



Depression in Child & Adolescent

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- ✓ Indian J Psychiatry. 2019/Assessment and management of pediatric depression
- ✓ (2020) A narrative review of major depressive disorder in children and adolescents
- ✓ Depressive Disorders in Children and Adolescents Apr 2021
- ✓ DEPRESSION AND LOW MOOD IN YOUNG PEOPLE: TOWARDS BEST PRACTICE
- ✓ Depression in Early Childhood Joan L. Luby Diana Whalen 2019
- ✓ Depression in adolescence: a review (2020)
- Depression in Children and Young People Identification and management in primary, community and secondary care National Clinical Practice Guideline National Collaborating Centre for Mental Health Royal College of Psychiatrists' Research and Training National Institute for Health and Clinical Excellence The British Psychological Society 2015 - 2019
- ✓ APA CLINICAL PRACTICE GUIDELINE for the Treatment of Depression Across Three Age Cohorts 2019



DSM-5

"Mood Disorders" → "Depressive Disorders"

- Disruptive Mood Dysregulation Disorder
- Major Depressive Disorder—Single and Recurrent Episodes
- Persistent Depressive Disorder
- Premenstrual Dysphoric Disorder
- Substance/Medication Induced Depressive Disorder
- Depressive Disorder Due to Another Medical Condition
- > Other Specified Depressive Disorder
- Unspecified Depressive Disorder



Depressive Disorders in Children and Adolescents Apr 2021

- ✓ Disruptive mood dysregulation disorder
- ✓ Major depressive disorder
- ✓ Persistent depressive disorder (dysthymia)



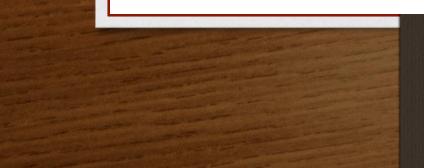
validation of clinical depression in children as young as age 3 years

Depression in Children and Adolescents Course

- Recurring, spontaneously remitting
- Average episode: 7-9 months
- 40% probability of recurrence in 2 years
- 60% likelihood in adulthood
- Predictors of recurrence:

 poorer response, greater severity, chronicity, previous episodes, comorbidity, hopelessness, negative cognitive style, family problems, low SES, abuse or family conflict





- \succ Symptom presentation \rightarrow varies with age
- ➤ Difficult to identify → Emotional and cognitive developments & comorbidities
- Prevalence of depression
- 2% in prepubertal children
- 4%–8% in adolescents
- Increasing trend of depression in youth
- ➤ Childhood depression → recurrent, relapsing condition causing significant morbidity and mortality

SIGNS & SYMPTOMS



- ✤ Not verbalize feeling → Irritability, Temper Tantrums, Mood Lability, Low Frustration Tolerance, Somatic Symptoms & Withdrawn Behavior
- ★ symptoms of depression → hidden by other behavioral & physical complaints
- ✤ Biological symptoms → Hypersomnia, decreased appetite and weight loss are more common in adolescents as compared to children
- ♦ Delusions \rightarrow uncommon in children
- ♦ Negative cognitions (low self-esteem, hopelessness, and negative attributions) → common in children

- In some children \rightarrow predominant mood is irritability rather than sadness
- The irritability associated with childhood depression \rightarrow manifest as over-activity and aggressive, antisocial behavior.
- In children with intellectual disability → somatic symptoms
 & behavioral disturbances

Depression in Early Childhood Joan L. Luby Diana Whalen 2019

- Young children display the core symptoms of depression, including vegetative signs, guilt, and anhedonia
- Depressed preschoolers tend to experience high levels of guilt
- Presence of sad or irritable mood and negative themes in play

Table E.1.1 Differences in the presentation of depression according to age. These symptoms can all be present at any age but are more common in the age group specified.

	Pre-pubertal children		Adolescents		Adults
•	Irritability (temper tantrums, non- compliance) Affect is reactive* Frequently comorbid with anxiety, behavior problems, and ADHD Somatic complaints	•	Irritability (grumpy, hostile, easily frustrated, angry outbursts) Affect is reactive* Hypersomnia Increased appetite and weight gain Somatic complaints Extreme sensitivity to rejection (e.g., falsely perceived putdown or criticism) resulting, for example, in difficulties maintaining relationships.	•	Anhedonia Lack of affective reactivity Psychomotor agitation or retardation Diurnal variation of mood (worse in the morning) Early morning waking

*Ability to be momentarily cheered up in response to positive events (e.g., visit by peers).

