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Chapter 12

FAMILY-BASED TREATMENT FOR ADOLESCENT EATING DISORDERS: CURRENT STATUS, NEW APPLICATIONS AND FUTURE DIRECTIONS

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Abstract

Family-based treatment (FBT) is emerging as a treatment of choice for adolescent anorexia nervosa (AN) and bulimia nervosa (BN). This paper reviews the history of FBT, core clinical and theoretical elements, and key findings from the FBT for AN and BN treatment outcome literature. In addition, we address clinical questions and controversies regarding FBT for eating disorders, including whether FBT is clinically appropriate for all adolescents (e.g., older adolescents, patients with comorbid conditions), and whether it indicated for all types of families (e.g., critical, enmeshed, and non-intact families). Finally, we outline recently manualized, innovative applications of FBT for new populations currently under early investigation, such as FBT as a preventive/early intervention for AN, FBT for young adults with eating disorders, and FBT for pediatric overweight.

Keywords: family-based treatment, eating disorders, adolescents.

INTRODUCTION

While there are several schools of family therapy, Family-Based Treatment (FBT) specifically refers to a treatment modality originally developed in the late 1970s and early

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1980s by a team of clinical researchers led by two family therapists, Christopher Dare and Ivan Eisler. This team was based at the Institute of Psychiatry and the Maudsley Hospital in London, England. Consequently, this treatment has come to be known as the "Maudsley Approach" or the "Maudsley Method" (1).

FBT is a novel therapy in that it is theoretically agnostic and emphasizes parents as a resource, and empowers families in their effort to bring about recovery in their adolescent with an eating disorder. However, the first effort to include families in the treatment of adolescents with anorexia nervosa (AN) was made by Minuchin and his colleagues at the Child Guidance Clinic in Philadelphia (2). While treatment was quite mixed, the primary intervention was family therapy and the authors reported successful outcome in about 86% of patients. Given this success rate, as well as the theoretical model of the "psychosomatic family" upon which much of their work was based, Minuchin's work ultimately exerted considerable influence on ensuing efforts by the Maudsley group to involve families in the treatment of adolescents with AN.

The underlying theoretical principles and clinical application of Minuchin's structural family therapy, along with other school's of thought such as Palazzoli's (3) work from the Milan Group and Haley's (4) strategic therapy, served as the foundation for the development of FBT. This, in turn, gave rise to a number of controlled FBT studies which were pioneered at the Maudsley Hospital in London. FBT, as employed in these studies, contained several aspects of Minuchin's approach, but differed in significant ways.

Most important of these was that the Maudsley team, unlike Minuchin, encouraged parents to persist in their efforts until normal body weight had been achieved. In FBT, general adolescent and family issues are deferred until the eating disorder behavior was under control.

FBT remained limited to England from the time of its development until the mid 1990s. In 1994, Daniel le Grange, a member of the Maudsley team introduced FBT to his colleagues in the United States, when he trained at Stanford University. Through the relationships he established at Stanford University, he teamed up with James Lock to collaborate on manualizing (5) and studying this approach in clinical research trials targeting adolescents with eating disorders.

Much of their work, both collaboratively and independently, has led to the successful dissemination of FBT to other specialist centers in the United States, Canada and Australia.

THE FOUNDATION APPROACH

Core Clinical and Theoretical Elements

FBT for adolescent AN is the original application of this model and its protocol (5) represents the foundation approach. In addition, manualized adaptations exist for bulimia nervosa (BN) (6), for the prevention of AN in children and adolescents with clinically significant, prodromal presentations (7), for young adults with AN (8), and for pediatric overweight (9). These newer applications will be described in detail below. FBT for adolescent AN is a short-term treatment designed to mobilize parents in assisting their ill child reverse his/her state of starvation acutely and ultimately achieve remission from AN. Given the profound physical and psychosocial liabilities associated with AN, a primary goal of FBT is to facilitate a return to a normal developmental trajectory, consistent with

chronological age. FBT challenges the practical factors maintaining the AN, such as allowing the ill adolescent to make his/her own food choices, and makes no assumptions about the cause of AN. The treatment does not presuppose a familial pathology and in fact works to reduce parental self-blame regarding etiology. Moreover, FBT externalizes the illness, thereby reducing blame toward the ill adolescent for the symptoms s/he is experiencing. This aids in correcting misperceptions often held by siblings, who may believe their sister/brother is orchestrating the AN for attention. Sibling relationships are further protected by assigning a supportive role in treatment to siblings, reserving all supervisory responsibilities exclusively for the parents (10).

