Depression in Youth: Psychosocial Interventions

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Witnessed over the past 20 years are major advances in knowledge regarding depression in children and adolescents. Although additional research is needed, clinicians can now turn to treatment strategies with demonstrated efficacy. In this article we review the literature on psychosocial interventions for depression in youth and offer a working model to guide the treatment of depressed youth. We begin with a brief overview of the model, followed by a review of the treatment efficacy and prevention literatures. We offer some caveats that impact the ability to move from this treatment literature to the real world of clinical practice. We conclude by considering how extant research can inform treatment decisions and highlight critical questions that need to be addressed through future research.

Mrs. Jones called, distraught. Her daughter, Alice, said she was “suicidal.” She hated her life, couldn’t stand the pressure at school, and felt depressed. Alice found school stressful, and her grades were declining. She had become crabby and difficult to get along with, wasn’t eating well, stayed up late at night, complained of feeling tired, and was increasingly withdrawn from friends and activities.

Twenty years ago, limited data were available to guide our work with clients like Alice. Today, major progress has been made in our ability to evaluate and treat depression in youth. Solid data exist to guide us in evaluating and developing a treatment plan for Alice. Although unanswered questions remain, we have strong evidence supporting the efficacy of psychosocial treatments for depression. In this article we review this evidence and offer a working model to guide the treatment of depressed youth. We begin with a brief overview of our model, followed by a review of the treatment efficacy and prevention literatures. Next, we offer some caveats that impact our ability to move from this treatment literature to the real world of clinical practice. We conclude by considering how extant research can inform treatment decisions for youth like Alice and highlight critical questions that need to be addressed through future research.

A Working Model

A working model for conceptualizing treatments for depression is presented in Figure 1. This vulnerability stress model has its conceptual underpinnings in cognitive–behavioral theories of depression as well as research demonstrating that depression is frequently triggered or complicated by environmental stress (Asarnow, Goldstein, Tompson, & Guthrie, 1993; Goodyer, Germany, Gowrusankur, & Altham, 1991; Hammen, Burge, & Adrian, 1991). The model is adapted from other work emphasizing cognitive–behavioral theories (e.g., Clarke, Lewinsohn, Miranda, Munoz) and interactions between biological and psychosocial factors (Rubenstein et al., 1996). In considering Figure 1, it is important to note that this figure was developed for Youth Partners in Care, a study of treatment effectiveness for adolescent depression among youth seen in primary care (Asarnow, Wells, Jaycox, and colleagues, Agency for Health Care Policy and Research). The model is developed as part of a psychoeducational intervention designed to help youth and family members understand depressive cycles and how treatment can help to reverse problems with depression as well as to help family members make a choice among possible treatments with demonstrated efficacy.
efficacy (cognitive–behavior therapy [CBT] or medication). As such, this model is intended to be employed in the initial psychoeducational phase of treatment when the emphasis is on developing a conceptual framework for youth and family members struggling with depression.

As shown in the top portion of Figure 1, cognitive–behavioral processes contributing to depressive cycles are emphasized. This portion of Figure 1 illustrates that depressive cycles often begin as responses to stress. As illustrated in the connected circles in the top portion of Figure 1, the model suggests that the ways in which each of us respond to stress is a function of interactions between (a) cognitions or thoughts, (b) behaviors or actions, and (c) feelings. Cognitive theory postulates that it is not stressful events themselves that cause depressed mood. Rather, it is the negative or dysfunctional interpretations that are made about such events that create and maintain depressed mood. These negative thought patterns are associated with increased vulnerability to depression. Similarly, behaviors such as social withdrawal, inactivity, or maladaptive social behaviors would be expected to exacerbate depressed mood and vulnerability to depression. CBT strategies are based on the assumption that interventions aimed at developing more adaptive cognitive, attributional, and behavioral patterns will lead to improved clinical and functioning outcomes. The cognitive component of CBT emphasizes helping youth to identify and interrupt negative and pessimistic thoughts, beliefs, biases, and causal attributions and to substitute more positive and optimistic thought patterns. The behavioral component of CBT emphasizes increasing positive behavioral patterns such as social skills, which are likely to lead to an increased rate of positive reinforcement and decreased rate of negative reinforcement in the youth’s environment (Lewinsohn, Clarke, Rohde, Hops, & Seeley, 1996).

Evidence for the cognitive model comes from studies comparing depressed to nondepressed youth. For instance, depressed children show more negative attributional styles than nondepressed children (e.g., Asarnow & Bates, 1988; Cole & Turner, 1993; Nolen-Hoeksema, Gigrus, & Seligman, 1992; Quiggle, Garber, Panak, & Dodge, 1992). That is, they tend to make more stable, internal, and global attributions about negative events. In addition, depressed youth show evidence of specific negative distortions about the self, world, and future (e.g., Asarnow & Bates, 1988; Kaslow et al., 1992; Stark, Schmidt, & Joiner, 1996) and make more cognitive errors (Leitenberg, Yost, & Carroll-Wilson, 1986). Though the cognitive differences noted in these studies could reflect symptoms of depression rather than causal factors, evidence from studies of children at risk for depression bolster the argument that distorted cognitions play a causal role. For instance, among children at varying risk for depression by virtue of their mother’s psychiatric history, those at highest risk showed more negative attributional styles and lower self-worth than those at less risk, even when current depressive symptoms were controlled (Garber & Robinson, 1997). Second, longitudinal data shows that attributional style becomes more negative over time and tends to persist after a first episode of depression, presumably setting the stage for subsequent bouts of depression (Nolen-Hoeksema et al., 1992). Other studies have examined depressed, remitted, and nondepressed youth. Asarnow and Bates and McCauley, Mitchell, Burke, and Moss (1988) found that youth whose depressions were in remission scored similarly to nondepressed youth on measures of depressogenic cognitions, although Asarnow and Bates found that scores on the attributional style measure for the remitted group fell between the nondepressed and depressed groups and did not differ significantly from those of either group. In contrast, Gotlib, Lewinsohn, Seeley, Rhode, and Redner (1993) found evidence of incomplete recovery in terms of negative cognitions and attributional styles in adolescents whose depres-
The downward spiral in Figure 1 leading from the feeling–action–thought cycle illustrates how depressive-cognitive and behavioral patterns can lead to clinical depression, a condition characterized by the addition of physical symptoms to the feeling–action–thought patterns depicted in the preceding portion of the model. The spiral leading down from clinical depression to more severe depression emphasizes the point that as depressions become more severe, biological changes can occur. At this point in the spiral, treatment is frequently needed to reverse the depressive spiral, and pharmacologic as well as psychosocial treatments should be considered.

