Overview of the Evidence Base for Family Interventions in Child Psychiatry

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KEYWORDS

• Family therapy • Family intervention • Children • Adolescent • Mental health
• Parent training

KEY POINTS

- There is sufficient evidence to support that family involvement is effective in managing child and adolescent mental health issues.
- There is some evidence to show that family involvement in treatment results in maintenance of posttreatment improvement.
- Chronic and refractory conditions, such as conduct disorder, substance abuse, and delinquency, can be effectively treated with family therapy–based treatments, such as multisystemic therapy, functional family therapy, and multidimensional family therapy.

METHOD OF THIS REVIEW

This article reviews randomized controlled trials (RCTs) for family-based interventions carried out over the last 15 years. The studies were selected from an evidence-based clearinghouse search for family therapy, and specific child and adolescent psychiatric disorders. Thus, it is a selective review guided by exposure to as many well done RCTs as possible that evaluate major schools of family intervention and/or different types of family therapy. Family interventions can be quite variable in their level of intensity; therefore, this article is organized from least intensive to most intensive treatment.

INTRODUCTION

The development of family therapy began in the years following World War II. Although experts in family therapy found it to be an effective treatment of mental health issues especially for children and adolescents, it was consistently criticized for a lack of

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Abbreviations

ABFT	Attachment-based family therapy
ADHD	Attention-deficit/hyperactivity disorder
AFT	Adolescent-focused individual therapy
AGT	Adolescent group therapy
ASD	Autism spectrum disorder
CBT	Cognitive behavioral therapy
CCT	Client-centered therapy
FBT	Family-based treatment
FCBT	Family cognitive behavioral treatment
FESA	Family-based education, support, and attention
FFT	Functional family therapy
FPE	Family psychoeducation
ICBT	Individual cognitive behavior treatment
MDFT	Multidimensional family therapy
MEI	Multifamily educational intervention
MST	Multisystemic therapy
MTFC	Multidimensional treatment foster care
PTSD	Posttraumatic stress disorder
RAP-P	Resourceful adolescent parent program
RCTs	Randomized controlled trials
TF-CBT	Trauma-focused cognitive behavioral therapy

empirical data demonstrating its efficacy. However, over the last two decades, research in the effectiveness of family therapy and family interventions has been steadily increasing.

COMMON FACTORS

All family interventions possess some common features, such as a willingness to connect with the family and to develop a shared vision of family success in solving the problem. Successful engagement with the family not only requires dedicated professionals with a shared vision, treatment plan, and constant monitoring, but also an interest in and understanding of the family's strengths and limitations. The family and the clinician form a team that facilitates parental collaboration and agrees on roles of each individual in the treatment with the aim to empower families toward self-care and self-direction. This change requires a deep and intense engagement by the therapist resulting in new patterns for the family.

To create new and more adaptive patterns, the therapist must strive to forge a systemic therapeutic alliance with the families. The focus is to develop parenting, cognitive, behavioral, and problem-solving skills in the participants such that the presenting symptoms decline and the newly learned skills are reinforced by the parents. The aim is to enhance positive interactions by improving communication skills, building connections, identifying strengths, sharing emotions, developing shared concerns, maintaining focus, and increasing willingness to be direct. The therapist helps families to develop conflict resolution skills, and the skills to manage affect among family members. Overall, the goal is that family members learn to build positive attachment and connections so that they can provide mutual support for each other while also connecting with community support, services, and systems.

Different mental health challenges among children and adolescents require specific responses from parents, caretakers, and family members to improve. Anxiety requires parental confidence and security. Depression requires parental attachment and

availability. Disruptive disorders require parental authority, supervision, and consistency. Trauma-related problems require parents to provide safety and see the problem through the eyes of the child. Eating disorders require parental collaboration and consistency. Autism spectrum disorders (ASDs) require parental understanding, acceptance, and the capacity to collaborate with other involved professionals. These realities provide a direction for family interventions and are at the heart of evidence-based treatments.

SOME APPROACHES TO SPECIFIC PROBLEMS WITH RANDOMIZED CONTROLLED TRIAL EVIDENCE

The different approaches are organized from least intensive to most intensive.

