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Cognitive-Behavior Therapy With Eating Disorders: The Role of Medications in Treatment

Wayne A. Bowers, PhD
Arnold E. Andersen, MD
University of Iowa

Cognitive-behavioral therapy has demonstrated efficacy in the treatment of bulimia nervosa, but there is less empirical data on its usefulness with anorexia nervosa or binge-eating disorder. The use of cognitive-behavioral therapy (CBT) is recommended as the first line of treatment for bulimia nervosa and strongly recommended in combination when medications alone have not been effective. Combined treatment also improves symptoms such as anxiety, depression, and dietary restriction. Empirical studies support the usefulness of CBT with binge-eating disorder and suggest higher remission rates with combined treatment. No single psychotherapy or medicine alone is effective in treating anorexia nervosa. CBT is typically used as part of a comprehensive treatment program with nutritional rehabilitation and prudent use of medication. Both CBT and medication may have benefits in maintaining gains for anorexia nervosa patients after inpatient treatment. More research on CBT alone and in combination with medication is needed to adequately understand the respective roles of these therapies in a comprehensive treatment of eating disorders.

Keywords: cognitive therapy; eating disorders; medications; combined treatment

Cognitive-behavioral therapy (CBT) has become one of the most prominent treatment models in mental health (Wonderlich, Mitchell, Swan-Kremier, Peterson, & Crow, 2004). Initially designed as an outpatient treatment, CBT has been adapted and used in a wide range of settings including crisis intervention, day treatment, partial hospital programs, and inpatient units (Bowers, Andersen, & Evans, 2004). CBT has been recommended as a primary approach in the treatment of eating disorders (American Psychiatric Association, 2000) and been called the "gold standard" in the treatment of bulimia nervosa (Mitchell, Peterson, Myers, & Wonderlich, 2001).

Like many psychiatric disorders, eating disorders have been treated using medications, psychotherapy, and at times a combination of medications and psychotherapy. Unlike other disorders, there is less uniformity and understanding of the role of medications when treating eating disorders, especially anorexia nervosa (Steinglass & Walsh, 2004). Crow and Brown (2003) suggest that a number of medications (primarily antidepressants) are of some benefit in the treatment of eating disorders but that there is considerable room for improvement. Peterson and Mitchell (1999) identify positive findings in the treatment of bulimia nervosa and binge-eating disorder with the use of antidepressant medications. Preliminary studies suggest that the use of

fluoxetine and psychotherapy may be helpful in preventing relapse for individuals with anorexia nervosa after their weight has returned to normal (Kaye, Nataga, et al., 2001). Additionally, Brewerton (2004) has indicated that recent advances in the understanding of the neurobiological aspects of eating disorders offer encouraging possibilities for the use of atypical antipsychotics in the treatment of anorexia nervosa (Mitchell, de Zwaan, & Roerig, 2003).

Bulimia Nervosa

Among eating disorders, bulimia nervosa has the most empirical research regarding treatment outcome (Brewerton, 2004). A wide range of medicines has been studied in the treatment of bulimia nervosa with encouraging results (Steinglass & Walsh, 2004). The most widely explored medicines are the antidepressants (tricyclics, monoamine oxidase inhibitors, serotonin reuptake inhibitors), with the serotonin reuptake inhibitors (SSRIs) having found the most favor in treatment studies (Romano, Halmi, Sarkar, Koke, & Lee, 2002; Steinglass & Walsh, 2004; Walsh, Hadigan, Devlin, Gladis, & Roose, 1991). Antidepressant medications decrease depressive symptoms, improve mood, and may have a role in relapse prevention (Steinglass & Walsh, 2004). Additionally, SSRIs have demonstrated their usefulness in reducing binge frequency and ending binge-purge behavior (Bacaltchuk, Hay, & Mari, 2000). The generalizability of empirical data has been questioned, however, due to the short-term nature of the studies and the observation that most studies have focused on normal-weight women who have self-induced vomiting (Steinglass & Walsh, 2004).

