

# The Behavioral Psychotherapy of Anorexia Nervosa



**Michel Hersen, Ph.D.**  
**Thomas Detre, M.D.**

**The Behavioral Psychotherapy of  
Anorexia Nervosa**

**Michel Hersen, Ph.D.  
Thomas Detre, M.D.**

e-Book 2018 International Psychotherapy Institute

From *Specialized Techniques in Individual Psychotherapy* edited by Toksoz B. Karasu and Leopold Bellak

All Rights Reserved

Created in the United States of America

Copyright © 1980 by Toksoz B. Karasu and Leopold Bellak

## Table of Contents

[Preamble](#)

[General Psychotherapeutic Considerations](#)

[Weight Loss](#)

[Attitudes Toward Food and Weight](#)

[Bulimia](#)

[Family Therapy](#)

[Long-Term Maintenance](#)

[Conclusion](#)

[REFERENCES](#)

# The Behavioral Psychotherapy of Anorexia Nervosa

## Preamble

The label of anorexia nervosa is misleading on two accounts: 1) *anorexia*—far from being anorectic, these patients are starved and periodically engorge themselves; 2) *nervosa*—this implies that the ailment is psychological in origin, but apart from change in dietary habits consistent with the patient's belief system that she is too fat, the majority of the cases exhibit no changes in mood or cognition typically found in psychiatric disorders. The situation is not unlike the one found in transsexuals, who are convinced that their "soul" has been mistakenly placed in a body shell displaying sexual characteristics that are inconsistent with their internal convictions about their sexual assignment. Both have, as has been pointed out, an obsessoid personality structure.

Although the biological symptoms and signs thus far reported in anorexia nervosa also are scarce, inconsistent, and mostly secondary to weight loss, it is by now generally recognized that a significant percentage of patients becomes amenorrheic before developing symptoms of anorexia. Minimally, this finding should suggest that at least one subgroup of patients suffers from some sort of disorder involving neuroendocrine regulation.

Irrespective of the etiology, all evidence points to the effectiveness of psychological rather than biological treatment, though the latter has been used as co-adjuvant in the management of patients. It also is reasonably clear, but by no means surprising, that the success or failure of treatment depends largely on the consistency of the family environment, given that the majority of patients are preadolescent or adolescent and thereby still dependent on the parents or

parent-substitutes when first brought to medical attention.

The major difficulties encountered in the management of anorexia nervosa, however, have less to do with the failure on the part of the parents to acknowledge their child's need for treatment than with the failure of mental health professionals to recognize a fatal error in their own reasoning: namely, that the success of psychological therapies per se does not prove that the disorder should be regarded as a psychiatric disorder. Yet, the view that anorexia nervosa is a "mental disorder" and the insistence that patient and family endorse and enthusiastically participate with the staff in a "fishing expedition" aimed to uncover some sort of psychological problem (or at least come to an agreement about one), even when the evidence is unconvincing, do turn family members off, and rightly so. The collaboration between treatment staff, the patient, and the family should be based on an honest understanding of what we know and do not know about this disorder. Accordingly, and given the considerable short- and long-term risks, it is perfectly appropriate to present the need for psychological management convincingly. On the other hand, the fact that psychological treatment seems effective is insufficient reason for persuading the patient and the family that the psychiatric disorder exists, or worse yet, that in some mysterious manner it has been produced by them. Indeed, statistically just the opposite is true. In those instances where symptoms and signs of an affective, obsessive, or schizophrenic disorder are observable, the chances are very high that patients suffer from a secondary rather than a primary or idiopathic type of anorexia nervosa.