Family Psychoeducation for Adolescent Depression

How family psychoeducation (FPE) impacts different child and adolescent mental health issues varies depending on the condition. Sanford and colleagues[1] attempted to answer this question specifically for adolescent depression through an unblinded RCT. They assessed the outcome of FPE for acute depressive symptoms in the adolescent and the improvement in family and social functioning by studying two groups. Both groups received the "usual treatment," which can include individual counseling, group counseling, supportive case management, or drug therapy. The drug therapy was antidepressants, selective serotonin reuptake inhibitors, venlafaxine, or bupropion, in combination with anxiolytics or antipsychotics, as indicated by the case. Although both groups received different combinations of this treatment, one group was provided with 12 FPE sessions lasting 90 minutes in their home. FPE sessions included several topics, such as the medical model of understanding depression, patient education, stress vulnerability, communication, and coping models.

The power of this study is small with 16 families in the experimental group and 15 families in the control group. All adolescents had a high rate of comorbidities, such as generalized anxiety disorder, social phobia, and substance abuse. The participants had moderate to severe depression confirmed by low Children's Global Assessment Scale scores. At the posttreatment assessment, 21% of the FPE group and 50% of the control group met major depressive disorder criteria. At follow-up, these numbers increased to 25% and 53% for the FPE and control group, respectively. Improvements were noted in adolescent–mother, adolescent–father, and peer relationships. Also, parents reported improved social functioning of the adolescent. The FPE group had decrease in depressive symptoms acutely and at 3-month follow-up. It also had a better quality of relationships with parents and peers.

Parent Training for Autism Spectrum Disorder

Children with ASD struggle in social emotional development because of their inability to read and understand social cues. Because of limited language development, they often use behaviors to communicate. These behaviors can be used to express frustrations or to resist demands that are challenging. Often, parents struggle to understand these behaviors and may react to a child in a manner that reinforces the maladaptive behavior. Also, if parents do not address the behavior appropriately, they may fail to support the child in learning more adaptive skills.

There are RCTs that have looked at outcome of parent training plus medication for children with ASD. Aman and colleagues[2] found that subjects in the risperidone plus parent training group had significantly lower scores on standardized rating scale for

behavior problems. Handen and colleagues[3] attempted to expand on that study by adding an observational component to better assess the improvement in behavior. They conducted a 24-week RCT of risperidone and risperidone plus parent training (COMB group). All the subjects (N = 124) had diagnosis of ASD, were of age 4 to 13, had IQ greater than or equal to 35 and mental age greater than or equal to 18 months, and had a raw score of greater than 18 on the parent-rated Aberrant Behavior Checklist for Irritability. The dose of risperidone was adjusted according to weight. If risperidone was found to be ineffective or intolerable, subjects were switched to aripiprazole. The COMB group (N = 75) received parent training from a trained behaviorist for 60 to 90 minutes weekly for 16 weeks. Three of those sessions were optional. The sessions were individualized to target the symptoms of each child, and thus each family received individualized homework. Parents also received booster face-to-face sessions and a telephone call between 16 and 24 weeks. The training emphasized preventing antecedent factors, using positive reinforcement, and teaching new skills.

The authors used the Standardized Observation Analogue Procedure to assess the outcome. The raters watched the family interact through a one-way observation room and communicated to the parent via a "bug in the ear" device. Parent–child interaction was observed at baseline and Week 24 in four conditions: (1) free play condition, (2) social attention condition, (3) demand condition, and (4) tangible restriction condition. At each condition, the child had increasingly less attention from the parent and more demand placed on them. After 24 weeks, the COMB group had the lowest rate of inappropriate behavior in the free play condition and highest rate of compliance in the demand condition. Additionally, there was increased positive reinforcement by parents during the free play and demand conditions. Parents also made significantly less restrictive statements during the social attention condition. The addition of parent training to medication management improved child's behavior and parents' supportive reactions.

