Chapter 3

Depression in children and adolescents: evidence-based treatment guidelines

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Clinical picture

Unipolar affective disorders in children and adolescents are typically captured in two diagnostic categories, namely, major depressive disorder (MDD) and persistent depressive disorder (PDD), previously referred to as dysthymic disorder. These two disorders, which will serve as the focus of this chapter, are characterized by a core symptom of sadness, anhedonia, or irritability that is severe or persistent enough to interfere with daily functioning and/or cause considerable distress. PDD and MDD primarily differ in symptom severity and duration and the fact that MDD is episodic in nature while PDD/dysthymia follows a more persistent course.

A DSM-5 diagnosis of MDD requires that in addition to sad mood, irritability, or anhedonia, at least four additional symptoms are present for at least 2 weeks (American Psychiatric Association, 2013). These symptoms include appetite and weight disturbances, sleep disturbance, psychomotor agitation or retardation, loss of energy or fatigue, decreased concentration, suicidal ideation, or plans, and feeling of worthlessness or excessive or inappropriate guilt. The International Classification of Diseases (World Health Organization, 2019) defines a depressive episode similarly.

According to the DSM-5, a diagnosis of PDD in children or adolescence requires the presence of depressed or irritable mood for most of the day for more days than not, for at least 1 year. In addition, two or more of the following symptoms should be present: (i) poor appetite or overeating, (ii) insomnia or hypersomnia, (iii) low energy or fatigue, (iv) low self-esteem, (v) poor concentration, and (vi) feeling of hopelessness. The diagnostic criteria for PDD/dysthymic disorder are similar across DSM-5 and ICD-11.

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Prevalence and course

A recent meta-analysis of data from 72 studies of youths between the ages of 10 and 19 years found a global point prevalence of 8% and 4% for MDD and PDD, respectively (Shorey et al., 2021). The risk of an affective disorder is relatively low in childhood and increases substantially in adolescence (Avenevoli et al., 2008; McGuire et al., 2019). Affective disorders appear to be equally common in males and females prior to puberty, with females experiencing an elevated relative risk after the onset of puberty (Douglas & Scott, 2014).

Comorbidity

It is very common for depressed youth to present with comorbid psychological conditions (Ollendick et al., 2008). In fact, the majority of individuals diagnosed with MDD will exhibit comorbid conditions including anxiety disorders, substance use disorder, conduct disorder, oppositional defiant disorder, and attention-deficit hyperactivity disorder (Ollendick et al., 2008; Seligman & Gahr, 2013; Seligman & Ollendick, 1998). Youth may also be diagnosed with "double depression," the presence of both MDD and PDD. Typically, comorbidity is associated with greater symptom severity (Seligman & Ollendick, 1998). Moreover, comorbidity frequently brings up questions in treatment planning regarding how to address multiple presenting problems; this is often the motivation for seeking out modular treatment (Chu et al., 2012).

Treatment of depression in youth: overview and state of the evidence

In the not-too-distant past, there was little empirical evidence to guide clinicians in the treatment of depression in youth. However, the last two decades have started to see advances in the number of clinical trials to address youth depression and greater attention to methodological rigor; more recently, studies have also begun to address increasingly complex questions, including the utility of modular treatments. Nevertheless, we would be remiss if before diving into a discussion of this evidence, we did not point out the numerous complexities inherent in the investigation of evidence-based treatments for depression in youth and by extension, with the interpretation of this literature. As discussed previously, prevailing diagnostic systems divide unipolar depression in youth into two distinct diagnostics, PDD and MDD. Presumably, the rationale for considering two similar syndromes as distinct diagnostic categories would include possible differentiation in their etiologies, clinical course, prognosis, or *treatment*. However, clinical trials have generally not taken this approach and youths with either MDD or PDD are often included in the same trials, although the presence of PDD has been examined in terms of prediction of treatment outcome.

This is where the official diagnostic divisions end, nevertheless in practice, the treatment literature often references treatment-resistant depression, which is typically defined as nonresponse to medication [most often as nonresponse to a selective serotonin reuptake inhibitor (SSRI)—usually fluoxetine], as well as subthreshold depression or high-risk youth—with the latter two occasionally being defined in the same way. Moreover, it is difficult to discuss some of the more nuanced literature guiding clinical decision-making for youth with depression per se given that the research on this topic is typically driven by what to do about the very high co-occurrence of anxiety and depression in youth (Ollendick et al., 2008; Seligman & Ollendick, 1998) as well as depression and the experience of trauma (Kilpatrick et al., 2003). So, our discussion about some studies could just as accurately describe them as studies on the treatment of youth with anxiety disorders or, sometimes, as youth having experienced a traumatic event.

