Psychotherapy-Lite: Obesity and the Role of the Mental Health Practitioner

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Obesity is a chronic medical disorder that is the result of a complex interaction of genetic, environmental, neuro-endocrinological, psychosocial, and behavioral factors. There are treatment algorithms, depending on the severity of obesity, and a multi-component approach, including attention to psychological issues, is recommended regardless of the level of obesity. Cognitive-behavioral therapy is beneficial in assisting with stimulus control, self-monitoring of lifestyle changes, goal-setting, and restructuring negative and self-defeating thoughts, and psychodynamic (insight-oriented) psychotherapy is useful in assisting with conflicts regarding excessive weight, body image, relationship to food and disordered patterns of eating, and dealing with the prejudice and overt discrimination obese patients may experience. Neither therapy is particularly effective alone and either and/or both may need to be continued indefinitely to avoid inevitable weight regain. Psychological intervention before and during the difficult process of dieting, as well as before and after bariatric surgery, is essential for some vulnerable patients. Since psychological factors are neither primarily etiological nor even necessarily predominant in obesity, the mental health professional plays an important, though adjunctive role—"psychotherapy-lite" role—in treating obese patients.

INTRODUCTION: DEFINITIONS OF OBESITY

There are various, and even divergent, frameworks for studying obesity. Some people, quite simplistically and incorrectly, continue to view "obesity as a drama of temptation versus discipline" (Hirsch, 2003, p. 1). Others, such as those in the National Association for the Advancement of Fat Acceptance (NAAFA), claim that obesity is merely an example of body diversity, analogous to racial or sexual diversity, which should be celebrated rather than pathologized. (Saguy & Riley, 2005) Still others focus on the huge contribution of our environment so that obesity is seen as

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"inadequate adaptation" to our sophisticated twenty-first-century world, which provides fewer opportunities for physical activity and enormous varieties of enticing food choices (Power & Schulkin, p. 11, 2009.)

Most researchers and clinicians in the field, however, believe that obesity is a chronic medical disorder that results from complex interactions of genetic, environmental, neuro-endocrinological, psychosocial, and behavioral factors. (Levin, 2004). Even early on, obesity was not seen as a "single disease with a single etiology" (Stunkard, 1959, p. 293), but rather "the end stage of a variety of different conditions with different etiologies" (p. 294). Most who study obesity also assert that the overwhelming majority of obese people will develop serious physical and psychological morbidity, including metabolic disorders such as diabetes, dyslipidemias, and hypertension, cardiovascular disease, certain cancers, sleep apnea, osteoarthritis, gall bladder disease, and even psychiatric symptoms, such as depression and anxiety. (see Karasu & Karasu, 2010, pp. 30-39). Kreier (2010, p. 214) has called obesity "the most urgent unsolved medical problem, with the threat of a decreased life expectancy rate for the first time in medical history." The more severe the obesity, the more likely there will be morbidity and mortality.

Simply defined, obesity is an accumulation of excess adipose (fat) tissue due either to increased consumption and/or decreased expenditure of energy. In other words, it is an energy imbalance that is a function of the First Law of Thermodynamics: when we take in more calories (i.e., food) than we use, those extra calories are converted to fat. (Bray, 2004) Obesity is defined somewhat arbitrarily as a "threshold" (Friedman, 2003, p. 856) based on body mass index (BMI), i.e., our weight in kilograms divided by our height in meters squared. With the classifications now in standard practice, clinicians and researchers define obesity as a BMI of 30 kg/m^2 or greater (with further Class I, II, III, and IV subdivisions as BMI increases) and those who are overweight as a BMI of 25 kg/m² to 29.9 kg/m². (World Health Organization, 2012) In the future, however, it is possible that body mass index, which is an imperfect measure of fat, will not be the standard measure. Recently, Shah and Braverman (2012) proposed using blood levels of the fat hormone leptin and dual-energy X-ray absorptiometry (DXA) scans (the same scans used to measure and assess bone density) to obtain a more accurate assessment of adipose tissue.

OUR COMPLEX PSYCHOLOGICAL RELATIONSHIP TO FOOD

Unlike alcohol or illicit drugs, where total abstinence is possible, we can obviously never exist without food. As a result, any behavior process

involving food must involve modification or addition, i.e., "reshaping rather than abstaining" and not total elimination of the desire for food (Armstrong et al., 2011, p. 709). Further, we have such complex feelings about food: we use food as reward, punishment, and even guilt. (Wansink, 2006, p. 176) We make value judgments about food—we label foods as "good" and "bad." King and her colleagues (1987) found, for example, that both dieters (i.e. "restrained eaters") and non-dieters felt guilty about eating certain foods (p. 151). Dieters labeled both sweet and salty foods as guilt-producing whereas non-dieters felt guilt only about eating sweet foods (p. 155). Dieters felt guilty because they were breaking regimen with these highly caloric foods, whereas non-dieters felt guilty because those sweet foods were not nutritious.