Thus, the Youth Partners in Care model highlights the potential utility of both CBT and pharmacologic treatments, both of which have demonstrated efficacy for adolescents with depression. In addition, the emphasis on stress in the model suggests the value of other approaches to treatment designed to decrease the level of stress to which an individual is exposed or to assist youth in better managing stress. For example, family interventions designed to reduce family stress and enhance the youth’s resources for coping with life stress are consistent with this model. Similarly, interpersonal models of depression that emphasize the value of improving interpersonal functioning and relationships (Mufson, Moreau, Weissman, & Klerman, 1993) would be expected to result in increased social support and reduced interpersonal stress. As detailed later, however, the only treatments for youth with demonstrated efficacy to date are CBT and medication (selective serotonin reuptake inhibitors). In addition, there are two recent reports demonstrating the efficacy of interpersonal psychotherapy for adolescent depression (Mufson, Weissman, Moreau, & Garfinkel, 1999; Rosello & Bernal, 1999). There is a critical need for further research aimed at clarifying the efficacy of different treatment strategies, including combination treatments as well as treatment algorithms for sequencing alternative treatment strategies.

The Research Literature:
What Do We Know?

If Alice were an adult, extensive data would be available to guide us. This data accumulated through years of research, and large national trials, has led to the development of treatment guidelines and a large database informing us regarding optimal treatment approaches for adults presenting with different forms of depression (Depression Guidelines Panel, 1993; Schulberg, Katon, Simon, & Rush, 1998). Not surprising, given the general resistance in the field to recognize depression as a significant clinical problem in children until the 1980s, less data are available on depression in youth. Although the focus of this article is on psychosocial treatments for depression, it is important to note that recent research also supports the efficacy of antidepressant medications for the treatment of depression in youth (Emslie et al., 1997; Wagner et al., 1998). Interested readers are referred to the excellent article by Wagner and Ambrosini (this issue) for greater detail. Suffice it to say, however, that although extant data are limited, the strength of current evidence supporting the efficacy of selective serotonin reuptake inhibitors has led to the development of algorithms for pharmacotherapy with youth suffering from major depression (American Academy of Child and Adolescent Psychiatry, 1998; Hughes et al., 1999). Thus, as we consider the strength of the evidence on the efficacy of psychotherapy for depression in youth, it is important to note that many youth may respond as well or better to medication, and that for some youth, a combination of psychotherapy plus medication may represent the optimal treatment choice. These questions await further research evidence and should be clarified through the National Institute of Mental Health Multisite Treatment of Adolescent Depression Study (March, personal communication, 1998), which will directly compare medication, CBT, combined medication plus CBT, and placebo.

