Depression in children and adolescents in primary care

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Contributions: (I) Conception and design: Both authors; (II) Administrative support: A Cheung; (III) Provision of study materials or patients: None; (IV) Collection and assembly of data: A Cheung; (V) Data analysis and interpretation: Both authors; (VI) Manuscript writing: Both authors; (VII) Final approval of manuscript: Both authors.

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Abstract: Depression is a commonly occurring illness in children and adolescents. Appropriate and timely care of these patients is essential in the primary care setting. A narrative review was undertaken for pediatric depression based on the AAP-approved guidelines, GLAD–PC, for the management of depression in the primary care setting. Emerging research regarding suicidality and social media was also reviewed. There are many tools to assist primary care in the assessment and management of adolescents and children with depression. The key components include: Assessment and Diagnosis, Initial Management (including safety planning), Treatment, and Ongoing Management. Comprehensive interviews with patients individually and with caregivers along with the use of tools are critical to the assessment process. Initial management after confirming the diagnosis of depression includes safety planning, psychoeducation and referral to peer support. Evidenced-based treatments for depression in children and adolescents include psychotherapy, antidepressants (SSRIs), and the combination of the two. Brief psychosocial interventions (BPI) have also been demonstrated to be efficacious when compared to CBT. Ongoing management is essential to reach or to maintain remission. Depression is common in the pediatric population and it is critical that primary care provide accessible and timely care to this population and their families.

Keywords: Adolescent; children; depression; primary care; antidepressants

Received: 27 August 2020; Accepted: 31 December 2020; Published: 28 February 2021. doi: 10.21037/pm-20-82 View this article at: http://dx.doi.org/10.21037/pm-20-82

Introduction

Depression is a chronic and recurrent condition that commonly affects children and adolescents (1-3). Globally, depression is the leading cause of disability worldwide among adolescents (4). Rates of depressive disorders among children and adolescents have been estimated to be as high as 10%. This means that in any high school classroom of 30 students, we would expect to find up to 3 who have or are struggling with depression at any one time. However, about 50% of children and adolescents with depression remain undiagnosed and even among those who are diagnosed, only half are treated appropriately before adulthood (5,6).

Depression is a chronic recurrent disorder that leads to significant morbidity and mortality into adulthood (7-9).

Approximately 50% of adults with depression report their first episode of depression in adolescence (9). A follow up study to an acute treatment trial found that approximately 60% of adolescents experience a recurrence of their depressive disorders at 5 years (9). Adolescent girls were also more likely to experience a recurrence compared to adolescent boys (7-9). Sex-related differences emerge in the prevalence of depression after puberty. The prevalence of depression amongst boys and girls are similar before puberty. However, after the onset of puberty, the rates of depression amongst girls becomes 2 to 3 times higher compared to boys. Theories that have been postulated to explain this difference include significant differences in psychological factors as well as hormonal changes at puberty between boys and girls.

Depression can present with a wide range of signs and symptoms that can be easily confused with other mental health disorders in childhood such as anxiety disorders and/or emotional issues related to adolescence. Common presentations of depression in children and adolescents include: sadness and irritability; tearfulness; decreased interest; decreased pleasure in most activities; low energy; weight loss or gain; sleep disturbance including hypersomnia; inattention; somatic complaints (aches and pains); ambivalence or difficulty with making decisions; worthlessness and hopelessness; and suicidal thinking or gestures (7,10).

Assessment and diagnosis

The assessment and diagnosis of depression in children and adolescents should start with a comprehensive interview. In the primary care setting where scheduled appointments can be short, this interview can be conducted over several visits. However, a risk assessment and a safety plan must be completed at the end of the first visit (see side box on suicidality). The clinical assessment for depression should include an interview with the patient alone and with parents/caregivers. Other sources that can provide important clinical information include teachers, extended family, community agencies (e.g., child welfare services), and any current or previous health care providers. It is important during the interview to establish rapport with the patient and to discuss the limits of confidentiality. Clinicians can help with rapport and engagement by establishing a communication plan. This plan can include how information will be communicated to patients' caregivers and what information the clinician has the obligation to disclose, what might be helpful to disclose with the patient's permission, and what can remain private. Several guides are available to clinicians who need guidance on how to obtain consent and establish rapport with patients (11,12). One helpful starting point to the discussion around confidentially is to assure patients that information will not be shared between the clinician and caregivers without the patient's knowledge and consent. In general, clinicians should try to share information with caregivers in the presence of the patient. Limits of confidentiality should also be clear, including if there is harm to oneself or others.