Cognitive-behavioral therapy has been the most thoroughly studied treatment for bulimia nervosa (Wonderlich et al., 2004). The more than 20 controlled trials for bulimia nervosa indicate that CBT is superior to minimal interventions or wait-list control groups in reducing binge-purge symptoms. Additionally, CBT has generally shown better treatment results when compared to other therapies, such as behavior therapy, psychodynamic therapy, and pharmacotherapy (Bowers, 2001; Wonderlich et al., 2004). Wonderlich et al. do warn that a significant but small percentage of patients treated with CBT continue to have problems at the end of treatment. Also, there is evidence that interpersonal therapy (IPT) can be as effective as CBT when treating bulimia nervosa. Five-year follow-up data demonstrated that individuals treated with both methods maintained their gains (Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000; Walsh et al., 1997). Although these findings are encouraging, more study is needed before IPT would be considered the first-line treatment (Mitchell, Halmi, Wilson, Agras, Kraemer, & Crow, 2002; Wonderlich et al., 2004).

Six studies have demonstrated that CBT is superior to antidepressant medications (Agras, et al. 1992; Fechter et al., 1991; Goldbloom et al., 1997; Mitchell et al., 1990; Walsh et al., 1997). Also, an investigation by Walsh and coworkers found that CBT was superior to medication alone and the combination of CBT and medication was better than medication alone (Walsh et al., 1997). The long-term outcome suggests that women treated with CBT or medications report improved social adjustment when compared to women who received a placebo condition (Keel, Mitchell, Davis, & Crow, 2002).

As noted, some individuals do not respond to CBT, and a stepped-care or sequential approach has been recommended (Dalla Grave, Ricca, & Todesco, 2001; Mitchell et al., 2001; Wilson, Vitousek, & Loeb, 2000). Walsh et al. (2000) suggest that fluoxetine may be useful as an intervention for those individuals who do not respond to CBT. A multicenter study looked at adding either IPT or medications for individuals who did not respond to CBT (Mitchell et al., 2002). Nonresponders were randomly assigned to IPT or medications. Results suggest a low response to secondary treatment, and sequential treatment appeared to have little potential value. More empirical study is needed on sequential or stepped-care treatment as well as different psychotherapeutic models such as IPT or psychodynamic therapies (Cooper, 2003; Yager, 2004).

Binge-Eating Disorder

Binge-eating disorder is a relatively new syndrome, recognized in *DSM-IV*. Few treatment outcome studies have been completed for this condition. Like bulimia nervosa, treatment has been pursued using psychopharmacological and psychosocial methods. Studies that have examined the efficacy of antidepressants, antiobesity, and antiseizure medications have suggested their usefulness in the treatment of binge-eating disorder (Appolinarion & McElroy, 2004). Some research has suggested that SSRIs are beneficial to individuals with binge-eating disorder (Hudson, et al., 1998; McElroy et al., 2000). These two studies reveal a significant reduction in binge frequency and binge-eating behaviors in those treated with SSRIs compared to a placebo control group. An anticonvulsant medication, topiramate, has been studied in a case series and a randomized controlled trial. In a case series, Shapira, Goldsmith, and McElroy (2000) concluded that the medication might be an effective treatment. In a randomized, placebo-controlled study, McElroy et al. (2003) compared placebo and topiramate. There was a greater reduction in binge frequency, binge day frequency, weight, and obsessionality, and there was better psychosocial adjustment in patients treated with topiramate. Although in its infancy, research on binge-eating disorder using medications does show promise and suggests that pharmacotherapy could be useful as a component in a multidimensional treatment model.

Interventions used in CBT of bulimia nervosa have been adapted for use with binge-eating disorder. CBT has been shown to reduce binge frequency as well as decrease overall body weight (Smith, Marcus, & Kaye, 1992; Wilfley et al., 2002). Evidence suggests that treatment for binge-eating disorder can be effective in an individual, group, or self-help format, as well as in methods modified for inpatient use (Gorin & Le Grange, 2003; Peterson, et al., 2001; Riva, Bacchetta, Cesa, Conti, & Molinari, 2003; Wilfley et al., 2002; Wolff & Clark, 2001). The treatment of binge-eating disorder with IPT has had similar success to that seen in its use with bulimia nervosa, and the long-term outcome for this disorder looks promising (Brewerton, 2004).

The combination of medication and CBT to treat binge-eating disorder has been studied in a number of investigations (Agras et al., 1994; Devlin Goldfein, Carino, & Wolk, 2000; Grilo, Masheb, Heninger, & Wilson, 2002; Ricca et al., 1997; Ricca et al., 2001). Agras et al. (1994) suggest that CBT and medications increased remission rates for binge eating. Grilo et al. (2002) found that combined CBT and medicine displayed higher remission rates than medicine alone. The highest remission rates were in the CBT alone group. Although the results appear promising, the generalization of treatment results past specific settings is hard, due to the small sample sizes in the empirical studies. Additionally, there is little standardization across treatment programs to create judgments regarding the effectiveness of any type or combination of treatments. There is a need for more research before specific treatment recommendations can be made (Steinglass & Walsh 2004; Wonderlich et al., 2004).

