



Position Statement

Anxiety in children and youth: Part 2—The management of anxiety disorders

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ABSTRACT

Anxiety disorders are the most common mental health concerns affecting Canadian children and adolescents. The Canadian Paediatric Society has developed two position statements that summarize current evidence regarding the diagnosis and management of anxiety disorders. Both statements offer evidence-informed guidance to support paediatric health care providers (HCPs) making decisions around the care of children and adolescents with these conditions. The objectives of Part 2, which focuses on management, are to: (1) review the evidence and context for a range of clinical approaches that combine behavioural and pharmacological interventions to effectively address impairment, (2) describe the roles of education and psychotherapy in the prevention and treatment of anxiety disorders, and (3) outline the use of pharmacotherapy, with side effects and risks. Recommendations for managing anxiety are based on current guidelines, review of the literature, and expert consensus. Note that when the word 'parent' (singular or plural) is used, it includes any primary caregiver and every configuration of family.

Keywords: Adverse effects; Anxiety; Cognitive behaviour therapy; Medication management; Psychoeducation; Psychotherapy.

BACKGROUND AND APPROACHES

It is developmentally appropriate for children and adolescents to experience occasional fears and worries. Having these anxieties attended to, named, and validated (see Box 1) is important for developing appropriate adaptive responses. Anxiety disorders, however, can be diagnosed when fears and worries cause significant, lasting distress or interfere with a child or adolescent's day-to-day functioning. Anxiety disorders often do not remit without treatment (1–3), highlighting the needs for early recognition, diagnosis, and management. While anxiety disorders are the most common mental health condition in young people (4,5), they are also highly treatable. It is essential that paediatric health care providers (HCPs) have the expertise to recognize, assess, and manage anxiety disorders across most clinical settings.

Optimal management of anxiety disorders often requires a multimodal approach that engages both the child or adolescent and parents and other family caregivers. When considering the best treatment modalities for an individual, HCPs must consider the following factors:

- The severity of symptoms, including the extent of functional impairment and distress
- The child or adolescent's age and developmental level
- The presence of co-occurring disorders
- Acceptability of a specific modality to both patient and family (compliance can improve engagement and adherence to treatment planning) (6)
- Family functioning, including parental distress, socioeconomic stressors, and biopsychosocial supports
- Availability and accessibility of services and mental HCPs trained in evidence-based interventions. Where access to publicly funded resources is limited, families may need to seek out private options, which are not equally accessible or affordable for all.
- Parental anxiety, which can contribute to children's symptoms of anxiety.

Regardless of treatment modalities employed, measuring a child or adolescent's response to management is essential (7,8).

The most common and effective approaches to anxiety management include psychoeducation, psychotherapy (parenting programs, cognitive behavioural therapy [CBT], and family-based interventions), and pharmacotherapy. This statement provides an overview of each management option, with supporting evidence.

PSYCHOEDUCATION

One of the first-line interventions for managing signs or symptoms of anxiety is psychoeducation. Children and adolescents need to know that some feelings of anxiety are normal, and that their cause or intensity should not be ignored or discounted. They can learn that feelings of uneasiness are common and nameable (as a 'worry', 'anxiety', or 'scary thing'). Discussing and explaining the physical and psychological manifestations of anxiety (e.g., somatic, cognitive, and behavioural) using age- and developmentally appropriate language can help children, adolescents, and families recognize what they are feeling, and why. Helping parents understand that there may be underlying developmental and environmental reasons for children's behaviours that are not related to anxiety can also inform more positive parenting. Counsel parents that while empathic responses to children's anxiety are needed, helping children to face their fears is a key parenting goal. By modelling and supporting adaptive coping strategies for life stressors, a parent can help children to 'avoid avoidance' or stop avoiding things that may, at first, appear overwhelming.