The DSM-5 Criteria for Major Depressive Disorder (MDD) requires five or more symptoms over a 2-week period and represent a change from previous functioning.

At least one of the symptoms must be depressed mood or anhedonia (10).

The patient should experience sadness most of the day, almost every day. Irritable mood is also common among the pediatric population presenting with depression. Other diagnostic criteria to assess include change in weight and appetite, sleep disturbance, feelings of restlessness or being slowed down, and low energy. Patients can also struggle with feelings of worthlessness and guilt. Focus and motivation can also be significantly affected.

Along with assessing for the symptoms of depression using DSM 5 criteria, the assessment must also include an assessment of the patient's functioning at home, school and with peers as well as their risk for self-harm and suicide (see side box) (7,10). Stressors such as ongoing school difficulties, trauma including emotional, physical and sexual abuse as well as bullying, family conflict, and other stressful life events may also trigger and perpetuate depressive symptoms and poor functioning.

The assessment should also involve the use of tools including screening instruments and rating scales. Depression screening instruments such as the Patient Health Questionnaire Modified (PHQ-M) (Appendix 1) or the Kutcher Adolescent Depression Scale (KADS) can assist clinicians in identifying patients with depression. They are particularly helpful in the assessment in children and adolescents who are less forthcoming verbally to be able to share their symptoms in another way. If co-morbid illnesses are suspected, a general symptom or psychosocial screener can also be used such as the Pediatric Symptom Checklist (PSC). The use of depression-specific rating scales can help with evaluating severity in symptoms and aid in treatment planning. However, no tool can replace a comprehensive and thoughtful clinical interview although they can serve an important complementary role in the assessment. Many tools are now available and have been validated in different languages (13).

A validated tool should not only be used during the initial assessment period but also regularly throughout treatment to facilitate the monitoring of depressive symptoms. Examples of such tools are available free for us in the GLAD PC toolkit (www.GLADPC.org) and include the PHQ-M as mentioned above (Appendix 1).

As part of the assessment for depression, primary care should also assess for both physical and psychiatric comorbidities. Consideration should be given to the possible impact of medical comorbidities (e.g., anemia, hypothyroidism) on common symptoms of depression such

Table 1 Quick guide for depression management

- Does the patient present with symptoms of depression with functional impairment? This is can determined by interview and aided by a depression or psychosocial questionnaire
- Is the patient presenting with co-morbid illness or substance misuse? Co-morbidities should be assessed before initiating treatment for depression
- Is the patient presenting with symptoms of depression along with hypomania or mania? With psychotic symptoms? These patients
 would be best managed with the support of psychiatry
- Has the patient and caregivers been provided with psychoeducation and referred for peer support? Has safety planning been completed? Have you discussed the limits of confidentiality with the patient and caregivers? These are all critical elements to the recovery of your patient with depression
- Is the patient's school providing accommodations? If not, use that standard letter to provide support to the patient. Remember to ask whether the patient wants to disclose their diagnoses and review what accommodations would be most helpful
- Does the patient's symptoms require immediate treatment or are symptoms mild enough to allow for a period of watchful waiting? Don't forget that brief psychosocial interventions during the period of watchful waiting can help to remit symptoms in up to 20% of youth who present with depression. If immediate treatment is needed, remember that combination treatment is most effective
- Have you reviewed the potential side effects of medication treatment? This includes non-psychiatric effects such as GI disturbance, headaches and sleep disturbance as well as psychiatric effects such as worsening or new onset suicidality, mania/hypomania and agitation. Remember to follow up with the patient and/or caregiver every week to 2 weeks—this could be done virtually or in person, and by the clinician or by another member of the primary care team
- Are patient's symptoms and functioning improving with treatment? If not, reassess the diagnosis of depression and for co-morbidities. If patient is improving, continue to monitor for improvement and side effects in a systematic manner (HINT: there are checklists for this!)

as fatigue and sleep disturbance. Comorbid psychiatric disorders such as anxiety can significantly impact on the presentation, as well as response of depressive symptoms to treatment (14). Other common co-occurring illnesses to screen for include substance misuse, learning disorders, and behavioral disorders. Finally, a small proportion of adolescents with depression will later present with mania and be diagnosed with bipolar disorder. Therefore, an assessment of the patient's family history for bipolar disorder as well as the patient's own history of episodes of elated mood (which may include irritability, grandiosity, decreased need for sleep and inattention) is critical before initiating treatment for depression. In particular, antidepressant treatment for such patients could be ineffective, destabilizing and may provoke hypomanic or manic episodes. Tools are available for clinicians who want to evaluate the risk for the development of bipolar disorder (15). Table 1 is a quick reference on caring for a child/teenager with depression.