Anorexia Nervosa

The use of medication in the treatment of anorexia nervosa has been the subject of surprisingly few controlled studies. Although various drugs have been advocated, they are often seen as an adjunct treatment during hospitalization. Medications have been used to treat secondary symptoms of anorexia nervosa (depression, anxiety) or have been part of a multidisciplinary treatment program. Dally and Sargant (1960, 1966) report the first use of antipsychotic medications in the treatment of anorexia nervosa. When compared to a control group, the experimental group achieved more rapid weight gain and earlier discharge from the hospital. However, at follow-up there did not appear to be a clear benefit for the experimental group over the control group. Two placebo-controlled trials of neuroleptics (Vandereycken, 1984; Vandereycken & Pierloot, 1982) to improve weight gain indicated a trend favoring the active medication in daily weight

increase and change in patients' attitudes and behavior, but did not show a consistent advantage. An open label trial of haloperidol, used as an adjunct treatment with individuals who were defined as treatment resistant found that low doses might be an effective adjunct treatment for seriously ill patients with anorexia nervosa (Cassano et al., 2001). However, the use of traditional neuroleptic medications has been criticized in the treatment of anorexia nervosa because there is an unfavorable risk/benefit ratio (Vandereycken, 1987).

The advent of a new generation of antipsychotics with fewer side effects has renewed interest in their use in the treatment of anorexia nervosa. Olanzapine has been studied in numerous case reports and has been advocated due to its side effect of weight gain and its ability to influence beliefs about an individual's body-image distortion. Preliminary results from small studies all suggest a benefit regarding weight restoration and positive changes in mood, cognitive functioning, and psychological adjustment (Boachie, Goldfield, & Spettige, 2003; Ercan, Copkunol, Cykoethlu, & Varan, 2003; LaVia, Gray, & Kaye, 2000; Malina et al., 2003; Mehler et al., 2001; Powers, Santana, & Bannon, 2002). There is a strong need for larger controlled trials before the efficacy of these agents can be established. Also, the use of medication for a side effect of weight gain may create problems with individuals who are not willing to restore weight.

The use of antidepressant medications has grown out of an appreciation for the high incidence of depressive and anxiety symptoms in patients with anorexia nervosa (Strober & Katz, 1988). Early case reports and open trials primarily focused on the use of tricyclics (Moore, 1977; Needleman & Waber, 1977; White & Schnaultz, 1977) and suggested there may be some efficacy in treating anorexia nervosa. These early positive results led to a placebo-controlled study that focused on their use with inpatients (Lacey & Crisp, 1980). No evidence was found in this investigation to suggest that the medication promoted weight restoration. Biederman and colleagues (Biederman et al., 1985) used amitriptyline to treat patients with anorexia nervosa but found that the medication offered no significant benefit in weight gain or change in symptoms of depression. Halmi and colleagues (Halmi, Eckert, LaDu, & Cohen, 1986) compared amitriptyline with cyproheptadine and placebo in the treatment of patients with anorexia nervosa and found a trend, but no significant effect, for amitriptyline on increasing weight or decreasing depressive symptoms in hospitalized patients.

Serotonin-specific reuptake inhibition medications have also been studied in the treatment of anorexia nervosa. Case studies (Ferguson, 1987; Gwirtsman, Guze, Jager, & Gainsley, 1991) have noted that the use of fluoxetine during the acute phase of treatment increased weight, reduced obsessive thoughts surrounding food, improved mood, and reduced abnormal eating. Kaye and colleagues (Kaye, Weltzin, Hsu, & Bulik, 1991) started 31 patients on fluoxetine after inpatient weight restoration and then followed their progress as outpatients. At follow-up, 29 of 31 patients had maintained their weight at or above 85% average body weight. The restricting subtype of anorexia nervosa responded better than the bulimic and/or purging subtype of anorexia nervosa. Attia, Haiman, Walsh, and Flater (1998) reported a randomized controlled trial of fluoxetine during the inpatient treatment of anorexia. Their results suggested that fluoxetine offered no benefit to weight restoration. This is supported by a report by Strober, Pataki, Freeman, and DeAntonio (1999), who, in an open trial, found no benefit to the administration of fluoxetine during the treatment of anorexia nervosa in the early phase of treatment.

