Advances in Psychotherapy for Children and Adolescents with Eating Disorders

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There is a significant lag in the development of evidence based approaches for eating disorders in children and adolescents despite the fact that these disorders typically onset during these developmental periods. Available studies suggest that psychotherapy is the best available approach to these disorders. Specific studies support the use of family based interventions, adolescent focused individual therapy, and developmentally adapted cognitive behavioral therapy in this age group. The current report summarizes the available evidence supportive of each of these treatment modalities, as well as, provides a description of the rationale and principle therapeutic targets and intervention types. Future directions in psychotherapy research in child and adolescent eating disorders are discussed.

KEYWORDS: anorexia; bulimia; psychotherapy; adolescents

INTRODUCTION

Eating disorders typically onset during late childhood and early adolescence (Hoek & Hoeken, 2003; van Son et al., 2006). These disorders are relatively common, both as full and partial syndromes (Hoek & Hoeken, 2003). The incidence rate for anorexia nervosa (AN) is just under 1%, similar to schizophrenia, while the incidence rate for bulimia nervosa (BN) is between 2% to 3%. Partial or subthreshold cases, sometimes referred to as Eating Disorder Not Otherwise Specified, account for another 2% to 5%. In addition to being common, these disorders often lead to physical health problems, including bone loss, amenorrhea, hypokalemia, and death (Golden et al., 2003; Rome & Ammerman, 2003). Mortality rates for anorexia nervosa are among the highest for any psychiatric disorder averaging 8% to 12% of patients (Herzog et al., 2000; Sullivan, 1995).

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Deaths are most often due to cardiac arrest and suicide. Eating disorders, especially anorexia nervosa, are expensive to treat because of the high use of hospitalization (Lock, Couturier, & Agras, 2008; Streigel-Moore, Leslie, Petrill, Garvin, & Rosenheck, 2000).

Strangely, given these facts, eating disorders in children and adolescents have resided on the peripheries of child and adolescent psychiatry and psychology. Instead of child and adolescent psychiatric and psychological experts focusing on these disorders, for the most part, these young patients have been treated by adult psychiatrists, adolescent medicine specialists, and nutritionists (Lock, 2002). In many cases, these clinicians provide exceptional and well-informed care; however, at other times, the lack of a developmentally informed psychological approach has lead to an overemphasis on adolescent autonomy, a neglect of the importance of families and parents in particular, an overemphasis on the medical aspects of treatment, and an ignorance of the psychological and cognitive limits of children and adolescents (Crisp, 1980).

In addition to much of the clinical care being offered by providers with a limited developmental understanding of children and adolescents, most of the psychiatric treatment research in eating disorders has focused on adults for both anorexia nervosa and bulimia nervosa (Le Grange & Lock, 2005; Lock & Gowers, 2005). This would not be surprising if these disorders did not so clearly onset during the adolescent years (Flament, Ledoux, Jeammet, Choquet, & Simon, 1995; Hoek & Hoeken, 2003). At the same time, results of these studies likely have limited applicability for adolescents with eating disorders because adult cases typically represent more chronic and resistant forms of eating disorders (Herzog et al., 1993). This has lead, especially in anorexia nervosa, to a kind of therapeutic nihilism regarding treatment response. Further, approaches using an adult model have tended to focus on individual therapy, motivation, and cognitive approaches suitable for adult levels of interpersonal, legal, and psychological maturity (Geller, Cocksell, & Drab, 2001; Pike, Walsh, Vitousek, Wilson, & Bauer, 2004). This is not to suggest that adults with anorexia nervosa cannot recover, but their chances are likely quite low, based on long term outcome studies (Deter & Herzog, 1994; Herzog et al., 1993; Russell, Szmukler, Dare, & Eisler, 1987; Steinhausen, Rauss-Mason, & Seidel, 1991, 1993).

The range of proposed individually focused psychological treatments for eating disorders include psychodynamic psychotherapy, interpersonal psychotherapy, developmentally oriented individual therapy, cognitive behavioral therapy, dialectical behavioral therapy, nutritional therapy, and

most recently, cognitive remediation therapy (Crisp, 1980; Levenkron, 2001; Mcintosh et al., 2005; Pike, Walsh, Vitousek, Wilson, & Bauer, 2004; Robin et al., 1999; Tchanturia, Whitney, & Treasure, 2006). Similarly, there are a number of forms of family therapy proposed, including structural family therapy, systemic family therapy, family-based therapy, multi-family group therapy, and narrative family therapy (Le Grange & Lock, 2007; J. Lock, Le Grange, Agras, & Dare, 2001; Minuchin, Rosman, & Baker, 1978; Selvini Palazzoli, 1974).

