Childhood depression and anxiety disorders

Don't miss the telltale signs

PHILIP HAZELL BMedSc, MB ChB, PhD, FRANZCP, Cert Accred Child Psychiatry

The recognition and management of most anxiety disorders in children is straightforward, whereas the detection and management of depression can be challenging. Cognitive behavioural therapy and pharmacotherapy options are available to treat children with anxiety or depressive disorders.

Anxiety is the second most common mental disorder among children in Australia aged 4 to 11 years, affecting about 7% of this population.[1] In contrast, depression affects about 1% of children in this age band.[1] Both anxiety and depression are equally common among boys and girls aged 4 to 11 years. The prevalence of anxiety remains much the same after puberty, but the prevalence of depression rises sharply, particularly among girls. This article will focus on the recognition and management of anxiety and depression in prepubertal children.

MedicineToday 2017; 18(6): 18-23

Professor Hazell is Conjoint Professor of Child and Adolescent Psychiatry, Discipline of Psychiatry, Sydney Medical School, University of Sydney, NSW.

Anxiety disorders

Anxiety is a cognitive and physiological response to threat, either real or imagined. A mild to moderate level of anxiety is normal and adaptive in certain situations. For example, if a child becomes distressed when approached with a syringe, this is not needle phobia, it is a normal reaction to the prospect of pain. Anxiety is considered to be a disorder when it is recurrent, maladaptive and leads to impairment.

Specialist psychiatric services for children may use self-, parent- and teacher-report behaviour checklists to quantify anxiety symptoms, but in the general practice setting the history should be sufficient to detect and assess the severity of the problem.

Acute anxiety

Acute anxiety is easily recognised. Think of the child who is too distressed to come inside the medical centre, even for a visit that will not involve needles. The child will have a fearful or apprehensive expression on their face, may cling to the caregiver, be restless and/or startle easily. The child may be flushed and perspiring, with irregular breathing and they may whimper or sigh.

An acutely anxious child may appear hyperactive at the beginning of a consultation, but will settle as they become more comfortable. In contrast, a child with

KEY POINTS

- Anxiety is the second most common mental disorder affecting children.
- Depression is less common than anxiety and typically will present in association with anxiety.
- Acute anxiety is instantly recognisable. In the general practice setting, chronic anxiety is likely to present with physical complaints.
- Depression is more difficult to detect than anxiety and can therefore be overlooked.
- The symptom criteria to diagnose depression are the same for children as they are for adults, but there are some small modifications.
- First-line management of children with anxiety is general support and psychological treatment; pharmacological treatment is only considered when other measures have failed.
- First-line management of children with depression is general support and monitoring. Children with mild depression that has not improved with monitoring should be treated with specific psychotherapy, whereas those with moderate-to-severe depression are likely to require antidepressant medication.

attention deficit hyperactivity disorder (ADHD) may seem well regulated to begin with, but will become restless and overactive as their attention span and patience are stretched.

Sometimes the anxious child is accompanied by an anxious parent. Anxiety is transmitted genetically and through modelling. If a parent perceives threat, it makes sense for the child to also be vigilant.

Chronic anxiety

Somatic symptoms

Chronic anxiety presents more covertly, with somatic problems being the most likely lead symptom in the general practice setting. Even in the psychiatric setting, the author's screening question for anxiety and depression is 'Does your child experience a lot of headaches or abdominal pain?' Less commonly, there may be reports of chest pain, fatigue, dizziness or problems swallowing.

A child presenting for the first time describing physical symptoms that are likely to be due to anxiety and do not respond to parental reassurance ('Let's see how you feel in the morning') should have a thorough medical history and examination, but usually only once. To feel understood and to be well examined are cogent factors in the child's recovery. Clinicians need to have a clear plan and be aware of the traps associated with an abnormal but clinically nonsignificant laboratory test. Through this process, clinicians can confidently reassure patients. ('This problem is going to get better' is better than 'The tests do not show anything').

Organic causes for anxiety are extremely rare in children, but anxiety can accompany any physical illness. Specific conditions to be aware of include hyperthyroidism, heart arrhythmias, mitral valve prolapse, asthma and seizures.

