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## Eating Disorders

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### Abstract

Therapist competency is fundamental to the success in treating most psychological disorders. However, the skills required to effectively treat eating disorders may be more demanding than many other problems, because competency requires mastery of considerable educational information about physical complications associated with eating-disorder symptoms and chronic weight suppression. The cognitive-behavioral model of treatment has become well-defined in recent years; however, the mark for therapist competency continues to rise as the knowledge base has expanded with the high level of clinical and research interest in eating disorders. The guidelines provided in this paper are intended to provide a springboard for the training and supervision to improve patient care.

### Resumen

La competencia del terapeuta es fundamental para el éxito en el tratamiento de los Trastornos Psicológicos. Sin embargo, las habilidades que se requieren para tratar eficazmente los Trastornos del Comportamiento Alimentarios pueden ser más demandantes que para otros problemas, porque la competencia requiere del dominio de considerable información educativa acerca de las complicaciones físicas asociadas con los síntomas de los Trastornos Alimentarios y la supresión crónica de peso. El modelo de tratamiento cognitivo-conductual se ha convertido en el mejor definido en recientes años, sin embargo, el marco de la competencia del terapeuta continúa aumentando, dado que, la base de conocimientos se ha ampliado con el alto nivel de interés en la investigación clínica y en los trastornos alimentarios. Las directrices que proporciona este artículo tiene objetivo servir de trampolín para la formación y supervisión para mejorar la atención al paciente.

### INFORMACIÓN ARTÍCULO

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### *Prevalence and Associated Problems*

Eating disorders have been part of the psychiatric nomenclature for many years; however, only in the past 2 decades have they commanded widespread interest in psychology, psychiatry, and allied professions (Theander, 2004). Part of the reason for this interest has been the recognition of the severe health consequences of the disorders; anorexia nervosa (AN) has a long and established history of high mortality, having an estimated average standardized mortality ratio (the ratio of observed to expected deaths) of 10.5, with the leading cause of these deaths being suicide (Birmingham, Su, Hlynsky, Goldner, & Gao, 2005;

Franko & Keel, 2006). AN mortality rates are consistently ranked the highest of any other psychiatric disorder (Millar et al., 2005; Sullivan, 1995). However, mortality rates for bulimia nervosa (BN) are much lower, but still notable (Nielsen, 2003). The prevalence rates of eating disorders in Western cultures are the topic of some debate; however, most epidemiological studies point to the prevalence of 0.3% for AN and 1% for BN among young women (Hoek & van Hoeken, 2003).

Medical complications are typical during the acute phase of an eating disorder (Becker, Grinspoon, Klibanski, & Herzog, 1999) and persist among those who are unsuccessfully treated (Keel, Mitchell, Davis, & Crow, 2002). In addition, eating disorders are associated with a wide range of physical and emotional disorders through early adulthood, including

major depression, obsessive compulsive disorder (OCD), substance abuse, and anxiety disorders (Johnson, Cohen, Kotler, Kasen, & Brook, 2002; O'Brien & Vincent, 2003). The complex interplay between the psychological and physical symptoms contends against defining eating disorders as exclusively "psychiatric" or "medical," as effective treatment must target both domains.

### *Diagnostic Classification*

The prevailing diagnostic systems, the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed. [DSM-IV]; American Psychiatric Association [APA], 1994) and the *International Classification of Diseases* (World Health Organization, 1992) have limited the current classifications of eating disorders to one of the three diagnostic categories: that of AN, BN, and a third category of disorders not matching the stringent criteria for either, and labeled eating disorders not otherwise specified (EDNOS). AN individuals have further been classified into subtypes of those who simply restrict caloric intake (AN-R) and those who have symptoms of bingeing and/or purging (AN-B/P). Binge-eating disorder (BED), characterized by binge-eating episodes and lack of compensatory behaviors for caloric intake, is currently classified under EDNOS; however, it is likely to be addressed in more detail in the forthcoming edition of the *DSM* (Wilfley, Bishop, Wilson, & Agras, 2007).

Despite the requisite nature of diagnostic classifications, the clinical stability of eating-disorder diagnoses have been questioned in the long-term owing to significant crossover between both the full diagnostic categories and subtypes (Eddy et al., 2008; Fichter & Quadflieg, 2007; Wonderlich, Joiner, Keel, Williamson, & Crosby, 2007). While there is some established distinctiveness between the categories of AN and BN diagnoses (e.g., Eddy et al.), the remarkable heterogeneity in psychological features within the diagnostic subgroups underscores the clinical utility of evaluating patients on a broad spectrum of meaningful psychosocial variables. For clinical purposes, there is far greater heuristic value

in directly assessing the psychological domains that are conceptually relevant across all eating-disorder subgroups rather than simply drawing inferences from DSM-IV (1994) diagnostic categories.

### *Risk and Maintenance Factors*

The understanding of factors that contribute to the etiology and maintenance of eating disorders has advanced substantially in recent decades. Most models assume that eating disorders are multidetermined and heterogeneous in nature deriving from the interplay of three broad classes of predisposing or risk factors: cultural, individual, and familial (Garner, 1993). However, cumulative evidence has begun to specify in greater detail about the respective roles of these categories (Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004; Stice, 2002; Striegel-Moore & Bulik, 2007).

Jacobi et al. (2004) have recommended conceptualizing factors in terms of clinical evidence and potency of association. Important high-potency factors that predispose the disorders are being female, in adolescence or early adulthood, having weight concerns, dieting, and ideating a negative body image. Medium-potency factors are sexual abuse and physical neglect in adolescence. Lower potency and non-specific variables that predispose eating disorders are temperament factors, frequent alcohol consumption, low social support, low self-esteem, and general psychiatric morbidity. The key maintaining or perpetuating factors are the psychological, emotional, and physical effects of starvation and semi-starvation.

### *Evidence-Based Treatment*

The recommended evidence-based treatments for eating disorders generally include weight restoration/maintenance incorporated with psychotherapy. Outpatient service is possible for a large portion of patients with BN, while more acute manifestations of BN and many AN cases (owing to the clinical severity of AN behaviors and maintenance effects of emaciated state) may require a more protracted and intensive treatment to reach a desirable level of

functioning (Haliburn, 2005; Garner, Vitousek, & Pike, 1992; Wilson, Grilo, & Vitousek, 2007). Pharmacotherapy treatment alone for the primary diagnoses of eating disorders is contraindicated and ineffective for weight maintenance (Castro-Fornieles et al., 2007; Wilson et al., 2007).

## **Recognition of Symptoms and their Assessment**

### *Screening and Initial Assessment*

Initial assessment of the presence of an eating disorder should follow professional referral or a patient's volitional search for the treatment. A difficulty in assessing eating disorders, especially AN, is that often patients view their symptoms as functional, necessary, or even desirable, and may be ambivalent about seeking treatment (Garner, Vitousek, & Pike, 1997; Vitousek, Watson, & Wilson, 1998). It is, therefore, paramount that the initial interview be fostered to develop a sense of openness and trust between the clinician and patient in hopes of establishing a therapeutic alliance. In cases of denial or minimization of the symptoms, the clinician should avoid making value judgments of the patient's condition and provide empathic support in an effort to motivate the patient toward treatment (Vitousek et al., 1998). A number of standardized and non-standardized measures have been created to supplement an individual's clinical background; and the conventional assessments used for screening of eating disorders will be briefly discussed.

### *Medical Assessment*

Medical complications are common in those with eating disorders; therefore, patients should be assessed by a physician familiar with physical byproducts of starvation and eating-disorder symptoms such as binge-eating and vomiting. A complete medical examination should include a medical history, review of presenting physical symptoms, laboratory tests, and careful consideration of medical conditions other than an eating disorder that could account for the patient's current state (Becker et al., 1999). Choosing

a physician with experience in evaluating those with eating disorders cannot be overemphasized in the light of the complex interplay between the physical and psychological symptoms' presentation.

### *The Structured Interview*

Four structured interviews have specifically been created for assessing and screening eating disorders (Grilo, 2005). These include the Eating Disorder Examination (EDE; Cooper & Fairburn, 1987), Clinical Eating Disorder Rating Instrument (CEDRI; Palmer, Christie, Cordle, Davies, & Kenrick, 1987), the Interview for the Diagnosis of Eating Disorders (IDED; Williamson, 1990), and the Structured Interview for Anorexic and Bulimic Disorders (SIAB-EX; Fichter, Herpertz, Quadflieg, & Herpertz-Dahlmann, 1998). Of these, the EDE is the most sophisticated and detailed (Grilo, 2005), and is regarded as the most established for assessing eating disorders (Wilfley, Schwartz, Spurrell, & Fairburn, 2000). In addition, the EDE has been adapted for use with children and adolescent patients (ChEDE; Bryant-Waugh, Cooper, Taylor, & Lask, 1996). The latest revision of the IDED focuses exclusively on providing differential diagnosis using *DSM-IV* (1994) criteria. The SIAB-EX differs from other interviews in providing information on general and familial psychopathology linked to eating disorders (Grilo, 2005).