Despite the range of therapeutic options proposed, little progress has been made in evaluating treatments for eating disorders in younger populations ([See Table 1] Le Grange & Lock, 2005). For adolescents with anorexia nervosa, only six randomized clinical trials have been published (Eisler et al., 2000; Eisler et al., 1997; Eisler, Simic, Russell, & Dare, 2007; Gowers et al., 2007; Le Grange, Eisler, Dare, & Russell, 1992; Lock, Agras, Bryson, & Kraemer, 2005; Lock, Couturier, & Agras, 2006; Robin et al., 1999; Russell, Szmukler, Dare, & Eisler, 1987). Most of these studies are small in scale. All but one examined some form of family therapy. There are only two published randomized clinical trials for adolescent bulimia nervosa, with a combined subject pool of 165 (Le Grange, Crosby, Rathouz, & Leventhal, 2007; Schmidt et al., 2007). No studies have systematically examined the effectiveness of medications in adolescents with either anorexia nervosa or bulimia nervosa (Crow, Mitchell, Roerig, & Steffen, 2008).

Even with limited evidence, adherents of particular schools of psychotherapy have been strong advocates for their various approaches. The strongest case, however, can be made for family therapy for adolescent anorexia nervosa where both case series data and a few limited randomized clinical trials suggest efficacy both at the end of treatment and at longer-term follow up (N.I.C.E., 2004). On the other hand, individual therapy for adolescent anorexia nervosa has been studied in only two published trials (Gowers et al., 2007; Robin et al., 1999). In both studies, the comparison treatment, family therapy, performed as well as or better than individual therapy at the end of treatment. However in one of these studies, patients in individual therapy "caught up" to those who had received family therapy (Robin et al., 1999). At follow up, data from several case series and two randomized clinical trials suggest that family therapy may be superior to individual therapy for adolescent bulimia nervosa (Dodge, Hodes, Eisler, & Dare, 1995; Le Grange, Lock, & Dymek, 2003; Le Grange, Crosby, Rathouz, & Leventhal, 2007; Schmidt et al., 2007). A number of studies suggest that cognitive-behavioral therapy is the best approach (e.g.

Table 1. COMPLETED OUTPATIENT PSYCHOTHERAPY TREATMENT TRIALS FOR ADOLESCENT ANOREXIA NERVOSA

Study	Type Treatment	n	Age (Mean)	Outcomes (Morgan/Russell –good or intermediate)
Russell et al., (1987) (Russell, Szmukler, Dare, & Eisler, 1987)	Family-Based Treatment vs Supportive Therapy	21	15.3	Family therapy = 90% Individual therapy=18% $p < .02$
Le Grange et al., (1992) (Le Grange, Eisler, Dare, & Russell, 1992)	Family-Based Treatment vs Separated Family-Based Treatment	18	15.3	68% overall; no differences between groups
Robin et al., (1999) (Robin et al., 1999)	Family-Based Treatment vs Ego-Oriented Individual Therapy	37	13.9	Family therapy = 94% Individual therapy = 65% $p < .05$
Eisler, et al (2000) (I. Eisler et al., 2000)	FBT vs. separated FBT	40	15.5	63% overall; No differences between groups
Lock et al (2005) (J Lock, Agras, Bryson, & Kraemer, 2005)	Family-Based Treatment (low dose) vs Family-Based Treatment (high dose)	86	15.1	90% overall; no differences between groups
Gowers et al (2007)	Hospitalization (H) vs Cognitive Behavioral Therapy vs Usual Care (UC)	160	14.9	No differences between groups: CBT = 30%; UC = 41%; H = 30%.

Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000) for treating bulimia nervosa in adults. However, only a few case series studies (Lock, 2005; Schapman & Lock, 2006), and one randomized clinical trial has assessed the usefulness of CBT for adolescents, and the RCT used a self-help form of CBT (Schmidt et al., 2007). That RCT suggested CBT was as effective as family therapy in the adolescent age group (Schmidt et al., 2007).