What Depression Looks Like at Different Ages

Age	Behaviors	Precursors		
Preschoolers (Ages 2-5)	 Anger, irritability, tantrums Excessive crying, sad expressions Loss of interest in favorite toys/activities Complains of physical symptoms like stomachaches and headaches 	 Family history of depression and mental illness Family history of suicidal ideation and attempts Family stressors such as divorce, loved one's death Chronic, physical illness 		
Middle Childhood (Ages 6-12)	 Behaviors listed above, and: Prefers to be alone rather than with family or friends Bullying, or being bullied Sleep problems Eating problems such as no appetite, weightloss Difficulty concentrating Separation anxiety from caregiver Refusing to attend school Poor school performance Thoughts of worthlessness, hurting oneself 	 Precursors listed above, and: Low parent/peer social support Inconsistent parenting Bullying, or being bullied Social isolation/rejection High academic pressure Other mental illnesses such as anxiety*, learning disorders, substance abuse 		
Adolescence (Ages 13-18)	 Behaviors listed above, and: Feels hopeless or pessimistic about their future No interest and enjoyment in activities Low self-esteem and self-worth Runs away from home Substance abuse Thinks, plans or attempts to hurt oneself 	 Precursors listed above, and: Onset of puberty Parent-child conflict due to increased independence 		

Symptoms associated with depression more commonly in children and adolescents than in adults include:

• Frequent vague, nonspecific physical complaints (headaches, stomach aches)

• Frequent absences from school or unusually poor school performance, School refusal or excessive separation anxiety

- Outbursts of shouting, complaining, unexplained irritability, or crying
- Chronic boredom or apathy
- Lack of interest in playing with friends
- Alcohol or drug abuse
- Withdrawal, social isolation, and poor communication

- •Excessive fear of or preoccupation with death
- Extreme sensitivity to rejection or failure
- Unusual temper tantrums, defiance, or oppositional behavior
- Reckless behavior
- Difficulty maintaining relationships
- Regression (acting babyish, resumption of wetting or soiling after toilet training)
- Increased risk-taking behavior

*** Another important risk while using antidepressants among children and adolescents is medication-induced behavioral activation. It is characterized by the symptoms of irritability, agitated and aggressive behavior, anxiety symptoms, restlessness, hostility, akathisia, hypomania/mania, and emergence of psychotic symptoms. There antidepressantassociated behavioral activation has been found to be associated with the use of higher doses of medications.

Suicidality

□ Incidence of suicide attempts → peak during adolescence particularly from middle-to-late adolescence

- □ The two most important risk factors for suicide
- ✓ Associated depressive disorder
- ✓ Previous suicide attempt

- History should include causative factors \rightarrow domestic violence, sexual abuse and exploitation and drug adverse effects.
- suicidal behavior (ideation, gestures, attempts)





Environmental risks

- Personal characteristics (accident, illness including post-infective mood states, financial etc.)
- □ Personal focus (self, parent, friend, etc.)
- □ Origin (self-induced, independent of self)
- □ Time of onset and (less frequently)
- Duration of exposure
- □ Locus of control (uncontrollable by self, controllable)
- □ Age and developmental stage of exposure

Probable vulnerability factors

- Presence of short arm serotonin promoter gene
- Elevated morning cortisol levels
- Acquired fetal infections
- Maltreatment or emotional neglect through infancy
- Maternal postnatal depression
- Parental history of depressive disorder*
- Brain illnesses in childhood including trauma and infection Being female* Being post-pubertal*
- Divorced parents
- Chronic parental psychiatric illness

- □ Self- devaluative thinking
- Poor school performance
- Bullying Co-existing medical illnesses
- Death of close relative
- Death of a pet
- Obesity

young people are exposed to a combination of:

Chronic marital difficulties

Parental (predominantly maternal) low mood or depression

Recent life events

Two or more lifetime losses, such as bereavement or marital breakdown

High risk groups for common mental health problems in childhood and adolescence includes those who: are "in care"

are seeking asylum or refuge

have a learning disability

suffer with long term physical illnesses or conditions

have a history of offending behavior

live in "a troubled family"

It is also important not to miss children and young people

- Being seriously bullied (enduring, recurrent, high level, multi-source)
- Being neglected through absent, inadequate parenting
- Being abused, including through sexual exploitation show escalating patterns of self harm (typically cutting or self-poisoning)

- Unipolar vs. bipolar
- Psychotic depression vs. schizophrenia
- Depression vs. substance use
- Depression vs. adjustment disorder with depressed mood
- Depression vs. demoralization from disruptive disorders

Depression in Children and Adolescents Medical Differential Diagnosis

- Medications
- Substances of abuse
- Infections
- Neurological disorders
- Endocrine

COMORBIDITIES

- Comorbid psychiatric disorders $\rightarrow 80\%-95\%$
- Anxiety Disorders, Conduct Disorders & ADHD
- The most common comorbidity \rightarrow <u>Separation Anxiety</u> <u>Disorder</u> in children





- ✓ Alterations in cortical gray-matter development across school age & early adolescence → preschool depression
- ✓ Preschool depression predicts \rightarrow MDD later in childhood and adolescence
- ✓ Preschool depression can predict → anxiety disorders and ADHD in later childhood

POORER OUTCOMES

- Psychotic symptoms
- ✤ Bizarre symptoms
- Anti-social behaviors
- ✤ Aggressive conduct disorder





TREATMENT OF DEPRESSION

Acute phase

Maintenance phase

Continuation phase

Acute phase

Defined as at least 50% reduction in symptoms

Range from 2 weeks to 2 months / 8–12 weeks

Efficacy of SSRIs such as Fluoxetine and Escitalopram in acute phase

Maintenance phase

Consolidation of gains achieved in acute phase and prevention of relapse

Ranges from 6 to 12 months

Efficacy of fluoxetine in preventing relapse when continued at the dose given in acute phase

Continuation phase

Defined as recovery phase where the aim is to prevent any recurrence of depressive symptoms

Prevent relapse by continuing treatment in children or adolescents having recurrent/severe/chronic disorder

This period beyond 12 months which aims are preventing recurrence

Never been addressed in any trial

- Mild: supportive management, CBT, or
 IPT→no response→CBT, IPT, or antidepressant medication
- Moderate: supportive management, CBT, IPT or medication → no response–add medication
- Severe: CBT/IPT and medication
- Psychotic depression: CBT/IPT and medication and second generation antipsychotic drug

TABLE 2

Recommendations for the Adolescent Population from the APA Guideline Development Panel for the Treatment of Depression¹¹

Recommendation	Strength of Recommendation	Justification	
Initial Treatment			
For initial treatment of adolescent patients with depressive disorders ¹² the panel recommends that clinicians offer one of the following psycho- therapies/interventions ¹³ :	Recommendation for use	Based on the literature reviewed that met the AMSTAR requirements, cognitive-behavioral therapy and	
 Cognitive-behavioral therapy Interpersonal psychotherapy adapted for adolescents (IPT-A) 		interpersonal psychotherapy adapt- ed for adolescents (IPT-A) were the	
The panel recommends fluoxetine as a first-line medication compared to other medications for adolescent patients with major depressive disorder, specifically when considering medication options.		only psychotherapy interventions with evidence of efficacy.	
There was insufficient evidence to recommend either treatment (psy- chotherapy or fluoxetine) over the other for major depressive disorder.			
Additional psychotherapy recommendations for initial treatment			
If neither recommended psychotherapy is available or neither is accept- able to the patient and their parent/guardian, the panel suggests con- sidering an alternative model. However, at this time, while the following interventions have been evaluated in adolescents, there is insufficient evidence to recommend for or against clinicians offering any one of the following psychotherapies/interventions over the others:	Insufficient evidence for a recommendation	Based on the literature reviewed that met the AMSTAR requirements for all interventions except for cog- nitive-behavioral therapy and inter- personal psychotherapy adapted for adolescents (IPT-A), evidence was	
 Behavioral therapy Cognitive therapy Family therapy Problem-solving therapy Psychodynamic therapy Supportive therapy 		not strong enough to determine that any one therapy was superior to an- other. Decision should be based on shared decision-making with youth patients, their parents/guardians, or family members actively involved in their care.	