Although there is an agreement that interview assessments have good potential to provide accurate information owing their probing utility (Pike, 2005), their disadvantages include their lengthy time to administer, the necessity of a trained interviewer, and the potential to be viewed as overly intrusive. Additionally, some have suggested that self-report measures may provide more accurate information of eating-disorder symptomatology based on the willingness of the patients to be more honest in the absence of an interviewer (Keel, Crow, Davis, & Mitchell, 2002; Wolk, Loeb, & Walsh, 2005).

### *Self-Report Measures*

Self-report measures provide an efficient means of

obtaining information for clinical purposes. While these measures should not be used as the sole basis for diagnostic and treatment decisions, they provide advantages of economical administration and scoring. Among the measures that test for general eating pathology, the Eating Disorder Inventory (EDI; Garner, 1991, 2004; Garner, Olmstead, & Polivy, 1983) has created a substantial body of supporting research (Peterson & Mitchell, 2005). The EDI was developed to assess the eating-disorder symptoms as well as the related psychological variables. It has undergone several revisions; the second revision (EDI-2) is a widely used, easily administered, and scored test that attains information on eight subscales. The most recent revision (EDI-3; Garner, 2004), reorganizes items from the 1991 version (EDI-2) into three "eating-disorder risk" scales (Drive for Thinness, Bulimia, and Body Dissatisfaction), nine psychological scales, six composite scores, and three response-style indicators.

An adaptation of the EDE structured interview, the Eating Disorder Examination-Questionnaire (EDE-Q; Fairburn & Bèglin, 1994) focuses on eating-disorder symptoms and attitudes over a 28-day history. While the EDI is useful for general eating pathology, the EDE-Q is a valid instrument for making *DSM-IV* diagnoses and is considered accurate for assessing binge-eating (Pike, 2005). The EDE-Q contains four subscales: Restraint, Eating Concern, Shape Concern, and Weight Concern. It has produced levels of reliability and validity to support its use (Fairburn & Cooper, 1993) and has acceptable levels of internal consistency (Peterson et al., 2007). Also, reports finding higher levels of disturbance on EDE-Q than its EDE-interview counterpart have led to suggestions that it may be a more accurate indicator of severity of symptoms (Wolk et al., 2005).

In addition to the above mentioned assessments, the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979; Garner, Olmsted, Bohr, & Garfinkel, 1982) is a useful screening instrument of severity in clinical and non-clinical samples. Other instruments, such as the Eating Disorder Questionnaire (EDQ; Mitchell, Hatsukami, Eckert, & Pyle, 1985) are useful as da-

tabase tools for tracking an array of demographic information and symptoms over time (Peterson & Mitchell, 2005).

### **General Measures of Psychopathology and Medical Assessment**

Complete psychiatric assessment of patients with eating disorders should also include measures of personality, psychological distress, self-esteem, depression, anxiety, family functioning, history of sexual abuse, social and vocational adaptation, and impulse-related features. Careful assessment of these related areas is important in confirming Axis II diagnoses and treatment planning.

### **Factors Maintaining Eating Disorders**

#### *Conceptualization of Risk and Maintenance Factors*

A discussion on the perpetuating factors of a psychiatric disorder is necessarily based on the understanding of etiology; however, there are few models that integrate putative factors of association or causality into a developed framework for eating disorders (Tylka & Subich, 2004). Moreover, certain risk factors do not easily fit into the classes of predisposing, precipitating, or maintenance regarding the course of the disorders (Garner & Magana, 2006). Furthermore, although many associations and links have been identified, knowledge surrounding the risk factors for eating disorders is frustratingly incomplete (Striegel-Moore & Bulik, 2007). For brevity, this discussion will limit itself to describing factors profoundly associated with eating-disordered populations, and will avoid exploring a framework that would include an etiological time-line. Additionally, factors are included for eating disorders, in general, rather than deferring to specific diagnostic classifications. This is based on the clinical utility of assessing a potential patient across conceptually associated variables that overlap the disorders. For a detailed discussion on the classification-specific factors, see the comprehensive review by Jacobi et al. (2004).

### *Putative Factors of Risk for Eating Disorders*

There have been several large-scale reviews of the risk factors of eating disorders in recent years which have been the primary sources for our discussion (Jacobi et al., 2004; Stice, 2002; Striegel-Moore & Bulik, 2007). Jacobi et al. recommended conceptualizing a factor in terms of the magnitude of association, called its potency. Putative factors may also be broken down into their larger domains of context – whether they are derived from culture, family/biology, or are specific to the individual.

#### *Cultural Factors*

Cultural risk factors were originally posited to account for the high prevalence of eating disorders among women in Western countries, conceptualized as a response to pressures to achieve an ultra-thin representation of feminine beauty (Garner & Garfinkel, 1980). They are considered high-potency contributing factors; however, it is now well-established that eating disorders also occur in non-Western cultures and in minority populations (Wildes & Emery, 2001). Participating in sports or professions emphasizing thinness (e.g., gymnastics, dancing, or wrestling) is considered as another high-potency factor. Being of a minority culture, acculturating to a dominant culture is an additional factor with unspecified potency.

#### *Familial and Biological Factors*

*Biological.* One very consistent finding in the literature is the preponderance of females with eating disorders when compared with males, estimated up to ten times for both the disorders, and is a highly potent risk factor. Factors specific to genetics are also considered to be high-potency factors; however, most studies point to a polygenic risk (involving multiple gene sites) probably conferring the risk through a predisposition to personality traits (perfectionism and obsessiveness) in a Gene–Environment interaction. The key biological factors of unspecified potency which are likely to contribute to maintenance are the physical effects of emaciated state (Garner,

1997).

*Parental.* Having a mother with an eating disorder is the highest potency familial indicator of risk for an eating disorder. Other medium-potency factors include having a parent who diets and parents making critical comments about a child's weight. Additional low and nonspecific potency factors of parents and parenting involve high-performance expectations, low contact or neglect, over-concern or hypervigilance, a parental history of obesity, high levels of exercise, and presence of an affective disorder.

#### *Individual Factors*

*Adverse life events.* Physical abuse, physical neglect, and sexual abuse are all low-to-medium potency factors of risk for developing an eating disorder. Other general stressful life events (such as loss as the result of death), have been conceptualized as a factor of low potency.

*Behavioral.* Major factors of extremely high potency for risk are the presence of restrictive dieting, concern/fear of gaining weight, and ideating a negative body image. Involvement in high levels of exercise is also regarded as a high-potency factor. A final nonspecific risk factor is the abuse of substances (drugs and alcohol).

*Cognitive processes and core beliefs.* Central to cognitive theory of eating disorders are idiosyncratic beliefs, self-statements, automatic thoughts, and underlying assumptions about food, eating, weight, and shape that can interact with more core beliefs about the self (Garner & Magana, 2006). Constructs that have manifested valid risk for eating disorders are consistent with EDI-3 subscales (Garner, 2004). High-potency factors include having a drive for thinness, body dissatisfaction and weight concerns, low self-esteem or ineffectiveness (low self-efficacy), perfectionism, interpersonal insecurity and/or alienation/attachment deficits, and errors in reasoning. Medium-potency factors are depression, anxiety, low interoceptive awareness (difficulty in recognizing and responding to affective states), and poor emotional regulation. Cognitive factors of low and

nonspecific potency are body misperception, obsessive compulsive traits, asceticism (pursuit of virtue through sacrifice), fears of reaching psychobiological maturity, and neuropsychological deficits (e.g., altered serotonin levels).

*Developmental.* A major factor specific to an individual's development of high potency for risk is being in adolescence. Other factors of low and unspecified potency include having childhood eating problems, pregnancy complications/premature birth, childhood anxiety, and early onset of puberty.

## Evidence-Based Treatment Approaches

### *Pharmacological Treatment*

Many psychiatric disorders are treated primarily by pharmacological intervention. Pharmacotherapy as a primary treatment for eating disorders has little empirical support; however, it may be useful as an adjunct to other forms of therapy for the treatment of co-occurrent conditions, such as affective disorders and psychosis (Bulik, Berkman, Brownley, Sedway, & Lohr, 2007; Castro-Fornieles et al., 2007; Wilson et al., 2007).

