

Psychotherapy and (or) Medications for Depression in Youth? An Evidence-Based Review with Recommendations for Treatment

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Abstract This article reviews existing research pertaining to antidepressant medications, psychotherapy, and their combined efficacy in the treatment of clinical depression in youth. Based on this review, we recommend that youth depression and its treatment can be readily understood from a social-psycho-bio model. We maintain that this model presents an alternative conceptualization to the dominant biopsychosocial model, which implies the primacy of biological contributors. Further, our review indicates that psychotherapy should be the frontline treatment for youth with depression and that little scientific evidence suggests that combined psychotherapy and medication treatment is more effective than psychotherapy alone. Due primarily to safety issues, selective serotonin reuptake inhibitors should be initiated only in conjunction with psychotherapy and/or supportive monitoring.

Keywords Psychotherapy · Antidepressant medications · Children and adolescents · Randomized controlled trials · Efficacy

Within the United States, psychiatric researchers and practitioners currently formulate youth depression as a medical illness (Vitiello 2008). This biomedical perspective extends adult neurochemical explanations for depression to youth and emphasizes the safety and efficacy of antidepressant medications as a primary treatment

modality (Hughes et al. 2007). Indeed, the *American Academy of Child and Adolescent Psychiatry's* (AACAP) latest youth depression practice parameter asserts that, “Depressive disorders are often familial recurrent illnesses” (Birmaher et al. 2007, p. 1503).

Many psychologists and other mental health professionals also embrace the biomedical model, using it as a guide for accurate diagnosis and treatment (Wyatt and Livson 1994). Further, the view that depression is a chronic medical disease—similar to diabetes or hypertension—is provided in educational materials directed toward parents (e.g., Evans and Andrews 2005). Depression is described as a brain-based disease instead of a condition resulting from psychological or social factors.

Despite its widespread acceptance, evidence supporting an exclusively biomedical model of youth depression is equivocal. Specifically, there are no consistent biological or genetic markers for clinical depression (Henn 2008). Additionally, if depression results from known biomedical mechanisms, then it should remit with targeted medical treatment. However, even the most rigorous youth depression treatment study to date observed remission among only 37% of participants receiving somatic treatment under optimal conditions (Brent 2006). As discussed later, findings like these imply that biomedical models incompletely conceptualize youth depression and that alternative models might evidence equal or superior treatment utility.

In this article, we address the following questions: (a) What is the safety and efficacy of antidepressant medications used alone or in combination with psychotherapy? (b) How does psychotherapy compare with antidepressant medication treatment? (c) If the dominant model of youth depression—which asserts biomedical primacy—is insufficient, what alternative model might generate more

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effective treatments and outcomes? (d) What treatment guidelines for depression in youth should practitioners follow?

A Brief History of Antidepressant Medication Treatment Research

Three relatively distinct periods characterize youth antidepressant research.

Pre-1987 Tricyclic Antidepressant (TCA) Efficacy

Early conclusions about TCA safety and efficacy were generously optimistic. Kashani et al. (1984), for example, claimed possible efficacy for amitriptyline on the basis of minimal existing evidence and their own double-blind study with nine prepubertal children, despite the fact that their study lacked statistical significance and 11% of the treated sample developed hypomanic symptoms. This tendency to inflate clinical significance and minimize safety issues is a common theme with regard to historical and contemporary antidepressant treatments for adults and youth (Turner et al. 2008).

1987–1994: Randomized Controlled Trials (RCTs) with TCAs

The years 1965–1994 witnessed publication of 13 TCA RCTs (double-blind, placebo controlled trials), with most studies appearing after 1987 (Sommers-Flanagan and Sommers-Flanagan 1996). These studies confirmed the prematurity of Kashani and colleagues' early hopeful claims and raised concern about youth TCA treatment safety. Indeed, no published study ever observed a demonstrable advantage for TCAs over placebo and consequently, subsequent research efforts began examining serotonergic agents.