Further, the episodic nature of major depression itself presents some complications in defining treatment "success." Treatment success could be defined as stringently as resulting in recovery at posttreatment (i.e., being diagnosis-free), resulting in clinically significant changes in associated impairment, and preventing future episodes. However, such a definition could result in discarding treatments with a potentially important impact on a child or adolescent's well-being, so most often treatment success has been defined as recovery at posttreatment.

Finally, we caution the reader against the assumption that the lack of rigorous studies supporting the efficacy of a treatment should be interpreted as evidence of a lack of efficacy (e.g., assuming large-scale studies were not conducted because of tepid results in preliminary trials). Rigorous clinical trials for youth depression can be complicated, ethically complex, and expensive endeavors. In addition to the potential efficacy or effectiveness of the treatment under consideration, the willingness to make such an investment can be driven by a myriad of factors including risk perceptions or the potential financial return on this investment. With these considerations, at the broadest level, there is evidence of the efficacy of both psychosocial treatments and biologic treatments. Therefore, we organize our discussion in this way.

Psychotherapy

Clinical trials of psychotherapy for youth depression have primarily investigated the efficacy of cognitive-behavioral therapy (CBT) or interpersonal therapy for adolescents (IPT-A). There are several notable similarities across these treatments; first, both are time-limited—typically 3–4 months in length, directive, and focused on skills-building. Second, similar therapeutic techniques are used to learn and build skills (e.g., role-playing, and outside of session practice). However, the underlying theoretical framework is where these treatments diverge.

Attachment theory forms the theoretical base driving the focus of IPT-A and the decision-making of the clinician. As a result, IPT-A focuses specifically on interpersonal relationships and role transitions that cause conflict within interpersonal relationships (Hall & Mufson, 2009). Although parents are considered "integral to IPT-A" (Hall & Mufson, 2009, p. 583), they play more of a supportive role. There are three interdependent phases in the course of treatment. The initial phase focuses on identification of the youth's interpersonal relationships and an assessment of the quality of these relationships and those that appear to be most related to depressive symptoms. This phase concludes with the identification of the problem area that serves as the focus of treatment; this can be either the youth's grief in response to a death, conflict in a relationship, difficulty in a role transition, or interpersonal deficits. In the middle phase of treatment, the youths, and to some degree the parents, are provided psychoeducation around the link between relationship concerns and depression and the youth is taught skills to address the conflicts or deficits identified in the initial stage. The final stage primarily focuses on consolidation and generalization of skills, and in recognition of the recurring nature of depression, the adolescent is taught to identify early warning signs of reoccurrence and how to address a relapse.

Cognitive and learning theories serve as the basis of CBT for youth depression. As with IPT, early CBT sessions also include assessment and psychoeducation, although here the focus is on the link between thoughts, feelings, and behavior; and more specifically on the identification of thought patterns—automatic thoughts or core beliefs—that lead to depressive mood or behavioral avoidance, and behavior that leads to a decrease in naturally occurring reinforcement from the environment. Depending upon the specific protocol and the age of the child, parents may be included. Subsequent sessions focus on building skills to address problem areas through activities such as cognitive restructuring and activity scheduling. These skills are taught, applied to real-life events, and practiced via homework assignments.

A recent meta-analysis examining the efficacy of psychosocial treatments for subthreshold depression ($k = 12$), that is, youth with symptoms of depression that did not meet criteria for MDD or PDD, found a small to medium effect size when comparing psychotherapy to care-as-usual, an attention control, or supportive treatment (Cuijpers et al., 2021). This effect size was associated with an NNT (number needed to treat) of around 8.5, that is, for every 8 to 9 youths treated with one of the experimental psychotherapy treatments, one youth would achieve a better outcome compared to if all youths were treated with care-as-usual or a supportive treatment. With one exception, the experimental treatments in this investigation were either CBT or IPT, with the majority (2/3) investigating CBT. Hence, these results may be most relevant to CBT for youth depression. There were no significant differences, however, when effect sizes describing treatment outcomes for CBT and non-CBT treatments were compared.