In the first of three phases of treatment, parents fully take charge of their ill child's eating, assuming the functions typical of an inpatient staff. The therapist helps parents develop and refine their techniques in an in-session family meal, a goal of which is for parents to convince their child to consume at least one more bite than s/he was originally willing. It is important to emphasize that this parental stance is unique to Phase I of FBT; once a minimal level of weight restoration is achieved (i.e., the adolescent crosses back over the diagnostic weight threshold) and conflict around eating is significantly reduced, control over food consumption is transferred back to the adolescent in Phase II of treatment. Phase III of FBT focuses on termination and more general issues of adolescent development. In its manualized format (5), FBT encompasses 20 sessions, although recent research indicates that a shorter course is as efficacious and arguably more cost-effective (11).

As suggested above, FBT incorporates an amalgam of techniques from family systems therapy, structural family therapy, and eating disorders- specific interventions. Also, as the treatment does not align with a particular therapeutic approach, etiological theory of AN, or model regarding maintenance of illness, hypothesized mechanisms of action of FBT for AN include exposure to forbidden foods and feared weight ranges, restructuring of family authorities and coalitions, and hormonal re- regulation as a function of weight restoration. FBT for AN has not been directly compared to inpatient behavioral interventions; however, long-term data across clinical trials and naturalistic follow-up studies indicate that treatment effects are more durable and relapse rates are markedly lower in FBT (12-14). Since FBT does not directly target the psychological feature of AN, such as fear of weight gain and body image disturbance, it is unlikely that improvements in these domains account for the sustained good outcome several years after completing FBT (12-14). However, indirect effects in these symptoms via the mechanisms noted above (e.g., exposure to feared weights, hormonal correction following full and sustained weight restoration) cannot be ruled out. Another possibility is that since FBT for adolescent AN by definition targets younger patients with a more recent onset of illness than their adult counterparts, this population is more responsive to treatment and has a better prognosis. However, randomized controlled trials (RCTs) of FBT versus individual psychotherapy show that even within this restricted age range, FBT is superior (12,15-17). Finally, it is likely that by training parents to create a zero- tolerance environment for self-starvation in their home and teaching them to identify signs and symptoms of AN, they keep relapse at bay. In that respect, parents can prevent a kindling effect, with each relapse increasing the likelihood of a subsequent one and of a more chronic course of illness.

FBT for Adolescent Anorexia Nervosa

Key Findings from the Literature

The efficacy of FBT for adolescent AN has been tested in RCTs (11-19). The first RCT of FBT for AN included a population of adolescent and adult patients. The only significant finding from this study demonstrated that FBT was particularly efficacious for patients 18 and younger. That is, FBT delivered better results in absolute clinical outcome and relative to individual treatment, acutely (one-year post- hospitalization) (17) and at five-year follow-up (12). These seminal studies provided preliminary evidence of FBT's utility in preventing relapse and facilitating continued improvement following inpatient weight restoration.

Since then, FBT for adolescents with AN has been subjected to further study in several additional RCTs, open trials, and clinical case series. Taken together, this literature has demonstrated that FBT is effective for a full course of outpatient weight restoration thereby preventing hospitalization (11,18,19) and that such gains are maintained 4-5 years after treatment ends (12-14); a version of FBT in which parents are seen separately from their adolescent is superior to the traditional conjoint FBT format when families are critical of their adolescent (high levels of expressed emotion) (18,21); that FBT yields a better outcome than either supportive individual psychotherapy (17) or a more focused and manualized ego-oriented individual therapy (15,16); that an abbreviated, 10-session course of FBT is as efficacious as the manualized 20-session version (11); that FBT can be disseminated in that it is feasible and effective when administered by investigators other than its developers (22,23); and that it appears to be as effective for children as it is for adolescents (24).

