

# Depressive Disorders in Children and Adolescents

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**No  
Disclosures**

# Objectives

**By the end of this presentation, individuals should be able to:**

- 1. Identify up to date general clinical information regarding depressive disorders in children and adolescents**
- 2. Differentiate between different types of depressive disorders**
- 3. Evaluate patients for depressive disorders**
- 4. Be aware of the appropriate treatment options**

# Epidemiology

Take aways:

- Depressive disorders are common in youth
- Depressive disorders become increasingly more common as kids get older and become adolescents
- In teenage years, girls outnumber boys 2:1 for depressive disorders
- Overall numbers vary a lot depending on where you look. However studies indicate that since the pandemic, the incidence of kids with depressive disorders and depressive symptoms have doubled. The most common numbers I go with when I talk to families is pre-pandemic the numbers for depression was 10% and then after the pandemic 20%

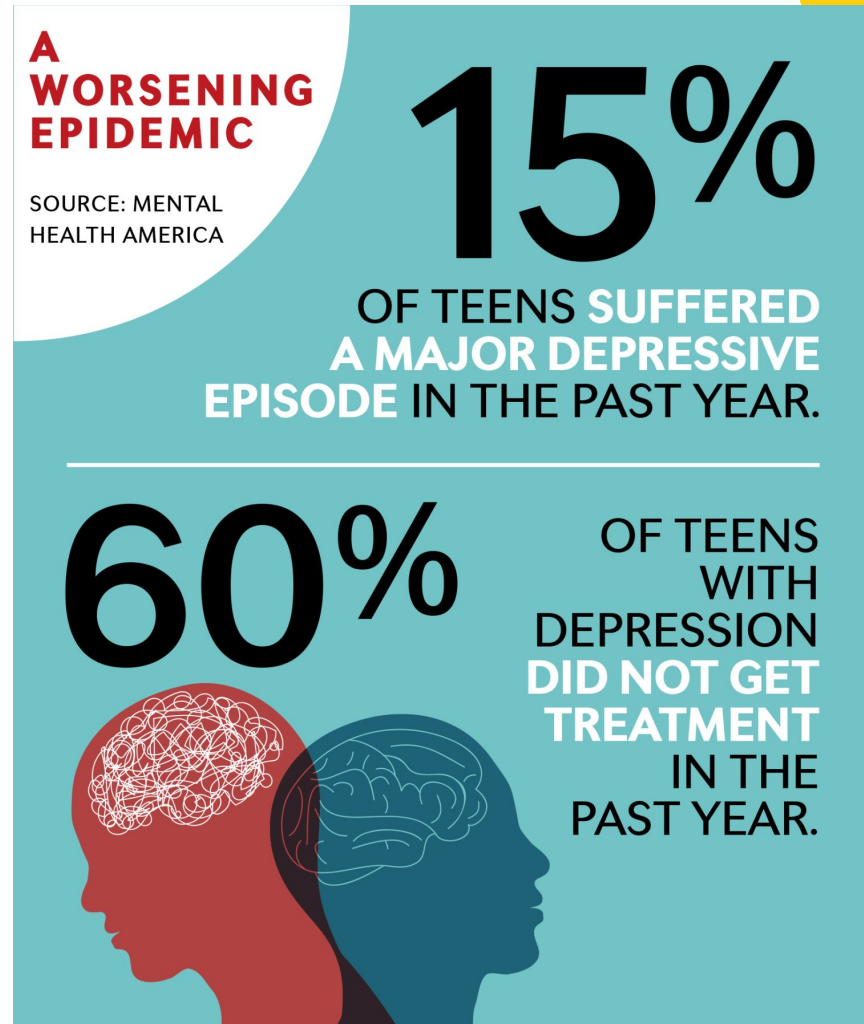
# Epidemiology

For adolescents, depression, substance use and suicide are important concerns. Among adolescents aged 12-17 years in 2018-2019 reporting on the past year:

- 15.1% had a major depressive episode.<sup>2</sup>
- 36.7% had persistent feelings of sadness or hopelessness.<sup>2</sup>
- 4.1% had a substance use disorder.<sup>2</sup>
- 1.6% had an alcohol use disorder.<sup>2</sup>
- 3.2% had an illicit drug use disorder.<sup>2</sup>
- 18.8% seriously considered attempting suicide.<sup>2</sup>
- 15.7% made a suicide plan.<sup>2</sup>
- 8.9% attempted suicide.<sup>2</sup>
- 2.5% made a suicide attempt requiring medical treatment.

<https://www.cdc.gov/childrensmentalhealth/data.html>

Per the CDC



<https://www.nea.org/advocating-for-change/new-from-nea/mental-health-schools-kids-are-not-all-right>