As shown in Table 1, the past few decades have led to a series of studies examining treatments for depressed youth. (Studies are listed in alphabetical order based on the last name of the first author.) This work has served to identify some promising treatments, particularly for adolescents. Seven groups have completed treatment studies with youth meeting diagnostic criteria for depressive disorders. First, Lewinsohn, Clarke, Hops, and Andrews (1990) completed two independent studies examining the efficacy of group CBT therapy (the 16-session Coping With Depression Course) for the treatment of adolescents meeting criteria for major depression or dysthymic disorder. The initial study demonstrated a significant advantage for CBT (Lewinsohn et al., 1996), and this finding was replicated in the second study (Clarke, Rohde, Lewinsohn, Hops, & Seeley, 1999). Results across the two studies revealed a recovery rate of roughly 60.8% at the end of treatment, which was significantly higher than the recovery rate observed in the wait list control condition. The addition of a 9-session parent group to the adolescent CBT was not associated with a significant improvement in efficacy. However, the addition of a continuation treatment at the end of the acute CBT involving booster sessions every 4 months was associated with accelerated recovery among youth who were still
<table>
<thead>
<tr>
<th>Reference</th>
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<th>Diagnostic and Risk Assessment</th>
<th>Treatment Formats</th>
<th>Intervention Types</th>
<th>Postintervention Assessment</th>
<th>Impact of Treatment</th>
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<tr>
<td>Beardslee et al. (1992); Beardslee et al. (1993); Beardslee, Wright, Rothberg, Salt, and Versage (1996); Beardslee, Wright, et al. (1997); Beardslee, Versage, et al. (1997)</td>
<td>Parents of children ages 8–14 ( (n = 37) )</td>
<td>Children at risk based on having a parent with a serious affective disorder</td>
<td>Family</td>
<td>1. Family preventive and psychoeducational intervention ( (n = 19) ) 2. Lecture comparison group ( (n = 18) )</td>
<td>Immediate; 3–6 weeks; 9–12 months; 3 years</td>
<td>Compared to the lecture group, parents in the family intervention group reported greater satisfaction and more behavior and attitude changes, which were sustained. Children in the family intervention group showed higher functioning in the year following the intervention and had a greater understanding of their parents’ affective disorder than did those in the lecture-only group.</td>
</tr>
<tr>
<td>Brent et al. (1997)</td>
<td>Adolescents ages 13–18 ( (n = 107) )</td>
<td>Diagnosis of MDD based on K-SADS Interview and BDI ≥ 13</td>
<td>Family, individual</td>
<td>1. Systematic behavior family therapy 2. Cognitive behavioral therapy 3. Supportive therapy. All received three sessions of family psychoeducation</td>
<td>Immediate; every 3 months during first year treatment; 24 months</td>
<td>Compared to the other two groups, the cognitive behavioral therapy group showed more rapid response and was less likely to have a diagnosable MDD at the end of the treatment and more likely to be remitted and to have lower rates of both interviewers and self-reported depressive symptoms.</td>
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<tr>
<td>Clarke, Hawkins, Murphy, and Sheeber (1993)</td>
<td>Adolescents ages 14–15 ( (n = 150) )</td>
<td>All students—no risk factors were used for inclusion</td>
<td>Group</td>
<td>Study 1: Three sessions educational intervention versus attention placebo Study 2: Five sessions behavioral skills training versus attention placebo</td>
<td>12 weeks</td>
<td>No differences between active prevention programs and attention placebo on the CES-D.</td>
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<tr>
<td>Clarke et al. (1995)</td>
<td>Adolescents grades 9 and 10 ( (n = 150) )</td>
<td>CES-D &gt; 23 but does not meet criteria for MDD or DD (K-SADS)</td>
<td>Group</td>
<td>1. Modified Adolescent Coping with Depression Course 2. No intervention</td>
<td>Immediate; 6 months; 12 months</td>
<td>At follow-up significantly fewer adolescents diagnosed MDD or DD in experimental group. Higher GAF and lower CES-D for experimental group at post-test but no differences at follow-up.</td>
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<tr>
<td>Clarke, Rohde, Lewinsohn, Hops, and Seeley (1999)</td>
<td>Adolescents ages 14–18 years ( (n = 123) )</td>
<td>Diagnosis of MDD or DD based on K-SADS interview</td>
<td>Group</td>
<td>1. Adolescent Coping with Depression Course (CWD-A) 2. CWD-A supplemented with nine-session parent group 3. Wait list control</td>
<td>Immediate; 12 months; 24 months (one half of youth in the two treatment conditions were evaluated every 4 months, and one half were evaluated every 12 months)</td>
<td>Following acute treatment, CBT was associated with higher depression recovery rates (66.7% vs. 48.1% in wait list condition) and greater reduction in self-reported depressive symptoms. Addition of the parent group had no significant effect. Booster sessions were associated with accelerated recovery among youth who were still depressed at the end of acute treatment but did not reduce the rate of recurrence.</td>
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<tr>
<td>Study Authors</td>
<td>Sample Description</td>
<td>Diagnosis Criteria</td>
<td>Group Interventions</td>
<td>Time Points</td>
<td>Findings</td>
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| Fine, Forth, Gilbert, and Haley (1991) | Adolescents ages 13–17 (n = 66), 83% girls | Diagnosis of MDD or DD based on K-SADS Interview | 1. Therapeutic support group  
2. Social skills group | Immediate; 9 Months | At post-test both groups improved; therapeutic support group significantly more effective than social skills group in reducing depression on K-SADS with more participants in nonclinical range. Group differences disappeared at follow-up. |
2. Social problem solving  
3. Combined (both treatments)  
4. Wait list control  
5. No participation control | Immediate; 6 months; 12 months; 18 months; 24 months | No differences between the treated groups. Treated groups showed fewer depressive symptoms at post-test and at follow-up, had improved classroom behavior (teacher report) than untreated groups. Effects more pronounced among children from high-conflict homes. Follow-up revealed even greater group differences in depressive symptoms over time. |
2. Relaxation training  
3. Self-modeling  
4. Wait list control | Immediate; 1 month | All three active treatment groups showed significant improvement in depression compared to control. Most children in both cognitive and relaxation groups went from dysfunctional to functional range on depressive symptoms; self-modeling group was less improved than other active treatment groups. |
| King and Kirschenbaum (1990) | Children grades kindergarten–4 (n = 135) | Children who scored above a cutoff on the Activity Mood screening questionnaire | 1. Social skills training plus consultation with parents and teachers  
2. Consultation only | Immediate | Combined program showed reduced depression based on interview data as compared to consultation only. Multidimensional ratings of behavior and skills improved across both groups. |
| Lewinsohn, Clarke, Hops, and Andrews (1990) | Adolescents ages 14–18 (n = 59) | Diagnosis of major, minor, or intermittent depression based on K-SADS interview with mother and adolescent | 1. Adolescent only cognitive-behavioral training group  
2. Adolescent–parent cognitive-behavioral training groups  
3. Wait list control | Immediate; 1 month; 6 months; 12 months; 24 months | Significantly fewer youths in the treatment groups met criteria for depressive disorders after treatment and at follow-up. Significantly improved on self-reported depression, anxiety, number of pleasant activities, and depressogenic thoughts. Trend for adolescent–parent condition to outperform adolescent-only group. |

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Table 1. (Continued)