FBT for Adolescent Bulimia Nervosa

Rationale for Adaptation

Family-Based Treatment for bulimia nervosa (FBT-BN) (6) has been adapted from FBT for AN and, like its predecessor, is designed for adolescents. Until the development of this manual, only a limited number of either case series or case studies have been conducted for adolescents with BN. Most of these studies involve the patient's parents in the treatment. Moreover, AN - binge/purge subtype (about 20% of the samples studied) is typically responsive to FBT in terms of weight gain and reductions in binge and purge episodes. This suggests that parents are able to effectively decrease bulimic behaviors in addition to reversing severe dieting (11,18). Whereas AN and BN are distinct syndromes, considerable overlap in symptomatology is common Therefore, the efficacy of FBT for adolescent AN might be extended to include adolescent BN.

As in FBT for AN, this treatment modality for adolescents with BN is an outpatient intervention typically conducted in 20 sessions over 6 months. In some instances a shorter course is sufficient while additional sessions may be necessary for others. FBTBN consists of three phases. In Phase I parents are encouraged to assist their teen to reestablish healthy eating patterns and avoid engaging in binge eating and purging episodes. This process is collaborative in nature, however, parental authority is mobilized should this be required to manage the health crisis that the eating disorder poses. The adolescent's autonomy in other

domains such as friendships and school is almost always kept intact at a level consistent with the patient's stage of development. In Phase II manages the return of control over eating to the adolescent at the time that acute symptoms have abated and regular eating patterns are established. Phase III addresses termination and issues of family structure and normal adolescent development.

In keeping with FBT for AN, FBT-BN also views the parents as a resource for resolving the eating disorder, and corrects misperceptions of blame directed to either the parents and their adolescent. Siblings are protected from the job assigned to the parents and are encouraged to play a supportive role in treatment. FBT-BN does not delve into what caused BN, instead, this treatment focuses on what can be done to resolve this serious disorder.

Key Findings from the Literature

The first of only two RCTs for adolescents with BN compared family therapy (n=41) (a form of FBTBN) and cognitive-behavioral guided self-care (n=44) (CBT-GSC) (25). These authors found no statistical differences at six months follow-up between the two treatments on binge/purge abstinence rates (around 40% for both). Direct cost was lower for CBT-GSC compared to family therapy, however, there were no other differences in cost between these two treatments. In the second RCT, Le Grange and colleagues (26) assigned 41 patients to FBT-BN and 39 to supportive psychotherapy (SPT), and unlike the Schmidt et al. (25), significant differences between the treatments did emerge. Categorical outcomes at post-treatment demonstrated significantly more patients in FBT-BN (39%) were binge/purge abstinent compared to SPT (17.9%). Somewhat fewer patients were abstinent at 6-month follow-up, however, the difference was statistically in favor of FBT-BN (29.3% vs 10.3%). Secondary outcome assessment, based upon random regression analysis, revealed main effects in favor of FBT-BN on all measures of eating pathology. Therefore, FBT-BN showed a clinical and statistical advantage over IPT at post-treatment and at 6-month follow-up. Reduction in core bulimic symptoms was also more acute for patients in FBTBN as opposed to SPT. But still it is the same results, when comparing FBT-BN to CBT-GSC. That is, FBT-BN and CBT-GSC are significantly favored treatments in comparison to SPT.

CLINICAL QUESTIONS AND CONTROVERSIES

Does FBT Work for All Adolescents with AN or BN?