While fluoxetine has had a poor outcome in assisting in weight restoration, other researchers have looked at its effect on other aspects of anorexia nervosa (Attia et al., 1998; Strober et al., 1999). Again, the results seem to suggest a limited benefit in changing mood, body image, weight concerns, or abnormal eating behavior. A double-blind placebo trial (Kaye et al., 2001) found that individuals treated with fluoxetine did significantly better in maintaining their weight above 85% after discharge than those who were on placebo. There does seem to be a benefit in the use of fluoxetine when looking at relapse prevention after the reestablishment of appropriate weight (DeZwaan, Roerig, & Mitchell 2004).

The current literature indicates minimal evidence to support the use of antidepressants during the standard inpatient treatment of anorexia nervosa and almost as little support for their use after inpatient care (DeZwaan et al., 2004; Steinglass & Walsh, 2004). These finding may be related to the observation that individuals at low weight may not be able to utilize the medications until they have been restored to a more healthy weight (Attia, Meyer, & Killory, 2001). Also, it has been suggested that the benefit of SSRIs is short term unless the medicine is administered with nutritional and cognitive and/or behavioral therapy (Vaswani, Linda, & Ramesh, 2003). The use of antidepressant medicine as a maintenance treatment shows promise in reducing relapse. However, the inconsistency in the literature from randomized controlled trials suggests that more research is needed before clear recommendations can be made on the role of antidepressant medications in the treatment of anorexia nervosa (DeZwaan et al., 2004).

CBT

While there are numerous studies on the use of CBT with bulimia nervosa, there remains a scarcity of work on anorexia nervosa. Recently, research has suggested that there may be efficacy in the use of CBT in the treatment of anorexia nervosa (Pike, 2000). Although detailed treatment manuals have yet to be published providing step-by-step procedures for treating anorexia nervosa, several authors have written about specific CBT approaches to the treatment of this disorder (Garner, Vitousek, & Pike, 1997; Wilson, Fairburn, & Agras, 1997). It has been suggested that the delay in the development of detailed interventions is related to the complex and often unyielding nature of anorexia nervosa (Bowers & Andersen, 1994; Vitousek, 2002) and that recruitment for studies to treat anorexia nervosa is difficult (McDermott et al., 2004). An early study (Channon, De Silva, Hemsley, & Perkins, 1989) found CBT to be as effective as behavior therapy. Fernandez-Aranda, Bel, Jimenez, Vinuales, Turon, and Vallejo (1998) reported on the use of a group format to treat anorexia nervosa on an outpatient basis. They found that at the end of treatment there was significant change in mood, core eating disorder psychopathology, and weight, and the gains were sustained at 1-year follow-up. Bowers and Ansher (2000) provide data to suggest that the use of an inpatient milieu designed to use CBT as the primary psychotherapeutic model was effective in changing cognitive distortion, schemas, and cognitions related to anorexia nervosa at the time of discharge. Pike, Walsh, Vitousek, Wilson, and Bauer (2003) published what may be the first empirical data regarding the efficacy of CBT in posthospital care and relapse prevention with adult anorexia nervosa. In this study, individuals were randomly assigned to nutritional counseling or CBT posthospitalization. Individuals in the CBT group had a significantly lower relapse rate and a better overall outcome when compared to those in the nutritional counseling group. CBT has also been developed specifically for the inpatient treatment of anorexia (Bowers, 1993) as part of a stepped-care approach in the treatment of anorexia nervosa (Bowers, Andersen, & Evans, 2004; Dalla Grave et al., 2001; Wilson et al., 2000).