Given that youth in these studies were considered at risk for MDD, evidence that treatment could prevent future major depressive episodes was of particular interest. Results indicated a 48% reduction in risk of a major depressive episode at 1 year follow-up in youth treated in the experimental treatments (CBT and IPT) compared to the control conditions. Although the relative risk ratio was not statistically significant, the risk difference was. More specifically, a risk difference of −0.10 was found, indicating that youth treated with one of the experimental treatments had 10 fewer cases of MDD per 100 youth during the 1 year follow-up period. Given that youth in the control groups were receiving some type of treatment, and many were receiving what was considered by the provider to be treatment of choice, these findings should be considered clinically significant; the increased use of IPT and CBT for youth with subthreshold depression has the potential to decrease the number of these youths who go on to develop MDD, at least in the short term. Additional research, examining long-term effects, is needed, however.

There is also evidence to suggest the efficacy of CBT for clinically depressed youth. More specifically, examining change over time (i.e., prepost effect sizes) in clinical samples ($k = 24$) of depressed youth, Rith-Najarian et al. (2019) found CBT to be associated with a large effect size. Moreover, treatment effects were larger at both 1-year and longer follow-up assessments, suggesting continued improvement—although this conclusion should be regarded with some caution due to the small number of studies reporting follow-up data.

A more complicated picture is found in the results of Treatment of Adolescent Depression Study (TADS), a large multisite study funded by the National Institute of Mental Health (NIMH) initiated in 1998. In this study, youths with MDD were randomized to receive either a placebo medication, fluoxetine, CBT, or CBT + fluoxetine. Participants received treatment according to their assignment for 12 weeks. At the conclusion of the initial stage, nonresponders were referred out for community treatment[1]; responders were given maintenance treatment within their assigned condition for 6 weeks, and partial responders received an intensified version of their assigned treatment for 6 weeks. An 18-week maintenance stage followed that focused on maintenance of treatment gains for all participants (i.e., check-ins with possible reduction of dose to address side effects for fluoxetine patients and spaced booster session for those receiving CBT). The last stage was a 1-year open community follow-up; during this phase participants were followed for 1 year during which they could seek treatment in the community if they wished to do so. Although specific analyses yielded some minor differences in findings, the takeaway message from TADS regarding CBT as a standalone treatment for MDD was not positive. On many

1. Nonresponders in the placebo group were offered active treatment through the study.

outcomes, CBT failed to separate from pill placebo; for example, the posttreatment response rates for CBT and placebo were 43.2% and 34.8%, respectively (Treatment for Adolescents With Depression Study Team, 2004); and there is no significant differences between the CBT only group and the placebo group on measure of functioning or quality of like (Vitiello et al., 2006). Nevertheless, CBT combined with fluoxetine proved to be superior to fluoxetine alone in many, although not all, analyses (Treatment for Adolescents With Depression Study Team, 2004), including analyses examining functioning and quality of life (Vitiello et al., 2006). This was particularly true when examining suicidal ideation. Despite high suicide risk being an exclusion criterion in the study, nearly a third (29%) of participants reported a baseline score on a self-report of suicidal ideation consistent with the need for prompt attention. At the 12-week assessment period, youth in the combined CBT + fluoxetine group showed significantly greater improvement on this outcome compared to placebo while the monotherapies did not separate from placebo (Treatment for Adolescents With Depression Study Team, 2004).

Reanalysis of the TADS trial data using a person-centered approach to examine trajectories of change over the acute stage of the trial also yielded clinically relevant information; CBT did not yield rapid change in the high severity individuals, but instead resulted in slower, later improvement at least in some subsamples of youth (Scott et al., 2019). Although these findings have sometimes been interpreted as evidence of the slower effects of CBT, it should also be remembered that longer-term outcomes also reflect a larger CBT dose and may suggest that this level of treatment is required to optimize outcomes.

