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Depression in Children: Information for Primary Care

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Summary: Children can become depressed just as adolescents and adults can. Look for red flags for childhood depression, and refer to mental health services and supports when depression is suspected. With children, interventions focus on optimizing the parent-child relationship, as well as supporting parents (whereas services for adolescents and adults often have more an individual focus).

Note: If you are looking instead for information about depression in adolescents (aged 6-18), please see our module about Depression in Adolescents.

Case

You are seeing D., a 5-yo female brought by her mother for problems with depressed mood. Your assessment shows that indeed, she meets criteria for major depression. Mother has had longstanding struggles with depression as well, along with post-partum depression following D's birth. She loves her daughter, but life has not been easy for the mother.

Epidemiology of Childhood Depression

Prevalence
- 1% of preschoolers (age 3-5) (Luby, 2010)
- 2% children (i.e. under 12) (Birmaher, 2007)
- 4-8% adolescents (age 12-18) (Birmaher, 2007)

Risk factors include:
- Family history, particularly parents with depression

Prognosis
- Preschool depression has 50% persistence rate
- Mother with mental health issues is a negative prognostic factor

All the above highlight the importance of the importance of early screening for early childhood depression, and the importance of ensuring mental health care for parents.

Normal Development

Infants, children and youth require various things for well being:

- Physical well being, which includes proper nutrition, opportunities to move and be outside, along with shelter and access to medical care.
- Emotional well being, which includes having healthy attachments with caregivers (so that they can feel a sense of belonging), with a sense of
- Belonging (includes attachment),
- Purpose (e.g. work, school, or the other things we do in life that keep us busy)
- Meaning (i.e. knowing that our life has meaning)
- Hope (e.g. knowing that will continue to go well, or will get better in the future)

When our needs are unmet, we may struggle with mental wellness (and thus depression) …

Primary care providers are uniquely poised to identify and provide early intervention at early stages…

Clinical Presentation

Depression in infants, toddlers and children presents somewhat differently compared to adults.

Depression in Infants / Toddlers

When “depressed”, infants and toddlers may present with ‘depressive equivalents’, such as

- Failure to thrive
- Problems with attachment, i.e. insecure attachment, which is a When faced with parental separation, the infant/toddler that is
- Avoidant: Doesn’t seem to react when caregivers leave ; Doesn’t cry, nor turn to parents for his/her needs
- Anxious : Overly anxious with parental separation, “clings on” to parents
- Disorganized: Odd or ambivalent behavior with separation or reunion, e.g. When parent returns, may initially seek out parent but then run away, curl up in a ball, hit the parent (i.e. fight/flight/freeze)

Clinical Presentation of Depression in Preschoolers (age 3-5)

Depressed preschoolers may appear (Luby, 2000)

- Less joyful;
- More prone to guilt;
- Fail to enjoy activities and play;
- Changes in sleep, appetite, and activity as compared to healthy peers.

Often undetected by parents/caregivers, as symptoms less disruptive (than in older children).

Clinical Presentation of Depression in Children (age 6-12)

Children may have

- Mood lability,
- Irritability,
- Low frustration tolerance,
- Temper tantrums,
- Somatic complaints,
- Social withdrawal
- They may be able to say they are sad or depressed.

Screening / Identification

Consider using screening questions based on the PHQ-4 (Centre of Effective Practice, 2017). Although recommended for patients aged 12 and above, the questions may be modified for use with children.

Consider asking the parent:

Anxiety screening	
Clinician (to parent):	Over the past 2-weeks, how often has your child been bothered by feeling nervous, or on edge? Or not being able to stop or control worrying?
Depression screening	
Clinician (to parent):	Over the past 2-weeks, how often has your child had little interest or pleasure in doing things? Feeling down, depressed or hopeless?

For older children, consider asking the questions to the child directly as well, for example:

Anxiety screening	
Clinician (to parent):	Over the past 2-weeks, have you been bothered by feeling nervous, or on edge? Or not being able to stop or control worrying?
Depression screening	
Clinician (to parent):	Over the past 2-weeks, have you felt that things aren't any fun, or boring? have you felt sad, down or depressed?

If these screening questions are positive, consider exploring more in-depth for mood and/or anxiety disorders.