School avoidance and separation anxiety

School avoidance is another relatively common manifestation of anxiety in children. It is usually part of a broader problem of

separation anxiety where the child cannot tolerate being apart from the parent, and there will likely be other issues such as an inability to sleep alone or away from home. One or both parents may also have an anxiety disorder. Sometimes parents will describe a child as naughty or defiant when in fact the child is using their combativeness to avoid being placed in an anxiety-provoking situation; for example, the child will protest about going to bed because they fear being alone in the dark.

Selective mutism

Selective mutism, that is, speaking only to close family members, is a rare presentation of anxiety.

Depression

Just as the recognition of anxiety in children can be straightforward, the recognition of depression in children is complex. Detecting depression symptoms requires active history taking. Children with depressive disorders rarely take on the appearance of classic melancholia (i.e. psychomotor slowing, weight loss, early morning wakening, diurnal mood variation) that is seen in adults. In fact, if they do show this classic presentation they should be assessed for a physical illness.

Symptoms of depression may go unnoticed by adults because of a tendency for depression to have an insidious onset in children, and because the symptoms may fluctuate in intensity. A discriminating indicator of depression in children is the loss of enjoyment derived from previously pleasurable activities. Depressed children may:

- no longer accept invitations to play with their friends
- feel irritable rather than sad
- criticise themselves
- be pessimistic or hopeless about the future
- be indecisive and have difficulties with concentration, causing problems at school
- try to avoid school, often on the pretext of ill health
- lack energy and have problems sleeping.

Morbid thoughts occasionally progress to suicidal thinking and even suicide attempts. Many children who develop depression will have first been anxious and, therefore, may have presented with any of the problems described earlier in this article. Psychotic features are rare, but if present they are more likely to involve hallucinations rather than delusions.

A significant proportion of depressed children will have comorbid ADHD or conduct problems. These issues may obscure the presentation of depression. Alternatively, the onset of depression may lead to an intensification of conduct problems.

Diagnosing depression

The symptom criteria used to diagnose depression are the same for children as they are for adults, although there are some slight modifications. A diagnosis of major depressive disorder is made when five or more symptoms, including depressed mood or loss of interest or pleasure, have been present during the same two-week period and represent a change from previous functioning. These criteria are listed in the Table, with comments for each symptom to assist the clinician in applying the criteria in children.

When assessing a child with possible depression, the clinical history may be augmented with a self- or parent-report questionnaire. The Short Mood and Feelings Questionnaire is available as a free download from the Center for Developmental Epidemiology at Duke University, USA (devepi.mc.duke.edu/MFQ.html).[2] A score of eight or more will detect eight out of 10 cases of depressive illness, but about one-third of children achieving this score will not reach threshold for a diagnosis (false positive).

Depending on the level of dysfunction, major depressive illness may be described as mild, moderate or severe.

Depressive disorders

Types of depressive disorder include adjustment disorder with depressed features (brief, usually low-intensity depression triggered by a discrete life event), persistent depressive disorder (also known as dysthymia) and depression arising from a medical condition. Hypothyroidism is often cited as a likely cause of organic depression, but postviral syndromes are far more common.

Disruptive mood dysregulation disorder

Disruptive mood dysregulation disorder (DMDD) is a new diagnosis introduced to the *Diagnostic and Statistical Manual of Mental Disorders* 5th edition (*DSM-5*). This diagnosis is used to describe people who have intermittent severe temper outbursts and interepisode irritability. DMDD is grouped with the depressive disorders but was developed to curb the inappropriate diagnosis of bipolar disorder in children and adolescents. The validity of the condition is still being established and treatment implications are uncertain.