Attachment-Based Treatment of Adolescent Depression

Family factors, such as a weak attachment, high hostility, parental psychopathology, and poor parenting, have been implicated in adolescent depression.[4,5] Attachment-based family therapy (ABFT) was developed by Diamond and Siqueland[6] to address these factors in treating adolescent depression. ABFT integrates elements of structural family therapy, multidimensional family therapy (MDFT), contextual therapy, emotion-focused therapy, and attachment therapy.[7] The principle of ABFT is that a negative family environment prevents adolescents from developing appropriate coping skills that would allow them to buffer social stressors. Without these coping skills, they are at risk of developing or exacerbating depressive symptoms.[8,9]

The ABFT manual that was developed for this study aligned with the goal of repairing attachment between parent and adolescent and promoting individuation. They hoped to reach that goal by following the tasks listed in **Table 1**.

To assess the effectiveness of ABFT on adolescent depression, Diamond and Siqueland[6] randomized 32 depressed participants aged between 13 and 17 years to two groups: ABFT and waitlist control for 12 weeks. Seventy-eight percent of the participants were female and were predominately African-American. Treatment was delivered by therapists who received training and weekly supervision with the first author.[10]

The participants in the ABFT group had a decrease in the diagnosis of depression and in the severity of depressive and anxious symptoms after 12 weeks of treatment.

Table 1
Attachment-based family therapy goals

Task	Problem Addressed	Goal
Relational reframe	Parent criticism	Cognitive shift from "fixing" to "improving" family relations
Adolescent alliance building	Low engagement of the adolescent	Bonding, identifying goals, and preparing adolescent to communicate with parents
Parent alliance building	Parental stress	Bonding, empathizing, and encouraging parents to be receptive to adolescent
Attachment	Past failed attachments	Rebuilding trust by listening to adolescent's anger and offering remorse
Competence-promoting	Negative self-concept	Encouragement to establish successful relationships outside of home

Adapted from Diamond GS, Reis BF, Diamond GM, et al. Attachment-based family therapy for depressed adolescents: a treatment development study. J Am Acad Child Adolesc Psychiatry 2002;41:1190–96; with permission.

The same participants reported a decrease in hopelessness and suicidal ideation. They also described improved attachment to their mother. Similarly, another study showed effectiveness of ABFT for adolescents with suicidal ideation and depression.[11]

Family-Based Cognitive Behavioral Treatment of Anxiety Disorders

There are sufficient data demonstrating that the presence of parental anxiety indicates poorer prognosis or response to treatment of the child with anxiety disorder.[12–14] Kendall and colleagues[15] hypothesized that individual cognitive behavioral treatment (ICBT) and family cognitive behavioral treatment (FCBT) would show significant improvement in comparison with family-based education, support, and attention (FESA). They also sought to answer the following questions: whether the treatment causes change in parental anxiety; and whether the presence of parental anxiety moderated child outcomes. A total of 161 subjects age 7 to 14 with diagnosis of anxiety disorder (separation anxiety disorder, generalized anxiety disorder, and social phobia) were included in this study. Therapists for each treatment group reviewed the manuals and attended two 3-hour workshops. During the study, the therapists participated in weekly 2-hour group supervision.

Each of the three treatment modalities (ICBT, FCBT, and FESA) followed manuals. Each treatment had 16 weekly 60-minute sessions. ICBT and FCBT both used Coping CAT Workbook,[16] which emphasized the FEAR acronym (F- feeling frightened; E- expecting bad things to happen; A- Attitudes and actions; R- Rewards and results), behavioral strategies, relaxation training, contingent reinforcement, and homework tasks. Both included parents in Sessions 4 and 9. However, in FCBT, the family CBT for anxious children manual was also used. This resulted in sessions that focused on modifying maladaptive parental beliefs. It included teaching parents strategies to respond to their children's anxiety in a constructive and supportive manner. This was to be done while encouraging effective communication between parents and children. In FCBT, parents and children met separately during Sessions 4 and 9 to provide

an opportunity to discuss private questions. FESA relied on psychoeducation about emotions in general and theories of presentation of anxiety, and provided a setting to discuss the child's anxiety. The participants in the FESA group were not given directions on how to manage anxiety. Similar to FCBT, Sessions 4 and 9 were reserved for parents to discuss their concerns with the therapist privately.