### *Weight as a Consideration in Treatment*

In contrast to the earlier decades, there is now a milieu of options for treating eating disorders, most of which have been ill-researched (Fairburn, 2005). Some emerging facilities and approaches to treatment do not require weight gain as part of therapy for patients. As mentioned earlier in this chapter, eating disorders inevitably affect both psychological and medical domains of functioning. It should be mentioned that, irrespective of the intervention being considered, the factors of weight gain and weight maintenance are inexorably linked to the course and outcome of the disorder (Garner, 1997). Clinical practice that advises against or neglects these variables is in contradiction with a wide body of clinical researches; evidence that weight gain should be considered in the treatment can be observed from the fact that it is most often considered as a variable in the definition

of recovery (Couturier & Lock, 2006), is predictive of treatment remission (Lock, Couturier, Bryson, & Agras, 2006), low weight at presentation is predictive of death in AN (Berkman, Lohr, & Bulik, 2007), and weight suppression for BN patients has a direct relationship with the frequency of bingeing and is a predictor of the outcome (Butryn, Lowe, Safer, & Agras, 2006).

### *Psychological Treatment for Eating Disorders*

Although eating disorders have been recognized in modern psychotherapeutic practice for several years, only a few models of psychological treatment for eating disorders have received controlled-trial or clinical support (Wilson et al., 2007). Most trials for the treatment of AN have additionally used considerably small samples (Fairburn, 2005). As there are many approaches still in question, this chapter will reserve discussion to three approaches that have been most investigated in the context of eating disorders: interpersonal psychotherapy (IPT), family-based therapy (FBT; specifically the Maudsley approach), and cognitive-behavioral therapy (CBT).

### *Interpersonal Psychotherapy*

Interpersonal psychotherapy was originally developed as a time-limited outpatient therapy for depression (Klerman, Weissman, Rounsaville, & Chevron, 1984) and was adapted for treatment of BN by Fairburn et al. (Fairburn, Jones, Peveler, Hope, & O'Connor, 1993). The basic tenants of the theory focus on non-directive and non-interpretive intervention, attempting to resolve relational conflicts discovered within the patient's life. The clinician focuses on one of the four problem areas: interpersonal disputes, role transitions, abnormal grief, or interpersonal deficits (Weissman & Markowitz, 2002). Clinicians and theorists advocating the use of IPT for the treatment of eating disorders cite dysfunctional interpersonal functioning found in families of the eating disordered, such as closed and rigid family structures, overprotective parenting styles, and high

expectation of achievement, as well as the argument that while in adolescence these individuals are ill-equipped to deal with interpersonal demands (McIntosh, Bulik, McKenzie, Luty, & Jordan, 2000).

*Efficacy of treatment.* Although there have been few trials investigating the efficacy of IPT for the treatment of eating disorders, at least two studies have compared the outcomes of BN with treatments using CBT (Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000; Fairburn et al., 1991). The results suggest that IPT is inferior to CBT at post-treatment, though equally effective at long-term follow-up. To our knowledge, there have been no large-scale randomized control trials of nearly any treatment modality for AN. The IPT is not an exception, even though some have made theoretical arguments for its use in eating-disordered populations as mentioned earlier (McIntosh et al., 2000); however, IPT has been rated as mid-level methodologically for the treatment of BN, because it does not directly address the core dysfunction and symptomatology, and is recommended as an alternative to CBT (National Institute for Clinical Excellence [NICE], 2004).

#### *Family-Based Therapy*

Family-based therapy is the most investigated form of treatment for AN (Wilson et al., 2007). The best researched of these therapies is the Maudsley approach, described in detail by Lock et al. (2001). Lock et al. suggested FBT for adolescent patients specifically, because adolescents are generally embedded within a family system that provides necessary nurturance and support for development. Best construed as an intensive outpatient treatment, parents and immediate family members play an active role in recovery in the context of clinician–family meetings incorporated with weight gain. Lock et al. (2001) outlined a three-phased therapy

The first phase of treatment involves *refeeding the patient*, and focuses almost exclusively on the eating disorder and related symptoms. It includes a family mealtime, with the clinician acting as observer and working toward absolving the parents from blame for the disorder. The second phase of treatment in-

volves *negotiating a new pattern of relationships* for the patient, in which the patient surrenders to the will of the parents to increase the food intake. In this phase, the parents take the main control of the treatment to return their child to physical health. The third phase of treatment involves *issues of adolescence and termination of treatment*. During this last phase, the patient achieves and maintains a stable weight, which Lock et al. (2001) stated should be above 95% of ideal body weight. The core themes of this phase are embedded within establishing a healthy adolescent identity and maintaining appropriate parental–adolescent boundaries.

*Efficacy of treatment.* Although FBT has a widely known precedence of treatment for AN, the conception that it has strong body of empirical support is unsubstantiated, and the mechanisms of action are not well understood (Fairburn, 2005). The Maudsley approach seems to be more efficacious with younger adolescents (Fairburn, 2005; Russell, Szukler, Dare, & Eisler, 1987; Vitousek & Gray, 2005), though there is a lack of evidence that it is better than individual therapy (Wilson et al., 2007). For AN, FBT has been awarded a mid-level rating for practice with adolescents (NICE, 2004). FBT for adolescent patients with BN has recently been investigated and is possibly efficacious (le Grange, Crosby, Rathouz, & Leventhal, 2007; Schmidt et al., 2007), though results are limited owing to small sample sizes and lack of blind assessment in the study by le Grange et al.

#### *Cognitive-Behavioral Therapy*

CBT is the most frequently tested individual therapy for AN (Wilson et al., 2007) and has the longest established framework of the treatments presently discussed. CBT, as a treatment for AN, was first described by Garner and Vitousek (Garner & Bemis, 1982; Garner et al., 1997). However, an alternative perspective has been presented for treating BN (Fairburn, 1985; Fairburn, Marcus, & Wilson, 1993); the treatments are largely consonant. However, it is noted that there are important treatment differences according to the diagnostic group that the patient belongs. These are based on the differing characteris-

tics of the disorders and manifest in areas such as treatment motivation, weight gain, and introducing self-monitoring behaviors (Garner et al.).

The CBT as a treatment for AN and BN is largely based on cognitive theory in which patients are collaborators in their recovery with the clinician. Using a variety of strategies, the clinician addresses dysfunctional thinking patterns, schemas, and beliefs, and guides the patient through creating new, appropriate methods of thinking. It is also noted that the framework of the intervention is sufficiently broad to address specific clinical issues by incorporating IPT or Family Therapy into treatment (Garner et al. 1997). Garner et al. have outlined a three-phased intervention.

Phase I of the treatment involves *building trust with the patient and setting treatment parameters*, and includes outlining and building a positive therapeutic alliance, fostering motivation for treatment, and assessing key features of the patient's manifestation of the disorder. As many eating-disordered patients are ambivalent about the treatment, much of this phase is dedicated to establishing this therapeutic bond. Phase II of the treatment involves *changing patient beliefs related to food and weight*, and subsequently broadening the scope of therapy to address specific clinical issues and dysfunction thought patterns. The core issues addressed within this phase are emphasis on weight gain and normalized eating, as well as identifying and developing cognitive skill sets for restructuring dysfunctional thoughts and schemas. Phase III of the treatment is driven toward *preventing relapse and preparing the patient for treatment termination*, and includes summarizing therapeutic progress, reviewing areas of vulnerability and continuing progress, and making the patient aware of when to return to treatment.

*Efficacy of treatment.* Manually-driven CBT has been rated as the treatment of choice for adults with BN and is superior to other interventions at least in the short-term, eliminating between 30% and 50% of bingeing and purging symptoms in all the cases (NICE, 2004; Wilson & Fairburn, 2002; Wilson et al., 2007). However, along with other forms of thera-

py, there is a desire for further empirical support for treating AN (Wilson et al., 2007). To date, there have been at least three studies comparing CBT with other forms of psychotherapy, in which no differences were found between the modalities (Ball & Mitchell, 2004; Channon, de Silva, Hemsley, & Perkins, 1989; McIntosh et al., 2005). However, the length of the treatment was truncated against the recommendations of the CBT format currently discussed. Other trials have compared CBT with the nutritional counseling in which CBT was found to be superior, but the comparison has been deemed weak (Pike, Walsh, Vitousek, Wilson, & Bauer, 2003; Serfaty, Turkington, Heap, Ledsham, & Jolley, 1999).

### **Mechanisms of Change Underlying the Intervention**

#### *The Cognitive Model of Change*

Eating disorders continue to have elusive etiologies, and therefore, any discussion on the underlying actions of therapeutic change is derived from a limited understanding of how they occur. A review of the various theoretical models for the mechanisms of change in eating disorders is a daunting task and is well beyond the purpose of this chapter. We have chosen to limit the brief discussion of mechanisms of change to a cognitive framework, as it is the most popular and best researched model to date.