Since almost every social situation in most societies seems to involve or even revolve around food intake, food is a "very social entity" and "a form of social exchange." (Rozin, 1996, p. 244) People tend to value and enjoy food more when it is prepared by those we value and reject food prepared by those we consider "unsavory" (Rozin, 1996, p. 245). It is also not uncommon for people to develop disordered (i.e., dysfunctional) patterns of eating. While not eating disorders specifically, these patterns may involve "food misuse," (Yilmaz, Povey, & Dalgliesh, 2011, p. 43) such as emotional eating, skipping meals, eating irregularly, bingeing, etc. It is in that complex behavioral context that we must view obesity.

THE ROLE OF THE MENTAL HEALTH PROFESSIONAL

Writer Gary Taubes takes the somewhat controversial position that obesity does not involve either an eating or behavioral disorder. Says Taubes (2007, p. 311), "Imagine if diabetologists had perceived ravenous hunger that accompanies uncontrolled diabetes as a behavior disorder, to be treated by years of psychotherapy or behavioral modification rather than injections of insulin?" Hirsch (2003, p. 7) makes the point that eating behavior, "usually ascribed to subtle psychological mechanisms is profoundly affected" not by "our own 'bad' behaviors" but rather by an internal and "impersonal" biologic system that regulates fat storage. Hirsch (2003, p. 4) found "no specific constellation of behavioral abnormalities or psychological aberrations" in his obese patients and "... nothing convincingly implicated any psychiatric or psychological disturbance as the cause of their obesity" (p. 4). Ironically, Hirsch compared the dietary regimens to which obese patients have been subjected as "the modern-day equivalent of beating the insane to keep them quiet" (1978, p. 2).

What exactly, then, is the role of the mental health practitioner in the

evaluation and treatment of obesity, especially since obesity is predominantly a medical disorder where behavior is only one element of a complex multi-factorial interaction? Does the mental health professional even have a role, particularly since the Task Force for the upcoming DSM-V (Diagnostic and Statistical Manual V) has chosen not to include obesity as a psychiatric disorder (Gever, 2010; Devlin, 2007)?

The relevance of psychological issues for obese patients, though, has been known for many years. For example, many patients, despite wanting to lose weight and having considerable information about calories, nutrition, and exercise, still fail to follow what they know. The treatment of obesity has been called "a notoriously frustrating business" and its "successful management . . . demands awareness of the psychological situation" for this very reason (Keys, 1965, p. 1329).

Though psychological issues are not, for the most part, etiological or even necessarily apparent, the mental health professional can serve many different, important functions in both the evaluation and treatment of obese patients. Short-term weight loss and particularly long-term weight maintenance remain very difficult for most people. Over time not only are there biological adaptations (e.g., "adaptive thermogenesis") that may lead to weight regain, (Ebberling et al., 2012) but there also are many psychological dimensions involved (Karasu, 2012), for example, when people lose their motivation to comply with permanent lifestyle changes or fail to have a sense of self-efficacy, i.e., "low perceptions of personal control over their obesity" (Sniehotta et al., 2011, p. 9). Furthermore, overweight and obesity have been associated with lowered self-esteem, which is often related to the prejudice and overt discrimination that obese people experience in our thin-obsessed culture, (Stunkard, LaFleur, & Wadden, 1998; Pull & Brownell, 2001) disturbances in body image, lower quality of life, and overt psychiatric disorders, such as mood and anxiety disorders (Loveman, et al., 2011). A systematic review of 61 studies among overweight and obese patients in weight loss studies found that psychological and behavioral factors (e.g. poorer body image and body dissatisfaction, poorer mental health, lower levels of self-efficacy, higher weight loss expectations, as well as less exercise and more previous attempts at weight loss) were more predictive of attrition rates than the background characteristics of the patients (Moroshko, Brennan, & O'Brien, 2011).

EARLY RESEARCHERS

Clinicians face extraordinary impediments when treating obesity, particularly because of the high recidivism rate. Psychiatrist Albert Stunkard

(1958) emphasized that those who treat obese individuals often do better when not focusing on the patient's obesity specifically and more on the patient him- or herself. Despite that focus, he prophetically summarized results of treatment: "Most obese persons will not stay in treatment for obesity. Of those who stay in treatment, most will not lose weight, and of those who do lose weight, most will regain it" (Stunkard, 1958, p. 79).