### **General Psychotherapeutic Considerations**

When we speak of anorexia nervosa, the generic label not only is misleading, as already noted in our Preamble, but it subsumes a wide variety of specific signs and symptoms in any given individual so afflicted. Recent comprehensive reviews of the literature by Van Buskirk (1) and Bemis (2) clearly suggest, however, that individuals who eventually receive the diagnosis of

anorexia nervosa do not necessarily share *all* of the same signs and symptoms. For example, although many anorectics have lost at least 25% of their “normal” body weight, all do not typically induce vomiting as a means to maintain diminished weight. Some anorectics exhibit certain characterological difficulties such as a “passive-aggressive” life-style, but that does not hold true for many others who are quite obsessive in their orientation. While in some cases there may be an alternation of anorexia and periods of bulimia, in still others, particularly when the disorder remains untreated for many years, anorexia predominates, leading to a dramatic linear reduction in weight.

Given that specific symptomatology *does* vary considerably across patients labeled anorexia nervosa, there can be no uniform psychotherapeutic approach that will deal effectively, at one time, with all the manifestations of the disorder. Indeed, a very careful diagnostic appraisal of each aspect of the disorder is warranted. Then, for each aspect of the disorder so identified, the appropriate treatment strategy must be specifically tailored (3). In light of the specificity of treatment required and in consideration of the unique problems posed by each of the individual symptoms subsumed under anorexia nervosa, we submit that, for the most part, the behavior therapy approach should prove parsimonious and expedient (4, 5).

Although the behavioral approach for treating anorexia nervosa has received some sharp criticism by Bruch (6), as astutely pointed out by Wolpe (7), failures of behavioral treatment can easily be traced to an incomplete behavioral assessment and attention to only one facet of the disorder (e.g., attention to weight gain but no attempt to deal with the “weight” phobia leading to the original weight loss). Thus, in the succeeding sections, we will outline specific treatment strategies that may be applied to each of the identified facets of the disorder. Undoubtedly, future research should confirm that a multifaceted approach to treatment will prove superior to the more naive behavioral treatment approach that only deals with one facet (i.e., weight gain) or the nonspecific psychotherapy that is not at all tailored to the patient’s unique

presenting problems. Even more important, we will argue that for maintaining gains initially accrued during inpatient treatment, programmed booster therapy sessions over a period of many years will probably be required.

### Weight Loss

Treatment of the weight loss, which at times may be of life-threatening proportions, is best accomplished in a well-controlled environment such as the inpatient psychiatric ward. Although when medical complications arise (e.g., viral infection), forced feeding via a naso-gastric tube may become a necessity, under ordinary circumstances a less invasive procedure for inducing weight gain is recommended.

Experience in a wide variety of centers over the last decade indicates that the use of operant conditioning procedures is the behavioral treatment of choice for obtaining “rapid weight restoration at times of nutritional crisis” (8, p. 171). In essence, a *somewhat one-sided contract* is drawn up between the treating agent and the patient, stating that the patient will be given access to reinforcers (e.g., physical activity, television, reading material, other privileges) contingent on a specific weight gain in a designated time period. For example, Halmi, Powers, and Cunningham (9) maintained patients in relative isolation unless they gained 0.5 kg per five-day period. Naturally, the specific weight gain required per time period should be realistic and determined by the extent of the weight loss. Also, to maximize the efficacy of the behavioral contingency, it is of paramount importance that the patient be given access to her (only 15% of reported cases are males) favorite reinforcers. Moreover, Agras, Barlow, Chapin et al. (10) found that informational feedback about caloric intake and weight gain given to the patient as well as presenting her with four high caloric meals (1500 calories each) per day further promoted rapid weight gain.

To summarize, the patient should be restricted to her room, privileges are to be given contingently on increased caloric intake and weight gain,



informational feedback about caloric consumption and weight gain are to be provided, and large as opposed to small meals are to be presented to the patient at least four times a day. No comments should be made to the patient prior to or while eating. That is, the therapist need not engage in a prolongation of the verbal struggle with the patient. In addition, the patient should be weighed daily under standardized conditions (i.e., after urinating, in hospital gown only, at precisely the same time each day). It is widely known that anorexics attempt to falsify their weight and, of consequence, need to be carefully examined for foreign objects in or on their bodies and garments when being weighed.