What to do after making a diagnosis

A clinician working within a Primary Healthcare Network will likely have access to one of the local HealthPathways website (www.healthpathwayscommunity.org), which inform primary care physicians on the management and referral of patients and provide links to clinician and consumer resources . Psychosocial support to the child and parents or caregivers is required for both anxiety and depression. HealthPathways recommendations include that the GP:

- builds a therapeutic relationship through an honest, empathic and nonjudgemental approach
- surveys the adequacy of family, community and social supports and advocate for additional support if necessary
- provides psychoeducation about lifestyle factors that may increase or alleviate symptoms such as decreasing consumption of caffeinated drinks to reduce anxiety and avoiding use of screens close to bedtime to alleviate insomnia
- involves the child and parents or

TABLE. SYMPTOM CRITERIA TO ESTABLISH A DIAGNOSIS OF DEPRESSION, WITH COMMENTS SPECIFIC TO CHILDREN*

Symptom	Comments specific to children
Depressed mood most of the day, almost every day, as indicated by a subjective report or observation made by others	May be irritable rather than have a depressed mood Children may not be able to articulate how they are feeling and it may be somewhat undifferentiated Adults may overlook the symptom in their children, especially in the presence of comorbid problems
Markedly diminished interest or pleasure in all, or almost all, activities most of the day, almost every day	A discriminating symptom, but it may be confused with oppositionality
Significant weight loss when not dieting, or weight gain, or decrease or increase in appetite almost every day	Consider failure to make expected weight gains Children sometimes appear to have lost weight when in fact they have had a growth spurt Change in appetite may be confused with food fads
Insomnia or hypersomnia almost every day	Insomnia may be related to anxiety rather than depression Differentiate insomnia from a preference to engage in other activities at night, such as the use of devices An unusual pattern of hypersomnia warrants investigation of possible organic causes
Psychomotor agitation or retardation observable by others and present almost every day	In the presence of premorbid hyperactivity, there needs to be a clear increase in the symptom within the context of the depressive episode
Fatigue or loss of energy almost every day	The clinician must exercise judgement over whether the symptom may be better explained by intercurrent medical illness Symptoms that seem to be in excess of the level of physical morbidity may still raise the possibility of depression
Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) almost every day	A discriminating symptom, because guilt is not encountered often in young people
Diminished ability to think or concentrate, or indecisiveness almost every day	The problem may come to light because of a decline in academic performance In the presence of premorbid attention problems there needs to be a clear increase in the symptom within the context of the depressive episode
Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation, a suicide attempt or a specific plan for committing suicide	Differentiate from hurtful or manipulative statements made in anger but independent of depressed mood

*A diagnosis of major depressive disorder is made when five or more symptoms, including depressed mood or loss of interest or pleasure, have been present during the same two-week period and represent a change from previous functioning.

caregivers in developing a management plan.

Anxiety is a compelling symptom that must not be ignored. It is easily transmitted from one person or system to another. The clinician must be able to deal with manifestations of anxiety, usually in parents, such as an exaggerated sense of urgency or severity, or repeated requests for reassurance. In the first instance, this can be dealt with through an empathic approach ('I can see you are worried') but if this is unsuccessful it can be useful to say 'I think that is the anxiety talking'. The clinician should not unwittingly transfer anxiety to other systems, such as exaggerating the sense of urgency or severity.

Treatment is required for a childhood mental disorder if it is interfering with function. In practice this means compromised family relationships, school engagement, social participation or physical health and safety.

Management of children with anxiety disorders

There are several categories of anxiety disorder but in general the disorder type is of little relevance to treatment planning because management of the affected child will be the same.

Psychological therapy

BMJ Best Practice concludes that cognitive behavioural therapy (CBT) is the best evidence-based treatment for children with anxiety disorders.[3] CBT for children can be accessed through private psychologists (under a Mental Health Treatment Plan), university psychology clinics, community child and family teams, and child and adolescent mental health services.

Children who have phobias of specific things or situations benefit from targeted exposure therapy, which pairs coping strategies with a graded introduction to the feared item or situation.

Children with anxiety arising from exposure to trauma, such as that experienced by those with post-traumatic stress disorder, require treatment that takes into account the trauma experience.

Obsessive compulsive disorder (OCD) also has specific targeted treatments. However, OCD is now grouped separately from other anxiety disorders in the *DSM-5* psychiatric classification system. The reason for this is that OCD has distinct associations with neurodevelopmental disorders, a feature not seen with most anxiety disorders.

Children with autism spectrum disorder are especially prone to anxiety symptoms when they are forced to deviate from their usual routine or are placed in situations where they feel outside their 'comfort zone'.