Summary of Systematic Reviews and Meta-Analyses Used for Each Age Group

Age Group	Systematic Reviews and Meta-Analyses Used		
Children and Adolescents	 "Comparative efficacy and acceptability of psychotherapies for depression in children and adolescents: A systematic review and network meta-analysis" (Zhou et al., 2015) 		
	 "Comparative efficacy and tolerability of antidepressants for major depressive disorder in children and adolescents: A network meta-analysis" (Cipriani et al., 2016) 		
General Adult Population	"Nonpharmacological versus pharmacological treatments for adult patients with major depressive disorder" (Gartlehner et al., 2015)		
	 "Management of major depressive disorder, Evidence synthesis report, Clinical practice guideline" (ECRI Institute, 2015) 		
	 "The efficacy of non-directive supportive psychotherapy for adult depression: A meta-analysis" (Cuijpers, Driessen, et al., 2012a) 		
	 "Psychotherapy for subclinical depression: Meta-analysis" (Cuijpers, Koole, et al., 2014b) 		
	"The efficacy of short-term psychodynamic psychotherapy for depression: A meta-analysis update" (Driesser et al., 2015)		
	 "Interpersonal Psychotherapy for Mental Health Problems: A Comprehensive Meta-Analysis" (Cuijpers et al., 2016) 		
Older Adults	 "Managing depression in older age: Psychological interventions" (Cuijpers Karyotaki, Pot, et al., 2014a) "Continuation and maintenance treatments for depression in older people" (Wilkinson & Izmeth, 2012) 		

Table 1 Controlled pediatric MDD studies

	Medication	Reference	Ages	Number of studies
Positive studies*	Fluoxetine	Emslie et al. [16], Emslie et al. [17], TADS [19], Almeida-Montes & Friederichsen [15]	6–17	4
	Escitalopram	Emslie et al. [20]	12-17	1
	Sertraline	Wagner et al. [22] **	6–17	 (a priori pooled analysis, individual trials negative)
Negative studies	Escitalopram	Wagner et al. [21]	6-17	1
	Citalopram	von Knorring et al. [23]	13-18	1
	Paroxetine	Keller et al. [25], Emslie et al. [27], Berard et al. [26], Paroxetine Trial 1 [28]	7–17	4
	Venlafaxine	Emslie et al. [29]**	7-17	2
	Mirtazapine	Mirtazapine Trials 1 & 2 [30]**	7-17	2

Evidence base

SSRIs

- Generally well tolerated in children and are associated
- Side effects such as gastrointestinal symptoms (nausea, changes in appetite and heartburn) and sleep changes (insomnia, hypersomnia, vivid dreams, and nightmares)
- Uncommon symptoms include behavioral activation such as irritability, agitation and impulsivity → time limited and can be managed with care and support
- Efficacy of SSRIs definitely outweighs harm caused by them

Discontinuation of medications, as appropriate, should be done gradually over a period of 6 weeks or longer • Children and adolescents should remain in treatment for at least 1 year after symptoms have remitted. Indications for use In 2002 the American Academy of Child and Adolescent Psychiatry (AACAP) published a practice parameter for the use of ECT with adolescents (AACAP, 2002).

- The adolescent should be diagnosed with severe, persistent depression, with or without psychotic features
- The symptoms must be severe, persistent and significantly disabling, (life-threatening symptoms such as refusal to eat or drink, severe suicidality, or florid psychosis)
- Other treatments should have been tried and failed (at least two or more trials of appropriate psychopharmacology, unless the severity of symptoms precludes waiting for a response to other treatments)
- Should give a second opinion
- Every adolescent should have a memory assessment before treatment, at the end of treatment and at 3–6 months after treatment
- Policies should be in place covering consent for the use of ECT with adolescents.