Reinforcing positive family routines, such as shared meals and regular sleep—wake times, limiting and curating time on screens, and curtailing caffeine intake, can be effective first steps in managing anxiety disorders (9). Encouraging regular exercise, shared family activities, and more independent engagement by youth in activities they enjoy are further positive steps (10). Identifying and addressing stressors at home, in school, and socially are part of psychoeducation, and can mitigate mild symptoms of anxiety disorders. Recommending particular relaxation apps and the use of a "mood diary" are additional management steps (11,12).

Positive parenting style and strategies have crucial roles when managing anxiety disorders. Research has shown that these skills can be learned by caregivers and implemented at any time, but are especially effective when applied early, with young children. Evidence has also shown that positive parenting can reduce risk of developing an anxiety disorder (13).

Family relational health (14) depends, in part, both on managing life's stressors and individual responses to stress. Parents can use the following strategies and approaches to promote secure attachment, strengthen relationships with children, and cope with anxiety: (15,16)

PSYCHOTHERAPY

Psychotherapy with a trained therapist is recommended as the first line treatment for anxiety disorders in children and adolescents (19). While there are many types of psychotherapy that can be used to support families, including motivational interviewing, emotion focused therapy, and

mindfulness and acceptance-based therapies, CBT is the most common evidence-based treatment modality for anxiety disorders (15).

Cognitive behavioural therapy

CBT is a mainstay of psychotherapeutic treatment for anxiety, based on the premise that thoughts influence feelings and behaviours. CBT is a time-limited and goal-oriented psychotherapy that provides individuals with tools and strategies to help them recognize feeling states, such as the signs and symptoms of anxiety, and learn to use relaxation and cognitive strategies to manage them. For anxiety, young people can learn to recognize physical signs and symptoms (e.g., headaches, abdominal pain, racing heart), and use techniques to manage them, such as relaxation, imagery, or deep breathing exercises. They also learn to recognize patterns or predictors of 'anxious thinking' and replace them with more positive thoughts. Exposure and desensitization to anxiety triggers can be conducted in a stepwise, open, and non-judgemental process where a child or youth is encouraged to try 'brave behaviours' over "avoidant behaviours'.

Studies have evaluated the use of CBT for a variety of childhood anxiety diagnoses, including generalized anxiety disorder, social anxiety disorder, specific phobias, panic disorder, separation anxiety disorder, and selective mutism (15). A recent Cochrane review of 87 studies involving nearly 6,000 participants reported that compared with children on waitlists or receiving no treatment, CBT increased probability of a child with a primary anxiety diagnosis achieving remission posttreatment (odds ratio [OR] 5.45, 95% confidence interval [CI] 3.90 to 7.60) (15). However, when compared with 'treatment as usual' for anxiety, which included other forms of psychotherapy or allowing participants access to any psychosocial or pharmacological intervention available, quality of evidence for efficacy was lower and there was no significant difference between the CBT and 'treatment as usual' groups. When comparing CBT with medications for children with anxiety, one recent and one seminal study (20,21) both found that a combination of CBT and sertraline was more effective than sertraline or CBT alone. While CBT remains the best studied psychosocial intervention for anxiety in children, current evidence suggests CBT provides additional benefit when combined with other treatment modalities, such as medication.

A key consideration when choosing a CBT program is mode of delivery. CBT can be taught individually or in groups, directly to children or adolescents or parents, or with both together, and in-person or virtually (22). There does not appear to be a difference in outcomes between individual versus group delivery, which has positive implications for accessing care (15).

While delivery mode may not affect treatment efficacy, a child's age and developmental level do influence outcome. CBT programs involving parent education have been provided to families of children aged 4 to 5 years using developmentally appropriate concepts and materials to help them recognize thoughts and feelings (23–25). Along with parental participation, many programs include accommodations for younger children, such as fewer verbal demands and use of visuals to explain more abstract concepts (24).