Is FBT clinically appropriate across the child- adolescent age spectrum? Eating disorders impose significant developmental constraints on adolescents in both physical and psychosocial domains, with AN rendering the most severe liabilities. As described above, FBT works to restore the adolescent to his/her chronologically expected developmental state. In addition, FBT views the illness as directly responsible for impairing the adolescent's decision-making capabilities with regard to sensible food consumption and shape/weight standards. In that respect, the adolescent — even the older adolescent - is seen as functioning at a developmentally regressed level in his/her ability to appropriately self-feed. FBT asks parents to compensate for this discrepancy between chronological age and illness-influenced developmental state by temporarily taking charge of their child's eating until the eating

disorder minimally recedes. In AN, this initial phase of treatment is characterized by parents assuming full responsibility for their child's eating; in BN, where the adolescent is typically less impaired and more on a par with her peers in terms of adolescent development, the process in Phase I is more collaborative between parents and child.

Given the equalizing force of the eating disorder in yielding a similarly regressed state across chronological age, FBT does not modulate its early techniques as a function of adolescent stage of development. However, Phase II, in which control is transferred back to the adolescent, and Phase III, in which broader issues of adolescence are addressed, are exquisitely sensitive to the subtle and gross differences between early, middle, and late adolescence. Importantly, even in Phase I, the therapist instructs the family to defer to actual stage of adolescent development in domains external to the eating disorder. For example, while parents may fully supervise meals, they would not supervise their adolescent's social encounters in the same manner. If parents do not afford sufficient respect to adolescent development in these other areas — whether pre- morbidly, as a function of general concern for their ill child, or based on a misunderstanding of their mission in FBT — the therapist actively corrects this.

Does the research support the application of FBT across the full child-adolescent age spectrum? While not yet tested in an RCT, FBT for children has generated promising results in a clinical case series (24) Within adolescence, compared to younger adolescents with AN, the evidence for the efficacy of FBT for older adolescents is somewhat mixed. A case series of adolescents with AN (22) showed no difference in outcome for younger (9-14 years) versus older (15-18 years) patients. Recent FBT trials for adolescent AN (12 to 18 years) (11) or BN (12 to 19 years old) (26) found that age was not a moderator of treatment outcome. In contrast, younger age was a predictor of remission for AN in univariate (but not multivariate) analyses (20). However, it is difficult to disentangle age from other variables that might be a proxy for severity of illness, such duration of illness, number of previous hospitalizations, and BMI, all of which loaded with age on the principal component analysis in that study (20).

Is FBT clinically appropriate for adolescents with greater levels of specific and comorbid psychopathology? In the only predictor analysis of adolescents with AN receiving FBT, Lock and colleagues (20) found that co-morbid psychiatric disorder predicted dropout and lower remission rates, and that the probability of remission increased with a reduction in child behavioral symptoms. Moderator analyses from the original trial (11) found that patients with higher levels of eating disorder-specific obsessions and compulsions fared better in a full course of treatment compared to an abbreviated course, but that that other severity indices (e.g., duration of illness, purging status) did not moderate outcome. In the only predictor analysis for adolescents with BN receiving FBT or SPT, findings indicated that participants with less severe Eating Disorder Examination (EDE) (27) eating concerns at baseline were more likely to be binge and purge abstinent (remitted) at post-treatment and follow-up, regardless of the treatment that they received (28). Participants with lower depression scores and fewer binge/purge episodes at baseline were more likely to be partly remitted (no longer meeting study entry criteria) at post-treatment and follow-up, respectively. In terms of moderators, participants with less severe eating disorder psychopathology (EDE global score), receiving FBT-BN, were more likely to meet criteria for partial remission at follow-up. Lower eating concerns are the best predictor of remission for adolescents with BN and FBT-BN may be most effective in those cases with low levels of eating disorder psychopathology. It is noteworthy that some severity-related factors with prior support as

predictive of outcome, such as duration of illness and diagnosis (17,29), turned out to be neither predictors nor moderators of outcome in the present study. (28).

Does FBT Work for All Families?