Kendall and colleagues[15] concluded that both ICBT and FCBT were superior to FESA. This also indicates that FCBT may not be superior to ICBT; however, it is possible that inclusion of the family may have resulted in a decreased number of individual sessions required. Because parents were aware of the type of treatment their child was receiving and teachers were not, the authors chose to use teacher reports to assess reduction in symptoms. According to teacher reports, the ICBT posttreatment improvement in the child's anxiety was significantly greater than in the FCBT and FESA conditions as shown in **Fig. 1**. A 40% improvement in parental anxiety was noted, but it was not significantly different among the three treatments.

Trauma-Focused Cognitive Behavioral Therapy for Sexual Trauma

Trauma-focused cognitive behavioral therapy (TF-CBT) is a manualized treatment that contextualizes traumatic experiences for the child and the parent while teaching coping skills.[17,18] It consists of different phases that integrate gradual exposure and parental involvement throughout treatment. The first phase is a stabilization phase that includes the following components: psychoeducation, parenting skills, relaxation skills, affect regulation skills, and cognitive processing skills. The second phase is the trauma narrative development phase during which the traumatic experience is processed. The third phase is called the consolidation phase, in which there is in vivo exposure, increased parent and child conjoint sessions, and emphasis on enhancing safety. A complete discussion of TF-CBT is provided by Cohen and Mannarino.

Deblinger and colleagues[19] conducted an RCT to assess the efficacy of 12 sessions of TF-CBT compared with 12 sessions of client-centered therapy (CCT) for sexually abused 8 to 14 year olds. In this study, TF-CBT was conducted as described

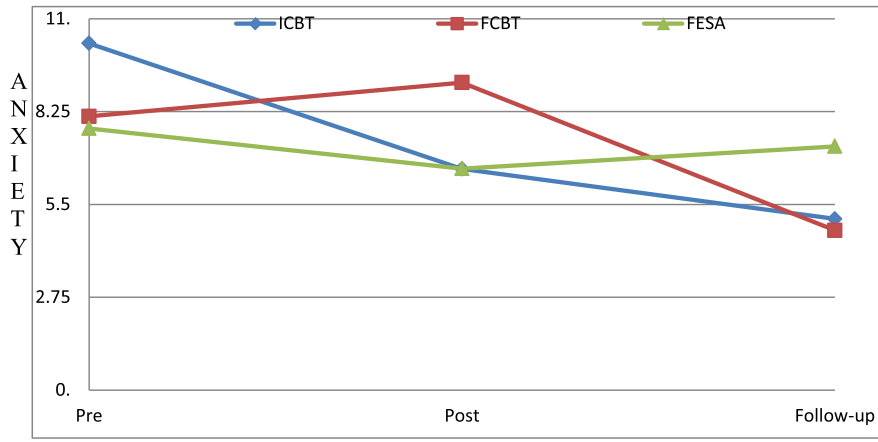

Fig. 1. Teacher's report of children's anxiety. (*From* Kendall PC, Hudson JL, Gosch E, et al. Cognitive-behavioral therapy for anxiety disordered youth: a randomized clinical trial evaluating child and family modalities. J Consulting Clinic Psychol 2008;76(2):293; with permission.)

previously. The focus of CCT was to establish a trusting relationship that enhanced self-affirmation, empowerment, and validation for both parent and child. The results of the study showed that subjects in TF-CBT (N = 92) had a significant reduction in posttraumatic stress disorder (PTSD) symptoms in comparison with subjects in CCT (N = 91). Parents reported a significant decrease in their child's behavioral problems and felt more confident about their parenting. In comparison with the CCT group, at 6- and 12-month follow-up, children and parents in the TF-CBT group maintained their gains. Additionally, there is further evidence of the efficacy of TF-CBT in 3 to 17 year olds who experienced symptoms of PTSD.[20,21] It was noted to lead to significant improvement in PTSD, depression, anxiety, cognitive, and behavior problems.[22,23]