Although making privileges strictly contingent on weight gain first requires the withdrawal of non-contingent reinforcement and has been described by some as coercive and furthering the “power struggle” with the patient (6), it is no more coercive and certainly less invasive than forced feeding by tube. Also, considering that weight loss in anorexia nervosa has led to eventual death in up to 15% of documented cases, the polemical nature of such an argument is nonsensical. Indeed, the first order of business in treating the anorexia nervosa patient is to restore her weight to a level that is reasonable and medically safe.

### **Attitudes Toward Food and Weight**

We fully agree with Bruch’s (6) contention that the concern with weight gain alone in anorexia nervosa constitutes only a partial and surface treatment of the problem. A very careful interview of the anorectic patient clearly reveals that she invariably has a most negative attitude about gaining weight, which often has an historical antecedent (i.e., at one point she actually may have been overweight). However, what also becomes readily apparent is that her current perception of how she looks and what she weighs is highly inaccurate. Thus, even though in reality rather thin (at times emaciated), the patient continues to think of herself as if she were still “fat.” Therefore, one might conceptualize the problem as a cognitive distortion with a resultant phobia for gaining weight.

Several single case reports have appeared in the literature illustrating the use of systematic desensitization in the treatment of anorexia nervosa (11-13). In these case studies the patients were treated as if they were suffering from a “weight” phobia. Generally, following training in deep muscle relaxation, separate hierarchies involving consumption of food and gaining weight were constructed. Then, in standard fashion, systematic desensitization treatment proceeded until all items in the two hierarchies were successfully completed under conditions of minimal anxiety. Of the cases reported, follow-ups were brief with the exception of the patient treated by Ollendick (13). But, although Ollendick’s (13) patient has a five-year follow-up and the controlling effects of systematic desensitization on weight gain are documented, additional strategies (e.g., cognitive restructuring) were required to reinstate weight gain and maintain the patient’s improvement during follow-up.

Thus, while systematic desensitization or some form of cognitive behavior therapy appears to make sense in dealing with the anorectic’s faulty cognitions and perceptions, it would be essential to obtain empirical documentation of the long-range effects in a large number of cases. Nonetheless, irrespective of the therapist’s specific choice of technique at this point, a direct intervention aimed at modifying the patient’s cognitive distortion about her body image should complement the operant approach directed to increasing weight. In practice, application of systematic desensitization could be accomplished concurrently with contingency management after some of the patient’s weight has been restored

### **Bulimia**

Surprisingly, little attention has been accorded to the direct treatment of episodes of bulimia even though it is well documented that many anorexics (contradicting their diagnostic label) periodically engorge themselves with fattening foods during the course of binges. Some of these binges may last for several hours or days at a time and are usually followed by the patient’s feeling of

disgust or remorse, leading to self-induced vomiting. When interviewed about their binge behavior, anorexics describe the antecedent as an irresistible impulse (associated with high levels of anxiety) which must be fulfilled. Once eating behavior has actually begun, the patient feels totally helpless, cannot stop, and continues consumption well past the state of normal satiation, even though the act of eating at that point no longer is enjoyable. Often it is reported that various food cues in the environment trigger off the entire chain of behaviors: impulse—bulimia—remorse—self-induced vomiting.

Although bulimia in anorexia nervosa may subside after lost weight has been regained and “normal” eating patterns have been established, it is quite possible that extinction of the phenomenon *may not automatically take place*. This being the case, it also is conceivable that with the appropriate stimulus conditions bulimia may recur, thereby leading to a return of self-induced vomiting after appropriate food consumption has taken place, once again eliciting the dramatic weight loss that brought the anorexia nervosa patient to our attention in the first place.