Screening Tools

In order to efficiently gather more information about possible depression, you might consider using the following screening tools:

Preschool Feelings Checklist (for depression)	Created for primary care to screen for depression 20-items Ages 3-5 yo Free http://www2.tulane.edu/som/tecc/upload/Preschool-feelings-checklist.pdf
Center for Epidemiological Studies Depression Scale for Children (CES-DC)	Ages 8-17 Free https://www.brightfutures.org/mentalhealth/pdf/professionals/bridges/ces_dc.pdf
Pediatric Symptom Checklist-17 (PSC-17)	Can help primary care providers assess the likelihood of finding any mental health disorder in their patient Ages 4-16 Freehttps://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf
Depression Self-Rating Scale for Children	18-item self-rating scale Ages 8-14 Scoring Children who scored 15 and over on the DSRS were significantly more likely to have a depressive diagnosis (Major Depression or Dysthymia) Free http://www.scalesandmeasures.net/files/files/Birleson%20Self-Rating%20Scale%20for%20Child%20Depressive%20Disorder.pdf

History

Key questions include:

- When did the depression start?
- Safety assessment
    - Any thoughts that life isn't worth living?
    - Any thoughts about ending your life?
- Symptoms of depression
    - Problems with mood
    - Problems with sleep, appetite, energy, concentration
- Psychiatric review of symptoms to rule out other conditions such as
    - Anxiety
    - Psychosis
    - Substance Use
    - Substance use
- Any use of alcohol? Recreational drugs?
    - Although alcohol / substance use is uncommon in aged 6-12, there are nonetheless certain populations that are higher at risk where it makes more sense to ask (e.g. children/youth that suffer from poverty, indigenous children, and those with parents with substance use.)
- Any particular stressors?
    - Home?
    - School? Such as teacher, peers, academics?
    - Any abuse or trauma?
- Interpersonal inventory
    - Who are the key people in the child's life?

Diagnoses

Diagnostic Criteria for Preschool Major Depressive Disorder (Age 3-5)

The problem with using standard DSM-IV criteria for depression in preschoolers (aged 3-5), is they miss 76% of preschoolers that were felt to be depressed (Luby, 2002). Thus, the following modified criteria have been developed and validated for preschoolers (Luby, 2002):

Five (or more) of the following symptoms have been present but not necessarily persistently over a 2-week period and represent a change from previous functioning: at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure in activities or play. If both (1) and (2) are present, a total of only four symptoms are needed.

1. Depressed mood for a portion of the day for several days, as observed (or reported) in behaviour. Note: May be irritable mood.
2. Markedly diminished interest or pleasure in all, or almost all, activities or play for a portion of the day for several days (as indicated by either subjective account or observations made by others).
3. Significant weight loss when not dieting, or weight gain or decrease or increase in appetite nearly every day.
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) that may be evident in play themes.
8. Diminished ability to think or concentrate or indecisiveness, for several days (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without specific plan, or a suicide attempt or a specific plan for committing suicide. Suicidal or self-destructive themes are persistently evident in play only.

DSM-5 Depression in Child/Adolescents

These criteria are provided here for reference, though note that they may be more accurate for adolescents than children (Luby, 2002).

5 or more symptoms present during a 2 week period which includes:

1. Depressed or irritable, cranky mood (outside being frustrated) or
2. Loss of interest or pleasure

Plus any three of the following:

1. Significant weight loss or decrease in appetite (more than 5 percent of body weight in a month or failure to meet expected weight gains.)
2. Insomnia or hypersomnia
3. Psychomotor agitation or retardation
4. Fatigue or lack of energy
5. Feelings of worthlessness or guilt
6. Decreased concentration or indecisiveness
7. Recurrent thoughts of death or suicide

DSM-5 Childhood Persistent Depressive Disorder (formerly known as dysthymia, dysthymic disorder)

A. Depressed mood for most of the day, for more days than not, as indicated by either subjective account or observation by others.

In children and adolescents, mood can be irritable and duration must be at least 1 year (vs. 2-years for adult dysthymia)

B. Presence, while depressed, of two (or more) of the following:

- Poor appetite or overeating
- Insomnia or hypersomnia
- Low energy or fatigue
- Low self-esteem
- Poor concentration or difficulty making decisions
- Feeling of hopelessness

During the 2 year period (1 year for children of adolescents) of the disturbance, the individual has never been without symptoms in Criteria A and B for more than 2 months at a time. Criteria for a major depressive disorder may be continuously present for 2 years.

Differential Diagnoses

Many conditions can lead or contribute to mood problems including but not limited to:

Psychiatric diagnoses

Normal Mood	It is normal for children to have periods of low moods. “Normal” low moods are transient, and not associated with significant problems with function nor physical symptoms.