Family-Based Treatment of Anorexia Nervosa

Lock and colleagues[24] compared manualized family-based treatment (FBT) for anorexia nervosa with adolescent-focused individual therapy (AFT). One hundred and twenty-one participants with anorexia nervosa, diagnosed by Diagnostic Standard Manual-IV criteria, aged 12 through 18 years old, were randomized to either treatment. It was not mandatory for the participants to have amenorrhea, a slight modification from Diagnostic Standard Manual-IV criteria. Both groups received 24 hours of the respective treatment over 12 months. They were assessed at baseline, end of treatment, and 6- and 12-month follow-up (discussed in more detail elsewhere in this issue). The authors concluded that significantly more participants achieved full remission (>95% ideal body weight) at 6- and 12-month follow-up in the FBT group. At the end of the treatment, participants in the FBT group reached partial remission more than AFT group. Weight gain was noted to appear faster with fewer hospitalizations for the FBT group at follow-up.

Family-Focused Treatment of Bipolar Disorder

Miklowitz and colleagues[10] conducted a study to assess whether family-focused treatment of adolescents with bipolar I or II disorders reduces the time spent ill and increases the time in remission during the year after the treatment. This study compared family-focused treatment with enhanced care while both groups received pharmacologic treatment concurrently. The pharmacologic treatment was based on standardized algorithm that reflected an up-to-date literature review. Medications were managed by board-certified psychiatrists who received monthly supervision from expert pharmacologists.

The families in the family-focused treatment group received 21 family sessions of 50 minutes. For the first 3 months, these sessions occurred weekly, then every 2 weeks for the following 3 months. Thereafter, three sessions took place every 3 months. During these sessions, families were provided with psychoeducation, communication enhancement training, and problem-solving skills training, in that order. In comparison, participants in the enhanced care arm received an abbreviated version of the family-focused treatment manual with a focus on moods and relapse prevention planning for three weekly sessions. All the clinicians underwent training in family-focused treatment and in enhanced care during a 2-day workshop, followed with monthly supervision.

The subjects were between 12 and 18 years old and were diagnosed with bipolar I or II based on the Schedule for Affective Disorders and Schizophrenia for School-Age Children–Present and Lifetime Version. All youth had experienced manic, hypomanic, or depressive symptoms in 3 months before the study. The study concluded that participants in the family-focused treatment group showed a lower number of weeks with

mania and hypomania symptoms after year 1 compared with the enhanced care group (Fig. 2).[10] However, family-focused treatment did not result in reduced depressive episodes.

Parent Involvement in Treatment of Disruptive Disorders

Treatment of disruptive behavior disorders, such as oppositional defiant disorder and conduct disorder, requires inclusion of support for improved parenting because the style of parenting is a risk factor for developing and maintaining these disorders. Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental condition that also has a behavioral component because of increased hyperactivity and impulsivity. Often negative feedback from parents and other authority figures results in progression from ADHD symptoms to more oppositional behaviors. Furlong and colleagues[25] evaluated the effectiveness of parent management training and other parenting programs in a review of RCTs of behavioral and cognitive behavioral group-based parenting programs for early onset conduct or oppositional problems in children aged 3 to 12 years. Most of the studies compared the different family intervention programs with a waiting-list group. The authors reviewed 12 studies, five from the United States (four in Seattle) and seven from Europe (three in the United Kingdom).

The number of participants per study ranged from 28 to 153; all together there were 1078 participants. Out of 1078 participants, 646 received an intervention and 432 were in the control group. Participants were predominately white with involvement of the primary caretaker alone or both parents. Average age of the parents was 33 years with 8 to 12 parents per group. A total of 68.3% of the children involved were boys.

The authors only focused on group-based parenting programs that focus on collaborative learning and practicing of parenting skills. More specifically, these skills include appropriate and constructive play, praise, rewards, and discipline. The programs