Box 1. Positive parenting tips for managing anxiety

- 1. Help children and adolescents recognize, acknowledge, and name feelings, including how they feel physically, and label them (e.g., as worrisome, anxiety-provoking, or scary).
- 2. Avoid avoidance by using gentle but firm encouragement. Take time to talk about strong emotions and sensitive topics, try "You look worried. Is something on your mind?", or "It sounds like you're really angry. Would you like to talk about that?"
- 3. Empathize and validate anxieties, but try not to reinforce them ("Iknow you're feeling scared, AND I know you're brave to do this").
- 4. Connect and maintain secure attachment by engaging in child-led, free play with younger children, and staying aware of, and involved with, adolescents (14,17):
 - Spend one-on-one time together,
 - Know and show interest in who their friends are, and
 - Encourage community and extra-curricular activities.
- 5. Foster self-confidence (positive affect) through effective praise:
 - Start statements of praise with 'You ...' instead of 'I ...'.
 - Be specific about how they've earned your special notice.
 - Recognize brave, helpful, or kind acts as soon as possible after they happen. For younger children, notice brave behaviours—no matter how small and (ideally) every day.
- 6. Encourage opinions and choices. Acknowledge growing independence in older children, and promote and celebrate sound decision-making and problem-solving (17).
- 7. To make anxiety more manageable, break the task of facing it into small, practical steps (if possible), and positively reinforce each one.
- 8. Reward attempts and approximations, and compliment process as much as end results. Focus on strengths rather than shortcomings.
- 9. Model coping skills and techniques such as deep breathing, muscle tension relaxation, imagery, mindfulness, distraction, and positive self-talk.
- 10. Be involved with schooling. For a child or teen with anxiety, help teachers understand its sources and related behaviours. For example, explain that when your child avoids classroom tasks or appears oppositional, that this is likely due to anxiety, and ensure that necessary supports or accommodations are in place.
- 11. For young children showing signs of child care or school avoidance:
 - Prepare the night before so mornings are not rushed and stressful.
 - Encourage bringing a favoured toy from home to ease transition.
 - Take time to say a warm goodbye but avoid repeated goodbyes.
- 12. Model positive ways of handling conflict or distress when managing anxiety by:
 - Slowing down speech.
 - Taking time to calm down.
 - Being respectful of others' beliefs and feelings.
 - Being assertive rather than aggressive (18).

Children with neurodevelopmental or learning disorders are at high risk for developing a co-occurring anxiety disorder (26,27), which makes ensuring they are able to access evidence-informed anxiety treatment especially important. Studies of CBT programs designed for children with neurodevelopmental conditions, such as autism spectrum disorder (ASD) (28,29) have demonstrated higher rates of anxiety remission compared with 'treatment as usual' (15). Co-occurring conditions should not exclude children from CBT. Rather, extra efforts should be made to accommodate their developmental needs and build on their strengths.

PHARMACOTHERAPY

While psychotherapy is first-line treatment for anxiety disorders in children and adolescents for children with mild to moderate anxiety symptoms, medication can be also considered for children with acute or moderate symptoms and partial response to psychotherapy. As noted above, combining psychotherapy with pharmacotherapy has been shown to improve outcomes (15,30). Several factors should be considered when prescribing medication to treat a paediatric anxiety disorder, including specific diagnosis, developmental age and stage, the medication's efficacy and safety profile, risk for side effects, route of administration, onset of effect, and interactions with other medications a child may be taking, including complementary and alternative treatments (31).

Selective serotonin reuptake inhibitors

A number of medications are used to treat anxiety, with the most effective being selective serotonin reuptake inhibitors (SSRIs)

(19,32). Evidence-based guidelines endorsed by the American Academy of Child and Adolescent Psychiatry recommend SSRIs as the medication of choice for treating anxiety disorders in children and adolescents aged 6 to 18 years old (33). Selective norepinephrine reuptake inhibitors (SNRIs) can be considered for treatment of social anxiety, generalized anxiety, separation anxiety, or panic disorder (19). SSRIs and SNRIs can improve anxiety symptoms and global functioning and help achieve remission (19).