Initial management

After diagnosing depression, primary care providers should move to initial management. which includes referral to peer support, psychoeducation, safety planning, and active monitoring for patients with mild depressive symptoms (7).

In patients who present with mild depressive symptoms without any personal or family history of depression or complicating issues such as trauma, learning disabilities or co-morbid illnesses, primary care providers may consider "watchful waiting", that is, a period of active monitoring without initiating evidenced-based treatment given that such symptoms may be self-limited (7). Active monitoring involves regular follow up with patients to monitor symptoms and to review self-management goals. Several studies have shown the benefit of non-specific psychosocial interventions in improving a range of health issues including depressive symptoms (7,16). In patients who present with moderate to severe depressive symptoms, patients should be started on evidence-based treatment as soon as possible (see section on Treatment below).

A recent development in the management of depression as well as other mental health concerns is the role of peer support. Many patients and their caregivers find the healthcare system fragmented and challenging to navigate. Therefore, patients and their caregivers may benefit from the support of peers with lived experience in their journey to wellness. There are many advocacy organizations in Canada, the US, and around the world that provide peer

Table 2 Potential school accommodations

- Decreased course/work load
- Not penalized for missing classes/being late especially for morning classes
- Not penalized for lack of class participation
- Permission to take breaks during class
- Preferential seating
- Option to give presentation to faculty alone instead of peers
- Extended time for assignments/essays/projects
- Extended time for exams/tests
- Writing exams/tests in quiet room
- Changing exam/tests/assignment schedules to decrease stress (i.e., not multiple deadlines in the same week)
- Supervised breaks during exams/tests
- Changes to how much an exam is worth of your total grade

support. These include the National Alliance on Mental Illness (NAMI) in the US, Mood Disorders Society of Canada, and Rethink Mental Illness in the UK. Connecting your patients and their families to peer support is an important component of initial management (7). Many of these organizations offer both in person and online support for patients and their caregivers.

In order for patients and their caregivers to better understand and to participate more fully in care, clinicians should provide education about depression. Key components would include understanding of the signs and symptoms of depression, their impact on functioning and the impact of treatment. Recent reviews of psychoeducational interventions have found that they can play a meaningful role in preventing and managing adolescent depression. One example is understanding the role of lifestyle such as physical activity, sleep and substance use (17). Although the evidence for the effectiveness of psychoeducational interventions is limited, early studies have demonstrated promising results. There is also emerging evidence for parental involvement in improving treatment outcomes (18).

A key component of psychoeducation is the impact of depression on learning. Parents and caregivers often mistake depressive symptoms as 'laziness". Accommodations are commonly needed to help patients continue their education in a more supportive learning environment. *Table 2* and Appendix 2 provide information for primary care to support their patients' learning while recovering from depression.

Many resources are available to clinicians and their patients to support the request for accommodations. http://www. mynorthern.ca/docs/AccommodationGuideManagingMent alHealthonCampus.pptx

Evidence-based treatments

Evidence-based treatments for depression include psychotherapies and antidepressant medications. A recent systematic review by the Agency for Health Care Quality and Research (AHRQ) evaluated the "efficacy, comparative effectiveness, and moderators of benefits and harms of available non-pharmacological and pharmacological treatments for children and adolescents with a confirmed diagnosis of a depressive disorders-major depressive disorder (MDD), persistent depressive disorder or depressive disorders not otherwise specified" (19). The review included data from 60 studies and concluded that for adolescents (aged 12 to 18 years), cognitive behavioral therapy (CBT), and antidepressants including Fluoxetine, Escitalopram, and combination treatment of Fluoxetine and CBT can improve depressive symptoms. Furthermore, combination treatment was associated with lower rates of relapse among patients aged 8 to 17 years with MDD and selective serotonin reuptake inhibitors (SSRIs) was associated with improved response. However, the reviewers also concluded that antidepressants are associated with a higher risk of serious adverse events among children and adolescents with MDD. Therefore, the reviewers concluded that there are efficacious treatments for adolescents with MDD but that SSRIs are associated with increased serious adverse events (19).