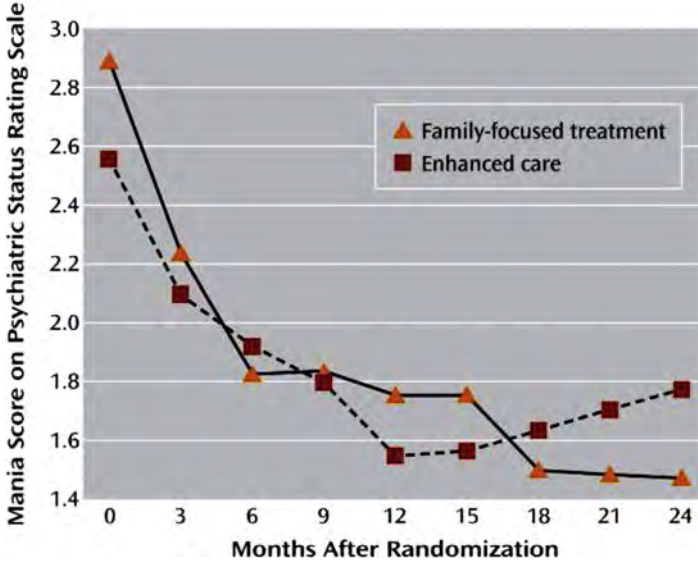

Fig. 2. Family-focused treatment versus enhanced care. (*From* Miklowitz DJ, Schneck CD, George EL, et al. Pharmacotherapy and family-focused treatment for adolescents with bipolar I and II disorders: a 2-year randomized trial. Am J Psychiatry 2014;171(6):658–67; with permission.)

reinforce the learned skills by modeling, observation, role-play, discussion, homework assignments, peer support, reframing cognitive perceptions, and addressing barriers. The frequency of these groups also ranges from 4 to 24 weekly sessions.

Nine of the 13 studies evaluated the Incredible Years BASIC Parenting Program, which consisted of videotaped vignettes of typical parent-child interactions, group discussions, role plays, and homework. Most of these programs had 9 to 16 weekly sessions that would last from 2 to 2.5 hours. Similar to these nine studies, two studies used parent management training focused on positive parenting skills. These studies evaluated programs that provided 22 to 24 weekly 2-hour sessions. For the first 10 weekly sessions, parents were taught the positive parenting skills that are encouraged further in the following five monthly sessions. One of these two programs provided additional material to manage parental stress, social support, and protective/risk factors. Similarly, the Triple P Parenting Program used the same modalities to teach positive parenting skills. However, this intervention involved four weekly 2-hour sessions with four weekly 15-minute telephone calls.

A meta-analysis was conducted of measures assessing conduct disorder, parental mental health, and parenting practices. The meta-analysis found behavioral and cognitive parent training to be effective in reducing conduct disorder behavior. The authors did not find any significant differences among the different programs evaluated. These trainings also enhanced parental mental health, thus possibly improving parent-child interactions. There is no long-term follow-up for the studies reviewed.

Multidimensional Family Therapy for Substance Abuse

MDFT was initially developed as an outpatient FBT for adolescent substance abuse.[26] It is deeply rooted in the structural family therapy model, developmental psychology, and developmental psychopathology. It is a multisystemic approach that addresses the individual characteristics of the adolescent, the parents, and the other involved family members. Additionally, it monitors and alters the interactional patterns among family members that contribute to substance abuse.[27]

Liddle[27] completed an RCT that showed the superiority of MDFT in comparison with a multifamily educational intervention (MEI) and adolescent group therapy (AGT). Participants included 13- to 18-year-old adolescents who were using illegal substances for average of 2.5 years with or without alcohol, although alcohol use was often concomitant. To confirm treatment fidelity, all three treatments were manual-guided and the sessions were videotaped. The participants were randomly assigned to one of the three treatments: MDFT, MEI, or AGT. Each arm consisted of 14 to 16 weekly sessions that occurred over 5 to 6 months. MDFT was conducted in three phases.

Similar to MDFT, MEI was also rooted in family therapy, but it integrated psychoeducational features and addressed three to four families at a time. In MEI group, didactic presentation, intrafamily or interfamily group discussion, and skill building exercises were conducted in three-part 90-minute sessions. The AGT arm had four phases that were modeled after Beck's group therapy model.[28,29] The initial phase included two family sessions to enlist family cooperation and discuss group rules. Additionally, individual meetings occurred with each adolescent to introduce the group therapy process and gather personal history. Treatment focused on skill-building by specifically focusing on drug-refusal, conflict resolution, and anger management skills. AGT concluded with generalization and maintenance of newly learned skills and relapse prevention.