Hilde Bruch was one of the first psychotherapists to explore issues of eating with her patients back in the 1950s and 1960s (Bruch, 1969). She focused on the concept of hunger—both its psychological and symbolic, as well as physiological, connotations—and believed that an awareness of hunger is not inborn but develops over time in the context of the infant's experience with its parents. For Bruch, hunger not only represented an unpleasant sensation when someone has not eaten, but also represented symbolically emotional tension and a general state of need (Bruch, 1969).

Both Bruch (1952) and Stunkard (1957) reported on unexpected and adverse reactions, including delusional psychotic states about weight that occurred to some patients during the process of dieting. Bruch does not specify what she meant by "psychotherapy" and in the same reference also uses the word "psychoanalysis" (p. 338) and although she presents three case vignettes, she gives few details of the actual therapy itself. Those of Bruch's patients with emotional issues had not been able to maintain their weight losses until they could recognize and deal with these issues. Ultimately, "Success or failure in reducing depends, among other factors, on the meaning of weight reduction to the patient" (Bruch, 1952, p. 346).

Stunkard (1957) found "nervousness, weakness, irritability, nausea, and fatigue," (p. 78) in more than half of his sample of 100 dieters during their attempts at dieting. He called this the "dieting depression," as manifested initially by intense anxiety and a more prolonged depression. In some of his patients, he also saw an initial phase of elation and excitement about starting the dieting. Ironically, the dieting depression seemed to be more common in patients whose physicians focused on emotional issues than in those whose physicians prescribed "weight reduction programs mechanically and with little prospect of serious cooperation by the patient" (Stunkard, 1957, p. 85). Obesity treatment was described as a "terribly difficult business" and when weight reduction did fail, physicians tended either to dismiss their patients or call them "gluttonous" (Stunkard & McLaren-Hume, 1959, p. 84). "Rarely have physicians so readily surrendered a part of their domain to moralizing, indifference, and despair" (Stunkard & McLaren-Hume, p. 84). Significantly, these authors raised the question whether "the failure to follow a regimen might in itself be a

medical problem," (p. 84) rather than a psychiatric problem, or, as more recently stated, the "obese eat too much and exercise too little" but the "deeper question" is why (Friedman, 2009, p. 977S).

Revisiting "the dieting depression" more than 20 years later, Stunkard and Rush (1974) explored the reasons for inconsistencies in the literature regarding emotional distress caused by the dieting process. They found that contradictions were related to different patient populations, length of time of the obesity (i.e., whether from childhood or of more recent onset), reason for the obesity (i.e., whether related to pregnancy or other causes), treatment modality (i.e., whether inpatient or outpatient), program protocol (i.e., whether fasting involved or low-calorie diet), and whether there was a history of emotional problems or not prior to dieting (p. 526). This though, was "a gloomy tale" (p. 531) since untoward effects are not uncommon during dieting and they even suggest that high drop-out rates during weight loss maybe related to emotional reactions whereby dropping out is seen as a kind of "safety-valve" for those obese individuals who are "biologically vulnerable" (p. 531). Though the authors call attention to psychological distress in their patients, they did not specify or recommend types of psychotherapeutic treatment.

Lowe and Timko (2004, p. S19, S21) more recently (and as pessimistically) emphasize that dieting has many different implications but can refer to "a variety of behavioral patterns," some of which can be harmful or ineffective. Their conclusion, though, is that long-term dieting for those who are overweight "is neither beneficial nor harmful, but rather simply ineffective" (p. S20), particularly as a "means of counteracting biological and environmental influences" (p. S21); further, even the "beneficial" effects that weight loss may have on self-esteem and body image do not last when a person regains the lost weight.

Earlier attempts at caring for obese individuals involved inpatient treatment and even psychoanalysis (Rowland, 1968; Rand & Stunkard, 1983). Inpatient treatment was considered of questionable use considering the enormous psychological stress these patients experienced (Rowland, 1968, p. 547). With four-year follow-up, although obese patients were able to lose weight and maintain that loss and even a better body image, Rand and Stunkard (1983) concluded, "even an uncontrolled study makes it clear that psychoanalysis is an expensive way to lose weight" (p. 1143).

TREATMENT ALGORITHMS

Obesity treatment consists of a "combination of treatments, rather than a contest between treatments" (Brownell, 1982, p. 835). "If 'cure' from

obesity is defined as a reduction to ideal weight and maintenance of that weight for 5 years, a person is more likely to recover from most forms of cancer than from obesity" (Brownell, 1982, p. 820). The only inevitable solution is to *avoid* getting obese, as an American Medical Association Council on Scientific Affairs (1988) stated emphatically, "Prevention is the treatment of choice" (p. 2548).

Obesity treatments have tended to fail because rather than focusing on the three components of weight control—the complex hormones, i.e. *hypothalamic*; the cognitive-behavioral, i.e., *cortical*; and the limbic, i.e., *emotional*—they usually focus on one component (Kreier, 2010, p. 216).