1997-Present: RCTs with Selective Serotonin Reuptake Inhibitors (SSRIs)

Our PsychInfo and PubMed database searches and cross-referencing strategies identified 10 published RCTs of SSRI efficacy. In total, these studies compared 1,223 SSRI treated patients to a similar number of placebo controls. Using the researchers' own efficacy criteria, six studies returned significant results favoring SSRIs over placebo. These included 3 of 4 fluoxetine studies (Emslie et al. 1997, 2002; Simeon et al. 1990; The TADS Team 2004), 1 of 3 paroxetine studies (Berard et al. 2006; Emslie et al. 2006; Keller 2001), 1 of 1 sertraline study (Wagner et al. 2003), and 1 of 1 citalopram study (Wagner et al. 2004).

Negative results were observed in the only escitalopram study (Wagner et al. 2006).

Methodological Issues

Recently, Turner et al. (2008) critically analyzed the adult antidepressant efficacy literature by comparing published results to published and unpublished results reported to the US Food and Drug Administration (FDA). The authors found that study publication was linked to outcome. Whereas positive outcomes were nearly always published, publication was exceptionally unlikely for studies with equivocal or non-supportive results. Additionally, Turner et al. also reported a discrepancy between published findings and findings reported to the FDA. For example, in nearly 15% of reviewed studies, Turner et al. noted that results were published in a way suggesting antidepressant efficacy even when findings reported to the FDA had been questionable or negative. At a minimum, Turner et al. (2008) suggest that selective publication practices breed overestimation of SSRI efficacy and underestimation of adverse effects. Our brief review suggests a similar trend with regard to SSRI efficacy and adverse events among children and adolescents diagnosed with clinical depression.

For example, despite the modestly positive results in 6 of 10 SSRI RCTs summarized previously, several methodological problems favoring SSRIs should temper optimistic conclusions. Specifically, (a) two positive fluoxetine studies were characterized by unusually and disproportionately high discontinuation rates within placebo conditions, which, when using intent-to-treat criteria, advantage the medication condition; (b) all but one positive study based conclusions exclusively on clinician rating scales which have been shown as likely to be biased (Greenberg and Fisher 1997); (c) despite multiple outcome measures, no study made statistical adjustments for Type I error; (d) the use of placebo washouts advantaged medications; (e) no procedures evaluated double-blind integrity (Greenberg and Fisher 1997); and (f) despite inter-racial differences in medication metabolism and responsiveness (Lin et al. 1993), generalized conclusions failed to address racial/cultural specificity.

Side Effects and Adverse Events

SSRI-related medication safety issues for young patients, in particular, deserve special scrutiny and articulation. For example, Emslie et al. (1997) published the first RCT to claim that fluoxetine is safe and efficacious for treating youth depression. Further inspection, however, uncovers not only methodological problems (such as the fact that psychiatrist ratings provided the sole outcome variable and

the possibility that intent-to-treat analyses conferred an advantage for fluoxetine due to a 46% discontinuation rate in the placebo condition), but also, three (6.25%) fluoxetine patients developed manic symptoms, a finding that, when extrapolated, suggests the possibility of 6,250 mania conversions for every 100,000 treated youth.

Similarly, in the much-heralded Treatment of Adolescents with Depression Study (TADS), self-harming and suicidal adverse events occurred among 12% of fluoxetine treated youth and only 5% of Cognitive Behavioral Therapy (CBT) patients. Additionally, psychiatric adverse events were reported for 21% of fluoxetine patients and 1% of CBT patients (March et al. 2006; The TADS Team 2004, 2007).

Keller et al. (2001), authors of the only positive paroxetine study, reported similar data regarding SSRI safety. In Keller et al.'s sample, 12% of paroxetine-treated adolescents experienced at least one adverse event, and 6% manifested increased suicidal ideation or behavior. Interestingly, in the TCA and placebo comparison groups, no participants evinced increased suicidality. Nonetheless, Keller et al. claimed paroxetine was safe and effective.