The outcome of this study was measured by symptom improvement, academic performance, family competency, and increase in protective factors. These measurements were taken at the intake of the treatment, termination of the treatment, and

6- and 12-month follow-up. There was overall improvement among each treatment modality. On review of frequency of drug use, improvement in grade point average, and competency in family functioning, MDFT showed the most improvement. AGT was second best, with MEI being the last. MDFT showed rapid reductions in drug use that were maintained during the 6- and 12-month follow-ups. There was significant improvement in family functioning in the MDFT group, whereas there was no change in the AGT group and significant deterioration in MEI. The participants of the AGT group had as low frequency of drug use as those in the MDFT group after 1 year. Thus, it seems that the impact of the AGT treatment occurs over time, in comparison with the MDFT group. However, the caveat here is that there were a higher number of drop-outs in the AGT group (48%). The drop-out rate in the MDFT group was 30%, whereas it was 34% in the MEI group. This may also indicate the role a family plays in adherence to a treatment plan because the two groups with family involvement have lower drop-out rates.

Multisystemic Therapy and Functional Family Therapy for Delinquent Behavior

A meta-analysis was conducted by Baldwin and colleagues[30] to identify the best family treatment of adolescent delinquency and substance abuse. They evaluated the outcome of promising family therapy–based treatments, such as brief-strategic family therapy, functional family therapy (FFT), MDFT, and multisystemic therapy (MST), as compared with treatment as usual, alternative therapy, and control condition. Alternative treatment included group therapy, psychodynamic family therapy, individual therapy, parent groups, and family education therapy. After reviewing 24 studies, all four therapies had better outcomes than treatment as usual or alternative therapy.

MST includes elements of Minuchin's structural family therapy, Haley's strategic perspective, social learning theory, and cognitive behavioral therapy (CBT). Thus, MST hopes to address repeated patterns of interaction among family members, the behavioral impact of family hierarchy, the importance of modeling and reinforcement, and the benefit of problem-solving skills to decrease adolescent delinquency and substance abuse (discussed in more detail elsewhere in this issue).[31]

In 1995 and 2005, Borduin and colleagues[32] showed effectiveness of MST when it was applied to a sample of chronic and violent juvenile offenders. The result was that at 14-year follow-up, MST improved family relations, decreased caregiver and adolescent mental health symptoms, and decreased repetitive incarcerations by more than 50%.[33] This research was replicated to assess the effectiveness of MST with juvenile sex offenders. As expected, at 9-year follow-up, MST reduced recidivism by 83% and decreased incarcerated days by 80%.[22] In conclusion, there is sufficient evidence for MST to be an effective treatment of youth, including African-American and multiracial Hawaiian, with antisocial behavior.

FFT sees behavioral and psychiatric problems to be a result of dysfunctional family relations. Thus, FFT establishes new patterns of family interaction by integrating behavioral and cognitive strategies with direct intervention with the family.[22] In FFT, a team is composed of three to eight therapists who carry a caseload of 12 to 15 families. The treatment involves 12 sessions, which are divided in three phases over 3 to 4 months. The theme of phase 1 is engagement and motivation. The focus of phase 2 is to replace the old relational patters with more adaptive family interactions. The therapist may use other evidence-based interventions to create behavioral change. For example, CBT may be used to address the adolescent depression. Therapists may also use other problem-solving and pragmatic techniques to improve communication among family members. The goal of phase 3 is to generalize the new learned patterns

and skills to the broader community.[34,35] The therapist also helps the family anticipate and plan for future barriers in sustaining positive relationships.[36]

Alexander and Parsons[23] showed the effectiveness of FFT in improving family interactions and decreasing recidivism for adolescents with status offenses. Similar to MST, the reduction in youth recidivism was significantly associated with therapist's adherence to the protocol and with increased supportive communication in families.[37] Additionally, treatment completion was associated with improvement in relationship skills among family members.[37]

Multidimensional Treatment Foster Care

Multidimensional treatment foster care (MTFC) was first developed for 12 to 17 year olds in foster care who failed intensive in-home and out-of-home services.[37] MTFC is rooted in social learning theory and natural contextual reinforcement. The promotion of prosocial behavior requires intense foster parent supervision, engagement in prosocial peer activities, removal from deviant peers, and encouragement for positive school performance. The goal is to keep this youth out of state detention centers or group care facilities.[38]

The team for MTFC is composed of a trained foster parent, a program supervisor, family therapist, individual therapist, skill trainer, and recruiter. The program supervisor is available for 24-hour crisis management. Foster parents receive 20-hour training to provide close supervision and highly structured behavior management. The caseload of the team is no more than 10 youths. Compared with MST, MDFT, and FFT, the duration of treatment usually lasts longer, on average 6 to 9 months. Family therapy, individual therapy, and skills training can continue for an additional 3 months.