Nonetheless, even with the limited data base available to support treatments for eating disorders in adolescents, several can be considered reasonable for eating disorders in younger patients. These therapeutic types— family-based treatment for anorexia nervosa and bulimia nervosa, developmentally focused individual therapy for anorexia nervosa, and cognitive-behavioral treatment adapted for adolescent bulimia nervosa— will be described in more detail here.

FAMILY-BASED TREATMENT FOR ADOLESCENT ANOREXIA NERVOSA AND BULIMIA NERVOSA

The first uncontrolled family treatment study was undertaken by Minuchin and colleagues in the late 1970s (Minuchin, Rosman, & Baker, 1978). Based on a theory that anorexia nervosa was maintained by psychosomatic family processes—rigidity, intrusiveness, conflict avoidance, over protectiveness—these authors used a structural family therapy approach to address these putative problems. These authors suggested that about 80% of patients no longer had anorexia nervosa at the end of their treatment and at follow up. Expanding on these promising findings, Christopher Dare, MD and Ivan Eisler, Ph.D at the Maudsley Hospital in London, UK, devised an approach to families that aimed at supporting families in promoting behavioral change in the affected adolescent rather than aimed at family processes per se (Dare & Eisler, 1997). These authors suggested several key therapeutic targets:

1) encourage parents to take charge of the child's eating and over exercise to promote weight gain in their child;
2) promote parental competence, by challenging their parents' assumptions that they caused the anorexia nervosa;
3) place parents in charge of decision making about how to address their child's self-starvation and over exercise;
4) provide education for parents about anorexia nervosa affects on thinking, behavior, and relationships; and,
5) remove blame and externalize the problems to be faced as a family by explaining that anorexia nervosa is psychiatric disease.

In manualized form, this approach is called Family-Based Treatment for anorexia nervosa ([FBT-AN] Lock, Le Grange, Agras, & Dare, 2001). In most cases, treatment lasts between 6 to 12 months and consists of between 10 and 20 one-hour family sessions (Lock, Agras, Bryson, & Kraemer, 2005). Early in treatment weight gain is the central focus. Each session begins with a report of the patient's weight progress to illustrate for the parents and family the effectiveness of the previous week's efforts.

Families often struggle in the initial sessions to find the way that works best for their family to take control of weight restoration. Sometimes it is necessary for one or both (if there are two) parents to observe meals and prevent exercise, similar to actions that might be required when helping a child with another type of serious medical illnesses. Parents commonly must address differences in their attitudes and preferred strategies to reach a compromise position that will work.

Early in treatment a family meal is held to allow the therapist to review family meal-time processes and to facilitate problem solving about food refusal in vivo. Siblings are asked to defer from involving themselves in trying to manage the symptoms of the anorexia nervosa, but to focus instead on ways to be supportive and helpful in other areas of the patient's life. Siblings might provide supportive and diverting conversation or play games, watch videos, or do favors or household chores to help. These activities help convey the sibling's love and concern while preventing them from taking on a quasi-parental role in relation to the patient. The central notion is to use the entire family's resources to challenge the problems they all face from having a family member with anorexia nervosa.

Once weight restoration is accomplished and the patient is eating without protest with parental oversight, it usually is appropriate to begin transitioning responsibility for eating and exercising back to the adolescent in an age-appropriate manner. Typically, parents gradually cede control over eating and exercising to ensure the adolescent can rise to the challenge without reverting to anorexic behaviors and thoughts. The process goes relatively smoothly as the patient usually is able to replace the anorexic preoccupations with developmentally appropriate concerns and activities, such as being with friends, and attending parties and sleepovers.

In the last sessions, the therapist focuses on general adolescent development without the continued focus on anorexia nervosa. Instead, the disorder is examined in terms of how it has interfered with other typical tasks of adolescence (autonomy, social identity, increased capacities for focused work and intimacy). The therapist asks the family to take stock of the ways they worked together to combat anorexia nervosa and to assess how these skills may assist them with other dilemmas of adolescence. Parents are asked to examine how having had to focus so intently on the patient affected on their own relationship, and they are encouraged to find time to focus again on their marital partnership.