Critical Families. Expressed Emotion (EE) has been studied in the families of patients with eating disorders (21,30-35), and has become a useful way to tap into the quality of the 'emotional life' of families of children with eating disorders. For instance, Minuchin and his colleagues (2,36) suggested that families of children with AN have several characteristics in common, such as enmeshment, and lack of conflict resolution. EE allows us to reliably measure several aspects of functioning in families with an eating disorder offspring.

Studies have shown that patients with AN are more likely to drop out of treatment prematurely, or have a poor outcome should they remain in treatment, if their parents are overly critical toward them (high EE family) (21,33,34). This fmding has recently also been replicated for adolescents with BN (31). Family interaction has important treatment implications. For instance, a version of FBT for AN in which parents are seen separately from their adolescent has shown to be superior to FBT in its conjoint format when families present with high levels of EE (high in terms of criticism) (18,21). This line of inquiry is still in its infancy and more work is clearly required.

Enmeshed Families. A traditional theory of eating disorders in adolescence, particularly AN, is that the illness represents a maladaptive attempt at separation and control in the context of an enmeshed family (36). Correspondingly, a prescription for recovery is often to afford more autonomy to the adolescent, especially with regard to eating, so as to prevent an exacerbation of symptoms. At its extreme, this recommendation excludes parents from treatment entirely, and has been labeled a "parentectomy" (37). In turn, a criticism that has been raised against FBT is that it prescribes, rather than proscribes enmeshment by virtue of Phase I techniques. This concern is predicated on four assumptions: first, that family enmeshment is implicated in the etiology of adolescent eating disorders; second, that FBT does not respect adolescent autonomy; third, that enmeshed parents would resist the transfer of control back to the adolescent in Phase II; and fourth, that FBT should ultimately worsen symptoms, even if it suppresses them in the short term. Each assumption is contradicted by or lacks support in research fmdings.

First, there are no longitudinal data to indicate enmeshment plays an etiological role in eating disorders. Even if large cross-sectional studies were to find an increased prevalence of enmeshment in eating disorder families relative to psychiatric and normal controls, it would be difficult to know whether this reflected cause of illness or the effect of having a child with a severe disorder, particularly one associated with a high mortality rate. Second, as noted above, FBT affords significant respect to adolescent autonomy, by maintaining domain specificity of parental control in Phase I, requiring transfer of control over food in Phase II, and directly addressing adolescent development, including issues pertaining to separation and individuation, in Phase III. In this respect, FBT can theoretically correct the expressions of an enmeshed family dynamic (while not directly treating the underlying family pathology) and would not be contraindicated for such a family. Third, there is no evidence to suggest that parents resist the transition to Phase II, which would be indicative of an enmeshed family process; in fact, clinical observations suggest a greater risk is parents' abrupt or rapid abdication of supervisory responsibilities once weight is minimally restored. Finally, follow

up studies of FBT for AN (12-14) demonstrate sustained and robust improvement, without evidence of an ultimate symptomatic backlash in response to Phase I techniques. In other words, it is the eating disorder, not FBT, which appears to pose an insult to adolescent development.

Non-Intact Families. Another concern that has been raised about FBT is whether it is appropriate for a variety of family structures (e.g., divorced, separated, single parent, grandparent-headed households, etc.) beyond the traditional intact family. The treatment manuals (5,6) have the latitude to accommodate atypical family configurations provided that at least one parent or guardian can be involved in treatment. Moderator analyses from the Lock et al (11) comparison of 6-month versus 12-month FBT for AN showed that non-intact family status fared better with a longer treatment duration. Predictor analyses (20) from this study did not fmd family status to predict dropout or remission. In the BN literature, FBT was equally effective for intact and non-intact families (28). Collectively, these findings support the use of FBT with both intact and non-intact families, with the latter benefiting from a full, 12-month (20- session) course of treatment, per the published manual (5).