Psychotherapy

The efficacy of psychotherapy for the treatment of depression in children and adolescents has been demonstrated in numerous clinical trials and in systematic reviews of the literature. Although the strongest evidence exists for CBT for the treatment of depression in adolescents, both CBT and Interpersonal Therapy for Adolescents (IPT-A) have been shown to be efficacious in this population (14,19-21). In children, only CBT has been shown to be efficacious in the treatment of depression.

IPT-A

IPT-A is a manualized, evidence-based treatment for depression in adolescents. IPT-A is a time limited treatment

and addresses the impact of current depressive symptoms on interpersonal relationships and vice versa. Key components of IPT-A include identifying a focus for therapy (e.g., grief, interpersonal conflicts, transitions, interpersonal deficits), and improving interpersonal problem-solving skills and communication patterns (20). IPT-A has been evaluated against placebo, as well as CBT and was found to be effective in reducing depressive symptoms. IPT-A has also been found to be effective when delivered in both individual and in group formats and in real world settings such as school-based mental health clinics (20).

CBT

CBT is a time-limited, manualized, evidenced-based therapy for the treatment of pediatric depression. CBT focuses on the interplay between a patient's thoughts, behaviors, and feelings. In CBT, patients learn to utilize different strategies including behavioral activation, cognitive restructuring and problem-solving.

There is strong empirical evidence supporting the use of CBT for the treatment of pediatric depression from clinical trials data. CBT has been found to be superior compared to placebo controls, waitlist controls, supportive therapy as well as family therapy (14,19,21). CBT has been shown to improve depressive symptoms and functioning. In the past decade, a number of computerized CBT-based programs have also been developed for children and adolescents with depression. In a recent review, four computerized CBT-based interventional programs for depression in children and adolescent were identified (22). The review concluded that that such programs can improve depressive symptoms. However, the benefit of these programs is small and, in some cases, comparable to that of general counseling (23).

Side box: psychotherapy versus psychosocial interventions

There is growing evidence to support the use of brief psychosocial interventions (BPI) in the treatment of pediatric depression. Goodyer and colleagues first evaluated BPI in the ADAPT study as a pre-randomization intervention and found that 21% of youth responded to the BPI and no longer met criteria for the study (24). This intervention was then evaluated against CBT in the IMPACT study and found to have similar efficacy raising further controversy about what is the critical "ingredient" in psychological treatments for depression (24).

Antidepressant medications

Although there is much controversy about the use antidepressants in the pediatric population, there is a substantial body of research that supports the use of antidepressants for the treatment of pediatric depression. There are also a number of systematic reviews that support the use of antidepressants (25). Among the antidepressants, only SSRIs, are considered first-line treatment for pediatric depression. The Food and Drug Administration (FDA) has only approved fluoxetine for the treatment of depression in children and adolescents 8 years of age and older. Escitalopram is also FDA approved for the treatment of depression but only for adolescents aged 12 and up. The choice of an SSRI can be based on several factors including: approval by regulatory agencies such as the FDA (US), positive outcomes in clinical trials data including risk of adverse effects, and family history of successful medication treatment. However, 'due to its FDA approval, multiple efficacious clinical trials, and long half-life (which minimizes adverse effects of poor compliance), if there are no contraindications, fluoxetine is recommended as the first-choice SSRI', but other SSRIs (see Table 3) may be considered "first-line" as well, especially escitalopram, which is also FDA-approved for adolescents (7).

Among the other SSRIs, clinical trials with Paroxetine have not demonstrated efficacy and it was also associated with significantly increased risk for new onset or worsening suicidality. In contrast, Citalopram, Escitalopram, and Sertraline have been shown to have some efficacy in clinical trials without the significantly elevated risk for suicidality demonstrated with Paroxetine (25). However, among the SSRIs, Fluoxetine has the most empirical support for its efficacy in treating depression in both children and adolescents. Therefore, when considering monotherapy with an antidepressant, Fluoxetine should be considered first-line for children and adolescents with depression. When treating adolescents with depression, Escitalopram may also be considered first-line.