The essence of the cognitive theory of eating disorders is that the symptoms are maintained by a characteristic set of over-valued ideas about the personal significance of body shape and weight. Early cognitive conceptualizations were derived from clinical observations and adapted to address certain distinctive features of AN (Garner & Bemis, 1982) and BN (Fairburn, 1985) which have been increasingly applied to all eating-disorder diagnostic subgroups (Cooper, 2005 ; Vitousek, 1996) . Relevant variables include: (1) idiosyncratic beliefs related to food and weight; (2) specific reasoning errors and disturbed information processing related to the significance given to weight and shape; (3) the role of cultural ideals for feminine beauty which have placed a pre-



mium on dieting and weight control as a marker for self-worth; (4) positive and negative cognitive reinforcement contingencies that maintain the symptoms; (5) the operation of underlying assumptions, dysfunctional self-schemas, and core beliefs (e.g., low self-esteem, self-identity, perfectionism, pursuit of asceticism, need for self-control, fears of maturity, “anorexic identity,” and interoceptive deficits); and, (6) the physiological consequences of starvation that tend to maintain disordered beliefs and behavior, and aggravate pre-existing emotional disturbance. A detailed discussion on the cognitive mechanisms of change is well beyond the scope of this chapter; however, the relevant theoretical principles can be found elsewhere in comprehensive reviews (Cooper, 1997, 2005 ; Garner, Vitousek, & Pike, 1997 ; Vitousek, 1996 ; Wilson et al., 2007) .

Of relevance in a practical chapter on competence in the treatment of eating disorders is an understanding of stereotypic beliefs and attitudes about food, shape, and weight characteristic of eating disorders. Body dissatisfaction and the desire to lose weight (drive for thinness) are two of the most well-recognized cognitive precursors to dieting and development of eating-disorder symptoms in community samples of preadolescents, adolescents, and adult females (Jacobi et al., 2004 ; Stice, 2002) . It is important for the novice clinician to be familiar with the “proximal” (versus remote) causes of eating-disorder behavior as being derived from the supreme importance given to weight or shape in maintaining the vast array of thoughts and behaviors displayed by those with eating disorders. The cognitive-behavioral model does not disavow the role of remote etiological variables (i.e., biological, genetic, constitutional, developmental, and personality), but “declines to take a strong position on the contribution [of these factors]” (Vitousek & Ewald, 1993) . The cognitive approach to eating disorders can be distinguished not by the specific content or timing of the presumed etiologic variables, but rather by the methods used in evaluating their relevance, as well as the general sequence followed in exploring the historical material. The cognitive approach does not make *a priori*

assumptions regarding the relevance of historical variables; however, their relevance is dictated by the degree of confidence with which they can be linked to current eating-disorder symptoms and current overall functioning. By their nature, some variables or constructs (e.g., early feeding patterns) defy the credible linkage or proof. Moreover, the sequence in exploring historical material distinguishes the cognitive approach by focusing “on proximal factors which maintain the disorder while gradually working back to explore distal belief systems which may have played a role in the actual development” (Garner & Bemis, 1985, p. 108). This model allows the exploration of historical themes relevant to the meaning system of a particular patient, without compelling all the cases to fit into one explanatory system.

#### *Basic Competencies of the Clinician*

Eating disorders have a reputation of being difficult to treat; however, experienced clinicians following current guidelines for care can have a very positive impact on the outcome. Although therapist competency is fundamental to the treatment of all psychological disorders, proficiency in treating eating disorders requires a familiarity with a body of scientific knowledge covering areas that are not generally a part of clinical training. Information on nutrition, dieting, biology of weight regulation, physical complications, and culture must be included to understand the more general psychological themes pertinent to eating disorders.

#### *General Therapist Qualities*

There is broad agreement that trust in the therapeutic relationship is a key to success with most patients and is fundamental in promoting change in diffident and often resistant eating-disorder patients. Being able to trust one’s therapist is judged by the patients and former patients as the most important component of treatment quality (de la Rei, Noordenbos, Donker, & van Furth, 2008). Basic skills are required for the therapist to convey warmth, accurate empathy, genuineness, trust, and a collaborative relationship.

Particularly, in light of the eating-disorder patient's ambivalence about the goals of treatment, it is vital that the therapist be cognizant of the patient's ongoing appraisal of the quality of the relationship. The therapist must strive to convey qualities of appropriate warmth, sensitivity, compassion, genuineness, honesty, flexibility, engagement, acceptance, positive regard, and be acutely attuned to how the patient is feeling about the treatment progress, as well as the therapist's role in this process. The patient's confidence in the therapist's trustworthiness, emotional fortitude, and technical skills are pivotal in establishing a therapeutic connection.

#### *Duration and Structure of Cognitive Therapy*

The duration of treatment for BN is typically about 20 weeks (Fairburn et al., 1993); however, it is well recognized that difficult patients may require a longer period of care (Wilson et al., 2007). In contrast, treatment for AN often lasts more than a year (Garner et al., 1997). The longer duration of treatment is required in most cases of AN, because of the time required to overcome motivational obstacles, achieve appropriate weight gain, and occasionally implement inpatient or partial hospitalization.

The structure of individual cognitive-therapy sessions is similar for BN (Fairburn et al., 1993) and AN (Garner et al., 1997). Each session involves: (1) setting an agenda; (2) self-monitoring is reviewed; (3) dysfunctional behaviors, schemas, and core beliefs are identified and changed; (4) the session is summarized, and homework assignments are specified. For AN, additional components are added for addressing poor motivation, checking the patient's weight, discussing weight within the context of goals, reviewing physical complications, and meal planning (Garner et al.). Also, in AN, therapy format must be adapted with respect to the age of the patient and clinical circumstances. Meeting format may be individual, family, or a mix of both formats, according to the clinical needs

#### *Two-Track Approach to Treatment*

Throughout all the stages of treatment, there are "two tracks" to treatment. The first track pertains to symptom control in areas related to eating, weight, bingeing, vomiting, strenuous dieting, and other behaviors aimed at extreme weight control. The second track addresses the psychological context of the disorder, including beliefs and thematic underlying assumptions that are relevant to the development or maintenance of the disorder. In practice, there is considerable switching back and forth between the two tracks during the therapy. Greater emphasis is placed on track 1 early in the therapy, emphasizing on the interdependence between the mental and physiological functioning. Subsequently, the treatment shifts to track-2 issues, as progress is made in the areas of eating behavior and body weight.

#### **Motivation for Treatment: Addressing Resistance in a Constructive Manner**

Eating-disorder patients have been labeled as resistant, stubborn, defiant, and unmotivated to change. This overgeneralization is unwarranted for many patients whose veneer of non-compliance is overshadowed by the awareness of their fragile physical and emotional state and wish to change. However, resistance to change is a common clinical obstacle for many, particularly, when they are directed to focus on behavioral change of eating-disorder symptoms. Thus, the clinician should expect that some patients will lack motivation or, at the very least, experience ambivalence at the beginning of therapy and at certain points thereafter. One of the key roles of the therapist is to assist in cultivating and sustaining motivation for change. Methods have been suggested for minimizing therapist anger that can result from the lack of patient progress as well as improving motivation (Vitousek et al., 1998). Motivation partly depends on the goals of the treatment; if the degree to which the therapist and the patient have shared goals is greater, then the cooperation will also be greater. From the earliest stages of treatment, goals need to be negotiated, which balance the need to focus on behavioral change while focusing on the underlying psychological issues. Educating the patients about

the starvation symptoms and the long-term effects of dietary restriction can play a valuable role in helping the them move toward behavioral change, as failure to correct these problem areas precludes the understanding and changes underlying psychological issues.

#### *Content Domains for Competency in the Treatment of Eating Disorders*

Content domains of therapy which reflect competency in the treatment of eating disorders have received very limited research attention in the field, other than empirically derived practice guidelines for eating-disorders treatment (APA, 2006 ; NICE, 2004) . However, practice guidelines do not directly address the issue of competency. Thus, the remainder of this chapter comprises these practice guidelines and is supplemented by our own clinical experience pertaining to treatment competency. In one of the few

studies to examine content domains associated with quality of treatment, de la Rie, Noordenbos, Donker, and van Furth (2008) surveyed therapists, current patients, and former patients to determine the factors that contribute to the quality of treatment from both therapist's and patient's perspective.

Table 1 provides the ranking of the top ten items with respect to therapist and patient perception of factors contributing to quality of treatment. All the items from the questionnaire were factor-analyzed, and the results revealed seven interpretable factors explaining 33% of the variance. The factors were: "mastery," "treatment modalities," "information," "focus on underlying problems," "bond with the therapist," "acceptance," and "focus on eating behavior." In general, therapists most often stressed the focus on eating-disorder symptoms and behavioral change, whereas current and former eating-disorder patients most often stressed the importance of

Therapists rank	Patients rank	Ten most-important weighted criterion items
1	6	Being respected
2		Learning take your own responsibility
3		Learning how to eat normally
4		Focus on recovering weight
5		Focus on improving your body image
6	2	Being taken seriously
7	1	Trust in therapist
8		Explanation or information on EDs
9		Keeping a(n) (eating) diary
10	9	Being able to talk about eating behaviors
	3	Treatment that addresses the person
	4	Being able to talk about feelings
	5	Focus on self-esteem
	7	Being able to talk about thoughts
	8	Addressing underlying problems
	10	Being accepted as you are

*Table 1 Ranking of weighted criteria on the quality of treatment of eating disorders by therapists and eating disorder patients (Adapted from Rie et al., 2008. International Journal of Eating Disorders, 41 , 307–317)*

the therapeutic relationship and the need to address problems underlying the eating disorder. Despite these differences, the main finding was that the therapists and patients shared many values on the factors associated with the quality of treatment.