TORDIA (the Treatment of Resistant Depression in Adolescents), another large multisite trial that examined approaches to treatment-resistant depression (i.e., youth that had not responded to SSRI treatment), found significant effects for CBT (Brent et al., 2008). More specifically, youth who were treated with a medication switch and CBT fared significantly better than those who were treated with a medication switch alone. Although, overall functioning for youth in the study improved with treatment, there were no significant differences between treatment groups (Brent et al., 2008). In longer term analyses, the effect for CBT disappeared (Emslie et al., 2010), but interpretation of this finding is complicated by the fact that nonresponders who did not initially get CBT were offered CBT once the initial phase of the study was completed. Additionally, in this study CBT did not protect against suicidal behavior (i.e., differences between treatment groups were not significant), although the authors note that because of the risk level of the sample, there was intensive monitoring of participants. This could have resulted in less variability in suicide risk than what would be seen in standard clinical care.

Biological interventions

Medication

Several options for pharmacological intervention in youth depression exist including the use of SSRIs, SNRIs (selective serotonin and norepinephrine reuptake inhibitors), and tricyclic antidepressants. However, there is mounting evidence of the superiority of SSRIs for the treatment of moderate-to-severe depression in youth (Cipriani et al., 2016). For example, across 16 studies with an SSRI–placebo comparison, Locher et al. (2017) found an average effect size of $g = 0.21$. Although the difference was not statistically significant, SNRI–placebo comparisons yielded a smaller average effect size ($g = 0.16$) (Locher et al., 2017). Locher et al. (2017) did not find significant within-class variability but it should be noted that effect sizes for the 16 SSRI–placebo comparisons ranged from 0.00 to 0.60, which is at least suggestive of some within-class differences. Consistent with this speculation, a network analysis found fluoxetine to be associated with the best outcomes for children and adolescents with depression (Cipriani et al., 2016). Moreover, the side-effect profile was better for fluoxetine compared to several other commonly prescribed antidepressants (Cipriani et al., 2016).

Due to findings like these, SSRIs and particularly fluoxetine are generally considered a first-line treatment for youth with moderate-to-severe depression. Interestingly, however, SSRIs likely should also be considered first as a second-line medication. This is due to a combination of findings on efficacy and safety. In terms of efficacy, the TORDIA trial did not find that youth who had failed an SSRI fared better when switched to an SNRI versus a second SSRI (Brent et al., 2008). Thus, there was no advantage to switching to an SNRI and given the greater risk of cardiovascular events associated with SNRIs in youth (Brent et al., 2008) there appears to be little justification for not staying within the class of SSRIs when using medication to address treatment-resistant depression.

As discussed previously, at posttreatment, the best outcomes for treatment-resistant youth in the TORDIA trial were for those who received adjunctive CBT; approximately 55% of youth in this group, the group with the best improvement rate, were considered responders at 12 weeks. By 24 weeks group differences were not observed and overall, 40% of youth were considered to have remitted, which was defined as 3 weeks without clinically significant depression symptoms (Emslie et al., 2010). This indicates that the majority (60%) of youth were still not seeing significant benefit, suggesting the need for other intervention strategies for youth with treatment-resistant depression.

Other biological interventions for youth depression

It has been hypothesized that fish oil supplementation, ketamine, and transcranial direct stimulation (TCDS) may offer hope for depressed youth and

their families; however, this research is in its infancy and conclusions are far from definitive at this point. Nevertheless, early findings examining fish oil as an adjunctive treatment for adolescents with MDD do not seem promising (McNamara, 2016). On the other hand, preliminary data available in clinicaltrials.gov suggest that youth treated with a single ketamine infusion see a significant, potentially clinically relevant, reduction in symptoms (Bloch, 2015−2019). Currently, trials are underway examining a multidosing schedule of ketamine (Bloch, 2019) and intranasal esketamine, a simpler to administer, although likely more expensive, form of ketamine (Janssen Research and Development, 2017). Similarly, trials examining TCDS, which has shown promise in adult studies, are also underway (San-Juan, 2021). Depending on these results and follow-ups with samples large and diverse enough to draw conclusions about safety and efficacy, treatment providers may soon have a range of options for youth suffering with depression.

Predictors, moderators, and mediators of change

Beyond knowing whether treatment can work for depressed youth, it is imperative that clinicians are equipped with the knowledge about who is likely to benefit and what variables should factor into the determination of the first line of treatment. We now turn to the research that could yield such answers.

