient's history and experiences, as well as the effects and manifestations of those symptoms on current relationships, including the relationship with the therapist (17). An emphasis is also placed on the therapeutic relationship and transference, or the way in which the patient's feelings might be projected onto their relationship with their therapist.

Like SSCM, the treatment can be subdivided into three stages (18). The first stage focuses mainly on therapeutic alliance, disorder ego-syntonicity (the way in which the disorder can become part of the person's identity) and self-esteem. The second stage places emphasis on the association between interpersonal relationships and ED symptoms

and behaviours. In the third stage, transference and termination of treatment are explored.

As in MANTRA, the importance of interpersonal factors, as well as the functional nature of ED symptoms, is recognised. Within FPT, symptoms might be viewed as defence mechanisms.

Adolescent-focused psychotherapy for anorexia nervosa

AFP-AN is an individual treatment for young people that originated from ego-oriented individual therapy (EOIT) (19). Treatment should consist of 32 to 40 individual sessions, with 8 to 12 additional family sessions as required for the young person (7). AFP is rooted in a self-psychology model that examines core developmental deficits associated with AN, suggesting that adolescents with AN avoid intolerable affective states associated with their development using food and/or weight (20). Common developmental difficulties may include grief or loss, abuse and/or neglect, child and/or family conflict, and avoidance of adolescent challenges. The AN in this context is understood to serve the purpose of allowing the young person to avoid the challenges and focus on preoccupation with something else (food and its control). Emotional regulation work, which promotes identifying, naming and tolerating emotions, is therefore an essential aspect of this framework.

The intervention consists of three stages, each with different therapeutic targets. The first stage focuses on building a therapeutic relationship between the young person and the therapist, and on formulating the young person's difficulties and functions of AN in managing developmental difficulties. In the second stage, issues associated with adolescence are identified (e.g., social identity, school) and development of age-appropriate independence is initiated. The third stage places emphasis on cultivating behaviours and management strategies to address problems and encouraging the young person to start applying and adapting the behaviours to establish independence.

While AFP-AN can be very flexible in terms of approach and can use a variety of strategies, including interpersonal, mindfulness, cognitive and behavioural strategies, the key difference between AFP-AN and CBT is that the focus of therapy is not on AN cognitions regarding food, weight and shape, but rather on the challenges adolescents with AN face (20). While acknowledging that weight gain and regular eating are essential parts of recovery, the focus on food and weight is secondary in AFP-AN, as opposed to being central in CBT-ED.

Family sessions, which are typically offered at the beginning of therapy, can include one or both parents or carers and create an opportunity for the family to gain insight into their child's AN, learn skills that can be adapted by the whole family, reflect on the skills the young person might start to practise as a result of therapy, and develop a more supportive home environment and better communication skills. However, unlike classic family therapy (or family-based therapy for AN, described in detail in another paper in this issue (page 194)), AFP does not identify family members as the "agents of change". Family members play a supportive role in helping the young person face their challenges, and the young person holds the responsibility of self-directed change (20).

Evidence base for adult interventions

The evidence base for the psychological interventions for AN remains limited. However, research suggests that all NICE-recommended treatments for adults with AN are equally effective and hence can all be offered as first-line interventions, although strictly defined rates of recovery remain low (4, 21). Clinical trials comparing CBT, MANTRA and SSCM show that all three treatments result in improvements in weight and ED symptoms, which are sustained at 12-month follow-up, with no significant differences in body mass index (BMI) changes or rates of symptom changes between treatment groups (13, 22, 23). Similar results have been yielded in the ANTOP study comparing CBT, FPT and treatment as usual (TAU), with all three treatment groups showing similar BMI increases post-treatment and at 12-month follow-up (24). A five-year follow-up of the ANTOP study revealed that BMI improvements persisted for all three groups with no further changes emerging between groups, suggesting that CBT-ED and FPT can result in long-term changes, especially if patients are treated at earlier stages of illness (25).

Both SSCM and CBT-ED have been shown to be effective at addressing severe and enduring AN, leading to improvements in quality of life, low mood, social adjustment, BMI and ED symptoms, with no significant differences post-treatment between groups (15). However, some slight differences emerged at 12-month follow-up, with CBT-ED resulting in lower ED symptoms, better social adjustment scores, and improved readiness for change. The differences might be attributed to the clearer structure and skill development of CBT-ED.

Some evidence suggests that, while being equally effective in terms of reducing ED psychopathology and increasing BMI, MANTRA appears to be rated as a more acceptable option by patients compared to SSCM (23). Importantly, improvements in symptoms and BMI were sustained over a 24-month period in both treatment groups, but MANTRA resulted in more profound weight gain, suggesting that it could be more suitable for more underweight patients (26). People engaged in MANTRA were also more willing to provide verbal feedback regarding the intervention and appeared to have a more positive experience of therapy. It is possible, therefore, that MANTRA could be more beneficial for people with a chronic or relapsing course of illness, which requires extensive or repeated treatment. A recent multicentre cohort study found that MANTRA could be an effective and acceptable treatment option for adolescents and emerging adults, resulting in better BMI and ED psychopathology improvements, as well as better remission rates

compared to TAU (27).