#### *Basic Competence in Assessment of Eating Disorder Symptoms*

Assessment of key clinical features of eating disorders is a basic skill-set required of the clinician. A detailed weight history should be taken to gather information regarding the nature and temporal sequence of events in the development of eating disorder. The assessment should include careful questioning regarding the duration and frequency of binge-eating and vomiting, as well as abuse of laxatives, diuretics, and diet pills. It should also cover other weight-controlling behaviors, such as other drug or alcohol use to control appetite, chewing and spitting food out before swallowing, prolonged fasting, and vigorous exercise for the purpose of controlling body weight. As mentioned earlier, there are numerous standardized self-report measures and structured interviews to assess eating pathology that can be used to supplement the clinical assessment (Peterson & Mitchell, 2005).

#### *Educational Topics to Achieve Basic Competence*

Most would agree that “generalist” skills are insufficient in the treatment of eating disorders. The competent clinician requires familiarity with specific scientific information about physical and psychological complications that perpetuate eating disorders, and this information needs to be conveyed to the patient to encourage self-responsibility and collaboration in the recovery process. “Psycho-education” has become a standard component of CBT (Garner, 1997; Garner, Rockert, Olmstead, Johnson, & Coscina, 1985) and is based on the assumption that eating-disorder patients often suffer from misconceptions about the factors that both cause and maintain symptoms. Patients are less likely to persist in self-defeating symptoms if they are made truly aware

of the scientific evidence regarding the factors that perpetuate eating disorders. The educational approach conveys the message that the responsibility for change rests with the patient; this is aimed at increasing motivation and reducing defensiveness. Psycho-educational topics will be briefly summarized and the reader should consult primary references to gain a more complete understanding of the content areas.

#### *Weight Suppression and Eating-Disorder Symptoms*

Eating-disorder patients typically do not appreciate the extent to which their food preoccupations, binge-eating, emotional distress, cognitive impairment, and social withdrawal are secondary to their extreme attempts to reduce or control their weight. As mentioned earlier, symptoms that once were thought to be primary features of those with eating disorders are actually better understood as consequences of semi-starvation observed in normal volunteers exposed to periods of sustained weight loss (Garner, 1997).

The description of the “starvation state” as normal physiological consequences of weight suppression can mitigate guilt or defensiveness about the symptoms that may have been perceived as “primary psychopathology.” It also introduces the notion that the current starved-state seriously impedes the reliable assessment of personality features, and also implies that restoring biological equilibrium is necessary to address fundamental emotional problems. Finally, the patient may be motivated through an understanding that increased food intake and the inevitable weight gain will possibly act as a method of diminishing some negative affective experiences of the disorder. Following on this thought, we have recommended that patients should think of food as “medicine” (Garner, 1997). Education must be presented sensitively to avoid minimizing the patient’s current experiences that may be influenced by distorted perceptions resulting from starvation.

#### *Education Indicating that Dieting Does Not Work*

Long-term follow-up studies of obesity treatment consistently indicate that 90–95% of those who lose

weight will regain it within several years (Garner & Wooley, 1991 ; Mann et al., 2007). Patients can benefit from understanding that the failure of restrictive dieting in permanently lowering body weight is not related to a lapse of will-power; rather, it is logically consistent with the biology of weight regulation that shows that weight loss leads to metabolic adaptations designed to return body weight to levels normally maintained. It is also important to emphasize that restrictive dieting may lead to weight gain in normal adolescents. Prospective studies on adolescents indicate that dieting to lose weight may actually result in weight gain and binge eating over the course of 3–5 years (Field et al., 2003; Neumark-Sztainer, Wall, Haines, Story, & Eisenberg, 2007).

#### *Education Indicating that Restrictive Dieting Increases the Risk of Bingeing*

Therapists should understand the literature on dieting as a risk factor for binge-eating (Jacobi et al., 2004 ; Polivy & Herman, 2002) as well as the development of full-blown eating disorders (Jacobi et al.; Patton, Selzer, Caffey, Carlin, & Wolfe 1999). Severe calorie restriction breaks down into binge-eating over time, even among the most dedicated dieters – those with the “pure” restricting AN. Over an 8-year follow-up, 88% of pure restricting patients reported regular binge/purge behaviors (Eddy et al., 2002) . The fact that binge-eating can occur in the absence of primary psychopathology is surprising to many patients and can serve as a springboard to a new understanding of the need to restore normal eating.

#### *Education About the Self-Perpetuating Cycle of Binge-Eating and Vomiting*

Self-induced vomiting and laxative abuse usually begin as methods of preventing weight gain by “undoing” the caloric effects of normal eating or binge-eating. It becomes self-perpetuating, because it allows the patient to acquiesce to the urge to eat but eliminates the feedback loop that would stem underlying hunger and food cravings.

#### *Education Regarding Laxative Abuse*

Laxative abuse is dangerous because it contributes to electrolyte imbalance and other physical complications. Perhaps, the most compelling argument for discontinuing their use is that they are an ineffective method of trying to prevent the absorption of calories (Garner, 1997).

#### *Education Regarding Physical Complications*

Eating-disorder patients should have a medical evaluation to determine the overall physical status and to identify or rule out the physical complications associated with starvation and certain extreme weight-loss behaviors (Becker et al., 1999) . However, all clinicians should be aware of the range of physical complications that can be expected in those with eating disorders.

#### *Education about Eating Disorders*

Attention should be given to clarifying myths resulting from inaccurate or conflicting reports regarding etiology and complications of eating disorders (Garner et al., 1997).

#### *Assessment and the Rationale Regarding Body Weight*

Therapists without specialized training in treating eating disorders may conclude that weighing patients is either outside of their role or that it can interfere with the therapeutic relationship. Some patients may resist the idea of being weighed as part of outpatient management. However, there are practical and theoretical reasons regarding why every therapist offering specialized eating-disorder treatment should routinely assess the body weight of patients who are underweight. At a practical level, it would be irresponsible to ignore the self-harm with a suicidal patient, and would be inappropriate to ignore a precipitous drop in body weight in an eating-disorder patient. Clearly, it is advisable for all seriously ill patients to be monitored by medical specialists; however, there is an added layer of protection for the therapist to also weigh the patient. At a theoretical level, asses-

sing body weight emphasizes the interdependence between physical and psychological functioning.

The clinician must be sensitive to the patient's current level of understanding and motivation when formulating body weight and eating goals. If body weight is below a BMI of 17.5 or if weight loss has been precipitous, then a partial hospitalization or inpatient treatment may offer sufficient structure to facilitate weight gain and is highly recommended. However, at the very beginning of the therapy, informing the patient about a precise weight goal may not be practical until there has been the opportunity to gather detailed information on the patient's personal weight history. Moreover, early in therapy, it may be prudent to avoid non-productive battles about "target" weight, and instead, can focus on educating the patient about the factors that must be considered in establishing a healthy body. Once the patient understands the range of factors that must go into recommendations about the body weight, there is more opportunity for thoughtful discussions and ultimate agreement on this difficult topic. Another way to address the issue of weight and eating-disorder symptoms is to keep a short-term focus. In the absence of formal agreement to change the eating-disorder symptoms, it is still possible to proceed with "experiments" aimed at stabilizing the body weight, normalizing eating, and controlling bingeing, vomiting, and laxative abuse.

Delineation of all the factors that must be considered in establishing a target body-weight range is beyond the current discussion; however, the APA Practice Guidelines for eating disorders (APA, 2006) provides a good source. As a general rule, favorable outcome with both anorexia and BN is associated with achieving a body weight that may be closer to 90% of pre-morbid weight (or extrapolations from pediatric growth charts), rather than attaining some percentage of population norms for body weight. In adolescent onset of AN, pediatric growth charts available through the Center for Disease Control provide valuable information about the trajectory of weight gain prior to the onset of the eating disorder. This concept can be alarming for patients with a higher

premorbid body weight. Timing and sensitivity are essential in relating this information to patients, as prematurely recommending a higher weight which is terrifying may drive the patient from the treatment, while avoiding the topic entirely fails to address a primary treatment issue and is likely to lead to a therapeutic impasse.