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<tr>
<td>Liddle and Spence (1990)</td>
<td>Children ages 7–11 (n = 31)</td>
<td>CDI ≥ 19 CDRS-R ≥ 40</td>
<td>Group</td>
<td>1. Social competence training 2. Attention placebo control 3. Wait list control</td>
<td>Immediate; 3 months</td>
<td>No group differences at pretest, post-test or follow-up. All groups declined on CDI scores and improved on teacher’s reports of problem behavior.</td>
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<td>Marcotte and Baron (1993)</td>
<td>Adolescents ages 14–17 (n = 25)</td>
<td>CDI ≥ 15 on two administrations and elevated score on semistructured interview focusing on depressive symptoms</td>
<td>Group</td>
<td>1. Rational–emotive (12 sessions) 2. No treatment</td>
<td>Immediate; 8 weeks</td>
<td>No difference between the two treatments: Depressive symptoms reduced at post-treatment in both groups.</td>
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<tr>
<td>Mufson, Weissman, Moreau, and Garfinkel (1999)</td>
<td>Adolescents ages 12–18 (n = 48)</td>
<td>Clinician diagnosis of MDD based on the HRSD</td>
<td>Individual</td>
<td>1. Interpersonal psychotherapy for depressed adolescents (IPT-A) 2. Clinical monitoring</td>
<td>Immediate</td>
<td>IPT-A patients reported greater decrease in depressive symptoms, improved social functioning, and improved problem-solving skills compared to controls. Seventy-four percent recovered in the IPT-A condition, compared to 46% in the control condition.</td>
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<tr>
<td>Reed (1994)</td>
<td>Adolescents ages 14–19 (n = 18)</td>
<td>Clinician diagnosis of MDD or DD</td>
<td>Group</td>
<td>1. Social skills training 2. Attention placebo control</td>
<td>Immediate; 6–8 weeks</td>
<td>Skills group participants scored significantly higher than control group on clinician’s rating of improvement. Male participants improved, but female participants deteriorated.</td>
</tr>
<tr>
<td>Reynolds and Coats (1986)</td>
<td>Adolescents grades 9–12 (n = 30)</td>
<td>1. BDI score &gt; 11; 2. RADS &gt; 71; 3. BID &gt; 20; 4. No other current treatment</td>
<td>Group</td>
<td>1. Cognitive–behavioral 2. Relaxation training 3. Wait list control</td>
<td>Immediate; 5 weeks</td>
<td>Both active treatments showed significant decreases in depressive symptoms and improved academic self-concept compared to control conditions. Adolescents in relaxation reported reductions in anxiety as well.</td>
</tr>
<tr>
<td>Rosello and Bernal (1999)</td>
<td>Ages 13–18 (n = 71)</td>
<td>Diagnosis of major depression, dysthymic disorder, or both</td>
<td>Individual</td>
<td>1. Cognitive–behavioral 2. Interpersonal 3. Wait list control</td>
<td>Immediate; 3 months</td>
<td>Both active treatments were associated with significant reductions in depression when compared to the wait list condition. Interpersonal was superior to cognitive–behavioral in enhancing social functioning and self-esteem. The effect size for interpersonal was greater than that for cognitive–behavioral.</td>
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Stark, Reynolds, and Kaslow (1987)

Children grades 4–5 ($n = 29$)

CDI scores $> 12$ on two administrations

Group

1. Behavioral problem solving
2. Self-control
3. Wait list control

Immediate; 8 weeks

Both active treatment conditions resulted in significant reductions in depressive symptoms; however, in behavioral problem solving both mothers and children reported differences, whereas in self-control only children reported differences.

Vostanis, Feehan, Grattan, and Bickerton (1996)

Ages 8–17 ($n = 56$)

Diagnosis of major depression, dysthymia, or minor depression based on K-SADS

Individual

1. Depression treatment program
2. Attention placebo

Immediate; 9 months

No difference in remission rates; remission rates were high in both groups.

Weisz, Thurber, Sweeney, Proffitt, and LeGagnoux (1997)

Grades 3–6 ($n = 48$)

CDI $\geq 10$ and/or identified by teachers/counselors as depressed; and CDRS-R interview score $\geq 34$

Group

1. Primary and secondary control enhancement training
2. No treatment control

Immediate; 9 months

At post-test treated group showed significantly greater reductions on both CDI and CDRS-R than did control group. At follow-up (60% available), group differences remained.


Children and adolescents ages 9–17 ($n = 48$)

Diagnosis of MDD or RDC minor depression based on K-SADS interview with both parent and child interviews

Individual

1. Cognitive–behavioral
2. Relaxation training

Immediate; 6 months

Post-test revealed greater reductions in both depressive symptoms and overall outcome in the cognitive–behavioral group. At 6 months group differences were attenuated.