Modifications to family based treatment have been made in a manualized version for adolescent bulimia nervosa (FBT-BN; Le Grange & Lock, 2007). The main therapeutic processes are similar, but because adolescents

with bulimia nervosa are typically older and more autonomous than those with anorexia nervosa, accommodations are made. Further, the treatment usually lasts between 4 and 6 months but still consists of about 20 family sessions. Also, instead of directly admonishing the parents to take charge of normalizing eating patterns and preventing binge eating and purging, the therapist enlists the patient to take a collaborative stance with his or her parents against bulimia nervosa. Unlike patients with anorexia nervosa, most patients with bulimia nervosa actually do not want to continue with their dysfunctional eating behaviors, but they cannot seem to break the cycle without assistance. Capitalizing on the ego dystonic nature of bulimia nervosa, the therapists asks the adolescent to consider using alternatives to bulimia. With this as a starting point, the therapist encourages united action from the parents designed to challenge and disrupt pathological eating and purging behaviors. Over the ensuing weeks of treatment, parents take control of the home environment to promote normal eating patterns and to reduce or eliminate situations and triggers that are likely to lead to binge eating, such as not stocking cabinets with large amounts of foods that the child might be tempted to over eat. Further, should binge eating occur, the parents with the help of the therapist develop strategies with the patient to prevent purging (e.g. taking a drive, watching a movie, or talking). A main challenge in this phase is to reduce the feeling of shame associated with binge eating and purging. In most cases when parents are brought on board to help, shame is reduced. The therapist facilitates discussions in a nonjudgmental fashion and focuses on positive steps and uses externalization (bulimia nervosa as a disease not a willful behavior) to help the family.

As with FBT-AN, once parents manage to normalize eating patterns, and binge eating and purging are eliminated, the therapist encourages the parents to help the adolescent test her ability to manage eating in a way more consistent with her age. Because the dysfunctional eating patterns have been successfully disrupted, the likelihood of success on the part of the patient is increased. Further, parents remain available to help the patient when she needs it when challenges occur (e.g. emotional or situational triggers).

The focus of the third phase is the establishment of a healthy adolescent or young adult relationship with the parents in which the disorder does not constitute the basis of interaction. As with FBT-AN, this entails working towards increasing personal autonomy for the adolescent, setting appropriate family boundaries, and encouraging the parents to focus their life

together, without needing to focus all their energies on combating bulimia nervosa.

Exploratory studies of moderators for both FBT-AN and FBT-BN have been conducted. For FBT-AN, it appears that single-parent families and divorced or separated families may not do as well as intact families. Further, adolescents with very high levels of obsessive-compulsive features may also do not fare as well as those without these features. For FBT-BN, the degree of eating-related psychopathology moderates outcome, those with less severe psychopathology doing best with FBT-BN (Le Grange, Crosby, & Lock, in press), whereas, those with higher levels of psychopathology responded similarly regardless of treatment type (Le Grange, Crosby, & Lock, 2008). Similarly, exploratory studies of how FBT-BN might work suggest that FBT-BN was more effective than individual therapy by virtue of achieving greater reductions in eating disorder psychopathology by mid treatment (Lock, Le Grange, & Crosby, 2008). In addition, FBT-BN may be more acceptable to younger adolescents, based on refusal rates for FBT therapy in older adolescents with BN (Schmidt et al., 2007).

ADOLESCENT-FOCUSED INDIVIDUAL THERAPY FOR ANOREXIA NERVOSA

Not all patients or families can make use of family based treatments. A viable alternative is adolescent-focused individual therapy (AFP), which is derived from an approach to adolescent AN described as Ego-Oriented Individual Therapy (EOIT) (Fitzpatrick, Moye, Hostee, Le Grange, & Lock, in press; Robin, Siegal, Koepke, Moye, & Tice, 1994). The focus of this therapy, in contrast to the behavioral focus of FBT, is on psychological deficits of persons with anorexia nervosa. In this model an extreme focus food and weight supports avoidance of negative affective states, especially those common to adolescent developmental tasks. The aim of therapy is to help the patient to develop a more constructive coping style and to improve self-efficacy. To accomplish this, the therapist assists the patient to identify and define his or her emotions, with the goal of increasing tolerance to negative emotional states. To this end, a supportive and nurturing relationship with the therapist is essential, but the therapist also uses his or her authority to emphasize the need for health and adherence to medical recommendations for weight gain. In this way, the therapist is simultaneously nurturing and authoritative (Levenkron, 2001).