An Expert Panel-convened by the National Heart, Lung & Blood Institute's Obesity Education Initiative and in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases (Clinical Guidelines, 1998, p. 899)-produced an Executive Summary of clinical guidelines for obesity, including both assessment and treatment management (Clinical Guidelines, 1998, p. 901). As part of the assessment, the Panel recommended that patients be evaluated for motivation before entering a weight-loss treatment program. Factors assessed included reasons for wanting to lose weight, previous history of all weight loss attempts (both successful and unsuccessful), support systems, patient understanding of obesity's relationship to other diseases, attitude about and willingness to engage in physical activity, time commitment, and financial issues (p. 903; Wadden & Phelan, 2002, pp. 194-200). Further, the Panel recommended that both the patient and physician must be involved in the decision-making process (p. 905) and that weight loss therapy consist of three components: diet, physical activity, and behavioral therapy (p. 905). The Panel, though, found that patients tended to regain weight over time to baseline levels if behavioral treatment, diet, and physical activity did not continue indefinitely (p. 911). Those who treat the obese, though, typically follow an algorithm based on categories of Body Mass Index (BMI) to determine the most efficacious treatment strategy, including both medical and behavioral components.

Wadden., Brownell, & Foster (2002), acknowledging that obesity for the majority of people, is a "chronic disorder requiring long-term care," (2002, p. 516) and "a problem out of control" (p. 520), have devised a "Classification Decision" process: These authors recommend that those who are overweight and have a BMI less than 27 kg/m² (level 1) should be treated by "self-directed" diet and exercise, as well as "physician counseling" while those overweight with a BMI of 27 to 29 kg/m² should enter a self-help, commercial, or behavioral program. Those who are in the obese

range, with a BMI from 30 to 39 kg/m2 (Level 3) are encouraged to follow a portion-controlled, low calorie diet (900 to 1200 Calories daily) and use adjunctive long-term pharmacotherapy. When a person's BMI is greater or equal to 40 kg/m², (or even when BMI is 35 kg/m² or greater if there are serious medical complications, such as cardiovascular disease or diabetes), these authors recommend bariatric surgery in combination with lifestyle modification, such as diet and exercise. Further, they recommend (p. 514) that "psychological counseling," as well as nutritional guidance, be part of a treatment plan "for patients who report marked problems with meal planning, depression, body image" etc. (Wadden et al., 2002, p. 514) The actual nature of this counseling is not delineated in detail though the authors recommend initial psychological screening of patients to rule out binge eating (which may occur in up to 30% of patients seeking treatment for weight loss). They remind that treatment for all levels of obesity involves setting realistic goals so that patients aim for "healthier" weights rather than "ideal" weights (Wadden et al., 2002, p. 515).

TREATMENT OPTIONS: A LITERATURE REVIEW

There have been numerous published reports that have included psychotherapeutic modalities for weight control. Studies, though, are often so different methodologically that multiple studies can be compared only by a narrative review rather than a meta-analysis. Furthermore, research studies of psychotherapeutic interventions for obese patients have been beset with multitudes of problems, including defining the actual nature of any behavioral intervention (e.g. lifestyle modification "counseling" vs. actual cognitive-behavioral psychotherapy) and delineating who conducts the therapy (e.g., psychologist, psychiatrist, social worker, nutritionist, etc.) In other words, there is a lack of standardized definitions and vocabulary (Abraham & Michie, 2008, p. 379). For example, treatment descriptions may focus on the type of person conducting the intervention (i.e., his or her training or credentials) or the intervention itself, such as "classes," "discussion groups," "counseling sessions," that may "mask procedurally and theoretically distinct designs" (p. 380) and hence, not reveal exactly what may be the most effective "intervention component" (p. 385). Significantly, behavior therapy was "very poorly defined" and offered only a "vague understanding of the content of the behavioral therapy" (Södlerlund, Fischer, & Johansson, 2009, p. 158) in a systematic review of treatments that included physical activity, diet, and behavioral modification in overweight and obese adults from 1995 to 2006.

Further, over time attrition rates are often quite high, and there is no

clear sense of the difference between weight loss and maintenance of that loss, i.e., follow-up is not long enough to be sure weight regain does not occur (Cooper, Fairburn, & Hawker, 2004, p. 13). It is crucial to distinguish weight loss from weight maintenance by three major factors: weight maintenance is less reinforcing, often because others provide less encouragement; weight maintenance is long-term rather than time-limited; and the obese may need to accept a body weight and shape far less desirable than they originally had hoped (p. 13).