Shortly after Keller et al. (2001) publication, regulatory agencies in France, Canada, and Great Britain restricted SSRI use among youth. In September of 2004, an expert panel of the US Food and Drug Administration (FDA) followed suit, voting 25-0 in support of an SSRI-suicide link and 15-8 in favor of a 'black box warning' on SSRI medication labels. The FDA warning and subsequent 2007 revision highlight the apparent increase of suicidal ideation and behavior among children, adolescents and young adults treated with antidepressants. The warning encourages close clinical monitoring (weekly for the first four weeks of treatment and biweekly thereafter) and ongoing communication among providers, patients and their families. When one considers the research closely, SSRI safety in children appears far from guaranteed.

Combination Medication and Psychotherapy Treatments

The 2004 TADS study is viewed as the 'state of the science' comparison of fluoxetine with CBT and their combination. This RCT represented the largest placebo-controlled study comparing mono-therapy with combination therapy. To summarize the outcomes: at 12-week follow-up 71% combination (fluoxetine + CBT) patients evidenced "much" or "very much" improvement on a single clinician-rated item. Fluoxetine produced a similar outcome (60.6%), and CBT (43.2%) did not differ significantly from placebo (34.8%). Given the surprisingly poor performance of CBT, several researchers and practitioners noted critically that the form of CBT used in TADS was suboptimal with multiple insufficiently developed

components (Brent 2006; Weisz et al. 2006). Interestingly, in spite of these arguments, TADS CBT demonstrated eventual effectiveness; there were no statistically significant differences between CBT and fluoxetine at week 18 and no statistically significant differences whatsoever among the three groups on primary outcomes at week 36 (The TADS Team 2007). Although fluoxetine-based interventions evidenced a speedier antidepressant effect, TADS outcomes suggested that CBT, even a possibly inferior form of CBT, is equally effective over 36 weeks.

Other than TADS, only one other RCT has evaluated combination SSRI and psychotherapy treatment for youth with depression. Specifically, Melvin et al. (2006) directly compared sertraline, CBT, and their combination. They observed partial remission among 71% of CBT patients, 33% of sertraline patients, and 47% of patients receiving combined treatment. Consistent with previously reviewed research, Sertraline patients evidenced significantly more adverse events and side effects. Surprisingly and in contradiction with their own data, Melvin et al. recommended CBT and sertraline with equal strength.

Psychotherapy for Youth Depression

The paucity of direct comparisons between SSRIs and psychotherapy make it difficult to establish definitive conclusions about the relative efficacy of these two divergent approaches in treating depressed youth. However, there is also a separate body of literature focusing exclusively on the efficacy of psychotherapy in treating depression in youth. We briefly examine this literature to provide an indirect comparison of medication and psychotherapy.

Numerous reviews and meta-analytic evaluations of CBT for adolescent depression provide evidence of CBT efficacy (Klein et al. 2007). Generally, more recent studies show less positive outcomes than earlier ones. Keeping in mind Cohen's (1977) anchor points for small ($d = .20$), medium ($d = .50$) and large ($d = .80$) effect sizes, early meta-analyses by Reinecke et al. (1998) and Lewinsohn and Clarke (1999), were very positive (i.e., $d = 1.02-1.27$). In contrast, Weisz et al. (2006) more recent analysis reported a small to moderate average effect size ($d = .34$) and Klein et al.'s meta-analysis showed a medium effect size ($d = .53$). As an alternative anchor point, these effect sizes generally compare favorably with Greenberg and colleagues (1994) analysis of fluoxetine's effect size among adults ($d = .40$).

Similar to SSRI RCTs, CBT outcome studies are vulnerable to a wide range of methodological problems and so these indirect comparisons are problematic. Nonetheless, the data suggest a modest CBT effect and, consistent with direct SSRI CBT studies, very few side effects or adverse events are observed within CBT studies.