CBT and Medications

What part do medications have in the treatment of eating disorders with CBT? The literature in the treatment of bulimia nervosa suggests there is a function for medications; however, their use as sole therapy does not seem sufficient to effectively treat most patients (DeZwaan et al., 2004; Steinglass & Walsh, 2004). The benefit of combining CBT and medications is less unclear but the literature suggests that CBT is superior to drug therapy alone and that a combination of medication and CBT is superior to medication alone (Agras et al., 1994; Corinna, Dahme, & Dittman, 2002; Goldbloom et al., 1997; Leitenberg et al., 1994; Mitchell et al., 1990; Walsh et al., 1997). It remains unclear how much benefit is gained when adding medication to effective psychological treatment

(DeZwaan et al. 2004; Steinglass & Walsh, 2004). How to specifically combine the two treatments and in what order has yet to be established. Both can work effectively, but the optimal sequence of treatment needs more research. It may be that medicines are a second-line treatment when individuals have failed in treatment with CBT or IPT (Wilson et al., 2000). Because of the small number of research studies in the treatment of binge-eating disorder and anorexia nervosa, there is little information available to guide the combined use of medication and CBT. There may be more of a role with binge-eating disorder, as with bulimia nervosa. However, in the treatment of anorexia nervosa, CBT and nutritional rehabilitation play primary roles while medications are secondary, especially during inpatient treatment (Bowers & Ansher, 2000; Mitchell et al., 2001; Steinglass & Walsh, 2004; Wilson et al., 2000).

Some tentative guidelines have been offered for combining psychotherapy and medications. When treating bulimia nervosa, CBT can be regarded as the first line of treatment, because research regarding its efficacy has shown it to be superior to medications (Mitchell et al., 2001). Mitchell et al. (2001) suggest specific but tentative guidelines in the treatment of bulimia nervosa.

1. When CBT is available and patients are without significant depressive symptoms, or when depression can be considered mild, patients should first receive CBT. If they do not achieve a 70% reduction in vomiting frequency by the end of the sixth session, pharmacotherapy with an SSRI, usually fluoxetine, should be added.
2. If these same subjects do achieve a 70% reduction, medications should not be started. However, if they remain symptomatic at the end of time-limited treatment, a course of medications should be used at that point.
3. Patients who are significantly depressed when entering treatment, in particular those with a strong family loading for depression or who have clear evidence of other major depressive episodes that were not associated with the eating disorder, should probably be treated with CBT plus antidepressants at entrance to therapy. (pp. 318–319)

Mitchell et al. (2001) also discuss some basic guidelines regarding medication management in general. The best and easiest way to combine psychotherapy and medication management would be for a single individual to administer both treatments. However, in most treatment settings, these tasks are split between a physician and a therapist. Given this treatment reality, it is very important for these two professionals to keep in constant contact. This can be accomplished by having regular meetings to review the case, sharing case notes, and keeping in contact by telephone, letters, or email correspondence. It is of the utmost importance that each team member is well informed about the treatment being delivered and that each member is in support of other members' therapy. There are times when a therapist may not be knowledgeable or have an antimedication bias, which may discourage the patient in his or her use of prescribed medicine. For psychotherapists working with this population, it is very important to be familiar with the prescribed medications, their indications, their side effects, and the way they are used in treatment. The psychotherapist's understanding and knowledge of medications can be of great value to the physician, as the therapist may be able to spot medication problems given the frequency of therapy visits relative to visits for medication management. By the same token the physician must be supportive of the psychotherapy and understand the rationale for the interventions being applied. The therapist and physician should be partners in treatment, supporting and complementing the other's treatment to enhance the overall care of the patient. Each team member must have a good working knowledge of the other practitioner's area of expertise. Equally important is an awareness of and sensitivity to issues regarding the age and gender of both patient and practitioner. Issues related to transference/countertransference around age and gender differences must be anticipated and addressed. Both therapist and physician must work to assist the patient to make informed decisions regarding treatment and the need to continue when difficulties or side effects occur. Also, acceptance of the individual's needs and desires must be integrated into the practical application of medication management and psychotherapy.

Case Study

Mary was a 19-year-old college sophomore diagnosed with anorexia nervosa, whose initial outpatient treatment met with limited success. As Mary continued to engage in eating disorder behaviors, she was admitted to her local hospital because of deteriorating health and dramatic mood swings. She was then transferred to a specialty unit for the treatment of her eating disorder, where she complained of poor concentration, and ruminated about weight, shape, food, and an intense desire to be thin.

At admission Mary was 5 feet 7 inches tall and weighed 107.6 pounds. Diagnostically, Mary met the *DSM-IV* criteria for anorexia nervosa. These problems were superimposed upon family difficulties, extremely high personal expectations, a highly perfectionist personality style, and an extreme fear of expressing her emotions. Mary's mood swings were related to difficulty in maintaining her expectations, intolerance for and a lack of understanding of the needs of others, and a fear that she was a significant problem in the relations between her parents. She found that being thin, eating less, and purging were quick, easy ways to release tension and maintain a sense of well-being. As food restriction and purging behaviors became more established, she began to feel uncomfortable with her body image. Mary acknowledged that she would put tremendous pressure on herself to meet exceedingly high expectations. Perfectionism was equated with confidence, and she would accept nothing less. When she did not meet her or others' expectations, she was driven to "atone" and needed to feel in control. Mary was extremely guarded with others and seemed to perceive emotional distance as necessary for safety.