Adjustment Disorder with Depressed mood	Difficulties adjusting to a stressful situation, that have led to depressed mood, but without neurovegetative symptoms sufficient to meet for major depressive disorder
Dysthymic Disorder	Problems with mood that have persisted more than 1-year (in children/youth)
Anxiety	Any problems with feeling excessively anxious? Shyness?
Attention deficit hyperactivity disorder (ADHD)	Any problems paying attention? Problems with hyperactivity? Impulsivity?
Learning disability	Learning disability, e.g. the child who struggles in school due to learning issues, which thus lead to frustration and mood problems
Disruptie mood dyregulation disorder (DMDD)	Any problems with excess anger or frustratoin? Temper tantrums? Rages?
Bipolar disorder	Episodic mood swings? Circadian rhythm disturbance? E.g. staying up all night despite high energy
Autism spectrum disorder (ASD)	Child disconnected and unable to relate to others
Sensory processing problems	Child with sensory overload

Medical Differential Diagnoses

Anemia	Any problems with low energy? Any risk factors such as vegetarianism?
Hypothyroidism	Thyroid problems (hypo and hyper),
CNS diseases	Brain tumors
Respiratory	Sleep apnea
Neoplastic	Any signs such as unexplained weight loss?
Infectious	Any signs of infection?

Physical Exam

There are no specific physical exam findings to major depressive disorder. Physical exam is important to rule out medical conditions that may mimic, or contribute to a mental health condition such as

- Thyroid or endocrine problems
- Infections such as meningitis, infectious mononucleosis
- Neurologic conditions such as tumors
- Tumors such as pancreatic cancer

Investigations

General screening tests based on clinical suspicion might include:

- CBC with differential
- Electrolytes, glucose, Ca
- Renal function (e.g. BUN/Cr)

- Thyroid screen, e.g. TSH
- Urinalysis with drug screen
- Liver enzymes
- Iron screen, e.g. serum transferrin
- B12 / folate

Additional specific investigations might be indicated depending on clinical suspicion such as:

- HIV antibody screen
- ESR
- Mg for Mg deficiency
- For Wilson's disease: Serum copper and ceruloplasmin
- For porphyria: 24-hr urine porphyrin levels
- For heavy metal toxicity: Blood or urine levels for lead, mercury, or other suspected heavy metals
- For autoimmune: Autoantibody screen and Igs
- For infectious causes: Cultures for infectious agents
- For alcohol use problems: Blood alcohol level; GGT; triglycerides
- For phaeochromocytoma: Urine catecholamines

Management/Treatment: Primary Care Interventions

Education about depression

- "Thank you for coming in today. I have bad news and good news… The bad news it appears your child has symptoms of depression. The good news is that there are many things we can do to support, and treat the depression."

Lifestyle strategies

- Ensuring healthy sleep routines
- Ensure proper nutrition
- Ensure regular nature time: For proper eye health, a minimum of 10 hrs outdoors per week has been suggested. Note that some studies suggest that recommending nature time is even more important than recommending physical activity, because as long as kids get outside, they will be physically active.
- Physical activity: Standard guidelines recommend at least 1-hr daily of physical activity for children.
- Limits on screen time: No more than 1-2 hrs day of screen time for the average child (Canadian Paediatric Society Screen Guidelines). In children with emotional/behavioural issues however, circumstances might warrant less screentime.

Relationship and communication strategies

- Teach parents how to listen and provide empathy, validation and acceptance of their child's feelings. When a child is depressed, it indicates that the child has distressing feelings which they have been unable to regulate or manage. Thus, it is important that the child be able to 1) turn to parents with those feelings, and 2) parents be able to soothe and support the child with these feelings.
- You might say the following to parents
    - Your child needs your help in managing their difficult feelings, whether it is feeling sad, worried or upset.
    - If your child is expressing difficult feelings, then
        - Listen without interrupting, and without jumping to giving advice or telling them what to do
        - Empathize and validate how your child feels, e.g. saying "It sounds like you are feeling sad. I can help you with your feelings. Let me give you a hug. Here's a tissue paper… Its okay if you want to cry.
- Family routines (e.g. family dinner, 1:1 time)
- Ensure that the family has routines which allow family connection, e.g. family dinners and family activities
- Ensure that the child has 1:1 time with a parent as well – it is during 1:1 time that the child will feel more

comfortable in talking about topics such as their true feelings, stresses and other issues.

School Intervention.

- If a child is having depression, most likely there is some impairment at school. Or school may be one of the contributing stresses that could be addressed
- During an appointment, consider calling the school, and/or writing a school letter to let them know about the child's needs for accommodations/modifications]
- Consider writing a sample letter to school in which you state the child's needs, and recommend modifications/accommodations for the child's needs. For children with depression, one particularly important intervention is ensuring that there are key school personnel that connect to the child regularly to see how the child is student and how they can support the student.
- For a sample letter:
- Visit "Depression in Children and Youth " at http://primarycare.ementalhealth.ca/index.php?m=fpArticle&ID=18300
- Click on "School/Workplace Letters"

Problem-Solving any particular Stressors

- Identifying and solving specific problems or stresses is a strategy that can be done in primary care (GLAD-PC Guidelines, 2007)
- The primary care provider works with the patient/parents to solve problems using the following seven steps