NEW APPLICATIONS UNDER INVESTIGATION

FBT for Young Adults with AN

The absence of FBT studies for young adults (1825 years) with AN is surprising for at least two reasons; there are similarities in terms of how fmancially dependent older adolescents and young adults are upon their parents, and there are significant challenges to engage and maintain adults in treatment. Young adults like older adolescents are substantially fmancially dependent on their parents, with nearly two-thirds of young adults in their early 20s receiving economic support from their parents (38). US census data from 1970-2000 suggest that the percentage of young adults living without fmancial dependence on family has declined significantly (39). Thus, dependence upon family resources continues later into the 20's for more young adults today than it did even a decade or two ago. Thus, it is surprising that we have not systematically used family treatment with young adults especially given the notorious difficulty in engaging and maintaining adults with AN in treatment (29). Involving family or other individuals who are concerned about the patient in treatment together with the AN patient may be a powerful way to maintain the patient's engagement. This is seen clearly in dropout rates for adult AN with the largest study reporting a dropout rate of 46% (29) and FBT treatment with adolescent AN showing dropout rates of 10-20% (11,40).

While young adults may still be substantially dependent upon parents, they also face different challenges than adolescents. It must also be noted that despite similarities, young adulthood has certain developmental differences from adolescence. For instance, young adults are legally regarded as adults, are more likely to be independent, and are more intellectually and socially experienced and skilled than adolescents. For instance, young adults are more likely to have moved out from home than adolescents with about half of the 27 million 18 to 24 years olds in the USA are not living with their parents (55.7%) (41). Due to this relative independence from family, young adults may struggle with new living situations, participation in the work-force or further educational challenges. Capitalizing on this ongoing leverage that parents may still have over their ill young adult offspring, FBT for this patient

population is more collaborative. In other words, it is more in keeping with the model for BN as opposed to adolescent AN.

FBT for Subsyndromal Anorexia Nervosa in Children and Adolescents

Early identification and treatment of AN is considered to have a positive prognostic impact on the course of illness in AN (42,43), although duration of illness remains a potential confound in these analyses (44). Given that (a) children and adolescents often present atypically on a number of dimensions relative to strict DSM (45) diagnostic criteria (Workgroup for Classification of Eating Disorders in Children and Adolescents (WCEDCA)), (46), (b) clinically significant but technically subthreshold presentations of AN (SAN) can reflect a disorder in evolution rather than a stable state or transient phase (e.g., 47, 48, 49) and (c) once the diagnostic threshold is crossed, AN is notoriously refractory to treatment, it is reasonable to target SAN at the intersect of prevention and intervention for AN. FBT is an excellent candidate preventive intervention for SAN in light of its efficacy for AN (50). In addition, an open feasibility/dissemination trial of FBT for AN- spectrum presentations found that FBT arrested and reversed AN symptoms in an SAN subset (23). An RCT is currently underway at Mount Sinai School of Medicine comparing FBT-SAN (7) to individual supportive psychotherapy in this potentially prodromal population.

While much of the core FBT for AN protocol (5) applies to clinically significant SAN patients, several important modifications are noted. First, the foundation approach is modified to address a wider range of developmental stages. While AN typically onsets in mid-late adolescence, prodromal AN by defmition precedes this. Second, for SAN participants who have lost weight but do not yet meet the weight cutoff for AN, regulation of eating patterns and the incorporation of a full range of foods in the child or adolescent's diet may be as important goals as weight gain early in treatment. Third, the goals and language of the treatment re modified to incorporate the notion of risk of progression from SAN to AN, while at the same time emphasizing the clinical severity of the SAN in and of itself, and the need for reduction and resolution of presenting symptoms. While we cannot be certain that all such patients would eventually go on to develop AN (i.e., that they are truly prodromal), their symptoms are sufficiently clinically severe to warrant intervention. Fourth, the revisions for SAN stress the importance of regular family meals at home and the modeling of healthy, non-restrictive eating habits by parents.