Considering the phenomenon of bulimia as anxiety-based and the resulting chain of events as anxiety-reducing, we recently have dealt with bulimia using anxiety-reducing techniques of flooding and response-prevention (14). In a few cases of anorexia nervosa, where bulimia was a prominent feature, we have placed the patient in a laboratory situation surrounded by her favorite foods (e.g., candy bars, cakes, chocolates, etc.). Upon presentation of food cues the patient appears physiologically aroused (increased heart and pulse rate). She is instructed to take a few bites of food and then told to stop eating. At that point physiological arousal is further enhanced (confirmed by the patient’s self-reports of heightened anxiety). The patient is then maintained in this environment (with the salient food cues), prevented from binge eating, and also prevented from inducing vomiting after “normal” food consumption. Such flooding and response prevention are continued (2-4 hours at a time) until physiological responses return to normal resting levels and the patient reports no further impulse to

engage in binge eating. After several sessions of combined flooding and response prevention, a “temptation” test is given the patient to assess the effects of treatment. In spite of a few successes employing this strategy, obviously further confirmation would be needed to determine whether generalization of treatment gains extend to the patient’s natural environment.

### Family Therapy

Although it is most tempting to speculate what role the family has in producing anorexia nervosa, any such speculation must take into account that such patients, apart from bizarre food habits and eating patterns, appear psychologically quite well. The contrast between the patient’s peculiar views on food intake and her otherwise “normal” behavior also is the reason why referral to treatment occurs usually late in the course of the disorder, when the patient is already emaciated and the family is no longer able to cope with the situation. It should come as no surprise that by the time the patient comes to medical attention, the power struggle which almost inevitably ensues when family members attempt (albeit ineffectively) to deal with the patient’s attitude causes considerable dissension as well as inconsistencies which inadvertently reinforce the patient’s weight loss and bizarre eating habits. Indeed, the situation parallels that of the family’s reaction to severe obsessive-compulsive ritualistic actions and his/her increasing demand for family participation. Thus, even though we find the etiologic role assigned to the family by some theoreticians unconvincing, we agree that a comprehensive approach to treating anorexia nervosa must include family therapy (15). Our preference for family therapy is one that is educative, non-punitive, and focused on the presenting problems unless, of course, there is evidence of conflicts unrelated to the patient’s eating problems. Since the relief which hospitalization provides to the immediate family tends to be very temporary, we believe the anorectic’s inpatient stay presents an excellent opportunity to teach the family how to manage her when she returns to the home setting. In essence, the goal is to teach family members those strategies that were

successful in dealing with the patient while she was hospitalized. Formal behavioral contracts (specifying behavior, privileges, and punishments) are helpful, as are treatment sessions done in a semi-naturalistic fashion during the course of meals in the hospital (15). It is, in our experience, always preferable to reinforce the patient's positive behavior while ignoring her negative initiatives. However, as with most aspects of the contemporary treatment of anorexia nervosa, confirmation of the successes reported will have to await the outcome of well-controlled clinical trials.

### **Long-Term Maintenance**

We already have potent psychotherapeutic techniques in our armamentarium to improve the condition of anorectics during the course of their hospital stay. The often dramatic gains achieved during the inpatient phase of treatment, however, are misleading, for it is clear that in the absence of maintenance therapy following discharge, long-term results will be disappointing (6, 7, 13, 16). While the multi-faceted approach to anorexia nervosa suggested by us should facilitate long-term maintenance, it is very difficult to predict what stresses the anorectic and her family may encounter that would lead to the recrudescence of the disorder even after a prolonged and well-organized aftercare program.

Given the chronicity and acute exacerbations, there is every reason to believe that psychiatric care should continue regardless as to how successful inpatient therapy has been. Looking at the natural history of anorexia nervosa and consistent with the medical model of treatment for chronic disorders, it would seem logical to recommend long-term maintenance treatment for at least five years.

Thus, the follow-up care of such patients should not be confined to the periodic reassessment of the situation, but consist of an active booster treatment program in which individual and family therapies are scheduled at regular

intervals, minimally six to twelve times per year. Furthermore, since relapses with severe weight loss are common and since, in our experience, neither the patient nor the family show less reluctance than the first time around to consider hospitalization, it is always advisable to spell out under what conditions the clinician is willing to assume responsibility for continuing care as well as to explain the rules which will prompt the clinician to recommend rehospitalization. Although some clinicians are willing to treat such individuals as outpatients even in the face of severe and progressive weight loss, it is our practice to insist on readmitting the patient whenever there is 15% weight loss, using weight at discharge as a baseline. Should the patient (or family) refuse readmission, the alternative of transferring the patient into another clinician's care should be offered.