#### *Meal Planning and Self-Monitoring*

Self-monitoring and meal planning are specific strategies to impose structure and regularity to dietary intake in those with eating disorders. Meal planning consists of specifying the details of eating in advance. It involves prescribing specific foods and amounts to be consumed, and describing the context, such as place and time. The structure imposed by meal planning allows most patients to relax rigid rules about food, and assures them that they will not be allowed to go too far in the direction of either overeating or under-eating. Self-monitoring involves recording all food and liquid ingested shortly after consumption. Therapists should feel comfortable with both the procedures and should review the meal planning or self-monitoring forms in each meeting as well as associated problematic eating behavior and dysfunctional thoughts.

#### *Interrupt Bingeing and Vomiting*

Basic competency in treating eating disorders involves familiarity with different strategies for interrupting binge-eating and self-induced vomiting, as well as other eating-disorder symptoms designed to lose weight. A detailed presentation of these techniques is beyond the scope of this chapter, though they have been reviewed elsewhere (Fairburn et al., 1993 ; Garner, 1986) . Practical strategies for changing cognitive focus include: (1) delaying acting on urges to binge and purge, (2) distracting away from troublesome thoughts and urges, and (3) engaging in alternative behaviors that can break the thought chain, such as abruptly leaving the house to go for a walk, making telephone calls to friends, listening to loud music, or watching television.

### *Early Cognitive Implementations*

Early treatment areas targeted with the patient largely revolve around increasing motivation for change. As indicated earlier, while some eating-disorder patients enter therapy “ready” to face the challenges of weight gain and losing the functionality of their eating disorder, many do not (Geller, 2006). Issues and beliefs often addressed early in therapy are the fear of weight gain and shape change, losing control surrounding food, and false beliefs concerning food and dietary health. Helping the patient to understand the often fluctuating path of symptoms toward recovery, allowing the patient to analyze the pros and cons of the disorder, aiding the patient in cognitively projecting into their future lives with and without the disorder, and reframing the ego-syntonic eating-disorder symptoms as incompatible with long-term goals may also be addressed at the beginning stages of the therapy.

### *Develop Cognitive Restructuring Skills*

Cognitive restructuring is a method of examining and modifying dysfunctional thinking. Automatic thoughts, beliefs, and assumptions can be pinpointed by increasing awareness of the thinking process. They may also be accessed by observing behavioral patterns. For example, restricting eating to “fat free” foods implies certain beliefs. The automatic thought may also be identified by focusing on particular situations and replaying the thinking and feeling associated with that situation. Then, the patient is encouraged to generate and examine the evidence for and against a particular dysfunctional belief. Most of the following cognitive strategies have been described in connection with the treatment of other emotional disorders; however, the content and style must be adapted with regard to eating disorders. Throughout the course of therapy, the therapist needs to assist the patient in learning to identify the dysfunctional thoughts and the processing errors that influence his or her perceptions, thoughts, feelings, and symptomatic behavior. The clinician also must take particular care to avoid allowing interventions to deteriorate

into an inquisition or argument over points of logic. There is a delicate balance between being persuasive on one hand, and avoiding any hint of personal attack on the other. Probes and suggestions must occur in an atmosphere of acceptance. Beliefs and behaviors that direct symptomatic behavior need to be connected to more general and often implicit schemas referred to as underlying assumptions (Beck, 1976), higher-order implicit meaning (Cooper, 1997), or schematic models (Garner et al., 1997).

Although different therapeutic orientations have been recommended in the treatment of eating disorders, empirical evidence for the utility of cognitive-behavioral methods compel the competent clinician to have mastery of the basic techniques. The clinician should be familiar with cognitive interventions, such as *decentering*, *challenging dichotomous reasoning*, and *decatastrophizing* that have been adapted to deal with the thought content of those with eating disorders (Garner & Bemis, 1982; Garner et al., 1997).

*Decentering* involves the process of evaluating a particular belief from a different perspective to appraise its validity more objectively. It is particularly useful in combating egocentric interpretations that the patient is central to other people’s attention. For example, one patient reported “I can’t eat in front of others in the residence cafeteria because others will be watching me.” First, it needs to be established that the eating behavior is not indeed unusual. If not, then the therapist might inquire: “How much do you really think about others’ eating? Even if you are sensitized to their eating, how much do you really care about it except in the sense that it reflects back to your own eating? Even if your behavior was unusual, do others *really* care?” In examples like this, *decentering* can be useful in reducing worry and anxiety.

*Dichotomous reasoning* (all-or-none or absolutistic thinking) is a common problem applied to food, eating, and body weight by those with eating disorders. For example, it is common for patients to believe that foods containing sugar are bad, eating food after a certain time of the day will lead to weight gain, or gaining a pound is a sign of complete loss of control. This style of thinking is applied to topics

beyond food and weight. Patients commonly report extreme attitudes in the pursuit of sports, school, careers, and acceptance from others. This type of reasoning is particularly evident in the beliefs about self-control. Common examples include: "If I am not in complete control, I will lose all control," "if I become angry, I will lose control of my emotions," "if I experience pleasure, I will become dominated by hedonism," "if I relax, I will become lazy." A major therapeutic task is to teach the patient to recognize this style of thinking, examine the evidence against it, evaluate its maladaptive consequences, and subsequently, practice adopting a more balanced lifestyle.

*Decatastrophizing* was originally described by Albert Ellis (1962) as a strategy for challenging anxiety that stems from magnifying negative outcomes. It involves asking the patient to clarify vague and implicit predictions of calamity by probing with questions such as: "What if the feared situation did occur? Would it really be as devastating as imagined? How would you cope if the feared outcome does occur?" Ironically, catastrophizing can actually produce the feared outcome. In an attempt to avoid social rejection and isolation, patients may withdraw from all social interactions, thus becoming isolated. Fear of failure can lead to the scrupulous avoidance of risk which results in failure. Moreover, there is no relief from catastrophic thinking. If a patient believes gaining weight would be a catastrophe, it is clear why they would be fearful and anxious when they experience weight gain. What is less obvious to the patient is that even when the fears are avoided in the short-term, it does not completely eliminate anxiety as there is a risk for the perceived calamity to develop in the future. In addition to helping the patient temper dire forecasts about the future, the therapist can facilitate the development of coping plans for mastering feared situations if they were to occur.

### **Expert Competencies of the Clinician**

The categorical distinction between basic and expert clinician competencies is somewhat artificial, as nuance and complexity can be applied to even the most basic topics areas. For example, meal planning may seem quite straightforward in its basic form;

however, a patient's objections to meal planning may be related to a myriad of underlying or core self-concept deficits, cognitive vulnerabilities, or interpersonal themes rather than a simple lack of information. For example, describing or implementing meal planning can lead to resistance that reflects complex family dynamics related to control, and simply providing information without awareness of the underlying interpersonal themes would only intensify the conflict and subterfuge therapeutic recommendations. The distinguishing feature of the expert clinician is the ability to identify the relevant themes and then creatively implement effective interventions that address the complex determinants of behavior.

### *Understanding the Multiple Functions of Eating-Disorder Symptoms*

Regardless of the conceptual framework used in therapy, there is a general agreement that eating disorders and their symptoms can serve multi-level adaptive functions across the heterogeneous patient population (Cooper, 2005 ; Garner et al., 1997 ; Vitousek, 1996) . At the most basic level, these can be understood in reinforcement terminology. One factor responsible for the intransigence of eating-disorder symptoms is that they are maintained by positive internal and social contingencies. They have been described as eliciting feelings of accomplishment, pleasure, power, and pride (Bemis, 1983 ; Vitousek et al., 1998) . It is not uncommon for patients to strive for and then cling to an "anorexic identity," because the disorder or symptoms of the disorder such as dietary restraint and exercise have acquired such a positive connotation in Western society. The strength of the positive connotation that has been placed on eating-disorder symptoms by some is reflected by the popularity of the so called "pro-anorexic" web-sites that brazenly extol the virtues of eating disorders as a "lifestyle" rather than a serious illness. Eating-disorder symptoms can also have a negatively reinforcing function, in that they allow the patient to prevent, avoid, or diminish unpleasant feelings. Examples include negative emotions, conflict, and anxiety, as well as a mature body shape that may be associated



with fears or developmental expectations for which the patient feels unprepared. Self-starvation can also serve as an “organizing” function, particularly in obsessive patients. Starvation tends to direct thinking toward specific cognitive content domains related to food. This may not only have a positively reinforcing effect on an individual with obsessive preference for order, exactness, and sameness, but it may also accommodate a rigid information-processing style by narrowing focus in a predictable manner.