Nevertheless, in recent years, psychotherapeutic interventions most *commonly* have included individual psychodynamic (insight-oriented) psychotherapy, interpersonal psychotherapy, and individual or group-based cognitive-behavioral psychotherapy. Writing a comprehensive overview of obesity, "What Mental Health Professionals Need to Know," in the American Journal of Psychiatry, Devlin, Yanovski, & Wilson, (2000, p. 861) say, "Psychotherapy should not be considered a primary treatment for obesity. However, this does not mean that psychotherapy has no role." The researchers acknowledge that both cognitive behavioral and interpersonal therapy are helpful in "normalizing" eating patterns and "reducing distress," (p. 861) particularly in those with binge eating disorder, though neither treatment was found to lead to significant weight loss. Rather, psychotherapy has a role in enhancing patients' self-esteem, dealing with body image, developing increased motivation to maintain healthier habits, and dealing with the prejudice and discrimination ("weightism" p. 861) to which the obese are exposed.

: Phelan and Wadden (2002) studied the use of medications combined with lifestyle modification given in an intensive group program. In this study, both sibutramine and orlistat were used. This combined intervention seemed to provide "additive effects" (p. 560): the behavioral approach helps patients control the "external food-related environment" whereas medication is used to control the "internal environment" (p. 560), that is "the biological variables," for example hunger, cravings, etc. (p. 566). Some clinicians, though, believe that the use of medication may undermine patients' sense of self-efficacy (p. 569). Although most of the medications (including sibutramine) that have been used for weight loss and weight control have been taken off the U.S. market because of serious health risks, it is likely that pharmacotherapy in the context of some form of behavioral treatment will play a much greater role in the future as new medications become available. Most recently (DeNoon 2012), the U.S. Food and Drug Administration has approved two new medications for weight control: Belvig (lorcaserin) and Osymia (combining phenteramine and topiramate).

Both inpatient psychodynamic (insight-oriented) and behavioral (symptom-oriented) approaches were found to be equally effective (the "most striking finding" p. 598) in a German study of weight loss in 98 (mostly women) obese patients who were on an inpatient unit for 6 weeks. (Beutel, Thiede, Wiltink, & Sobez, 2001) This same group (Wiltink and colleagues 2007) examined weight loss maintenance in almost 400 (85% female) obese patients, all of whom had at least one psychiatric diagnosis (most commonly affective illness or binge eating disorder) after either inpatient (average seven weeks) psychodynamic (conflict-based) psychotherapy or behavioral (focusing on increasing problem-solving, improving perceptions about their bodies, and encouraging eating related to hunger and satiety, etc) psychotherapy. Average weight loss at follow-up three years after the inpatient experience was about three kilograms or 2% of initial body weight, far below what is considered successful. Only about a third of patients were able to maintain or improve upon the amount of weight they had lost after the inpatient psychotherapy experience, though more patients had improved body image and less distress.

Shaw, O'Rourke, Del Mar, & Kenardy, (2005) conducted a literature search through 2003 and found 36 studies (with almost 3500 patients involved, with all but one study, involving outpatient community studies) that met their inclusion criteria. They found that most studies focused on behavioral and cognitive behavioral strategies for weight control, rather than other forms of psychotherapy. Though the studies were heterogeneous (e.g. variation in frequency and duration of patient contact), most used behavioral therapy in the context of providing interventions for diet and exercise. Though cognitive therapy was not found to be effective as a treatment for weight loss itself, both behavioral approaches and cognitivebehavioral therapy were found to be useful in the context of providing strategies for diet and exercise. The conclusion was that "psychological interventions ideally should be used in the context of a multi-component weight loss programme to gain their maximal benefit." There were too few and "less rigorously evaluated" (p. 2) studies on other forms of psychotherapy. The authors, though, cautioned that most studies they evaluated had "methodological shortcomings" (p. 14) and there were few long-term studies to assess whether any weight loss was not followed by regain, as is typical. As a result, "the true effect" of psychological interventions on both weight and even mortality is, hence, "difficult to determine." (p. 15) In a systematic review (10 studies) of obesity treatment within a primary care setting, Tsai and Wadden (2009) found physician counseling in a low- (less than one visit per month) to-moderate intensity (at least one counseling

session per month), by itself failed to produce "clinically meaningful" loss of weight (p. 1077) and recommended "collaborative interventions" with other professionals as part of a team (p. 1078). From their review, they also concluded that high-intensity "behavioral counseling" (i.e. at least two visits per month) might be "prohibitive" for most primary care practitioners in terms of time and expense, but further research was warranted to assess its efficacy (p. 1077.)

Behavioral weight loss intervention (e.g. advice on diet, exercise, etc.) can be administered by many different professionals with various kinds of expertise, but cognitive behavioral therapy usually requires specialized training (Lo Presti, Lai, Hildebrandt, & Loeb, 2010, p. 475). These authors acknowledge, though, that people can lose weight successfully without any professional intervention so the "key component may lie within the individual" rather than anyone specific (p. 475).