Interpersonal psychotherapy (IPT) also enjoys empirical support as an efficacious treatment for youth depression. RCTs of IPT suggest this treatment reduces depressive symptoms and improves social functioning in adolescents (Mufson et al. 1999). In a comparison of IPT to a waitlist control condition in a sample of Puerto Rican adolescents, Rossello and Bernal (1999) observed evidence for IPT's efficacy for improving depression, self-esteem and social adaptation. Other studies offer additional support for IPT's effectiveness in school-based treatment settings (e.g., Mufson et al. 2004) and culturally diverse samples such as rural Uganda (Clougherty et al. 2006). Finally, recent studies observed specific utility for interpersonal skill treatments among high-risk adolescents with elevated baseline depression (Horowitz et al. 2007) and among depressed adolescents with comorbid anxiety (Young et al. 2006). Overall, these studies are promising, but particularly because they are associated with little or no side effects or adverse events.

Depression Treatment Prevalence

Somewhat surprisingly, mental health professionals rarely represent the point of first treatment contact for youth with depression. Instead, it appears that increased antidepressant treatment—and not increased psychotherapy—is driving recent increases in depression treatment frequency (Ma et al. 2005). Consistent with adult research that observes a trend increasingly favoring primary over specialty clinic depression care (Olfson et al. 2002), youth depression treatment is also frequently provided in general medical settings. In a study of depressed youth HMO enrollees, for example, DeBar et al. (2001) found that most treated youth eligible for mental health specialist intervention did not receive it. In a suggestion that has since been echoed by others (e.g., Delate et al. 2004), DeBar et al. (2001) noted that health care system limitations might prohibit delivery of effective treatment options, like psychotherapy.

The limited availability and utilization of psychotherapy raise concern for a number of reasons. First, the AACAP practice parameter (Birmaher et al. 2007) demands that youth depression treatment plans employ psychoeducational and supportive psychotherapeutic interventions before other treatments (e.g., specific psychotherapies or antidepressants). Second, research suggests that most depressed youth prefer psychotherapeutic interventions over medications (Jaycox et al. 2006). Given recent findings of improved treatment outcomes for depressed adults who receive preferred treatments (Lin et al. 2005), it makes sense for providers to accommodate youth preferences. Finally, even after FDA warnings regarding the need for close clinical monitoring, quantitative and qualitative research suggest that medical providers fail to adhere to

follow-up treatment recommendations (Richardson et al. 2004, 2007). Relative to treatment provided in general medical settings, psychotherapeutic treatment provided by mental health specialists would come closer to the FDA and AACAP recommendations.

Research Conclusions

Our brief research review suggests that SSRIs may carry potential benefits for depressed youth, but these benefits are accompanied by significant risks. Whereas benefits may outweigh risks in some cases, this is not *necessarily* the case, and the opposite is also quite likely. In sum, this biomedical treatment option does not enjoy uniform and robust empirical support.

CBT and IPT are the most studied psychotherapies for youth depression. Despite indications that these psychotherapies work, the empirical data are difficult to directly compare with SSRI RCTs. Specifically, because psychotherapy studies often employ waitlist or treatment as usual comparison groups, some have noted that psychotherapy trials employ a lower standard than medication trials (Ryan 2005). In addition, unlike medication trials, which must be reported to the FDA, it is not possible to examine how many psychotherapy trials have remained unpublished due to negative or ambiguous results.

Further, although not reviewed here, psychotherapy outcomes research generally implies that theoretical approaches grounded in common factors will likely show efficacy in treating youth with depressive symptoms. In fact, given the dearth of research on the efficacy of non-CBT or IPT psychotherapies with this treatment population, it is possible that therapies with a stronger affective component than CBT or IPT might evidence better efficacy and common factors research would indicate that the specific techniques derived from CBT and IPT are only minimally important (Lambert 2005; Wampold 2001). Ultimately, we find that psychotherapy offers advantages over medication. Psychotherapeutic response matches medication, and psychotherapy appears to reduce suicidal impulses, and although perhaps slower to take full effect (The TADS Team 2004), it provides a natural opportunity for close clinical monitoring.