Side box: other classes of antidepressants

Tricyclic antidepressants (TCAs) were the first class of antidepressants evaluated for pediatric depression and were found to have no benefit compared to placebo.

Furthermore, children and adolescents treated with TCAs experienced serious side effects including rare lethal cardiac events.

Bupropion has not been evaluated in any randomized

 Table 3 Selective serotonin reuptake inhibitors (26)

		1						
	Medication	Starting Dose***	Increment	Effective Dose	Max. Dose	Not To Be Used With	Common Adverse Effects	RCT Evidence for Efficacy
1st Line	Fluoxetine	10 mg	10–20 mg	20 mg	60 mg	SSRI, TCA, MAOI**	Headaches, Gl Upset, Insomnia, Agitation, Anxiety	Yes*
2 nd Line	Escitalopram (12 and older)	5 mg	5mg	10-20 mg	20 mg	SSRI, TCA, MAOI**	Headaches, Gl Upset, Insomnia	Yes*
	Citalopram	10 mg	10 mg	20 mg	40 mg	SSRI, TCA, MAOI**	Headaches, Gl Upset, Insomnia	Yes
	Sertraline	25 mg	12.5 to 25 mg	100 mg	200 mg	SSRI, TCA, MAOI**	Headaches, GI Upset, Insomnia	Yes

*, FDA approved; **, Serotonin Reuptake Inhibitors, Tricyclic Antidepressants, Monoamine Oxidase Inhibitors; ***, Younger patients should be started on lower doses.

controlled trial for depression in children and adolescents with depression. However, its safety and efficacy has been evaluated in open label studies and found to be welltolerated and with some benefit. One major concern for use in adolescents is the risk of seizures when it is combined with alcohol.

Clinicians initiating SSRIs should schedule appointments for routine monitoring clinical effectiveness and side effects from treatment as well as safety planning (26). Tools to assist clinicians with monitoring are freely available online at www. GLADPC.org.

Side box: suicidality and antidepressants

In 2004, the FDA reanalyzed data from 24 clinical trials involving more than 4,400 children and adolescents with depression, anxiety and/attentional difficulties. The FDA concluded that children and adolescents randomized to receive an antidepressant medication were more likely to endorse new onset or worsening suicidality compared to those on placebo. The FDA's reanalysis showed that about 2% of subjects on placebo had new onset or worsening suicidality, compared to 4% of those who were treated with antidepressants. This risk was also found in larger population-based studies. Therefore, parents and youth should be provided psychoeducation regarding this rare risk. The key point of emphasis is that if suicidal ideation/ behaviour escalates, it may be a signal that the SSRI is the wrong treatment. In this situation, parents and youth should be advised to stop the medication and alert the care team immediately (26,27).

Notably, the FDA warning was also followed by a

decrease in rates of medication treatment for youth with depression in several countries. Subsequent to the warning, there was a parallel increase in suicide deaths in youth in those jurisdictions. Although these findings must be interpreted with a note of caution, they support the need for regulatory warnings to be incorporated into clinical practice more thoughtfully and effectively to minimize potential negative effects (26).

Combination treatment

There is also emerging evidence that combination treatment with antidepressant medication and psychotherapy is the most efficacious treatment. The landmark study for adolescent depression, TADS or the Treatment for Adolescents with Depression Study, was an NIMH-funded double-blind placebo controlled trial which randomized 439 adolescents with MDD (DSM-IV) to 12 weeks of (I) CBT, (II) fluoxetine, (III) a combination of CBT and fluoxetine, and 4) placebo medication (28). The researchers found the combination treatment group reported greater symptom reduction as well as improved satisfaction and functioning. Furthermore, they responded more quickly to treatment and had fewer instances of new onset or worsening suicidality compared to those on fluoxetine alone. The authors concluded that, for adolescents with MDD, combination treatment with psychotherapy and antidepressant medications should be initiated.