Studies by Murawski et al. (2009), Garaulet & de Heredia (2009), Paul-Ebhohimhen and Avenell (2009), Turk, Yang, Hravnak, Sereika, Ewing, & Burke (2009), Palmeira et al. (2010), Cooper et al. (2010), and Butryn, Webb & Wadden (2011) have focused on evaluation of a cognitive behavioral model for obesity. Murawski et al. (2009) emphasized the importance of knowledge about health and a belief in self-efficacy. Garaulet and de Heredia (2009) found that weight control is not about willpower, but about "development of skills" that enables patients to "normalize their relationship with food" (p. 630), as well as about setting appropriate, realistic, and measurable goals. Paul-Ebhohimhen and Avenell (2009) conducted a systematic review comparing group therapy with individual treatment in five studies (4 of them involving women) involving 336 obese participants. They found that group-based therapy conducted by psychologists, was shown to be more effective, as evidenced by greater weight loss at 12 months. Noteworthy, the largest attrition rates (64%) were seen in those groups conducted by dieticians rather than those conducted by psychologists (from over 3% to 18%) (Paul-Ebhohimhen & Avenell, 2009, p. 23)

Turk et al. (2009) reviewed the findings of 42 randomized clinical trials (and of those, 10 of these used "some form" of behavior therapy (p. 6) that focused on the difficult problem of weight loss maintenance. The results were dismal: after six months (during which the greatest amount of weight is lost), most slowly regained their lost weight, and by four years of follow-up, patients had maintained an average loss of only about four pounds (Turk et al. 2009). What seems most important for maintenance in this phase is continued patient contact with therapists, particularly with

people the patient had known during the weight loss part of the treatment (Turk et al., 2009).

Palmeira and colleagues (2010) studied 142 overweight or obese women who were given four months of behavioral modification and educational information on diet and exercise in weekly group meetings. These patients were followed for 12 months more. Their drop-out rate by the 16 months, though, was 33%. In general, psychosocial variables improved more than were weight loss goals achieved. Their conclusion was that programs should not only focus on weight loss but also on improving psychological well-being (p. 192). The authors acknowledge that causality between changes in psychological variables and weight loss was not easy to prove and was clearly "intertwined." (p. 192)

Cooper et al. (2010) conducted a randomized controlled study of 150 obese women (with three years of follow-up), comparing cognitive behavioral treatment for obesity (focusing on acceptance of more realistic changes in weight and appearance and weight maintenance) with behavioral therapy (focusing on changing eating and exercising patterns) and "guided self-help" (based on the LEARN program–Lifestyle, Exercise, Attitudes, Relationships, and Nutrition, p. 712). Although most individuals were able to lose weight, most regained it over time, and cognitive behavioral therapy fared no better than behavioral therapy at maintaining weight loss over time. The researchers concluded that "sustained behavioral change in people with obesity is remarkably difficult to achieve" and they believe that "this is a sufficiently robust finding to make it ethically questionable to claim that psychological treatments for obesity 'work'" (Cooper et al., 2010, p. 712).

Butryn et al. (2011) noted that even those who initially succeed at weight loss with behavioral treatment (e.g. goal-setting, self monitoring, and stimulus control) "are likely to find their efforts are eventually challenged by profound environmental influences" (p. 844). For that reason, they recommend that some obese patients may need some form of professional support "indefinitely" (p. 846) to avoid weight regain. In general, though, when behavioral therapy is effective, it can lead to about a 10% weight loss (Butryn et al., 2011, p. 854).

Rather than using a cognitive behavioral model as a therapeutic modality, Armstrong et al. (2011) used motivational interviewing, which came from addiction treatment and is "a directive, patient-centered counseling approach focused on exploring and resolving ambivalence" (p. 709). They differentiate between the notion of targeting behaviors (e.g. diet, exercise) and targeting outcomes (in this case, weight loss); they stress the impor-

tance of "prioritizing the greatest patient need" so that patients do not become "saturated" (p. 709) when too many behaviors are treated simultaneously.