Step	What a clinician might say
1. Explore what possible stresses or problems the child/family is facing	Clinician: "Everyone has stresses. Typical stresses include home stresses, such as stresses with home routines, expectations, parents, siblings. Typical school stresses include teachers, schoolwork and classmates, including peer pressure and bullying.
2. Choose a specific problem or stress to address	Clinician: "What is a problem/stress that we should address?"
3. Set a realistic goal	Clinician: "What would you like to see different or better?" Examples include therapeutic strategies such as improving sleep, getting more activity; or dealing with stresses
4. Generate multiple possible solutions; start with the patient/family's preferences first	Clinician: "Let's see if we might come up with some possible solutions. First, let's start off with your thoughts first." After that, one might ask, "Would it be okay if I made some suggestions?"
5. Compare the different possible solutions, and pick one to try out.	Clinician: "Let's review all the possible solutions to try. Which one would you like to try first?" If the solutions are complicated, consider writing out pros/cons for each.
6. Wrap up the session, and	Clinician: "Okay, so you'll try out this solution and see how it goes. At our next visit, we'll talk about how it goes.
At the next visit	
1. Evaluate the strategy tried and see if it was helpful.	Clinician: "Let's review how things went with ___. How did things go with ___?"
2. If helpful, great.	Clinician: "It sounds like the strategy worked. That's wonderful!"
3. If not, then try a new strategy.	Clinician: "I'm sorry to hear things didn't work out as well as hoped. Let's talk more about that…"

Management/Treatment

First-line

- **Parent interventions:** For depressed children (aged 0-12), start with parent interventions (as opposed to starting with child interventions such as individual therapy); Group and individual CBT with children (under aged 12) are less effective.

  If available, Parent Child Interaction Therapy-Emotion Development (PCIT) is an evidence-based treatment for depression in age 3-7 yo. It consists of 18 sessions, in which parents receive coaching and guidance on how to support their child with negative emotions. Though it is not widely available, it supports the rationale for interventions to improve parent's ability to meet the child's needs.

- **Parent mental health services:** Does the parent have unmet mental health needs? If the parent has ongoing mental health difficulties, then ensuring supports for the parent's mental health may be particularly high yield as well

Second-line

- If dysfunction despite non-medication strategies, might consider SSRIs.

Medications for Depression in Children/Youth

SSRIs	Start / Initial Target Dosage	Max Dosage
First Line SSRI		
• Fluoxetine (Prozac)	Child: Start 5 mg daily; initial target 5-10 mg daily Youth: Start 5-10 mg daily; initial target 10-60 mg daily	Child: Max 40 mg daily Youth: Max 80 mg daily
Second-line SSRI		
• Escitalopram (Cipralex or generic)	Child: Start 2.5 - 5 mg daily; initial target 5-10 mg daily Youth: Start 5 mg daily; initial target 5-10 mg daily;	Child: Max 10 mg daily Youth: Max 20 mg daily
• Citalopram (Celexa or generic)	Child: Start 5 mg daily; initial target 5 mg daily Youth: Start 10 mg daily; initial target 10 mg daily	Child: Max 20 mg daily Youth: Max 40 mg daily
• Sertraline (Zoloft or generic)	Child: Start 25 mg daily; initial target 50 mg daily Youth: Start 50 mg daily; initial target 100 mg daily	Child: Max 100 mg daily Youth: Max 200 mg daily
Others		
• Fluvoxamine (Luvox or generic)	Child: Start 25 mg daily; initial target 75 mg daily Youth: Start 25-50 mg daily; initial target 100-150 mg	Child: Max 150 mg daily Youth: Max 300 mg daily
• Paroxetine (Paxil or generic)	Child: Start 5 mg daily; initial target 10 mg daily Youth: Start 10 mg daily; initial target 20 mg daily * Not usually used due to short half-life	Child: Max 30 mg daily Youth Max 60 mg daily

Case: 5-yo D., Part 2

You are seeing D., a 5-yo female brought by her mother for problems with depressed mood. Your assessment shows that indeed, she meets criteria for major depression. Mother has had longstanding struggles with depression as well, along with post-partum depression following D's birth. She loves her daughter, but life has not been easy.

You do the following:

- Refer her parents to the local publicly funded children's mental health agency that provides parents with a program in positive parenting (Triple P program). Mother learns new ways to meet her daughter's needs, that she never experienced during her own upbringing. Dahlia's mood improves, however she continues to have some symptoms of depression. As a result, she starts with an individual counselor, who learns more about her issues. The counselor also meets with parents and helps them understand Dahlia's mental health needs and ways to support her.

Conflicts of Interest

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About this Document

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