Combination therapy has also been shown to be efficacious in the management of treatment-resistant depression, specifically, in those who have failed a trial of SSRIs treatment. This was demonstrated in the TORDIA

trial (29). In this trial, 334 adolescents were randomized adolescents with MDD and had failed a 2-month trial of treatment with an SSRI to one of four interventions: (I) switch to another SSRI, (II) switch to a different SSRI plus CBT; (III) switch to venlafaxine; or (IV) switch to venlafaxine plus CBT. The highest response rates were observed in patients who had CBT added to their antidepressant regimen.

In summary, combination treatment with both antidepressant medication and psychotherapy is ideal for children and adolescents with moderate to severe depressive symptoms. However, clinicians must take into account the availability of services and the preferences of patients and/or caregivers when recommending treatments for depression.

Ongoing management

Ongoing management is critical to ensuring that children and adolescents with depression achieve remission and remain free from relapses and recurrences. If there is no improvement after 6-8 weeks with treatment, clinicians should reassess the diagnosis of depression. Clinicians should also assess for co-morbidities that may have attenuated the benefit with treatment. For example, a patient with depression who is also experiencing ongoing trauma might not respond to antidepressant treatment without psychological support. Depressive symptoms might also be unresponsive to treatment because of unrecognized comorbidities. Children and adolescents with depression along with anxiety symptoms have been shown to respond better to combination treatment with antidepressant and CBT. Similarly, clinicians should also consider that the initial diagnosis of depression should be reassessed (to consider other diagnoses such as bipolar disorder) if response to treatment is poor (26).

Only a limited number of clinical trials have studied treatment with antidepressants in the continuation and maintenance phases. Two clinical trials, both conducted in North America, evaluated the efficacy of continued treatment with SSRIs after acute response (12 weeks) (30,31). Both studies demonstrated benefit in continued antidepressant treatment beyond the acute phase to prevent relapses. Another Canadian study, evaluated the effect of continued antidepressant treatment in the maintenance phase after acute response (12 weeks) and continued treatment (24 weeks) and found a trend in support of continued treatment (32). The emerging evidence supports the clinical guidance from the American Academy of Child and Adolescent Psychiatry Practice Parameters regarding ongoing management beyond acute treatment in order to prevent relapses and recurrences (1).

Side box: suicidality and safety planning

Thoughts of death and self-harm are common among high school students-affecting almost 20% of teens (1-3). Teenagers with depression are at particular risk and clinicians must be vigilant about monitoring for suicidality in their patients with depression. Fortunately, suicidal thoughts and behaviour are much less common among children. In fact, it is extremely uncommon for children under the age of 12 to die by suicide. Very few children and teens die by suicide in general. However, as death is uncommon from any cause in these age groups, suicide remains the one of the most common causes of death among youth (1-3). The influence of media on suicide, especially among young, people has been noted for many decades (33,34). In particular, youth are more likely to be influenced by social learning and contagion-when exposed to the suicide death of a real life individual/celebrity or a fictional character (33-37). Most recently, the broadcast of the US network Netflix show "13 Reasons Why" about a teen suicide was followed by increases in both suicidality and suicide deaths among youth in the US and Canada. Areas of current active study include the influence of more novel exposures such as those on social media (33-37).

At the first clinical visit and at every visit for depression treatment, clinicians should inquire about hopelessness, thoughts of death and dying, self-harm and suicidality. A fulsome safety plan should be developed with each patient and ideally with their caregivers at the first clinical visit. Caregivers should be educated on how to safety proof the home with the removal of lethal means such as firearms, large knives, and medications. Patients should be included in such discussions but care must be taken to avoid inadvertently providing them with a list of suicide means. Therefore means restriction discussions with patients should focus on methods that they have already contemplated or used. With hanging/suffocation being the most common method for suicide death among teenagers, caregivers should also remove long ropes, cords, belts and scarves (https://wisqars-viz.cdc.gov:8006/explore-data/home). However, firearms is the second most common means and has the highest case fatality rate of any method (38). The safety plan should also include a list of adults that the patient can contact at times of crisis. This list may include

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other family members, teachers, coaches or family friends. Some patients may prefer to receive support anonymously such as through a helpline. Patients who are actively suicidal with imminent plans to die should be directed to the closest pediatric emergency room. It is important to remember that some interventions previously thought to be effective in preventing suicide such as having patients sign a suicide contract, have not been found to lower risk.