Loveman et al. (2011) conducted a systematic, narrative review of 12 randomized control studies to determine the long-term (at least 18 months' duration) clinical and cost effectiveness of multi-component weight control programs. They surveyed previously published reviews from 1997 through 2009 and found none of these "precisely matched the multicomponent approach they were evaluating (p. 9). Meta-analysis could not be performed because the studies were too heterogeneous. The studies included had the typical problems: definitions of behavioral techniques were not always standardized, participants could receive ongoing support by personal individual contact, group meetings, telephone calls, or even the internet, and behavioral therapy was conducted by a range of therapists, including dietitians, "weight loss advisors," psychologists, exercise physiologists, and behavioral psychologists. (Loveman et al., 2011, p. 26). Their conclusions were hardly sanguine: this multi-component approach does promote weight loss in overweight and obese adults, but the actual weight changes were small and patients did tend to regain weight over time. Further, the authors also stated that it was "not clear what degree of weight loss is deemed to be clinically meaningful" (see Executive Summary, p. xi). The authors delineated interventions typical of a behavior therapy approach:self-monitoring of behavior and progress (e.g. observing and recording behavior), stimulus control (e.g., avoiding certain restaurants where overeating might take place, keeping certain foods out of sight), goal-setting (daily or weekly), slowing rate of eating, ensuring social support, problem solving, assertiveness, cognitive restructuring (e.g. modifving thoughts by reframing; replacing negative, self-defeating thoughts with positive ones), reinforcement of changes, relapse prevention (e.g., identifying lapses and how to deal with them) and strategies for dealing with weight regain (Loveman et al., 2011, p. 6; pp. 11-12).

BARIATRIC SURGERY AND THE ROLE OF THE MENTAL HEALTH PROFESSIONAL

As noted, the actual amount of weight that can be lost with lifestyle interventions, medications, or even cognitive behavioral therapy remains so minimal that bariatric surgery, (e.g., gastric bypass, the so-called Roux-en-Y, or some form of gastric banding) has become ever more popular as the prevalence of morbid obesity has increased in recent years and people need to lose greater than 5% or even 10% of their body

weight. The many procedures available can involve or result in malabsorption due to the anatomical rearrangement and shortening of the intestine and/or due to decreased stomach capacity (see Karasu & Karasu, 2010, pp. 445-455 for a review). Whatever the procedure chosen, bariatric surgery involves a major commitment on the part of the patient since there is potential morbidity and possible mortality, not only during surgery but after as well. Patients must have motivation to follow instructions, including a willingness to change their eating habits. To avoid serious complications after surgery, patients are required to maintain a healthy lifestyle, including exercising, watching their diet carefully, eating frequent meals with much smaller portions, taking vitamins and minerals because of deficiencies secondary to the surgery, avoiding foods with high sugar content to avoid so-called "dumping syndrome" (characterized by lightheadedness, flushing, nausea, sweating, abdominal pain and diarrhea), and accepting "long-term medical surveillance" (Marcus, Kalarchian, & Courcoulas, 2009, p. 287). Patients must appreciate what is involved and have realistic expectations. Furthermore, in about 20% of patients, there will be substantial weight regain after surgery. Nevertheless, when no other treatment modality has been effective, the surgery is sometimes the only option for the morbidly obese or those with substantial medical complications due to their obesity. Sometimes within days of surgery, even before weight loss, patients have improvement in their metabolic profiles (e.g. improved glucose control for those with type ii diabetes). Patients may also have substantial psychosocial benefits from their subsequent weight loss, including increased self-esteem and improved body image.

Herpetz, Kielmann, Wolf, Hebebrand, & Senf (2004), in a systematic review of surgical intervention for severe (Level III or higher) obesity, acknowledge that while loss of excessive weight is not the only goal of bariatric surgery, it is certainly "one of the most important outcome variables" (p. 1555, 2004). Moldovan and David (2011, p. 161), in a systematic review of 141 obesity treatments compared psychosocial (11 studies that met inclusion criteria) with surgical interventions (seven studies that met inclusion criteria) and found results of surgical interventions "clearly point to a superior efficiency" for obesity (p. 166). Further, they found what they called a "quite dazzling conclusion," namely that *even* patterns of dysfunctional eating (e.g. emotional eating, binge eating, inadequate dietary restraint, skipping meals, etc.) were better treated (particularly when looking at long-term follow-up of several years) with surgical intervention rather than a psychosocial one. (p. 165). Since not all patients who undergo one of the many bariatric surgical procedures

available do well, clinicians have been well advised to appreciate the importance of selecting patients most suitable and able to benefit. Marcus et al. (2009) believe there are "compelling reasons for a comprehensive pre-surgical, including psychological, evaluation," to clarify a patient's expectations (p. 286).