Note: MDD = Major Depressive Disorder; DD = Dysthymic Disorder; K-SADS = Schedule for Affective Disorders and Schizophrenia for School-Age Children; BDI = Beck Depression Inventory; CDI = Children’s Depression Inventory; GAF = Global Assessment of Functioning Scale; CES-D = Center for Epidemiologic Studies–Depression Scale; CDRS-R = Revised Children’s Depression Rating Scale; RADS = Reynolds Adolescent Depression Scale; BID = Bellevue Index of Depression. HRSD = Hamilton Rating Scale for Depression.
depressed at the end of acute treatment. This continuation treatment was not associated with a decrease in rates of recurrence. Second, Brent et al. (1997) examined the relative efficacy of 12 to 16 sessions of individual CBT, systemic behavioral family therapy, and individual nondirective supportive therapy. Results indicated a higher rate of remission (60%) among adolescents treated with CBT, as compared to either family therapy (29%) or supportive therapy (36.4%). Third, Wood, Harrington, and Moore (1996) compared 6 to 8 sessions of individual CBT for depression to relaxation training among youth meeting Diagnostic and Statistical Manual of Mental Disorders (3rd ed., rev.; American Psychiatric Association, 1987) criteria for major depression or Research Diagnostic Criteria for minor depression. Results following treatment indicated significantly higher remission rates for youth in the CBT condition (54%) as compared to the relaxation condition (21%). Fourth, Vostanis, Feehan, Grattan, and Bickerton (1996) found substantial recovery (87%) following brief 2- to 9-session CBT (M = 6 sessions, similar to the Wood et al. CBT) among 8-year-old to 17-year-old youth with major depression, dysthmic disorder, or minor depression. Gains were generally maintained at the 9-month follow up. High recovery rates were also observed among youth in a comparison nonfocused intervention condition (75% recovery rate), yielding a nonsignificant difference between treatments. This suggests either that the nonfocused intervention had only a somewhat weaker psychotherapy effect or a high placebo response rate. It is important to note, however, that this study included a large number of youth with mild depression severity (54.4% with minor depression) who may have responded to nonspecific therapy factors. Fifth, Fine, Forth, Gilbert, and Haley (1991) contrasted a therapeutic support group and social skills training for adolescents (each 12 weeks in length). At posttest, both treatment groups had improved significantly from baseline; however, the therapeutic support group was significantly more effective than social skills training in reducing depression as assessed using the Schedule for Affective Disorders and Schizophrenia for School-Aged Children with more participants in the nonclinical range.

Finally, two groups examined interpersonal psychotherapy (IPT). In a sample of clinic-referred adolescents with major depression, Mufson et al. (1999) found that IPT was associated with greater improvements in depressive symptoms, social functioning, and problem-solving skills as compared to a control clinical monitoring condition. In addition, Rosello and Bernal (1999) compared CBT, IPT, and a wait list control condition among Puerto Rican adolescents meeting criteria for major depression or dysthmic disorder. Results indicated that both CBT and IPT led to significant reductions in depressive symptoms and improvements in self-esteem in comparison to a wait list condition. Youth treated with IPT showed greater gains in social functioning and self-esteem when compared to the wait list group, and the effect size for IPT (.73) exceeded that for CBT (.43). These two studies provide some initial support for the efficacy of IPT with adolescents and underscore the importance of further work on this approach. It is important to note that the Mufson et al. (1999) sample included a large proportion of Latino youth (almost 80% of the IPT group). Thus, both of the completed studies evaluating IPT with adolescents have included largely Latino samples, underscoring the importance of testing the efficacy of all of our interventions in different cultural groups.

There have been nine treatment studies to date that select children based on the severity of their depressive symptoms (as opposed to the presence of depressive disorders), and then treat the symptoms with some form of CBT as compared to a control group. One of these studies was nonrandomized (Butler, Miezitis, Friedman, & Cole, 1980), though it showed promising results, and two have not yet presented quantitative data indicative of whether CBT was superior to the controls (Rehm & Sharp, 1996; Stark, 1990). The other six studies are presented in Table 1 (Kahn, Kehle, Jenson, & Clark, 1990; Liddle & Spence, 1990; Marcotte & Baron, 1993; Reynolds & Coats, 1986; Stark, Reynolds, & Kaslow, 1987; Weiss, Thubrer, Sweeney, Proffitt, & LeGagnoux, 1997). Four of the six studies provide evidence that CBT techniques are useful in reducing depression compared to no treatment or wait list controls. However, the CBT techniques usually did not differ from the nonspecific controls, such as relaxation training. Two studies did not support the usefulness of CBT. One found no differences between those children treated with a social competence enhancement therapy, attention control, and no treatment control (Liddle & Spence, 1990). The second found no difference between a rational-emotive therapy and no treatment controls among 14- to 17-year-olds (Marcotte & Baron, 1993).

Collectively, these studies support the efficacy of psychosocial interventions for youth with depressive symptoms, or subsyndromal depression. A meta-analysis of several of these studies and one that treated diagnosed depression (Butler et al., 1980; Kahn et al., 1990; Lewinsohn et al., 1990; Liddle & Spence, 1990; Reynolds & Coats, 1986; Stark et al., 1987) revealed a medium effect size of .64 to .67 overall (Weisz, Weiss, Han, Granger, & Morton, 1995).

Additional research is needed to determine whether findings from studies that have targeted youth with subsyndromal depression will generalize to samples with clear depressive syndromes. This is particularly important because among the studies focusing on youth with diagnosable depressive disorders, only the Wood et al. (1996) and Vostanis et al. (1996) studies included children below the age of 14 years. Moreover, the ma-
Majority of other studies focusing on the younger preadolescent period have found no differences between depression-specific treatments and more general interventions such as relaxation training.

Despite a strong theoretical basis, the mode of action of CBT for child and adolescent depression has not yet been demonstrated. Changes in cognitions as a function of CBT have not frequently been evaluated. Existing data show that CBT is not more effective among those with more cognitive distortions (Clarke et al., 1992; Brent et al., 1998), and changes in depressogenic cognitions were not related to the treatment effect in a group CBT compared to a waiting list control group (Lewinsohn et al., 1990). It will be important to examine the changes in cognitions as a function of treatment in future studies to better understand the specificity of CBT and its mode of action.