Trends of increased depression treatment suggest that providers might be relying on pharmacological interventions at the expense of psychotherapy. Although increased treatment of depression in youth is likely to have positive public health outcomes, current data and recent controversies regarding SSRI medication safety suggest that the treatment community should reconsider standing practices. Specifically, providers might consider a range of interventions other than antidepressant monotherapy and should consider whether treatment delivery systems could be

redesigned to increase the availability of nonpharmacological interventions.

Reformulating Clinical Depression

The equivocal support regarding antidepressant efficacy and emergent safety problems lead us to assert that the biomedical model might simply be one potential formulation among many—and one that has not fared particularly well. It may be time for researchers and practitioners to consider a paradigm shift in the treatment of youth with depression.

In a call to medicine, Engel (1980) encouraged adoption of a biopsychosocial model of health. Despite this recommendation and the increasingly frequent use of ‘biopsychosocial’ language among non-medical practitioners, medicine has demonstrated little movement toward embracing Engel’s perspective (Alonso 2004). Although we advocate the components within the biopsychosocial model, our conceptualization of youth depression is designed to avoid biological dominance.

Our call for reformulating how we conceptualize depression in youth rests upon several factors. These include the equivocal data regarding antidepressant medication effectiveness, developmental and medical dangers associated with short- and long-term antidepressant use, knowledge of the etiology and course of youth depression, research on child development and trauma, and our own child-clinical experiences (Sommers-Flanagan and Sommers-Flanagan 1995, 2007). In short, we believe a social-psychological-biological (Social-Psycho-Bio) approach to youth depression is equally consistent with current scientific and clinical knowledge and has greater potential to advance clinical treatment research and practice.

We recognize that the development, maintenance, and remission of depressive symptoms are most likely complex, non-linear processes involving many interactive factors. However, for the sake of space and simplicity, we present our model as primarily linear, with (a) social/cultural factors activating (b) depressive psychological/cognitive processes, which can sometimes (c) trigger depressive biological processes.

Social-Cultural Components

The following factors provide a sampling of social and cultural factors that can drive depressive symptom emergence.

Cultural support

US Census data for 2006 (DeNavas-Walt et al. 2007) indicated that 12.8 million American children (17.4%) live

in poverty, and that the culture of poverty is much more likely among single female parent households (42.1%) than it is among married-couple families (8.1%). Single mothers living in poverty may be depressed themselves and have little community and governmental support (Goosby 2007). Moreover, research by Hammen et al. (2004) suggests that maternal depression might transmit intergenerationally to children via interpersonal and social stressors. Considering the protective value of the interpersonal environment, some communal and supportive cultural settings place less parenting burden on individual mothers, thus possibly decreasing depression. This possibility is supported by research suggesting that among low income families child mistreatment, a contributor to child maladjustment, is less likely in the presence of high perceived social support (Hashima and Amato 1994). The likelihood exists, therefore, that cultural support can decrease relative risk for depressive experiences in children.

Research affirms diverging cultural assumptions about depression etiology (Vitiello 2008). In one study, South Asian immigrants attributed depressive symptoms to social and moral influences while European Americans attributed depression primarily to biology (Karasz 2005). These cultural formulations and expectations likely influence medication or psychotherapeutic efficacy. Although biomedical researchers emphasize depression as a family medical illness, this narrow formulation ignores the fact that an individual’s depressive predisposition and treatment response may be strongly influenced by overarching cultural factors.

Early Caretaker-Child Interactions

Early caretaker-child interactions appear to stimulate depression development in very young children. As reviewed by Ashman and Dawson (2002) maternal depression studies demonstrate that mothers’ depressive behaviors influence their children’s own emotional experiences and appear to initiate neurological changes. Because evidence such as this asserts the primacy of social interaction, it offers further support for a social-psycho-bio model.