Predictors and Moderators. Nilsen et al. (2013) in their systematic review of 13 psychological treatment studies on depression treatment outcomes suggested that ethnic minority background was associated with slower recovery rates and poor treatment outcomes across two studies while one study found the association to be nonsignificant. Furthermore, some studies found that poorer treatment outcomes were predicted by greater severity levels of depression at baseline (Kunas et al., 2021), higher levels of dysfunction within the family and at school, and younger age (Cuijpers et al., 2021). Importantly, early response to antidepressant medication (Varigonda et al., 2015) appears to be a good indicator of whether treatment will ultimately be successful and there is some evidence from the adult literature that this is true for psychotherapy as well (Lewis et al., 2012). In psychotherapy, lower treatment dose was associated with a poor response and there is some evidence that ethnic minority youths attend fewer sessions (Nilsen et al., 2013). In terms of moderators of psychotherapy, or which treatments work best for whom, there is some evidence that older youth, more severely depressed or who report greater family or peer conflict, and those who evidence comorbidity, particularly with anxiety disorders, are more likely to need an evidence-based treatment (CBT and IPT-A) compared to TAU (Nilsen et al., 2013; Ollendick et al., 2008).

In terms of pharmacological treatment, a meta-analysis of 34 trials in participants with treatment-resistant depression found that fluoxetine as a first-line treatment should be considered only when treating children/adolescents

with moderate–severe depression among those who do not have access to psychotherapy or have not responded to nonpharmacological treatments (Cipriani et al., 2016). A recent study that reanalyzed the TADS trial data using a person-centered approach found three unique patterns based on symptoms and prognosis in adolescents with MDD (Scott et al., 2019). Notably, they found that the combined CBT and fluoxetine treatment predicted rapid decline in suicidality and self-reported depression and can increase remission rates of depression.

Mediators. In a recent systematic review of 46 randomized trials of CBT and IPT with depressed children and adolescents, Ng et al. (2020) found that nearly 75% of studies measured candidate mediators but only 17% analyzed these mediators. Common candidate mediators measured were changes in negative cognition, social engagement, family functioning, problem-solving, treatment expectancy, reframing, avoidance, engagement in pleasant activities, and motivation to change (Ng et al., 2020). Only changes in negative cognition, problem-solving, and pleasant activities mediated the effects of CBT, whereas changes in social engagement was a significant mediator in the only IPT trial examining the role of mediators (Dietz et al., 2015). In another systematic review of 35 studies that included 9 studies on adolescents, Lemmens et al. (2016) concluded that changes in dysfunctional attitudes and thoughts, rumination, and worry were psychological mediators associated with change in treatment.

Modular treatments

There have been two major investigations examining modular approaches to the treatment of youth with depression. The TADS described previously used a modular approach to treatment of adolescents with major depression. The Child System and Treatment Enhancement Projects (Child STEPs) initiative was a series of investigations that began in 2003 with two major aims—to describe the mental health service and treatment systems for youth and to examine the effectiveness of a modular approach to delivery of evidence-based treatment for youth with depression, anxiety, or a disruptive conduct disorder (Schoenwald et al., 2008; Weisz et al., 2012). An in-depth analysis of findings suggests that a modular approach yielded mixed results, providing some reasons for hope and perhaps a cautionary tale.

In the TADS, a treatment manual offered therapists a comprehensive guide to treatment modules ranging from cognitive restructuring and activity scheduling to psychoeducation and relaxation training (Curry et al., 2005). The first 6 weeks of treatment focused on required modules (i.e., the treatment rationale and goal setting, monitoring, activity scheduling, psychoeducation, problem-solving, and cognitive restructuring) with the adolescent and, at times, with the parent(s). During the remaining acute phase of the study (weeks 7–12) therapists were free to choose from the optional modules based

on their case conceptualization. For example, relaxation training was recommended for youth with labile emotional reactions and those experiencing panic attacks (Curry et al., 2005).