**Family Interventions**

Numerous studies have documented the importance of family attitudinal and interaction patterns for depressed youth (for reviews, see McCauley & Myers, 1992; Stark, Ostrander, Kurowski, Swearer, & Bowen, 1995), lending support to the inclusion of families in the treatment process. First, among youth with depression, greater family stress has been found to be associated with a longer initial episode and lower social competence at 3-year follow up (McCauley et al., 1993). Second, depressed children whose homes were characterized by high levels of parental criticism or emotional overinvolvement demonstrated significantly lower recovery rates at the end of the first year after hospitalization than did children whose parents scored low on these variables (Asarnow, Goldstein, Tompson, & Guthrie, 1993). Third, during depressive episodes, children demonstrate more negative and guilt-inducing behavior in laboratory-based family interactional tasks when compared to nondepressed psychiatric and control participants (Hamilton, Asarnow, & Tompson, 1999), underscoring the high level of stress experienced by families of depressed children. Fourth, maternal and child depressive episodes may be temporally linked such that symptoms in one member of the dyad potentiate symptoms in the other (Hammen et al., 1991). Fifth, although studies of depressed adults indicate strong family histories of depression in first degree relatives, familial loading appears to be even more substantial in children (Puig-Antich et al., 1989) and adolescents with major depression (Kutcher & Marton, 1991). Thus, children with depression are likely to be living with parents who also experience depression. Consequently, as Kazdin and Weisz (1998) pointed out, “Child and adolescent therapy is often de facto ‘family context’ therapy.”

The data on families and depression are predominantly correlational, and thus the role of family factors in the etiology of depression remains unclear. However, a number of authors have noted that these findings support an interactional model (Asarnow et al., 1994; Coyne, Downey, & Boergers, 1991; Keitner & Miller, 1990, 1994) in which parental depression and criticism, dysfunctional family interactional patterns, and family stress contribute to ongoing child depression, which in turn fuels family stress and dysfunction. Thus, regardless of their role in depression etiology, family factors may impact depressive symptoms, and the depressed individual impacts the family system. Family treatment strategies also have potential for decreasing the risk of depressive episodes across multiple family members (e.g., mother, children, father). Furthermore, depression in youth often presents with additional comorbid conditions, particularly anxiety and disruptive behavior disorders (Birmaher et al., 1996), and family-based treatments that improve family functioning and increase coping skills are capable of addressing a range of problems that these children are likely to present in treatment.

Although family and marital interventions have demonstrated efficacy in the treatment of adults with both depression (Jacobson et al., 1991; O’Leary & Beach, 1990) and, to a more limited extent, bipolar affective disorder (Haas et al., 1988; Miklowitz & Goldstein, 1997), examination of family-based treatments for depression in youth is extremely limited, and existing trials provide contradictory evidence as to their value. Research conducted to date has examined both brief family education interventions as well as more extended family interventions.

**Brief Family Education Interventions**

There is emerging support for the value of brief psychoeducational family programs. Brent, Poling, Mckain, and Baugher (1993) examined the impact of family education on depression in youth. They reported that following a 2-hr psychoeducation session, participants showed greater knowledge about depression as well as fewer dysfunctional beliefs about depression and the treatment of depression. Participants almost uniformly rated the program as worthwhile (97%) and felt that they had learned a lot (98%). In addition, perhaps the largest adolescent depression treatment study completed to date, Brent et al. (1997) added a brief family psychoeducation component across all treatment conditions as a means of minimizing dropout and promoting a family atmosphere that would support treatment gains.

In addition, our group (Asarnow & Scott, 1999) tested a combined cognitive–behavioral and family education intervention with fourth through sixth graders with depressive symptoms. The family education session followed nine sessions of group CBT during which children produced a video as a means of helping them to
practice and consolidate the skills introduced in each CBT session. The family education session was designed to promote generalization of skills to key environmental contexts (home, school, community). A major part of the session was a brief parent-only segment where the emphasis was on (a) the importance of helping the children to generalize the skills to real-world contexts and problems, (b) the fact that children would be more likely to use the skills if they felt good about what they had accomplished in the group, and (c) the value of the family session as a means of helping parents to help their children to feel positively about the CBT skills and to use the CBT skills in real-world settings. After this introduction, parents and children were brought together for a multiple family meeting during which the children’s video illustrating the treatment model was presented, and children were given awards for their accomplishments during the CBT. Parents and their children then engaged in a series of structured games designed to teach the parents the skills emphasized in the group CBT and promote generalization to critical life settings. The session ended with each child presenting his or her parents with an award for their participation in the family session. Results indicated that the intervention was associated with greater reductions in depressive symptoms as compared to a wait list control group. In addition, children and parents almost uniformly rated the intervention as enjoyable. When asked about the family component, all of the parents rated this intervention as useful. However, only 40% of the parents felt that more extended family sessions would be helpful, underscoring the potential utility of including some family education as well as the potential difficulties with lengthy family interventions.

Extended Family Interventions

Results of extant studies on the efficacy of extended family interventions are not encouraging. As shown in Table 1, Brent et al. (1997) compared systemic–behavioral family therapy, individual CBT, and individual nondirective supportive therapy for adolescents with major depression. The family treatment utilized a combination of reframing and communication and problem-solving skills training to alter family interaction patterns. Results indicated that systemic–behavioral family therapy was significantly less effective than CBT and was comparable in efficacy to nondirective supportive therapy in this study. However, it is important to note that all groups in this study received the brief family psychoeducation intervention described earlier.