Child Trauma

Garbarino’s (2001) statement, “Risk accumulates; opportunity ameliorates” (p. 362) articulates how trauma can, without requisite support and opportunity, initiate cognitive, emotional, and social pathology. Sufficiently intense trauma may also produce lasting “psychic scars” (Terr 1990). Additionally, early childhood trauma drains victims of meaningfulness and purposefulness in life (Garbarino 2001). There is little doubt about the powerful contribution

of trauma to the development of clinical depression and other mental disorders.

Psychological-Cognitive Components

Considerable evidence supports a cognitive model of depression in adults, and to some extent, in adolescents and children (Kazdin and Weisz 2003). Beck's (1970) pioneering work emphasized that personal experiences lead individuals to acquire specific negative beliefs about themselves, the world, and the future (i.e., the cognitive triad). Although empirical support for the cognitive triad's contributory and maintenance roles in depression is strong, these belief systems do not rise autonomously. Instead, as Beck notes, these deeply ingrained beliefs are learned vis-à-vis interpersonal experiences.

The Development of Schemata or Internal Working Models

Theorists spanning analytic, neoanalytic, cognitive, and attachment perspectives have proposed concepts that can be described as schemata or internal working models (Ainsworth 1989; Morehead 2002; Young et al. 2003). Although each theoretical perspective articulates the concept somewhat differently, all involve development of a psychological pattern of repetitive automatic beliefs and expectations. These beliefs and expectations about the self, the world, and others generate repetitive behaviors and affect. A cognitive schema or internal working model arises from early social interactions and may contribute to depression and other maladies.

The internal working model concept forms the foundation of many psychological interventions, including CBT and IPT (Kazdin and Weisz 2003). As internalized representations of early interpersonal experiences, internal working models or schemata constitute a psychological component of the social-psycho-bio model. When positive, adaptive, and healthy early experiences predominate, internalized working models buffer or immunize the individual against stress and trauma. When critical, negative, and maladaptive experiences predominate, schemata may predispose individuals to acute, chronic, or recurrent depressive episodes.

Biogenetic Components

Researchers have identified neurological correlates of depression and affective experience. These correlates include neurochemical changes and neural activity, which can be observed via brain imaging techniques (Davidson et al. 2002). Whereas imaging studies are typically presented as evidence that biomedical or biogenetic factors

cause depression, the social-psycho-bio model suggests that neural changes are natural and inevitable correlates of internalized depressive life experiences.

The search for fMRI and PET scan differences between depressed and non-depressed individuals represents a logical development in our understanding of depression as it exists within the whole person. Although neurochemical changes might initiate or maintain depression in some cases, these neurochemical changes are just as likely to be consequences of depressive conditions. Based on this depression re-formulation, we believe that it would be appropriate to initiate antidepressant medication treatment as an adjunctive approach if previously attempted experiential interventions, including exercise, dietary adjustments, and psychotherapy fail to achieve desired effectiveness. Further, conceptualizing neurochemical changes as depressive correlates rather than causes, leads us to agree with others who maintain that medication treatment should be considered a palliative and not a curative treatment (Overholser 2006).

Conclusions and Recommendations

We have reviewed some relative benefits and risks of TCA and SSRI medications, individual psychotherapy, and their combination in the treatment of depressed youth. We believe that although SSRIs and psychotherapy appear to provide equivalent antidepressant effects, safety issues make psychotherapy the preferred initial treatment. Further, there is no research available that demonstrates a clear advantage for combined treatments over either medication or psychotherapy alone (Melvin et al. 2006; The TADS Team 2007).

Based on the extant literature and usual initiation, course, and outcomes of depressive disorders in youth, we believe a social-psycho-bio conceptualization of depression is appropriate. This approach asserts that social and cultural factors are likely to initiate depressive processes. These processes later become internalized as negative core beliefs about the self, world and future. Eventually, after exposure to stressful social experiences and the development of negative cognitive schemata, neural correlates of depressive conditions may develop and maintain depression in some cases, even in the face of psychotherapy.