Combination therapy using SSRIs in conjunction with CBT should be considered at treatment onset for children and adolescents with moderate to severe anxiety disorders because this two-pronged approach has been shown to improve global functioning, response to treatment, and achievement of remission. Monotherapy using CBT or SSRIs demonstrated lower treatment response and higher relapse rates (19–21,33).

At time of writing, SSRIs had not been approved by Health Canada for use in individuals younger than age 18. The evidence from randomized, placebo-controlled trials has suggested that SSRIs are both safe and effective for the treatment of anxiety disorders in children and adolescents (34,35). However, treatment data have not demonstrated superiority of one SSRI over another, and it has been established that paroxetine should be avoided for this population due to its very short half-life and higher risk for SSRI discontinuation syndrome (36).

The association of SSRI medications with suicidal ideation and behaviours has been reviewed by Health Canada and other agencies (37–39). Monitoring for suicidality in children and adolescents who have started on SSRI medication for an anxiety

disorder must be performed and documented by the prescribing physician (36).

The patient and family should be provided with detailed information regarding the off-label use of these medications (40), possible side effects, and when symptom improvement may be expected. Before initiating medication, a child or youth's physical symptoms of anxiety should be elicited and documented to ensure they are not mistaken for medication-related side effects during treatment. Initial doses of medications should be started low, then titrated slowly upward based on effect. Common dose ranges for treating children and adolescents with anxiety are shown in Table 1 (31,41).

An improvement in symptom severity may be noticed within the first 2 weeks of starting medication, but clinically significant improvement may not be apparent until 6 to 8 weeks into treatment, with maximal beneficial effects at about 12 weeks or beyond (42). Typically, SSRI doses are titrated every 2 to 4 weeks depending on treatment response (43). A medication tracking form (31,44) can assist discussions regarding titration or discontinuation of medication.

For an in-depth overview of SSRIs, see this Canadian Paediatric Society position statement (36).

TREATMENT COLLABORATION AND MONITORING

Consulting with school personnel

With the child or adolescent's consent, open communication between the health care team and educational personnel can

Table 1. Medications that may be used in the treatment of anxiety in children and adolescents

Class	Medication/trade name	Common dose range (mg/day)	Common side effects (5-20%)	Serious side effects (<4%)	Uncommon, serious side effects
SSRI	Citalopram (Celexa) Escitalopram (Cipralex) Fluvoxamine (Luvox) Sertraline (Zoloft) Fluoxetine (Prozac)	10-40 5-20 100-300 25-200 10-60	 Headache Insomnia Diarrhea Anorexia Hyperactivity Vomiting Irritability Sexual dysfunction Myalgia Weight changes 	 Suicidality Arrhythmia (Citalopram in doses >40 mg/day) QT prolongation (Citalopram in doses >40 mg/day) Mania 	Serotonin syndrome Bleeding problems
SNRI	Venlafaxine (Effexor) Duloxetine (Cymbalta)	37.5–225 30–120	 Fatigue Insomnia Restlessness Sexual dysfunction Headache Dry mouth Irritability Hypertension Tachycardia Myalgia Weight changes 	Suicidality Mania	Serotonin syndrome Bleeding problems

assist with identifying and addressing specific stressors, such as bullying, or a learning difficulty. Treatment planning should include specific supports for students with anxiety, including adjusting time allotted for test-taking or completing homework, involving a special educator to help individualize anxiety management strategies and problem-solving, and having an individualized education plan (IEP), with agreed-upon input from the student, parents, and school team.

Primary care physicians should advocate for school accommodations when they are needed and ensure that children or youth with anxiety disorders have access to, and regular communication with, a mental HCP (e.g., a therapist, psychiatrist, paediatrician or social worker). Mental health clinician involvement is essential to optimize response to treatment, modify context or environment when appropriate, and ensure consistent messaging for patients and families. For a child or adolescent in remission, the mental health clinician can streamline access to services and support continuity of care if relapse occurs.