#### *Advanced Cognitive Interventions*

The therapist tends to take the lead in early cognitive interventions by probing the implications of specific behaviors and then gently countering them with information within pertinent arguments. This strategy quickly reveals the content and intensity of dysfunctional beliefs and thinking patterns that pertain to more fundamental underlying assumptions, schemas, and core beliefs that drive maladaptive behaviors. These cognitive schemas (relatively stable cognitive structures that organize and interpret new information) are by nature resistant to change often reflecting information biases (e.g., selective abstraction, overgeneralization, magnification of negative events, dichotomous reasoning, or personalization) that may be biologically and genetically determined, as in the case of perfectionism reviewed in the following section. Shifts in the fundamental information-processing styles and the core beliefs that they support depend heavily on the development of a positive therapeutic relationship as well as a high level of therapeutic skill. Movement away from familiar but dysfunctional thought patterns is a gradual process that may require months or even years of practice applying new modes of thinking in many different situations. It is essential to remain mindful of the inherent links between cognitions and behavior. Putative shifts in beliefs that are not accompanied by associated behavioral change may be viewed with skepticism. Advanced cognitive interventions involve behavioral experiments and exercises that are molded to reinforce as well as corroborate cognitive shifts in emergent belief structures. Behavioral exer-

cises molded to reinforce new models of thinking are gradual and are often performed with trepidation on the part of the patient; therefore, the clinician must play a vital role in encouraging and reinforcing the pursuit of adaptive and healthful goals throughout the course of treatment.

#### *Anxiety, Obsessionality, and Perfectionism*

Those with eating disorders have been shown to have an elevated lifetime prevalence of several anxiety disorders, including simple phobia, social phobia, panic, and OCD (Halmi et al., 1991; Perdereai, Faucher, Wallier, Vibert, & Godart, 2008; Toner, Garfinkel, & Garner, 1988). These reviews have led to the conclusion that anxiety disorders may represent a genetically mediated pathway to the development of eating disorders. Those with eating disorders tend to display only some obsessional target symptoms, such as need for order, symmetry, exactness, and arrangement, rather than obsessive checking or sexual obsessions common among others with OCD (Perdereai et al., 2008).

Perfectionism has been found to precede the onset of eating disorders, is present during the acute phase, persists well after recovery, and runs in families (Bulik et al., 2003; Franco-Paredes, Mancilla-Diaz, Vasquez-Arevalo, Lopez-Aguilar, & Alvarez-Rayon, 2005). There is considerable debate about the definition and structure of perfectionism as it relates to eating disorders; however, “high personal standards,” “doubts about actions,” and “concern over mistakes” have been identified as core constructs in a multi-conceptualization of perfectionism (Tozzi et al., 2004).

The central role that anxiety and worry plays in the development and maintenance of eating disorders has practical implications on clinicians aspiring to achieve expert competence in the treatment of these patients. In addition to understanding the idiosyncratic fears and worries experienced by those with eating disorders, it is also important for the clinician to be well-versed in both the theory and practice of treating those with severe anxiety disorders.

Behavioral methods of desensitization and graded exposure as well as their cognitive foundations are central elements of therapy. In the area of behavioral change, patients experience intense and sometimes debilitating fear with attempts to change eating patterns and gain weight. If patients are to recover, they must begin making behavioral changes in these areas. The experienced therapist is able to provide support and encouragement, as well as generate persuasive arguments for making behavioral change in the presence of extraordinary anxiety. This is one area in which specialized training is essential. The "irrational" nature of the danger or threat experienced by most anxious or phobic patients (e.g., fear of flying, social phobia, panic, agoraphobia, hand washing) may be evident to even the untrained health professional, although the techniques for ameliorating the problem usually require technical expertise. However, the erroneous thinking behind many of the fears expressed by those with eating disorders is not always obvious and may even be shared by a therapist who has not had specific training (e.g., "dietary fat is bad – if I eat dietary fat, I will gain weight," "I cannot allow myself to eat certain foods or I will lose control;" "I must take laxative so the food is not absorbed;" "I cannot eat more than 1,000 Calories or I will gain weight and become obese;" "if I eat 100 extra calories a day, I will gain 10 pounds a year;" "my body will get used to restricting to fewer calories;" "I am terrified of eating any sweets because they make me binge-eat;" "I am frightened to eat after 6:00 pm because the food will turn to fat;" "I must exercise an hour a day or I will gain weight"). As mentioned earlier, psychoeducation can be used to challenge certain irrational beliefs and assumptions associated with idiosyncratic eating behaviors (Garner, 1997). However, exposure through behavioral change is necessary to probe, challenge, and provide "evidence" to correct faulty assumptions regarding eating, weight, and related self-attributions. For example, it is probably more difficult to maintain the belief that you cannot eat dietary fat or sugar without binge-eating if you indeed consume these substances without losing control. Similarly, behavioral change can have

a profound effect on the beliefs in other areas that are not directly related to food and weight. Successful social interaction can attenuate the view of self as socially incompetent. Independent and self-reliant behavior interferes with personal and family schemas that foster over-protectiveness and excessive dependence. However, it should be noted that with more fundamental belief systems, such as those related to negative self-evaluation, it is possible for well-established beliefs to remain intact, despite undeniably contradictory behavior. Again, it is important for the therapist to make sure that the implications of the behavioral change are integrated at the cognitive level.

#### *Body Image: Reattribution Techniques*

Misperceptions related to weight and shape do not characterize all patients with eating disorders; however, a significant proportion of patients appear unable to accurately appraise their body. There are no reliable methods for directly modifying body-size misperception in eating disorders. Rather than correcting size misperception reported by some patients, it is useful to reframe the interpretation of the experience (Garner et al., 1997). This involves interrupting and overriding self-perceptions of fatness with higher-order interpretations, such as "I know that those with eating disorders cannot trust their own size perceptions" or "I expect to feel fat during my recovery, so I must consult the scale to get an accurate reading of my size." The therapist can ask the patient to attribute these body self-perceptions to the disorder, and to refrain from acting upon intrusive thoughts, images, or body experiences. This approach is contrary to the general therapeutic goal of encouraging self-trust in the validity and reliability of internal experiences.

#### *Modifying Self-Concept*

Self-concept is a multidimensional construct involving at least two sub-components: self-esteem and self-awareness. Self-esteem constitutes the appraisal or evaluation of personal value, including attitudes, feelings, and perceptions. In contrast, self-awareness

relates to the perception and understanding of the internal processes that guide the experience. Vitousek and Ewald (1993) have organized self-concept deficits that are characteristic of eating disorders into three broad clusters of variables: the unworthy self, the perfectible self, and the overwhelmed self. The *unworthy self* is characterized by (1) low self-esteem, (2) feelings of helplessness, (3) a poorly developed sense of identity, (4) a tendency to seek external verification, (5) extreme sensitivity to criticism, and (6) conflicts over autonomy/dependence. The second cluster, the *perfectible self*, includes (1) perfectionism, (2) grandiosity, (3) asceticism, and (4) a “New Year’s resolution” cognitive style. The third cluster, the *overwhelmed self*, is characterized by (1) a preference for simplicity, (2) a preference for certainty, and (3) a tendency to retreat from complex or intense social environments. The expert clinician should have a good working knowledge on self-concept deficits and methods of modifying it in those with eating disorders.

#### *Improving Self-Esteem*

As mentioned earlier, it is well recognized that poor self-esteem often predates the appearance of eating-disorder symptoms (Jacobi et al., 2004; Stice, 2002). The pride and accomplishment of weight control seem to temporarily alleviate low self-esteem, particularly in adolescents coming from families that place greater emphasis on appearance (Senra, Sanchez-Cao, Seoane, & Leung, 2007). Correction of low self-esteem, particularly, if pervasive and long-standing, is a time-consuming process. At the beginning of the therapy, it may be expressed in vague terms such as general feeling of ineffectiveness, helplessness, or lack of inner direction. Over time, the therapist needs to help the patient distill vague assumptions about self-worth into a clear and simple statement such as “I feel like a failure,” “I do not feel like a worthwhile person,” or “I must be liked by others in order to feel good about myself.” Once the patient has expressed the view that he or she has low self-worth, it is useful to engage in a more general discussion about the basis for self-worth, la-

ter applying what has been learnt back to particular index situations identified by the patient. It is often useful to begin by noting how much time and energy most people devote in trying to evaluate their self-worth. For most patients, weight or shape has become the predominant gauge for inferring self-worth. It is possible to determine the pros and cons of this frame of reference and then to extend this to other behaviors, traits, or characteristics employed in the process of self-evaluation following the procedures described by Burns (1993).

#### *Difficulties in Labeling and Expressing Emotions*

Cognitive theorists have attributed this tendency to idiosyncratic beliefs, assumptions, or schemas that eating-disorder patients use in evaluating inner state (Garner & Bmis, 1985). These beliefs commonly center on attitudes about the *legitimacy, desirability, acceptability, or justification* of inner experiences. The following comments by patients are clues to the operation of this process: “I do not know how I feel; how should I feel?; I do not experience pleasure; I never feel angry; I am always energetic and never get tired; I admire others who don’t show their feelings; I can’t stand these feelings – they are too strong; I don’t feel anything – I just binge.” Asked about feelings in a family interview, one patient appeared confused and responded by pointing to her mother stating: “ask her, she knows me better than I do.” Similar mislabeling can be applied to other sensations like pleasure, relaxation, or sexual feelings. Patients commonly interpret these sensations as “wrong,” frivolous, or threatening. One patient reported: “If I give in to the urge to relax, I will become a degenerate.” Once distorted meanings are revised, it is important for the therapist to encourage behavioral exercises to reinforce and legitimize the new interpretations.