Recommendations flowing from a social-psycho-bio model are surprisingly consistent with published practice parameters in child and adolescent psychiatry and pediatric medicine. Following decades of underwhelming research on antidepressant medication efficacy for youth depression, many professionals agree that non-medical interventions should precede antidepressant medications. If medications are used at all, practice parameters and guidelines

recommend that they should be accompanied by psychotherapy or other supportive interpersonal interventions (Birmaher et al. 2007).

Despite these practice directives, many depressed youth receive treatment exclusively in primary care settings where non-specialist practitioners rely on potentially dangerous medications with tenuous empirical support. Findings such as these are remarkable and concerning and suggest that too many practitioners subscribe blindly to a model of depression that asserts biomedical dominance.

Our preceding review, the social-psycho-bio formulation, and existing practice parameters drive the following recommendations:

1. Children and adolescents with significant depression should be offered psychotherapy in a manner appropriately sensitive to their cultural backgrounds and acculturation. To be consistent with the youth depression treatment research literature, psychotherapists should begin their case conceptualization using CBT or IPT approaches. However, to be consistent with psychotherapy outcomes research in general, psychotherapists should also recognize that many divergent approaches to psychotherapy are evidence-based (Lambert 2005; Wampold 2001). Additionally, family therapy, parent consultation, in-session activities that generate positive affect, and group counseling are all appropriate depression interventions. Consistent with CBT, homework assignments should emphasize pleasure-based experiences and thought monitoring/modification with relationship enhancement and participation in personally meaningful social, recreational, and culturally appropriate activities. Depending upon the cultural acceptability and preference, family or community members may be incorporated into the treatment plan.
2. Youth treated for clinical depression should be closely monitored for suicidal thoughts and impulses, especially patients on SSRI medication. To maintain appropriate balance, positive or strength-based cognitive, social, cultural, and emotional experiences should also be monitored and highlighted (Sommers-Flanagan and Sommers-Flanagan 2007).
3. If acceptable symptom reduction has not occurred within 8–12 weeks of psychotherapy, it may be reasonable (but not necessary) for a properly-trained prescriber who is knowledgeable about depression to offer SSRI medications as an augmentation strategy. Additionally, if psychotherapy fails to yield a significant response and if clients and family are amenable, it may be best to transfer care to a different psychotherapist.
4. If SSRI medication treatment is initiated, weekly psychotherapy should continue. This is especially important because of evidence that concomitant psychotherapy may reduce suicide risk and because of the possibility of other adverse events associated with SSRIs.
5. The treating psychotherapist and treating physician, physician's assistant, nurse, or other health care provider should communicate regularly regarding clinical response and the potential side effects or adverse effects associated with SSRI medication administration.
6. All treatment team members should educate the client and his/her parents that a pill is not a skill. Likewise, the need for specific environmental, familial, and individual efforts toward healthy and adaptive change should be emphasized.
7. When youth present with severe depression, to facilitate a speedier initial treatment response, it may be reasonable to simultaneously initiate psychotherapy and SSRI medication. In such cases, monitoring and communication is essential.
8. Some youth, their parents, caregivers, or physicians may clearly prefer SSRI medication treatment without concomitant psychotherapy. Although positive outcomes are possible with mono-SSRI treatment, we believe the prevalence of adverse events among SSRI treated youth (3–12%) confers risk of treatment that fails to abide by the Hippocratic oath "do no harm." Consequently, to guard against harm, mono-SSRI treatment should adhere to FDA recommendations for close and supportive weekly monitoring for the first four weeks and biweekly monitoring for the next four weeks. At a minimum, patients with new antidepressant prescriptions should be seen for supportive monitoring seven times within the first three months of treatment.

Overall, there is no argument about whether children and adolescents experiencing clinical depression warrant professional interventions. The need is real; depressed children and their parents experience great distress, and the cost to society is substantial (Mathers and Loncar 2006). However, as mental health professionals, it is our challenge to promote public awareness of psychotherapy as the frontline treatment option for youth depression and to work to develop even more efficacious psychotherapeutic techniques. Simply combining psychotherapy with medications is not an adequate solution to this challenging problem.

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