Pharmacotherapy

Panic disorders are characterised by catastrophic thoughts (e.g. 'I am going to die', 'the world is about to end') and severe physiological symptoms such as tachycardia, breathing difficulties, chest tightness and paraesthesia. Children with a panic disorder are more likely than those with other anxiety disorders to warrant pharmacotherapy; for example, fluoxetine at an initial dose of 0.15 mg/kg/day, titrating up to a maximum of 0.6 mg kg/day according to response and tolerability (off-label use).

Otherwise, pharmacotherapy is reserved for children who do not respond or have an inadequate response to psychological treatment. A systematic review found that children with anxiety disorders respond to most selective serotonin reuptake inhibitors (SSRIs).[4] Children and their parents or carers must be informed about the time to respond to treatment, which is usually at least several weeks. Treatment should be continued for at least six months after remission from symptoms has been achieved.

The tricyclic antidepressant clomipramine has a specific place as second-line pharmacotherapy for treatment-refractory obsessive compulsive disorder. This drug is best prescribed by a child and adolescent psychiatrist experienced in its use. Tempting as it can be, avoid prescribing drugs with a rapid-acting anxiolytic and sedating effect, such as benzodiazepines and certain antipsychotics, because tolerance quickly develops.

Management of children with depressive disorders

BMJ Best Practice distinguishes between treatment for children with mild, moderate and severe depression.[5] Categorisation is a clinical judgement based on the number and intensity of depressive symptoms, and the level of suicide risk.

Mild depression should, in the first instance, be managed with supportive care and monitoring. Some mild depression will spontaneously remit within weeks. If there is insufficient improvement, the patient should be referred for specific psychotherapy (usually CBT) using the same pathways that exist for the treatment of children with anxiety disorders.

For children with moderate-to-severe depression that has not improved after a few weeks of monitoring and support, pharmacotherapy, possibly augmented with a specific psychotherapy, is recommended.[5] It may be best to delay psychotherapy until the child has shown some response to medication, otherwise they may not be able to effectively participate in treatment.

A systematic review found only a modest benefit of newer-generation antidepressants for the treatment of children and adolescents with depression, with statistically significant benefit demonstrated only for fluoxetine and escitalopram (off-label uses).[6] Time on treatment seems to be a more important determinant of response than dose. If there is insufficient response to the first antidepressant tried, referral of the patient to a child and adolescent psychiatrist or a specialist child and adolescent mental health service is recommended.

Conclusion

The recognition and management of most anxiety disorders in children is straightforward, whereas the detection and management of depression can be challenging. Building a good therapeutic relationship is key to successful management. Psychosocial support for the child and parents or caregivers is essential in both disorders. Most children with anxiety disorders or mild depression respond to CBT. Pharmacological treatment is reserved for treatment of those with refractory anxiety, and for children with moderate-to-severe depression. MT

References

1. Lawrence D, Johnson S, Hafekost J, et al. The mental health of children and adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Canberra; Department of Health: 2015. Available online at: http://www.health.gov.au/internet/main/publishing.nsf Content/9DA8CA21306FE6EDCA257E2700016945/$File/child2.pdf (accessed May 2017).
2. Angold A, Costello EJ, Messer SC, Pickles A, Winder F, Silver D. The development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. Int J Methods Psychiatr Res 1995; 5: 237-249.
3. Gale CK, Millichamp J. Generalised anxiety disorder in children and adolescents. BMJ Best Practice 13 Jan 2016. Available online at: http://bestpractice.bmj.com/best-practice/evidence/1002.html (accessed May 2017).
4. Ipser JC, Stein DJ, Hawkridge S, Hoppe L. Pharmacotherapy for anxiety disorders in children and adolescents. Cochrane Database Syst Rev 2009; (3): CD005170.
5. Depression in children. BMJ Best Practice 4 April 2017. Available online at: http://bestpractice.bmj.com/best-practice/monograph/785.html (accessed May 2017).
6. Hetrick SE, McKenzie JE, Cox GR, Simmons MB, Merry SN. Newer generation antidepressants for depressive disorders in children and adolescents. Cochrane Database Syst Rev 2012; (11): CD004851.

COMPETING INTERESTS: Professor Hazell has received personal fees from BMJ Clinical Evidence.