Pull (2010) and Fabricatore, Crerand, Wadden, Sarwer, & Krasucki, (2006) reviewed psychological assessment practices conducted for bariatric surgical patients: among programs there were no uniform guidelines or screening techniques for these patients, despite the fact that most surgical departments recognize the potential important contribution psychological screening might have. Most, though, include a psychiatric evaluation usually involving a semi-structured interview, mental status exam, and questionnaires, such as the Beck Depression Inventory, though some programs have used the Minnesota Multiphase Personality Inventory (MMPI). In general, the main functions of a psychological assessment prior to surgery are to screen patients for severe psychopathology that might interfere with their ability to comply with the demands involved post surgery and to predict which patients might do better than others in terms of maintaining weight loss and improved psychosocial functioning. Ashton, Favretti, & Segato, (2008) caution that the literature fails to justify *why* preoperative psychological screening is "unambiguously supported" (p. 1334) and remain "an unthinking, unquestioned dogma" (p. 1334). There are very few contraindications except for those patients who are psychotic or severely mentally retarded. Black, Goldstein, & Mason. (2003) believe "... exclusion of otherwise suitable candidates for bariatric surgery on the basis of psychiatric disorder may be inappropriate.... If subjects were excluded because of a history of psychiatric illness, few patients would be eligible for surgery" (p. 750). In general, morbidly obese candidates who present for bariatric surgery do suffer from increased rates of psychiatric symptoms, including mood and anxiety disorders and disordered eating, such as binge eating. The severity of the symptoms rather than the symptoms themselves seems to be more important. Further, Pull (2010) and Ashton et al. (2008) found that psychopathology (including personality disorders) seen in the prescreening assessments did not necessarily have predictive value in terms of post-surgical weight loss or psychosocial functioning. Ashton et al. (2008) noted that these presurgical psychological screenings led to deferral of surgery in a significant number of patients, who were less likely to return for the procedure (p. 1331) and that the screenings were another form of prejudice against the obese (p. 1337). These researchers emphasized that because obesity

"does not have a primarily psychological pathogenesis," it is no wonder that psychological issues have such poor predictive value (p. 1334), and they even recommend (in contrast to Marcus et al., 2009) that the practice of pre-surgical screening cease. (p. 1335.)

Kinzl et al. (2002) report that psychological support is often necessary after bariatric surgery, particularly in helping patients to deal with the new eating patterns (and adherence to diet required), changes in self-esteem, and the risk of developing clinically significant disordered eating as a result of surgery. Marcus et al. (2009) reported that binge eating, with a subjective sense of a loss of control, has been seen in up to 49% of patients after bariatric surgery, though the figures vary considerably. Anxiety, depression, and substance abuse may occur in the postsurgical period. (Marcus et al., 2009, p. 288)

Furthermore, Hamad et al. (2012) report on lower plasma levels (i.e., reduced drug bioavailability) of selective serotonin reuptake inhibitors (SSRI) and serotonin-neurepinephrine reuptake inhibitors (SNRI) after bariatric surgery. Patients treated successfully prior to surgery for depression and anxiety had relapses after their Roux-en-Y procedures. Because these patients are at "substantial risk" for reduced blood plasma levels of SSRIs and SNRIs, the researchers recommend collaboration between the surgical and psychiatric treatment teams, establishment of the "most efficacious" dosage of medication prior to surgery, patient education for possible worsening of their psychiatric symptoms after their surgical procedure, and consideration a different medicine formulation (e.g. liquid form) that might have better absorption (Hamad et al., 2012, p. 261).

CONCLUSIONS

Because overweight and obesity result from a complex interaction of genetic, environmental, psychosocial, neuro-endocrinological, and behavioral factors, those who treat these patients have emphasized the importance of a multi-component weight management program, including a psychological component, regardless of the level of obesity. Weight loss, but particularly long-term weight control, requires constant behavioral vigilance to counteract significant adverse biological changes that may lead to subsequent (and often inevitable) weight regain. Further, there are also psychological impediments, such as the waning of motivation over longterm. Although psychotherapeutic interventions alone are not particularly effective in weight control itself and though obesity is not primarily a behavioral or psychological disorder, a mental health professional may have many significant, though adjunctive psychotherapeutic (*psychothera*-

py-lite) roles for obese patients, other than when dealing with overt psychiatric symptoms, such as major mood or eating disorders. These adjunctive roles include:

- 1. psychological evaluation of patients who want to begin a diet, especially when major weight loss is anticipated, including evaluation of patterns of disordered eating, evaluation of body dysmorphic states, and other psychiatric symptoms such as depression and anxiety, as well as assessing how realistic are weight loss (i.e., treatment) goals;
- 2. evaluation of/intervention for psychological symptoms that may occur during the dieting process, such as depression, anxiety, or even psychotic symptoms;
- 3. psychological evaluation (screening) of and possible intervention for severely obese patients before and after bariatric surgery;
- 4. assistance with cognitive behavioral techniques, including stimulus control, self-monitoring of lifestyle changes, goal-setting, and restructuring of negative and self-defeating thoughts, for weight loss and even more importantly, for long-term maintenance;
- 5. individual psychodynamic (insight-oriented) psychotherapy to explore conflicts regarding eating (including disordered eating patterns, such as skipping meals, bingeing, emotional eating (i.e. so-called "food misuse"), excessive weight, and the meaning of weight loss, as well as conflicts related to prejudice and overt discrimination experienced by the obese.

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