Treatment monitoring

Functional impairment should be monitored throughout treatment using validated self- and parent-reported symptom-rating scales, global measures of functioning such as school attendance and involvement in activities, patient satisfaction with (and adherence to) treatment, and remission. Obtaining this information before or during each clinical encounter (45–47) is crucial for optimizing management, understanding each individual's anxiety symptoms, and treatment (45,48,49). Aggregate measures of anxiety-related outcomes will help health care organizations identify ways to improve equity and effectiveness in anxiety program delivery (45,48,50).

Advocacy

Almost everywhere in Canada, the extent of child and adolescent mental illness has exceeded the capacity for care that physicians and non-physician mental health clinicians can provide. Psychotherapy and parenting programs offered by accredited child mental HCPs (e.g., clinical psychologists, social workers) are often only accessible by families with private insurance or who can pay out-of-pocket. Most Canadian children and adolescents cannot access timely, quality, first-line treatments for anxiety disorder.

Addressing the gaps in child and youth mental health care requires building capacity at the community level and integrating supportive service agencies with parenting and professional education programs (51,52). Public awareness campaigns may utilize social media targeting both children and parents to promote recognition of anxiety symptoms, public health measures to promote mental health, and resources for accessing care. Focused research and programming in support of culturally competent care delivery for populations disproportionally affected by mental illness are urgently needed. While assistive and online technologies hold promise for increasing access to mental health services and facilitating interventions or treatment at lower cost, many challenges and uncertainties remain (53). Roles of in-person and virtual mental health services need to be explored as evidence emerges.

RECOMMENDATIONS FOR PAEDIATRIC HEALTH CARE PROVIDERS

Paediatric HCPs, particularly primary care physicians, are well positioned to ask about and listen for concerns about child or adolescent anxiety. To help manage normal, developmentally appropriate feelings of anxiety, they should be prepared and willing to counsel young patients and parents on:

What anxiety can feel like, normal causes, and how to recognize, acknowledge, and name such feelings.

When children and youth are experiencing greater levels of anxiety, HCPs should be able to counsel on basic strategies (e.g., positive parenting), techniques (deep breathing, distraction, positive self-talk) or tools (e.g., relaxation apps or a mood diary) for managing symptoms of anxiety.

Paediatric HCPs must be prepared and able to respond to symptoms of anxiety disorders early and proactively. The following steps are key to optimize management:

- Be involved with a child care or school when needed.
 Developing IEPs for older children and youth, and advocate for specific educational accommodations, when appropriate.
- Refer and facilitate access to, and regular communication with, a mental HCP (e.g., a therapist, psychiatrist, paediatrician, or social worker).
- Psychotherapy is the first line treatment for anxiety disorders.
 As such, CBT services should be universally available and accessible for all Canadian children and youth who require them.
- Psychotherapy programs (one-on-one, group sessions, and online courses) should be delivered within a measurementbased care framework with data used to monitor quality and facilitate quality improvement.
- Offer patient- and family-centred treatment planning.
- For children and adolescents with co-occurring conditions, particularly those with a neurodevelopmental or learning disorder, ensure access to evidence-informed anxiety treatment programs, including CBT.
- For children and adolescents with a moderate to severe anxiety disorder, consider multimodal approaches at treatment onset (e.g., combining a selective SSRI—the medication option of first choice—with CBT), particularly.
- Consider selective SNRIs to treat social anxiety, generalized anxiety, separation anxiety, or panic disorder.
- Prescribe medication based on these contextual factors: specific diagnosis, the patient's developmental age and stage, the medication's efficacy and safety profile, risk for side effects, route of administration, onset of effect, and potential interactions with other medications being taken.
- Evaluate each child or adolescent's response to management on a regular, ongoing basis.
 - Monitor and document for suicidality in individuals who have been started on SSRI medication.
 - Assess function based on patient- and parent-reported symptom-rating scales, school attendance, and involvement in everyday activities.
 - Ask about patient satisfaction with (and adherence to) treatment before or during each clinical encounter.