In conjunction with developing a working alliance, the therapist develops a formulation tied to the patient's developmental challenges. This

formulation provides the general structure for focusing treatment. For example, if a patient is struggling with regressive needs (e.g., over dependence on parents, refusal to engage with age mates in social processes), setting independence goals may be a key aim. To accomplish this aim the therapist applies a wide variety of cognitive and behavioral strategies, including relaxation strategies, anger management and cognitive strategies aimed at understanding the relationship between thoughts, feelings and behaviors. However, in contrast to typical CBT for anorexia nervosa or bulimia nervosa, these strategies do not target food, weight, and body/shape cognition, but the perceived psychological and developmental deficits that underlie the eating disorder symptoms. There are a number of common categories used to specify psychological problems common to anorexia nervosa, as illustrated on Table 2.

A number of specific techniques are used in the process of challenging the use of food and weight to maintain psychological and developmental deficits. Because these adolescents have little experience to draw upon, the therapist often *models adaptive skills,* particularly for managing emotions and conflicts, since adolescents with anorexia nervosa are likely to be in delayed critical aspects of development, such as in emotion regulation and interpersonal assertiveness skills. At times, the therapist may move from modeling to being *directive.* This may be necessary, especially in relation to self-care related to food and eating as well as other behaviors (e.g., nonadherence to medication regimens and poor hygiene). This is followed by specific instruction or guidance in managing these behaviors. The therapist expresses concern and care for the patient through these directives.

In addition to modeling, *self-disclosure* can be used to build trust and to promote a deeper sense of empathy. Of course, self-disclosure should be used judiciously and within the boundaries of the therapeutic relationship. Self-disclosure might include personal information by the therapist, sharing or modeling personal feelings about a specific external problem or situation, or expressing personal feelings about the patient or her situation. Such disclosure is always in the service of helping the patient challenge a deficit of his or her own. For example, a therapist may say something like "I think I would feel sad about that. What kind of feeling did you have about that?" Adolescents often have a great interest in their therapists, and therapists may be asked personal or probing questions. The therapist will need to gauge carefully how to facilitate patient learning while maintaining boundaries. A common question asked by adolescents is whether the therapist has had an eating disorder. This should likely be answered in

Table 2. COMMON THERAPEUTIC TARGETS AND PROCEDURES IN ADOLESCENT FOCUSED THERAPY FOR ANOREXIA NERVOSA

Psychological or Developmental Deficit	Therapeutic Target
Regressive needs/Independence needs in which continuing with AN keeps the adolescent in a childlike state and assists her in avoiding the fear associated with assuming adult demands and expectations.	Treatment focuses on normalizing these concerns and shoring up resources to face these challenges.
Anger/Control issues may also be key areas in which refusal to eat may be used to punish family members and wield control over others. These behaviors may remain outside conscious awareness and instead, be expressed as guilt for the consequences of the disorder.	Bringing these feelings into awareness and providing adaptive mechanisms to express anger and assert control can be woven into therapeutic formulations.
Depressive characteristics, exemplified by feelings of helplessness and vulnerability may also promote AN because the deceptive appearance of control and mastery by managing food and weight give a false sense of empowerment	Treatment targets mood regulation, identifying and increasing pleasurable activities and identifying appropriate mastery skills
Deficits in self-esteem in which AN develops to provide purpose and self-worth where there is a compelling absence of identity and personally meaningful goals	Treatment targets developing developmentally appropriate behaviors to promote self esteem.
Alexithymia protects the patient from unwanted emotions. Behavioral, cognitive, and physiological factors associated with anorexia nervosa help to maintain emotional blunting	Treatment promotes emotional awareness through modeling, the therapeutic relationship, and challenging anorexic behaviors and thoughts.

terms of what this means to the patient ("It seems that it may be important to you that we share similar experiences. Is it?"). Of course, the therapist should not answer all personal questions, but recognize that adolescents, in particular, may need more sharing of this nature in order to trust and maintain the therapeutic relationship.

Directly addressing the risks and benefits of anorexia nervosa for the patient is also an important intervention. One strategy employed to accomplish this is *externalization* of the disorder. Although similar to the technique used in FBT to promote parental action against the disease of anorexia nervosa, the target here is specifically for the patient to see himself or herself as separate from the disorder. Externalization allows the therapist to see the patient in an unconditional positive regard without supporting the preoccupations and behaviors of anorexia nervosa. This also promotes the patient's own realization that she is more than the anorexic self. By creating a "cognitive space," the adolescent can potentially see how continuing to have anorexia nervosa may interfere with normal development and may prevent thinking about more complex, challenging issues. Development of metacognition is enhanced, thereby promoting an objective understanding of personal experience. Externalization strategies may change over time. Early in treatment, the therapist may directly "name" or "call out" the disorder: "It appears that anorexia nervosa is particularly strong today!" While somewhat challenging, the goal is to help the patient see her disorder as a disease rather than a personal accomplishment or failure. In the middle stages of treatment, externalization often will be collaborative: "Tell me, because I'm not sure, if that's you speaking or the anorexia nervosa?" Toward the end of treatment (and sometimes much earlier), patients may use this technique spontaneously and refer to their past concerns in an externalized fashion: "Anorexia nervosa used to make me feel bad at everything; especially if I ate something or gained weight. I was living under the black cloud of anorexia!"