#### *Interpersonal Focus in Therapy*

Interpersonal concerns are inevitably expressed by eating-disorder patients during the course of therapy. The prominence of interpersonal schemas has

been the basis for their inclusion in earlier cognitive approaches to the disorder (Garner & Bemis, 1985; Garner et al., 1997). Selveschemas and interpersonal schemas both influence and are influenced by interactions with others. Although the interpersonal focus to therapy requires a shift in therapy content, the systematic reliance on standard cognitive procedures continues. Patients tend to apply the same types of schematic processing errors and dysfunctional assumptions to interpersonal relationships as those displayed in other areas (Cooper, 2005).

Cognitive therapy generally eschews the exploration of historical individual material; however, this approach can also be therapeutic in examining interpersonal schemas. First, it is sometimes necessary to examine historical relationships to find recurrent interpersonal patterns. Second, it can be useful for patients to develop some understanding of the historical events and relationships that may have made particular interpersonal schemas “adaptive.” Understanding the earlier adaptive context can allow the patient to make sense of the current dysfunctional interpersonal schemas. Therapy sessions provide *in vivo* opportunities to assess dysfunctional interpersonal schemas that may generalize outside the therapy. For example, the patient might be encouraged to examine beliefs that interfere with assertiveness and then practice assertiveness in the therapy session. The therapist and the patient then need to plan out-of-session opportunities to apply this newly acquired skill outside the therapy session.

### Therapy

Support for involving the family in the treatment of eating disorders comes from a number of sources. First, there are ethical, financial, and practical grounds for including the parents in the treatment of younger patients with eating disorders. Second, recovered patients consider resolution of family and interpersonal problems as pivotal to recovery (Rorty, Yager, & Rossotto, 1993). Third, this mode of intervention has received empirical support in controlled trials (le Grange et al., 2007; Russell et al., 1987).

Practical factors are sufficiently compelling to justify the family approach with some patients; however, our primary impetus for integrating family and cognitive approaches to eating disorders is the conceptual harmony that can be achieved in integrating these two treatment models (Garner & Bemis, 1985; Garner et al., 1997). At a fundamental level, there is agreement between both the models for which “meaning” is the primary locus of clinical concern. Also, both the models assume that the symptoms are adaptive at one level of meaning and dysfunctional at another. The clinician should not assume the specific meaning behind interactional patterns, but should try to assist the patient and the family in identifying dysfunctional assumptions through questioning and the prescription of behavioral change. The following example illustrates multi-level beliefs. One patient did not understand why she was so angry at her mother’s cheerful and congenial manner until she realized that it was really insincere. This patient communicated her anger in her conflict-avoidant family by vomiting, claiming that her behavior was involuntary. The clue to the meaning of her behavior was that she always left the bathroom door open and retched so that all could hear. By defining her vomiting as involuntary, she denied its hostile intent and avoided reprisals.

### Transition from Basic to Expert Competence

There are several important factors to consider in facilitating the transition from basic to expert competency in treating eating disorders. Expert competency requires knowledge of the theory and the application of therapeutic model being used. One of the advantages of the cognitive model of therapy is that there have been detailed manuals providing the structure, stages, content, and methods used (Cooper, Todd, & Wells, 2008 ; Fariburn, 2008 ; Garner, Vitousek, & Pike, 1997 ; Lock et al., 2001) . Clear specification of the treatment methods allows better evaluation of how closely therapists adhere to treatment protocols. There are several other areas that are important focal points to consider in this brief discussion of transi-

tion to expert competence such as: (1) therapy skills; (2) mastery of content; (3) case conceptualization; (4) relationship factors; and (5) supervision.

### **Therapy Skills**

Cognitive therapy emphasizes on collaboration, guided discovery, and structure (Beck, Rush, Shaw, & Emery, 1979), and these key elements apply to the treatment of eating disorders.

As has been mentioned repeatedly in this chapter, eating disorders are a heterogeneous group, and the competent clinician must have the ability to select the most appropriate approach that fits each patient's needs. One approach to varied patient needs has been "stepped-care," "decision-tree," or "integration" models which rely on fixed or variable rules for the delivery of the various treatment options (Garner & Needleman, 1997). According to the stepped-care model, a patient is provided with the lowest step intervention, one that is least intrusive, dangerous, and costly, even if the lowest step intervention does not have the highest probability of success. In contrast, a decision-tree approach provides numerous choice points resulting in different paths for treatment, depending on the clinical features of the patient as well as the response to each treatment delivered. The use of a combined decision-tree and integration model recommends an educational approach as the initial intervention for the least disturbed BN patients, and forms of treatment need to be integrated for more severe patients such as those with AN. Family therapy is recommended as the primary treatment modality if patients are young, living at home, or highly dependent on parents. Until recently, inpatient hospitalization was the standard treatment for patients who needed to gain substantial body weight; however, most of these patients can now be managed effectively and at substantially lower cost at the partial hospitalization program (PHP) level of care. Selecting the correct form of treatment, applying specialized content, formulating a viable conceptualization of each case, and developing a strong therapeutic relationship are necessary ingredients to achieving competency. Mastery of different therapy formats (individual, group, or family) is highly desirable depending on

the work setting.

### *Mastery of Content*

There has been enormous growth of the knowledge base on eating disorders in the past 20 years, and mastery of the key content domains and their clinical application is a daunting task. Moreover, the compiling of research evidence in the eating-disorder area continues to accelerate, making it challenging to stay abreast of current developments. As has been emphasized throughout this chapter, many of the educational content areas in therapy with eating-disorder patients, such as the biology of weight regulation, are not part of the standard preparation of the "generalist" therapist. Basic educational principles must be learnt; however, achieving competency involves conceptualizing the most important targets for change and then artfully interweaving educational and core cognitive content domains in an effective manner.

### *Case Conceptualization*

A cornerstone of therapist competency is the ability to formulate a useful conceptualization of the core problems that apply to the patient. Understanding the specific meaning that the eating-disorder symptoms have acquired for the individual and how this meaning has changed over time is vital. This involves understanding of the present meaning that body weight, shape, and appearance has for the patient as well as the historical derivations of the meaning. For many patients, the historical source may be very different from the factors maintaining the symptoms in the present. For example, a patient may develop the eating disorder in response to being teased about weight as a child, but the current symptom picture may be driven by feelings of control and mastery. It is desirable to move beyond more generic conceptualizations to a more individualized understanding that takes into account the patient's developmental and interpersonal history as well as the key assumptions, core beliefs, and functional aspects that symp-

toms have acquired over time. Therapists should be encouraged to discuss tentative conceptualizations early in supervision and make refinements based on new information. It is important to determine the patient's conceptualization of the functional aspects of the eating disorder, as a shared understanding of the fundamental problems can be expected to lead to greater progress.

### *Relationship Factors*

As mentioned earlier, trust in the therapeutic relationship is rated by patients as the most important component of treatment quality (de la Rei et al., 2008). Maintaining a positive therapeutic relationship can be challenging, as some patients are very resistant to making behavioral change and seem intent on sabotaging progress. However, it is beneficial to develop a good understanding of the functional aspects of the disorder and to convey this along with empathy and compassion to the patient. In a classic work on motivation for change, Vitousek et al. (1998) provided practical suggestions for understanding resistance to change, and developing empathy and validation of the patient's experience without undermining the arguments for recovery.

### *Supervision*

Perhaps, the most important element in the transition from basic to expert skills as a therapist is acquiring state-of-the-art training from a skilled and experienced therapist. It is ideal to be part of a tea-quality treatment as well as discussion of the rationale for specific interventions. Supervision usually begins with didactic discussions and specifically designed reading material. The focus is on mastery of the therapy methods, educational content, and developing case conceptualization skills. As therapy skills develop, more attention is focused on the therapy relationship and understanding more advanced topics, such as the integration of individual and family interventions. Group therapy can be a useful training format, as it allows the less experienced therapist to benefit from

real-time learning from a more skilled therapist. It is important to encourage the novice therapist to participate in the group therapy process and build on the supervisee's strengths. Another key function of supervision is to provide the less experienced therapist with an opportunity to share reactions to patients and the process of the therapy. Role playing can be effective in illustrating specific therapy skills. Videotapes can have the advantage of capturing particular themes or learning points that can be discussed in relation to specific theoretical principles. Supervision should pinpoint problem areas, identify the specific skills needed to advance competency, and provide a clear roadmap for continued training.

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