Mary's dieting and restricted emotions were methods to control herself, her world, and her future. A low weight indicated self-control and the achievement of her high expectations. Attempts to assist her in restoring and maintaining a healthy weight were seen as threats to her personal world and future. She perceived that treatment would deprive her of the one thing that made her supremely self-confident, her ability to be thinner than those around her.

The specialized inpatient program was designed to use CBT as the primary psychotherapeutic intervention (Bowers, 1993; Wright, Thase, Beck, & Ludgate, 1993) while working to restore the patient to a normal weight range. Weight restoration is integrated into psychoeducational group, individual CBT, and group CBT. Each intervention is designed to blend with the other psychotherapies. The individual therapy uses Beck's model (Beck, Rush, Shaw, & Emery, 1979) with specific modifications for an inpatient unit (Bowers, 1993). Group CBT combines Beck's theory and interventions in a process-oriented framework (Bowers & Andersen, 1994).

During Mary's treatment, two medications were utilized for very specific problems. Mary displayed anxiety prior to, during, and after meals and was started on a small amount of antianxiety medicine (0.5 mg bid of lorazepam). This was maintained for 2 weeks as an adjunct to CBT to lessen her fear regarding daily meals and snacks. Mary monitored her thoughts, feelings, and behaviors around meals to track her basic assumptions on expressing emotions, forming close relationships, and the meaning to her of a low body weight. By testing these thoughts she was able to express herself more emotionally and develop close relationships with other patients on the unit. She also decreased her strong need to be thin as a way to control her world. The medication, along with staff and peer support, quickly reduced her intense concern surrounding meals.

An antidepressant medication, fluoxetine, was used as an adjunct to target perfectionist beliefs and generalized, overvalued beliefs. This medication was begun after Mary had restored some of her weight and returned to normal eating. The combination of medicine and CBT helped Mary put herself first during treatment, which reduced her focus on being

thin and fears of allowing herself to be vulnerable. She was more relaxed in her approach to the world. She used her new skills and explored the possibilities of changing her developmental patterns and modifying the underlying schemas and core beliefs that maintained her disorder. The antidepressant was continued after discharge for relapse prevention and to assist with the modification of her overvalued ideas related to weight, shape, size, and appearance.

Mary's outcome was extremely positive. At discharge she felt that she had learned how to use CBT skills for change and had substantially improved her communication with others. She was able to identify the way in which her own thoughts and perceptions contributed to her eating disorder and interfered in her life. She made significant changes in how she interacted with food and her world. To date she has been able to maintain her restored weight and has sustained many cognitive behavioral changes.

Conclusion

The effective treatment of eating disorders (anorexia nervosa, bulimia nervosa, binge-eating disorder) is at a very early stage. There are weighty data on the treatment of bulimia nervosa with CBT and/or medications, suggesting that combining CBT and medications may enhance the mood and engage more complex cases in treatment (DeZwaan et al., 2004). What contributes to maximum therapeutic benefit when combining or sequencing these two treatments has yet to be determined (Wonderlich et al., 2004). Less is known about successful treatments for binge-eating disorder with CBT and/or medications. However, early studies suggest that both have a role in effective treatment and a combination of CBT and medicine may influence or improve remission rates. A combined treatment approach using nutritional rehabilitation, CBT, and medicines is a major part of the treatment of anorexia nervosa (*DSM–IV–TR*; Bowers & Andersen, 1994; Wonderlich et al., 2004). The more complex nature of anorexia nervosa (the need for inpatient treatment, potential physical problems) limits our understanding of how best to implement CBT and medications in effective treatment. Combining CBT and medication may enhance the maintenance of therapeutic gains after hospitalization. To understand what combination of therapy and medicines will be effective in the treatment of eating disorders, more empirical research is needed.

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Correspondence regarding this article should be directed to Wayne A. Bowers, PhD, Department of Psychiatry, University of Iowa, Iowa City, IA 52242. E-mail: wayne-bowers@uiowa.edu