The TADS team hypothesized combination treatment would be superior to CBT or fluoxetine alone, and there would be no difference in response rates for each of the monotherapies (Treatment for Adolescents With Depression Study Team, 2003). Based on previous research, CBT and fluoxetine were each expected to have a response rate of around 60% (Treatment for Adolescents with Depression Study Team, 2003). Fluoxetine performed exactly as predicted but the modular approach to CBT used in TADS significantly underperformed, with a response rate of 43% (Treatment for Adolescents with Depression Study Team, 2004). Given that the placebo response rate was approximately 35%, the conclusion from TADS was that on its own, CBT was not efficacious. The takeaway message from TADS has been that as a monotherapy, CBT is not a good option for youth with moderate-to-severe depression, as the interpretation was that the poor showing for CBT was likely due to the severity of the symptoms treated in TADS compared to earlier studies. However, a subsequent analysis suggests that the modular approach taken in TADS and not the severity of the sample may be a more viable explanation for the poor results (Hollon et al., 2005). Specifically, Hollon et al. (2005) point out that one of the investigations that informed the TADS team's prediction of a 60% response rate for CBT (i.e., Brent et al., 1997) included youth whose symptoms were at least as severe as those in the TADS, making symptom severity an unlikely explanation for the poor outcomes for youth treated with CBT. Hollon et al. (2005) go on to note that the modular approach used in TADS integrated two different CBT approaches but may not have stayed true to either one, and that the TADS manual was extremely comprehensive, although it did not always include modules with the best empirical evidence (e.g., relaxation training to address anxiety but not exposure). The fact that the acute phase of the TADS trial was shorter than Brent et al. (1997), coupled with the fact that the TADS manual did not provide much guidance on how to choose optional modules or how to determine when the full benefit of a given module had been realized, may have meant that youth got exposure to many treatment elements but without the depth required to fully benefit from any of them. Consistent with this thinking, Hollon et al. (2005), p. 150 report "… we talked to several people involved with the [TADS] trial who expressed concern that the CBT therapists had so many things to do that they did not have enough time to anything as well as they would have liked …."

The Child STEPs trials (e.g., Chorpita et al., 2017) took a different tact, using a modular approach to address the comorbidity that is so common in youth. The Modular Approach to Therapy with Anxiety, Depression, Trauma, or Conduct Problems (Chorpita & Weisz, 2009) includes 33 modules drawn from the evidence-based treatment literature that form the basis of the Child STEPs approach. Importantly, however, the treatment modules are coupled

with an algorithm to guide the clinician as to which treatment modules to use and the order in which they should be implemented. Clinicians were also provided ongoing feedback regarding symptom trajectories and individual weekly consultation from a MATCH expert. In this regard, the Child STEPs modular approach is characterized by (1) evidence-based treatment modules, (2) a decision-making rule, and (3) ongoing clinician feedback, allowing treatment to be tailored to the individual characteristics of the youth within an evidence-based framework to guide decision-making. In a series of studies, this type of modular approach was compared to standard evidence-based treatment and TAU. Notably, these were effectiveness studies with the goal of testing the Child STEPs approach in real-life settings with youth evidencing subthreshold and/or comorbid presentations as typically seen in clinical practice. This meant that youths diagnosed with depression were included as were youths with clinically significant depression symptoms but so were youths with other presenting problems, some of whom also experienced depression and some did not. In other words, the inclusion criteria were much broader than those in a typical efficacy trial. Nonetheless, the youths in these studies and the therapists providing care represent the conditions seen in typical treatment settings, at least in the United States. Across several trials, the modular approach used in Child STEPs resulted in more rapid symptom improvement and greater rates of recovery (i.e., fewer diagnoses) at post-treatment, compared to TAU. In some cases the modular approach also outperformed the use of standard evidence-based treatment manuals (Chorpita et al., 2017; Weisz et al., 2012); moreover, the clinicians in these trials were more satisfied using the modular approach to treatment compared to standard evidence-based treatment manuals, suggesting they would be more likely to continue using this approach in the future. Analysis of longer-term outcomes (i.e., up to 12 months) partially supported these conclusions; the modular approach was generally superior to TAU in causing greater symptom decreases up through 12 months, after which differences were no longer observed (Chorpita et al., 2013). Additionally, there were no differences observed in terms of functional impairment and the use of additional mental health services (Chorpita et al., 2013). Nonetheless, this indicates that youth getting modular treatment experienced symptom relief faster than those receiving usual care, a favorable finding when one considers the distress experienced by depressed youth and their families.