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REFERENCES

- 1. Beesdo K, Bittner A, Pine DS, et al. Incidence of social anxiety disorder and the consistent risk for secondary depression in the first three decades of life. *Arch Gen Psychiatry* 2007;64(8):903–12.
- Bittner A, Egger HL, Erkanli A, Jane Costello E, Foley DL, Angold A. What do childhood anxiety disorders predict? *J Child Psychol Psychiatry* 2007;48(12):1174–83.
- Broeren S, Muris P, Diamantopoulou S, Baker JR. The course of childhood anxiety symptoms: Developmental trajectories and child-related factors in normal children. J Abnorm Child Psychol 2013;41(1):81–95.
- 4. Kessler RC, Petukhova M, Sampson NA, Zaslavsky AM, Wittchen HU. Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *Int J Methods Psychiatr Res* 2012;21(3):169–84.
- Polanczyk GV, Salum GA, Sugaya LS, Caye A, Rohde LA. Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *J Child Psychol Psychiatry* 2015;56(3):345–65.
- Pumariega AJ, Rothe E, Mian A, et al; American Academy of Child and Adolescent Psychiatry, Committee on Quality Issues. Practice parameter for cultural competence in child and adolescent psychiatric practice. J Am Acad Child Adolesc Psychiatry 2013;52(10):1101–15.
- Clark DM. Realizing the mass public benefit of evidence-based psychological therapies: The IAPT Program. Annu Rev Clin Psychol 2018;14:159–83.
- McGuire JF, Caporino NE, Palitz SA, et al. Integrating evidence-based assessment into clinical practice for pediatric anxiety disorders. Depress Anxiety 2019;36(8):744–52.
- Morgan AJ, Chittleborough P, Jorm AF. Self-help strategies for subthreshold anxiety: A Delphi consensus study to find messages suitable for population-wide promotion. J Affect Disord 2016;206:68–76.
- 10. Yap MBH, Pilkington PD, Ryan SM, Kelly CM, Jorm AF. Parenting strategies for reducing the risk of adolescent depression and anxiety disorders: A Delphi consensus study. J Affect Disord 2014;156:67–75.
- 11. Chen KW, Berger CC, Manheimer E, et al. Meditative therapies for reducing anxiety: A systematic review and meta-analysis of randomized controlled trials. *Depress Anxiety* 2012;29(7):545–62.