Second, Lewinsohn and colleagues (Clarke et al., 1999; Lewinsohn et al., 1990) compared adolescent-only group CBT, adolescent group CBT plus parallel parental group CBT, and a wait list control condition. The addition of the parental component offered no clear advantage over group CBT alone. However, it is important to note that the Lewinsohn et al. group CBT does focus on family interactions by teaching communication, negotiation, and conflict resolution skills for use with parents and peers, and including homework assignments practicing these skills with parents.

Third, the depression-specific treatment employed in the Wood et al. (1996) study, which encouraged parents to help in the CBT, was significantly superior to relaxation training in reducing depression. However, the design of the study does not permit evaluation of the specific impact of family involvement per se.

Fourth, Fristad and colleagues (Fristad, Gavazzi, & Soldano, 1998) described a six-session multifamily psychoeducational group for childhood mood disorders. Psychoeducational groups sessions begin and end with both the parents and adolescent or child; however, much of the material is then presented in “breakout sessions” in which parallel parent and child or adolescent groups are conducted. Topics of discussion in each of the groups include education about mood disorders, medication and medication side effects, interpersonal factors, communication skills, and stress reduction. During the child and adolescent groups, participants are able to meet others who cope with similar difficulties, increase their knowledge of symptoms and symptom management, build their social skills, and discuss common developmental issues (e.g., adolescents may focus on issues of substance use which are commonly confronted). Although the impact of this treatment on clinical symptoms has yet to be evaluated, preliminary data indicate that families are satisfied with the intervention, and parents report positive changes in their interactions with their child or adolescent following the intervention.

Three additional family treatment models have been proposed and are currently being evaluated. First, an ongoing study being conducted by Diamond and colleagues at the Philadelphia Child Guidance Center provides preliminary evidence that family treatment may be effective with depressed adolescents. Diamond and Siqueland (1995, 1998) described a family treatment model for depressed adolescents that derives from attachment theory and focuses on building the bond between the adolescent and his or her parents so that the family can serve as a secure base from which the adolescent develops increasing autonomy. The therapeutic strategies include a nonblaming reframing of the goals of treatment from a focus on the adolescent’s symptoms to a focus on the quality of parent–adolescent relationships, building alliances between the therapist and both the parent and adolescent, promoting attachment between the parents and the adolescent, and building competencies within the adolescent. Although evaluation of this treatment approach is currently in its beginning stages, early results suggest greater recovery from depression among the family-treated group compared
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to a wait list control group (Diamond, personal communication, February 2, 1999). Second, Schwartz and colleagues (Schwartz, Kaslow, Racusin, & Carton, 1998) described Interpersonal Family Therapy, a sophisticated model integrating theory and techniques from family systems perspectives, cognitive behavioral approaches, attachment theory, interpersonal therapy, and developmental psychopathology. Goals of the treatment include decreasing depressive symptomatology, changing maladaptive cognitive patterns, improving family affective communication, increasing adaptive behavior, and improving both interpersonal and family functioning. Although to our knowledge no empirical evaluation of this approach has yet been completed, this treatment attempts to focus on identifying and intervening in areas of particular need within each family, thus providing a tailored strategy. Finally, Tompson and Asarnow are currently testing a family focused intervention for depressed children (ages 8–14) based on both cognitive–behavioral and family systems models. This approach provides expanded family psychoeducation and skills building within a family context. Goals of the intervention include (a) educating family members about depression, focusing on its interpersonal nature; (b) teaching parents and children skills that will enable them to communicate and solve problems more effectively; (c) improving positive communication that may help family members to provide one another with more effective support; and (d) helping families to solve specific family problems.

Collectively, the data reviewed earlier highlight the potential advantages and disadvantages of adding a family component to the intervention. On the plus side, the data suggest that families see brief family educational interventions as helpful; there are no data indicating that these interventions are detrimental; and there are some data from the adult literature indicating that family interventions are associated with improved outcome or course in unipolar depression (Jacobson et al., 1991; O’Leary & Beach, 1990), bipolar disorders (Clarkin, Carpenter, Hull, Wilner, & Glick, 1998; Hass et al., 1988; Simonene, Miklowitz, Richards, Saleem, & George, in press), and schizophrenia (for review, see Goldstein, 1995). Alternatively, to our knowledge, there are no data showing that family treatments are more effective than other forms of treatment for depressed youth. Existing on family treatment models also appears to result in a sizable proportion of families refusing treatment. Nine of the 15 families (60%) refusing randomization in the Brent et al. (1997) study did so because they did not want family treatment, an observation that is consistent with results from our pilot study indicating that families preferred a brief as opposed to more extended family intervention.

It is important to note, however, that studies examining family interventions have emphasized adolescents rather than younger children who may be particularly likely to benefit from family-based treatment. Indeed, a recent study of family intervention for childhood anxiety disorders underscores the importance of carefully considering age group. Barrett, Dadds, and Rapee (1996) compared individual CBT, CBT plus family treatment, and wait list control group. At posttreatment, significantly more children in CBT (57%) achieved recovery from their anxiety disorder than those in the wait list group (26%), but the CBT plus family treatment group showed the highest rates of recovery (84%). The difference between the two active treatments was maintained at both 6-month and 12-month follow-ups. Most interesting, however, was the finding of a significant age effect, where younger children (age 7–10) showed better outcomes in CBT plus family treatment, whereas older children (ages 11–14) did equally well in both active treatments. These findings highlight the importance of examining family-based treatments in preadolescents.