The outcome of this intensive treatment was reduction in criminal charges and 60% fewer incarceration days at 1-year follow-up for chronic juvenile offenders.[39] This result was sustained at 2-year follow-up according to Eddy and coworkers.[40] The MTFC trial was further successfully generalized to adolescent female chronic offenders. The results of the study showed reduced pregnancies at 2-year follow-up.[41]

PROMISING TREATMENTS

Natural disasters, such as Hurricane Katrina, displace families from their homes and communities. While parents are trying to stabilize their lives and focus on surviving, their attention may not be on supervising their children or processing loss with their adolescents. Thus, youth in disaster-stricken areas are particularly vulnerable to mental health issues, such as PTSD. Recognizing the multifactorial postdisaster problems and the already existing evidence for MDFT, Rowe and Liddle[42] plan to generalize MDFT treatment to help adolescents with substance abuse and trauma post–Hurricane Katrina in the New Orleans region. In this RCT, they hope to compare MDFT with CBT-influenced high-quality group treatment of 13 to 17 years olds who have mild to moderate trauma symptoms and substance abuse problems.

Pineda and Dadds[43] compared a strength-based family education program called the Resourceful Adolescent Parent Program (RAP-P) with routine care (control group) when treating suicidal adolescents ages 12 to 17 years. These adolescents experienced at least one episode of suicidal behavior, which includes suicidal ideation, intent, attempt, self-injurious behavior, and parasuicidal gestures, in the previous 2 months. RAP-P is an interactive psychoeducation program for parents conducted over four 2-hour sessions. The first session identifies parental strengths and stress management strategies. The following three sessions involve education about normal adolescent development, how to promote adolescent self-esteem, how to encourage

autonomy while building attachment, and managing family conflict. Of the 40 families, the families in the RAP-P group had improved family functioning and reduced adolescent suicidality after intervention and at 6-month follow-up.

Family interventions are not limited to mental health issues. There are a few non-RCT studies that evaluate family interventions to manage childhood obesity. Initially family intervention was limited to education about healthy lifestyle and exercise.[31,44,45] Epstein and colleagues[44] reviewed 10 years of data that indicate maintenance of weight can be achieved through a family-based approach. Education about parenting and parenting styles was added to a behavioral approach that showed a positive outcome over 7 years.[46,47] Kitzman-Ulrich and coworkers[48] developed a treatment model that drew from family systems theory and combined it with a behavioral approach. This treatment builds nurturance, family cohesion, and conflict resolution.[47,48] Building family competence, satisfaction, and warmth also was included. Given the positive outcome in family interventions for childhood obesity, educating the family about healthy lifestyles and improving parenting should be considered standard treatment of childhood obesity.

FURTHER RESEARCH

Although the RCTs mentioned here support using family interventions for child and adolescent mental health issues, there continues to be a need for further research. It is not yet known which treatment is best for individual families. It is also not known which treatment is indicated for varying degrees of severity of the problem. Because most psychiatric conditions have comorbidity, it would be beneficial to have data on effectiveness for comorbid conditions.

From this review, it is apparent that family interventions are effective in treating child and adolescent mental illness. However, data are needed regarding which specific interventions with the family make the difference and produce the improved outcome. Is modeling adaptive behavior sufficient to result in improved anxiety? Is psychoeducation for the family about depression the primary factor that results in improved symptomatology? The growing diversity of society requires more RCTs with a higher proportion of minority families to guide treatment of families from varying cultures. Finally, studies that examine the inclusion of the common factors listed previously in manualized treatments would further guide and refine practice.

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