- 12. Pilkington K, Wieland LS. Self-care for anxiety and depression: A comparison of evidence from Cochrane reviews and practice to inform decision-making and priority-setting. *BMC Complement Med Ther* 2020;20(1):247.
- 13. Yap MBH, Jorm AF. Parental factors associated with childhood anxiety, depression, and internalizing problems: A systematic review and meta-analysis. *J Affect Disord* 2015;175:424–40.
- 14. Wolchik SA, West SG, Sandler IN, et al. An experimental evaluation of theory-based mother and mother-child programs for children of divorce. *J Consult Clin Psychol* 2000;68(5):843–56.
- 15. James AC, Reardon T, Soler A, James G, Creswell C. Cognitive behavioural therapy for anxiety disorders in children and adolescents. *Cochrane Database Syst Rev* 2020;11(11):CD013162.
- 16. Koerting J, Smith E, Knowles MM, et al. Barriers to, and facilitators of, parenting programmes for childhood behaviour problems: A qualitative synthesis of studies of parents' and professionals' perceptions. Eur Child Adolesc Psychiatry 2013;22(11):653–70.
- 17. Ginsburg GS. The Child Anxiety Prevention Study: Intervention model and primary outcomes. *J Consult Clin Psychol* 2009;77: (3)580–7.
- 18. Government of Western Australia, Centre for Clinical Interventions. Assertiveness Workbook: Assert Yourself. 2008: https://www.cci. health.wa.gov.au/Resources/Looking-After-Yourself/Assertiveness (Accessed March 31, 2022).
- Wang Z, Whiteside SPH, Sim L, et al. Comparative effectiveness and safety of cognitive behavioral therapy and pharmacotherapy for childhood anxiety disorders: A systematic review and meta-analysis. *JAMA Pediatr* 2017;171(11):1049–56.
- Walkup JT, Albano AM, Piacentini J, et al. Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. N Engl J Med 2008;359:2753–66.
- 21. Jeppesen P, Trap Wolf R, Nielsen SM, et al. Effectiveness of transdiagnostic cognitive-behavioral psychotherapy compared with management as usual for youth with common mental health problems: A randomized clinical trial. *JAMA Psychiatry* 2021;78(3):250–60.
- 22. Young C, Sinclair A, Black C, et al. Internet-Delivered Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder: A Health Technology Assessment. Ottawa, Ont.: Canadian Agency for Drugs and Technologies in Health; 2019.
- 23. Hirshfeld Becker DR, Masek B, Henin A, et al. Cognitive behavioral therapy for 4- to 7-year-old children with anxiety disorders: A randomized clinical trial. J Consult Clin Psychol 2010;78(4):498–510.
- 24. Monga S, Rosenbloom BN, Tanha A, Owens M, Young A. Comparison of child-parent and parent-only cognitive-behavioral therapy programs for anxious children aged 5 to 7 years: Short- and long-term outcomes. *J Am Acad Child Adolesc Psychiatry* 2015;54(2):138–46.
- 25. Lau EX, Rapee RM, Coplan RJ. Combining child social skills training with a parent early intervention program for inhibited preschool children. *J Anxiety Disord* 2017;51:32–8.
- Francis DA, Caruana N, Hudson JL, McArthur GM. The association between poor reading and internalising problems: A systematic review and meta-analysis. Clin Psychol Rev 2019;67:45–60.
- 27. Lai MC, Kassee C, Besney R, et al. Prevalence of co-occurring mental health diagnoses in the autism population: A systematic review and meta-analysis. *Lancet Psychiatry* 2019;6(10):819–29.
- 28. Wood JJ, Drahota A, Sze K, Har K, Chiu A, Langer DA. Cognitive behavioral therapy for anxiety in children with autism spectrum disorders: A randomized, controlled trial. *J Child Psychol Psychiatry* 2009;50(3):224–34.
- Sukhodolsky DG, Bloch MH, Panza KE, Reichow B. Cognitivebehavioral therapy for anxiety in children with high-functioning autism: A meta-analysis. *Pediatrics* 2013;132(5):e1341–50.
- Ollendick TH, March JS, eds. Phobic and Anxiety Disorders in Children and Adolescents: A Clinician's Guide to Effective Psychosocial and Pharmacological Interventions. London, UK: Oxford University Press; 2004.
- 31. American Academy of Child and Adolescent Psychiatry, American Psychiatric Association. Anxiety Disorders: Parents' Medication Guide. 2020: https://www.aacap.org/App_Themes/AACAP/docs/resource_centers/resources/med_guides/anxiety-parents-medication-guide.pdf (Accessed March 31, 2022).