Prevention of Depression

The promise of CBT for treating depression has led to efforts to prevent depression from developing in children and adolescents. According to the model of depression depicted in Figure 1, the same skills that would reduce depression could be used to inoculate children against depression. Improved ability to challenge dysfunctional thinking and to develop functional behavior would be expected to decrease the likelihood that stress would lead to the downward spiral of depression.

Clarke, Hawkins, Murphy, and Sheeber (1993) developed a primary prevention program targeting normal adolescents in school and was unable to detect significant benefits over a 12-week follow-up period. However, three studies that attempted to prevent depression among children with elevated depressive symptoms showed more success. Clarke et al. (1995) found that, among adolescents with depressive symptoms but without Major Depressive Disorder or Dysthymic Disorder, group treatment based on CBT was associated with lower depressive symptom scores, lower rates of onset of major depression or dysthymia over 12 months of follow-up, and improved psychosocial functioning, compared to a no intervention comparison group. Jaycox, Reivich, Gillham, and Seligman (1994) selected children at risk for depression by virtue of subthreshold depressive symptoms or a high degree of family conflict at home and randomized schools to CBT or waitlist control conditions. Immediately after treatment, the 69 treated children showed lower levels of depressive symptoms and better classroom behavior compared to 73 children in the no-treatment condition (Jaycox et al., 1994). Moreover, the treated children continued to report fewer depressive symptoms at a 2-year follow-up assessment, with the
number of treated children who reported symptoms of depression in the moderate to severe range reduced by one half (Gillham, Reivich, Jaycox & Seligman, 1995). King and Kirschenbaum (1990) conducted a program of social skills training and consultation with parents and teachers and found that treated children fared better than those who received consultation only.

Another approach to preventive interventions has been tested by Beardslee et al. (1992), who identified youth at high risk for depression based on having a parent with a serious mood disorder. Beardslee et al. (1992) tested a family-based preventive psycho-educational intervention. This 6- to 10-session intervention involved individual sessions with both the parents and the child aimed at helping parents to convey to their children an understanding of the parent’s mood disorder, informing the parents about factors that increase resiliency in children, and assisting the child in identifying questions and concerns for the parents to address. One or two family meetings were then held to enable the parents and child to address these issues together. The children in these families were between the ages of 8 and 14 years. Compared to participants in a lecture-only control group, parents in the family intervention group reported greater satisfaction and more behavior and attitude changes, including increased family communication about the mood disorder, improved understanding of the child’s experience, and more.

Caveats

Although the research reviewed earlier supports the value of psychosocial interventions for depression in youth, several caveats merit note and underscore the critical need for additional research on the treatment of depression in youth.

1. The psychosocial treatments tested to date with clinically depressed youth have shown relatively limited efficacy. When clinically depressed samples have been employed, roughly 40% to 50% of the sample has failed to show significant recovery or remission as defined in each study. This rate is consistent with the relatively low recovery rate observed in extant pharmacologic trials, where about 40% to 50% of the sample have continued to show significant symptoms at the end of treatment (Ambrosini, Bianchi, Rabinovitch, & Elia, 1993; Emslie et al., 1997). Thus, although the tested treatments have shown promise, a substantial proportion of youth fail to respond. These data underscore the need to develop more effective treatment strategies.

2. The most marked improvements have generally been found on measures of depression. Improvements in functioning outcomes have been more difficult to demonstrate and may require more extended treatment or alternative approaches. Although requiring replica-
Conclusion and Discussion

The past 20 years have witnessed major advances in knowledge regarding depression in youth. Advances have been achieved in knowledge regarding phenomenology, correlates, etiology, and psychosocial factors. Major advances have also been achieved in knowledge regarding the treatment of depression in children and adolescents. Although additional research in this area is needed, clinicians can now turn to treatment strategies with demonstrated efficacy, and guidelines for clinical practice have been developed and disseminated. To date, psychosocial treatment research has emphasized cognitive–behavioral approaches and acute phase treatment.

Based on extant research and current guidelines, if Alice were seen today, treatment planning would begin with a thorough evaluation to confirm a diagnosis of depression and determine whether there are complicating comorbidities or psychosocial problems that need to be addressed in the treatment plan. For example, a comorbid diagnosis of substance abuse would suggest the need to treat the substance abuse prior to initiating depression treatment, and identification of depression in Alice’s mother would indicate a need to address the mother’s treatment needs. Second, based on our limited ability to predict which youth will benefit from which forms of treatment, offering Alice and her family a choice regarding treatment options would appear to represent a logical strategy and one that is likely to promote treatment adherence. Treatment options with support from the efficacy literature include CBT and medication (selective serotonin reuptake inhibitor). In addition, two initial studies support the promise of IPT for depressed adolescents (Mufson et al., 1999; Rosello & Bernal, 1999), with reported effect sizes for IPT exceeding those for CBT among adolescents with depression. Limited data further indicate that families are likely to view brief family psychoeducation as helpful (Asarnow & Scott, 1999; Brent et al. 1997). Following acute treatment, should Alice continue to show symptoms, there is some support for the value of continuation CBT (Clarke et al., 1999). However, empirical data to support decisions regarding continuation treatment for youth are presently lacking.

Additional research is needed to evaluate other treatment approaches, combined treatments, algorithms for making sequential treatment decisions, interventions for preventing relapse, strategies for promoting recovery among nonresponders to acute treatment, and to further clarify active treatment components and the processes through which therapeutic change occurs. There is also a critical need for research aimed at developing strategies for ensuring that efficacious treatments are available in real-world clinical practice settings where children like Alice seek treatment. As the field progresses, results of treatment research will further inform our models for the development and progression of depressive disorders in youth, as this body of research continues to inform our treatment strategies.

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