The original study suggesting SSCM as an active control treatment showed that SSCM, CBT and IPT resulted in equal improvements for people with AN (13). When considering a stepped-care treatment model, SSCM has been suggested as a more suitable intervention, particularly for people with higher motivation for change and recovery.

Evidence base for adolescent interventions

Evidence for the effectiveness of AFP-AN is even more limited compared to that for adult interventions, although more research is available on the effectiveness of FT which has led to the NICE recommendation of this approach as the first-line treatment for young people.

A comparison study between the precursor of AFP, EOIT, and behavioural family systems therapy (BFST) focusing on adolescent girls found that while improvements in BMI were evident in both groups, the improvements were superior in the BFST group (28). However, there were no differences in the number of adolescents who achieved their target weight by the end of the treatment, indicating that both family and individual interventions can be effective strategies for weight restoration. Both treatments seemed to result in improvements in eating attitudes, interoceptive awareness, depression, internalised behaviours and eating-related behavioural conflict, despite having different focuses (19).

More recent studies comparing AFP to FT found no significant differences in remission rates between groups post-treatment (29). However, FT became significantly superior to AFP at 6- and 12-month follow-up, with greater remission and recovery rates. Those who received FT were also hospitalised less often. Importantly, a longer follow-up study found remission and recovery rates to be stable in both groups two to four years after the intervention, indicating that both interventions can be effective long-term (30).

Family involvement in the treatment process appears to be beneficial (31). This does not argue against AFP, however, as family sessions are also recommended within the approach. AFP might be a more suitable option for older adolescents, where the influences of family naturally decrease and a need for independence and responsibility for self emerges. However, the small number of high-quality clinical trials and the lack of systematic evidence means that conclusive statements regarding superiority of any of the AN treatments for young people are difficult to make.

Non-specific factors

An interesting observation that arises from the current evidence base for psychological treatments for AN is the potential importance of non-specific therapy factors in overall intervention effectiveness. Some studies suggest that similarities in outcomes between treatments can be attributed to common features of most AN interventions, such as focus on establishing a healthier relationship with food and weight and addressing AN-specific and broader psychopathology (22). Apart from those features, all NICE-recommended treatments place strong emphasis on the therapeutic alliance, which is known to be one of the key non-specific factors of treatment adherence and success. A study of medical and surgical treatments has previously suggested that under general therapeutic conditions, where both the clinician and the patient have some level of faith in treatment and set up positive expectations, non-specific factors might account for most of the variance in treatment outcomes (32). The process evaluation of the MOSAIC trial comparing MANTRA and SSCM found that patients described both therapy-specific and therapy-non-specific factors, including therapeutic alliance, treatment duration and pacing, and external social support, as being equally important in their treatment journeys, further stressing the significance of those factors when considering research on the effectiveness of psychological treatments (33). Establishing the therapeutic alliance appears to be the key initial step for all NICE-recommended interventions for adults and young people, where the first stages of treatment are predominantly focused on building and strengthening that relationship. The valued nature of AN (34) and high ambivalence about change in people with AN also makes therapeutic alliance and shared goal setting particularly important to promote engagement and compliance.

Overall, the evidence base for AN treatment remains limited for both adults and young people and, in many ways, this is due to the nature of the illness. Patients with AN tend to be difficult to recruit and engage in treatment for the duration necessary for clinically meaningful trials and follow-ups (35, 36), and trials tend to lack statistical power (37). Some of the barriers to patient engagement include resistance to change, cognitive rigidity and avoidance tendencies (5, 6, 35). Moreover, relapse rates in AN appear to be high (4, 38), and more longitudinal evidence of treatment effectiveness in terms of sustained weight gain and reduced ED psychopathology is needed to draw stronger comparisons between treatments. More research into the effects of specific and non-specific factors on treatment outcomes would also be helpful when drawing comparisons between interventions and choosing the most appropriate option.

Conclusion

The recommendations given in NICE guidelines for the treatment and management of AN include a number of psychological treatment options apart from CBT-ED and FT-AN, which all appear to be equally effective in addressing core ED psychopathology and low BMI. All approaches share some similarities and differences, making it possible to pick a personalised intervention suitable for the needs of specific patients, although there is limited evidence to help

us to predict who might be most likely to benefit from which therapy. MANTRA might be more suitable for people with lower BMI, who find a flexible, yet structured, manual-based approach helpful. Further research needs to be conducted to explore and evaluate MANTRA adapted to group settings and adolescents. SSCM might be a helpful first-line intervention for people whose BMI is more stable, and who show greater readiness and motivation for change. Where other treatments appear to have been ineffective, FPT can be used to explore the meaning of AN symptoms more deeply. However, FPT has not been widely implemented in the UK due to the practical challenges of providing the necessary level of clinical training. AFP-AN could be more appropriate for mid-teenagers, as opposed to younger children, as they are likely to be in the process of separating and individuating from parents.

The need for more high-quality large-scale trials of AN treatment options remains pressing. These are required to evaluate each intervention further and to develop a better understanding of whether people with certain presentations and symptoms might benefit from a particular option more, leading to better personalisation of treatment. There is almost no evidence on whether comorbid conditions affect outcomes or require modifications to existing treatments. More longitudinal evidence is needed to draw stronger conclusions regarding treatment effectiveness and similarities or differences in long-term outcomes for different treatment groups.

Declaration of interests

The authors declare they have no conflict of interest.

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