Challenges and recommendations for practice

These two approaches to modular treatment described here vary greatly in terms of the youth included, the control groups, and the outcomes considered, making it difficult to draw direct conclusions for use in clinical practice. However, we do believe at least some *preliminary* recommendations can be made based on this literature. First, modular treatment can be as effective or, in

some ways, more effective than standard treatment manuals and, in many cases, more effective than the treatments that youths are most likely to receive as part of typical standard care. They may also be more likely to be adopted by clinicians. This suggests that modular treatment for depression should be the rule not the exception. However, there are some important stipulations to keep in mind when implementing such an approach:

- Modular treatments seem to be only as good as the modules themselves; individual treatment modules should draw from research and should include those with the best evidence (e.g., exposure for comorbid anxiety rather than relaxation).
- The way in which the treatment modules are selected should be decided by an evidence-based algorithm. These algorithms should be designed to provide individualized treatment based on a child's presentation, including comorbidity and evidence of which pathological processes are at play (Philippot et al., 2019).
- More is not better. In fact, it appears that doing too much can result in accomplishing almost nothing! This is not surprising given that evidence-based treatments for youth depression typically use a skills-building approach and as with any skill, repetition and practice are required for mastery. Just as we would not expect an adolescent to become a world-class basketball player by practicing dribbling skills for 1 or 2 weeks and moving on regardless of whether the child can get the ball down the court, we should not expect children and adolescents to master the challenging skills required to combat depression without repeated practice and "coaching" with extensive monitoring for evidence of skill mastery and symptom change.
- Modules are not tools in a toolkit and clinicians are not technicians. We argue that contrary to the sometimes-popular belief that every treatment intervention is just a tool in the clinician's toolkit that can be mixed and matched based on personal preferences, treatment modules are the operationalization of a core underlying theory as to what causes or maintains youth depression. Use of treatment modules without an understanding of this underlying theory can result in what looks like faithful implementation on the surface, with key components of the treatment going unheeded. Clinicians are required to make complex decisions moment-to-moment, so a treatment manual—whether in modular or standard form—cannot substitute for solid grounding in psychopathology research and an advanced understanding of the theory on which interventions are based. We argue that modular treatment approaches are practical solutions to aide expert clinicians who function in complex and demanding healthcare environments; but if we are to realize better outcomes for youth with depression, modular treatments should not be viewed as a substitute for expert clinicians.

- Modular approaches in low- and middle-income countries (LMICs). In LMICs, psychological treatment implementation often involves non-specialized healthcare workers. Few studies focus on modular treatment in LMICs and point toward characteristics that *may* improve treatment effectiveness at a lower cost. These include a stepped care approach within the modular models, that is, offering different levels of care for different clients of treatment (e.g., Program for Effective Mental Health Interventions in Under-resourced settings for Adolescents (PRIDE; Chorpita et al., 2020); creating modular designs that make decision-making simple for the healthcare workers (Chorpita et al., 2020); and identifying key elements and number of treatment sessions associated with clinically meaningful change in clients in LMICs (Murray et al., 2020).

Key practice points and recommended resources for personalizing care

Imagine going to the emergency room with a life-threatening condition and being put on a waiting list for months, persevering to make it to the top of the list, only to get a small, insufficient dose of the treatment you desperately need. Many youth with depression face exactly this situation. Depression is a serious condition that needs to be treated as such; mental health practitioners working with affected youth need to be well versed in either CBT or IPT-A and they need to partner with a medical professional for youth with moderate-to-severe depression who may require biologic treatments to experience relief.

An evidence-based approach such as that tested in the Child STEPs trials can be an important tool to help clinicians deliver effective treatment. However, a key component to this approach that is particularly important for youth with depression is careful monitoring of early treatment progress. Given the distress youth with depression and their families' experience and the evidence that early results are a good indicator of long-term prognosis with a given treatment, clinicians need to be carefully monitoring treatment response and intensifying or changing treatment if no improvement is seen in the first few sessions. This may be especially relevant for ethnic minority youth who may be less likely to get the intensive treatment needed. Finally, we expect that next few years will see new treatment options become available to youth with treatment refractory depression; it will be important for clinicians to stay abreast of current research so they can provide the families with whom they work the best treatment options.

- To learn more about an evidence-based approach to modular treatments with youth, interested clinicians should consult (Judge Baker Children's Center, n.d.)

- To keep abreast of current clinical trials around the world for youth depression and to view preliminary results, interested readers should consult clinicaltrials.gov
- To learn more about delivering CBT for depressed youth and their parents, consult https://effectivechildtherapy.fiu.edu/course/view.php?id=45
- To obtain the treatment manual used in the TADS visit https://tads.dcri.org/tads-manuals
- For information on interpersonal therapy, including training opportunities, visit https://iptinstitute.com/

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