Because these are adolescent patients, it is important to continue to involve parents to support their child's progress. Early on in treatment collateral sessions provide an opportunity for the therapist to gather important information that the patient may not convey. In addition, collateral sessions allow the therapist to assess and support the parents in changing their parenting style to support the patient as she develops into an adolescent with being hampered by anorexia nervosa. These collateral sessions with parents are not the main focus of treatment, but especially at the beginning of therapy, they can be critical for the therapist in developing a psychological formulation and therapeutic alliance. In addition, collateral sessions are a forum for emotional support for the parents, an opportunity to provide education about anorexia nervosa and adolescent development and broadening the skills of the family.

Adolescent-focused psychotherapy represents a structured and manualized approach that focuses many common psychotherapeutic practices

on the specific problem of anorexia nervosa. The approach has been used in one randomized clinical trial. On most measures, therapy similar to AFP (EOIT) did as well as FBT, though on physical health measures FBT outperformed individual therapy. A larger study is underway to test AFP in a more definitive manner. If AFP proves to be an effective treatment, then it may well represent a reasonable and needed alternative to FBT when family therapy is not an acceptable or feasible option.

COGNITIVE BEHAVIORAL THERAPY (CBT) ADAPTED FOR ADOLESCENTS WITH BN

A number of systematic studies support the use of CBT for adults with bulimia nervosa (N.I.C.E., 2004). As noted, the use of CBT for adolescent bulimia nervosa has less systematic support, with only several case series and one randomized clinical trial currently available in the literature (Lock, 2005; Schapman & Lock, 2006; Schmidt et al., 2007). Although limited, these data are consistently encouraging, as adolescent patients appear to respond to CBT. At the same time, there are differences between adolescents and adults with bulimia nervosa. Several authors have suggested adaptations of standard CBT for this younger age group (Le Grange & Lock, 2002; le Grange & Schmidt, 2005; Lock, 2005). A manualized version of CBT for adolescents (CBT-A) has been recently published (Lock, 2005).

Cognitive Behavior Therapy-A is designed specifically for adolescent patients with BN. As such, it is a modified version of the method originally developed by Fairburn (Fairburn, Marcus, & Wilson, 1993; J Lock, 2005). The CBT model of BN assumes that the disorder is maintained by dysfunctional attitudes toward body shape and weight that lead to an overvaluation of thinness, dissatisfaction with the body, and attempts to control shape and weight by excessive dieting. Highly restrictive dieting in turn results in both psychological and physiological deprivation. Further, dietary restriction increases the likelihood of binge eating because of excessive hunger. Binge eating increases anxiety about weight and shape, which lead to purging as an attempt to address this worry.

As with standard adult CBT for bulimia nervosa, CBT-A takes place over about 6 months and is divided into three major phases. The main adjustments to standard CBT focus on making CBT-A more acceptable and compatible with adolescent cognitive, social, and developmental processes. At the beginning of therapy there is an opportunity for increased contact of therapist in order to promote a working alliance. This takes the form of increased frequency of meetings early in treatment and

the use of telephone check ins. Most adolescents with bulimia nervosa live with their parents who set meal times, buy food, and provide the general environmental structure where the adolescent must manage eating. Thus, parents are important partners in CBT-A with the adolescent and the therapist. Parents are educated about the disorder, informed about treatment goals and process, asked to assist with changing triggers in the home environment, and when needed, recruited to assist with behavioral experiments. In order to make CBT-A more understandable for adolescents, particularly younger ones, concrete examples are used to illustrate key points. In addition, because bulimic symptoms are emerging in the context of adolescent processes of physical, cognitive, emotional, and social maturation, it is important to explore these developmental issues as potential triggers or maintaining factors for eating related behaviors and psychopathology. Finally, although the use of formal cognitive restructuring techniques may be used, in most cases, adolescents will use simpler problem-solving strategies instead.