### **Conclusion**

In conclusion, we view anorexia nervosa as a disorder of uncertain etiology which responds to psychological treatments. Because of the diversity of symptoms, not all of which may be prominent or even present in a particular case, rather than recommending a single form of therapy, a highly individualized treatment program using techniques of behavior therapy is indicated. Given that the majority of such patients are preadolescents or adolescents and still dependent on the parents or parent-substitutes, we consider family therapy essential both in the immediate and long-term management of patients. Our approach calls for family therapy that is educative rather than punitive and teaches the family how to manage the patient when she returns to the home setting. Since anorexia nervosa is a chronic disorder with periodic exacerbations, we consider it essential to provide maintenance therapy for at least five years consisting of an active booster treatment program administered at regularly scheduled intervals.

### **REFERENCES**

1. Van Buskirk, S. W. A two-phase perspective in the treatment of anorexia nervosa. *Psychol. Bull.*, 1977, 84:529-538.
2. Bemis, K. M. Current approaches to the etiology and treatment of anorexia nervosa. *Psychol. Bull.*, 1978, 85:593-617.
3. Hersen, M. and Bellack, A. S. *Behavioral Assessment: A Practical Handbook*. New York: Pergamon Press, 1976.
4. Stunkard, A. J. New therapies for the eating disorders: Behavior modification of obesity and anorexia nervosa. *Arch. Gen. Psychiat.*, 1972, 26:391-398.
5. Kellerman, J. Anorexia nervosa: The efficacy of behavior therapy. *J. Behav. Ther. & Exp. Psychiat.*, 1977, 8:387-390.
6. Bruch, H. Perils of behavior modification in treatment of anorexia nervosa. *JAMA*, 1974, 230:1419-1422.
7. Wolpe, J. Behavior therapy in anorexia nervosa. *JAMA*, 1975, 133:317-318.
8. Bhanji, S. and Thompson, J. Operant conditioning in the treatment of anorexia nervosa: A review and retrospective study of 11 cases. *Brit. J. Psychiat.*, 1974, 124:166-172.
9. Halmi, K. A., Powers, P., and Cunningham, S. Treatment of anorexia nervosa with behavior modification: Effectiveness of formula feeding and isolation. *Arch. Gen. Psychiat.*, 1975, 32:93-96.
10. Agras, W. S., Barlow, D. H., Chapin, H. N., et al. Behavior modification of anorexia nervosa. *Arch. Gen. Psychiat.*, 1974, 30:279-286.
11. Hallsten, E. A. Adolescent anorexia nervosa treated by desensitization. *Behav. Res. & Ther.*, 1965, 3:87-91.
12. Schnurer, A. T., Rubin, R. R., and Roy, A. Systematic desensitization of anorexia nervosa seen as a weight phobia. *J. Behav. Ther. & Exp. Psychiat.*, 1973, 4:149-153.
13. Ollendick, T. H. Behavioral treatment of anorexia nervosa: A five-year study. *Behav. Mod.* 1979, 3:124-135.
14. Marks, I. M. Behavioral treatments of phobic and obsessive-compulsive disorders A critical appraisal. In: M. Hersen, R. M. Eisler, and P. M. Miller (Eds.), *Progress in Behavior Modification*, Vol. 1. New York: Academic Press, 1975, pp. 65-158.
15. Liebman, R., Minuchin, S., and Baker, L. An integrated treatment program for anorexia nervosa. *Amer. J. Psychiat.*, 1974, 131:432-436.
16. Erwin, W. J. A 16-year follow-up of a case of severe anorexia nervosa. *J. Behav. Ther. & Exp. Psychiat.*, 1977, 8:157-160.