Conclusions

Depressive disorders in children and adolescents cause significant short and long-term morbidity and mortality in patients and a significant burden on their families. The assessment and diagnosis of depressive disorders in children and adolescents must begin with a comprehensive interview with the patient and caregivers. Other key components include assessing for physical and psychiatric comorbidities, establishing rapport and a therapeutic alliance with the patient, assessing for past and ongoing trauma, setting limits for confidentiality, utilizing validated tools to assess, monitor and track depressive symptoms, and conducting a risk assessment. After a patient is diagnosed with depression, initial management should be done in the primary care setting which may include active monitoring in mild cases, along with psychoeducation, safety planning and referral for peer support-all key components of initial management. Established evidence-based treatments for depression include BPIs, psychotherapies including CBT and IPTA, antidepressants (SSRIs), and combination treatment. The combined use of SSRIs and psychotherapy is most likely to lead to reduced symptoms and improved functioning. However, regardless of the final therapeutic approach, it is critical to include patients and their families as active participants in care planning to ensure that outcomes from treatment align with their goals and priorities.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the Guest Editors (Danielle Laraque-Arena and Ruth E.K. Stein) for the series "Integrating Mental Health in the Comprehensive Care of Children and Adolescents: Prevention, Screening, Diagnosis and Treatment" published in *Pediatric Medicine*. The article was sent for external peer review organized by the Guest Editors and the editorial office.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at https://pm.amegroups. com/article/view/10.21037/pm-20-82/coif). The series "Integrating Mental Health in the Comprehensive Care of Children and Adolescents: Prevention, Screening, Diagnosis and Treatment" was commissioned by the editorial office without any funding or sponsorship. MS reports grants from American Foundation for Suicide Prevention, grants from Dr. Brenda Smith Bipolar Fund, grants from University of Toronto Department of Psychiatry Excellence Fund, grants from Innovation Fund of the Alternative Funding Plan from the Academic Health Sciences Centres of Ontario, grants from Ontario Ministry of Research and Innovation, grants from Mental Health Research Canada/Institute for Advancement in Mental Health, grants from Telus, other from Staff at Google Canada, outside the submitted work. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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doi: 10.21037/pm-20-82

Cite this article as: Cheung A, Sinyor M. Depression in children and adolescents in primary care. Pediatr Med 2021;4:3.

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Appendix 1 PHQ-9 Modified

Patient Health Questionnaire-Modified for Teens

Over the <i>last 2 weeks</i> , how often have you been bothered by any of the following problems?		Not at all	Several days	More than half the days	Nearly every day
1.	Little interest or pleasure in doing things?	0	1	2	3
2.	Feeling down, depressed, irritable or hopeless?	0	1	2	3
3.	Trouble falling asleep, or staying asleep, or sleeping too much?	0	1	2	3
4.	Feeling tired or having little energy?	0	1	2	3
5.	Poor appetite, weight loss, or overeating?	0	1	2	3
6.	Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7.	Trouble concentrating on things like school work, reading, or watching TV?	0	1	2	3
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9.	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3
	For office coding:	0+	++	+	
			= 7	otal Score	
10.	If you are experiencing any of the problems on this form, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all □	Somewhat difficult	Very difficult	Extremely difficult
11.	In the past year , have you felt depressed or sad most days, even if you felt OK sometimes?	Yes	No □		
12.	Has there been a time in the <i>past month</i> when you have had serious thoughts about ending your life?	Yes	No □		
13.	Have you ever, in your whole life , tried to kill yourself or made a suicide attempt?	Yes	No □		
13.	life? Have you <i>ever, in your whole life,</i> tried to kill	Yes	No		

Adapted from the patient health questionnaire (PHQ) screeners (<u>www.phqscreeners.com</u>). Accessed October 6, 2016. See website for additional information and translations.

Appendix 2 Sample accommodations letter

Name of student:

Name of Institution:

Date

To whom it may concern:

I am writing this letter as the treating clinician for the above student who has medical conditions that affect academic functioning. Therefore, I am recommending the following accommodations:

Decreased course load

Not penalized for missing classes/being late especially for morning classes

Not penalized for lack of class participation

Option to give presentation to faculty alone instead of peers

Extended time for assignments/essays/projects

Extended time for exams/tests

Writing exams/tests in quiet room

Changing exam/tests/assignment schedules to decrease stress (i.e., not multiple deadlines in the same week)

If you have any concerns/questions, please contact me directly at

Sincerely,