This first stage includes the development of a patient-specific model for how bulimia nervosa symptoms are triggered and maintained. There is a discussion the goals of treatment, which includes establishing a normal pattern of eating, eliminating binge eating and purging, addressing the distorted beliefs about body shape and weight, and developing a relapse prevention plan. Early in treatment, the therapist educates the patient about eating disorders, nutrition, and weight regulation. The patient is asked to keep food records for the purpose of self-monitoring. This can be challenging for some adolescents who do not want to more "homework," but in these cases the therapist works to reconstruct missing food records, and in this way can illustrate their usefulness. The patient is encouraged to change highly restrictive dieting by applying a gradual shift in eating pattern to approximate a three-meal and two-snack pattern spread evenly across the day. Binge eating is illustrated to be a result of extreme dietary restriction. Further, by tracking weight and dysfunctional behaviors together in food records over the first few months of treatment, decreased purging is shown *not* to lead to increased weight gain. During collateral sessions, parents are educated about bulimia nervosa and the potential negative physical and emotional health impact of the disorder. Patients may ask parents to assist them in removing triggers from the home (binge foods) or to be present at times known to be likely binge eating or purging periods. Unlike FBT-BN, however, the treatment is focused on individual patient self-monitoring, then determining how best to change for themselves.

During the second stage of CBT-A the treatment changes from the behavioral focus in stage one to a more cognitive orientation. Cognitive experiments, thought challenging, and problem solving are the main approaches used to address the overvaluation of thinness, distortions in self-evaluation in terms of appearance and weight, and imbalance in key areas and life goals (education, religion, relationships, physical health). This cognitive treatment is supplemented with behavioral experiments to test dysfunctional assumptions, particularly those related to eating, appearance, and weight. The use of parents and friends to support these behavioral experiments is common. Collateral sessions with parents include updating them on progress as well as soliciting their assistance when needed to address problems such as eating feared (or forbidden) foods and supporting experiments the patient may undertake to challenge either behaviors or beliefs.

The final stage addresses relapse prevention. The patient and therapist work together to anticipate potential challenges or triggers that may emerge in the months ahead, with particular attention to those associated with adolescence (e.g. peer competition, dating, intimacy anxieties). Thought experiments may be nsed to practice managing or coping with these challenges and potential triggers for relapse. These experiments help to inform specific relapse preventions strategies. Collateral sessions with parents are used to educate parents about these preventions efforts and identify ways they can be alert to events or behaviors that may augur relapse.

CBT-A is likely an important psychotherapy for bulimia nervosa in adolescents. By attending to the developmental abilities, concerns, and resources available to adolescents, standard CBT is likely enhanced. This developmental focus is designed to increase the therapeutic relevancy of CBT to adolescent patients and thereby make it more likely that they will attend and make use of sessions. Through the inclusion of consideration of common concerns of adolescents, CBT-A addresses triggers and circumstances pertinent to bulimia nervosa as it affects mastery of developmental tasks of the period. Using parents to support treatment and to contribute to behavioral and cognitive changes is also a distinguishing feature CBT-A. The inclusion of parents may add a developmentally additional leverage to combat bulimia nervosa, making recovery more likely.

CONCLUSIONS

Although systematic evidence supporting specific treatment interventions for eating disorders in children and adolescents remains very limited,

there have been considerable advances in treatment of these disorders during the past decade. There are now several clearly described manualized approaches for both anorexia nervosa and bulimia nervosa that help guide the therapist in treating these disorders in this younger age group. Further, data about the usefulness of each of these manuals suggests that patients are likely to respond to these interventions. For anorexia nervosa, FBT-AN currently appears the best approach for intact families; however, individual therapy, such as described in AFT may be a viable alternative for some cases. In addition, FBT-AN appears to be useful for preadolescents with restrictive eating disorders. For bulimia nervosa, there is limited support for both FBT-BN and CBT-A. Fortunately, there are a number of ongoing studies that will help guide clinical practice in the future. A comparison of FBT-AN to AFT is nearing completion with a sample of 120 adolescents with anorexia nervosa at the University of Chicago and Stanford University. Another large multisite study is in the early recruitment stage that will compare FBT to standard family therapy for anorexia nervosa. In addition, a study comparing FBT-BN to CBT-A is being initiated at Stanford University and the University of Chicago, though it will be some years before the outcomes of this study are forthcoming.

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