FBT for Pediatric Overweight

Parent involvement is a crucial element in reducing pediatric overweight (PO) in light of parents' ability to control and modify the family's home environment to promote the child's healthy behaviors. Data from the PO literature highlight that the most efficacious PO interventions include parental involvement to some degree (51,52). However, a recent review of studies with differing degrees of parental involvement provides mixed evidence of a positive relationship between greater parental involvement and better weight loss outcomes (53). It is possible that the relationship between family involvement and successful weight loss, as well as the optimal level of parental involvement, may vary as a function of the child's age and psychosocial development. In particular, the literature has not adequately addressed the unique needs of adolescents and the ideal quality and quantity of parental involvement at this crucial stage of development. Treatment of adolescent overweight must adequately

navigate the dual challenge of the adolescent's increasing need for independence in the context of sustained reliance on a parent-influenced home environment. To date, no PO treatment study has targeted overweight across the child-adolescent age spectrum, nor has attempted to modulate parental involvement from a transdevelopmental perspective. FBT is a logical foundation approach to begin to resolve these deficits in the literature.

Inherent in the FBT model is a mission to increase parental empowerment, competence, and efficacy in facilitating healthy behaviors and outcomes for children, and in unapologetically assuming appropriate parental influence. Beyond this, FBT provides a strong foundation for application to the significant problem of PO because of its attention to parental engagement strategies, its demonstrated efficacy in correcting maladaptive eating and related behaviors, its explicit agenda of blame reduction, its disease-based model, and its emphasis on promoting normal physical and psychosocial development for the child or adolescent. Loeb and colleagues (9) proposed an innovative adaptation of FBT to PO (FBT-PO) that maintains the underlying tenets of the original FBT protocol but modifies it for a non-psychiatric weight disorder, with application to either psychiatric or primary care settings. FBT-P0 is currently being piloted at two sites (Mount Sinai School of Medicine and the University of Chicago.) Importantly, FBT-P0 recognizes that PO is not a psychiatric disorder and that children/adolescents are not developmentally regressed as they are in severe eating disorders. Therefore, FBT-P0 modulates the quality and intensity of parental involvement as a function of developmental stage. It also recognizes specific challenges of socioeconomically diverse populations (e.g., built environment, reduction in school-based physical activity), the challenges of concordance of overweight across family members, and the need for parents to model attitudes and dietary/physical activity habits associated with healthy weight. Finally, FBT-P0 addresses the multi- systemic toxic environment (54) that contributes to PO, and focuses on parent-driven, family-level change.

CONCLUSION

In conclusion, FBT is emerging as a treatment of choice for adolescent anorexia nervosa and bulimia nervosa, with promising adaptations for prevention of eating disorders in high risk children and adolescents, for young adult eating disorders, and for pediatric overweight. While the intervention continues to raise questions and controversies, it is gaining public and scientific acceptance in light of its demonstrated efficacy to date. However, additional and larger clinical trials are necessary to fully test its scientific merit. An NIMH five year two-site RCT (the University of Chicago and Stanford University) commenced in April 2004. In this study, adolescents with AN were randomly allocated to either FBT or Ego-oriented Individual Therapy (EOIT). This is the first large-scale treatment trial for adolescents with AN and should, upon completion, go some way toward verifying the relative efficacy of FBT for this clinical population. Another NIMH-funded multi-site study (with Stanford University as the Coordinating Center and 6 clinical sites) is examining FBT relative to family systems therapy as well as the adjunctive role of medication. Other studies underway involving FBT principles include a parent training treatment development study at Duke University; a study investigating the role of FBT in inpatient care at the University of Sydney; and a study of multi-family group FBT at the Institute of Psychiatry, London. Beyond these, future inquiries

should focus on dismantling and step-care studies, as well as comparisons between FBT and treatment as usual, including inpatient and day treatment models. Larger trials for AN and BN, especially designs with two active treatments with hypothesized mediators, would permit investigation of mechanisms of FBT. It is also important to examine the relative moderating effect of symptom severity in terms of cognitions for a treatment that focuses on such symptoms, e.g., CBT, in order to determine whether these moderating effects would be similar between two specific treatments. Finally, the newly manualized and piloted adaptations of FBT described above require formal testing, as well as raise intriguing possibilities about the adaptation of FBT to other psychiatric disorders in adolescence, such as substance abuse.

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