- 32. Dobson ET, Bloch MH, Strawn JR. Efficacy and tolerability of pharmacotherapy for pediatric anxiety disorders: A network meta-analysis. *J Clin Psychiatry* 2019;80(1):17r–12064.
- Walter HJ, Bukstein OG, Abright AR, et al. Clinical practice guideline for the assessment and treatment of children and adolescents with anxiety disorders. J Am Acad Child Adolesc Psychiatry 2020;59(10):1107–24.
- 34. Birmaher B, Axelson DA, Monk K, et al. Fluoxetine for the treatment of childhood anxiety disorders. *J Am Acad Child Adolesc Psychiatry* 2003;42(4):415–23.
- 35. Connolly SD, Bernstein GA; Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. *J Am Acad Child Adolesc Psychiatry* 2007;46(2):267–83.
- 36. Korczak D. Canadian Paediatric Society, Mental Health and Developmental Disabilities Committee. Use of selective serotonin reuptake inhibitor medications for the treatment of child and adolescent mental illness. *Paediatr Child Health* 2013;18(9):487–91.
- 37. Bridge JA, Iyengar S, Salary CB, et al. Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment: A meta-analysis of randomized controlled trials. *JAMA* 2007;297(15):1683–96.
- 38. Government of Canada, Recalls and safety alerts. Celexa (citalopram) Association with abnormal heart rhythms For Health Professionals. 2012: www.healthycanadians.gc.ca/recall-alert-rappelavis/hc-sc/2012/14672a-eng.php (Accessed March 31, 2022).
- Sakolsky D, Birmaher B. Developmentally informed pharmacotherapy for child and adolescent depressive disorders. *Child Adolesc Psychiatr Clin N Am* 2012;21(2):313–25, viii.
- 40. B.C. Mental Health and Addition Services; Kelty Mental Health. Off-Label Medication Use. 2013: https://keltymentalhealth.ca/sites/ default/files/resources/Off-Label%20Medication%20Use%20-%20 May%202013.pdf (Accessed March 31, 2022).
- 41. Wilens TE, Hammerness PG. Straight Talk about Psychiatric Medication for Kids, 4th edition. New York, NY: Guilford Press; 2016.
- 42. Strawn JR, Mills JA, Sauley BA, Welge JA. The impact of antidepressant dose and class on treatment response in pediatric anxiety disorders: A meta-analysis. *J Am Acad Child Adolesc Psychiatry* 2018;57(4):235–244.e2.

- 43. Katzman MA, Bleau P, Blier P, Chokka P, Kjernisted K, Van Ameringen M; Canadian Anxiety Guidelines Initiative Group. Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. *BMC Psychiatry* 2014;14(Suppl):S1. doi:10.1186/1471-244x-14-s1-s1.
- 44. B.C. Mental Health and Addition Services; Kelty Mental Health. Antidepressant Monitoring Form for Children and Adolescents, 2013: https://keltymentalhealth.ca/sites/default/files/documents/antidepressant_monitoring_form_-_may_2013.pdf (Accessed March 31, 2022).
- 45. Guo T, Xiang YT, Xiao L, et al. Measurement-based care versus standard care for major depression: A randomized controlled trial with blind raters. *Am J Psychiatry* 2015;172(10):1004–13.
- 46. Fortney JC, Unützer J, Wrenn G, et al. A tipping point for measurement-based care. *Psychiatr Serv* 2017;68(2):179–88.
- Lewis CC, Boyd M, Puspitasari A, et al. Implementing measurementbased care in behavioral health: A review. *JAMA Psychiatry* 2019;76(3):324–35.
- 48. Scott K, Lewis CC. Using measurement-based care to enhance any treatment. Cogn Behav Pract 2015;22(1):49–59.
- Aboraya A, Nasrallah HA, Elswick DE, et al. E. Measurement-based care in psychiatry: Past, present, and future. *Innov Clin Neurosci* 2018;15(11-12):13–26.
- Clark DM, Canvin L, Green J, Layard R, Pilling S, Janecka M. Transparency about the outcomes of mental health services (IAPT approach): An analysis of public data. *Lancet* 2018;391 (10121):679–86.
- Richardson G, Partridge I, Barrett J, eds. Child and Adolescent Mental Health Services: An Operational Handbook, 2nd edn. London, UK: RCPsych Publications; 2010.
- 52. Georgiades K, Duncan L, Wang L, Comeau J, Boyle MH. 2014 Ontario Child Health Study Team. Six-month prevalence of mental disorders and service contacts among children and youth in Ontario: Evidence from the 2014 Ontario Child Health Study. Can J Psychiatry 2019;64(4):246–55.
- 53. Bevan Jones R, Stallard P, Agha SS, et al. Practitioner review: Co-design of digital mental health technologies with children and young people. *J Child Psychol Psychiatry* 2020;61(8):928–40.

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