# Suicide

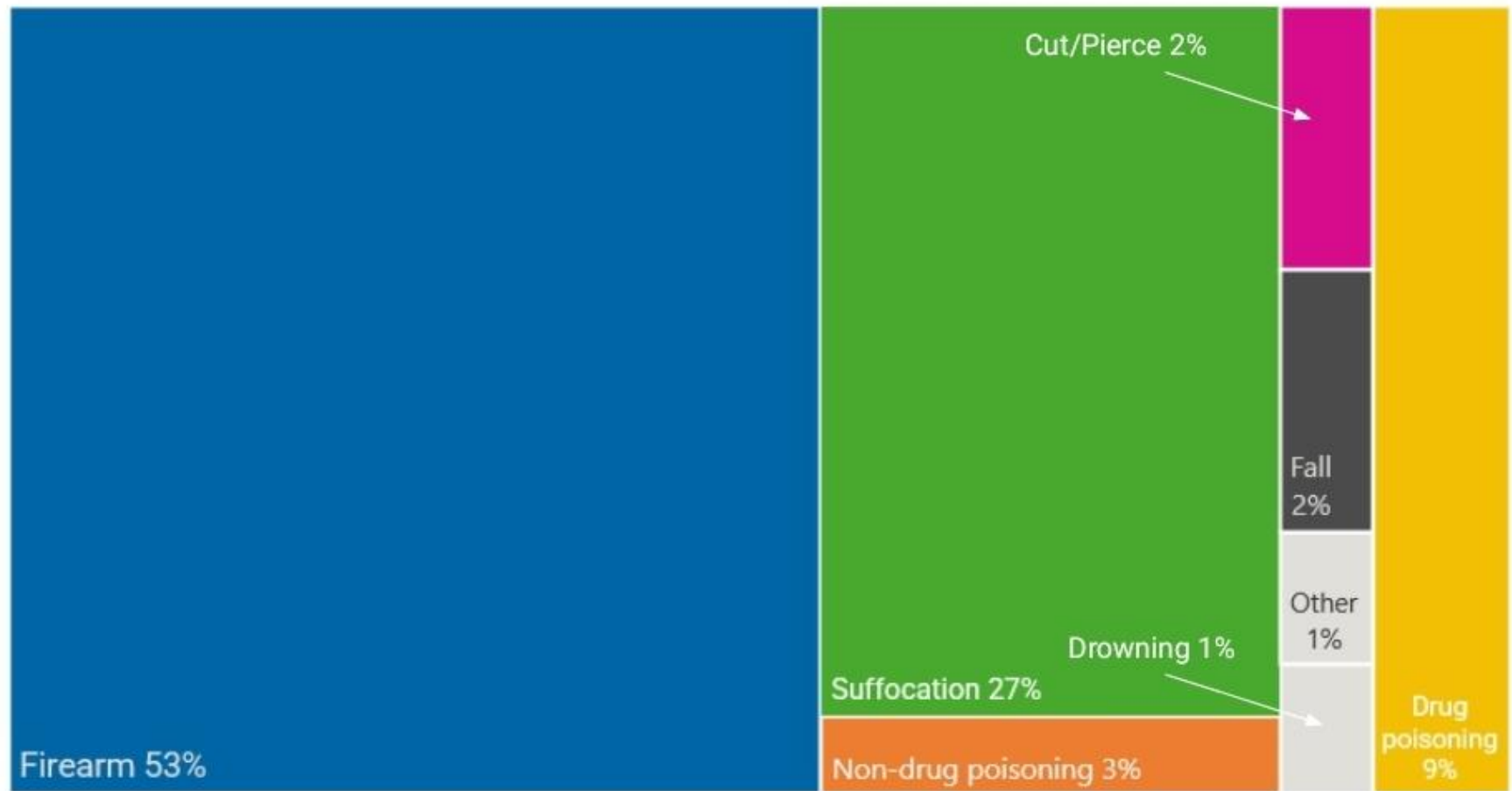
In 2020, suicide was the second leading cause of death for youth ages 10 to 14, and adults ages 25 to 34. Suicide was the third leading cause of death for people ages 15 to 24, the fourth leading cause of death for ages 35 to 44, and the seventh leading cause of death for ages 55 to 64. Although suicide has historically been among the top 10 leading causes of death, it was not in 2020.2

Green box = suicide

Crude Rate per 100,000 Ranking

|    |  | Age Groups                             |  |   |                                |                                |   |  |   |   |
|----|--|--|--|---|--------------------------------|--------------------------------|---|--|---|---|
|    |  | 5-9                                    | 10-14                                      | 15-24                                   | 25-34                          | 35-44                          | 45-54                                     | 55-64                                      | 65+   | All Ages                                    |
| 1  |  | Unintentional Injury<br>685            | Unintentional Injury<br>881                | Unintentional Injury<br>15,117          | Unintentional Injury<br>31,315 | Unintentional Injury<br>31,057 | Malignant Neoplasms<br>34,589             | Malignant Neoplasms<br>110,243             | Heart Disease<br>556,665                    | Heart Disease<br>696,962                    |
| 2  |  | Malignant Neoplasms<br>382             | Suicide<br>581                             | Homicide<br>6,466                       | Suicide<br>8,454               | Heart Disease<br>12,177        | Heart Disease<br>34,169                   | Heart Disease<br>88,551                    | Malignant Neoplasms<br>440,753              | Malignant Neoplasms<br>602,350              |
| 3  |  | Congenital Anomalies<br>171            | Malignant Neoplasms<br>410                 | Suicide<br>6,062                        | Homicide<br>7,125              | Malignant Neoplasms<br>10,730  | Unintentional Injury<br>27,819            | Covid-19<br>42,090                         | Covid-19<br>282,836                         | Covid-19<br>350,831                         |
| 4  |  | Homicide<br>169                        | Homicide<br>285                            | Malignant Neoplasms<br>1,306            | Heart Disease<br>3,984         | Suicide<br>7,314               | Covid-19<br>16,964                        | Unintentional Injury<br>28,915             | Cerebrovascular<br>137,392                  | Unintentional Injury<br>200,955             |
| 5  |  | Heart Disease<br>56                    | Congenital Anomalies<br>150                | Heart Disease<br>870                    | Malignant Neoplasms<br>3,573   | Covid-19<br>6,079              | Liver Disease<br>9,503                    | Chronic Low. Respiratory Disease<br>18,816 | Alzheimer's Disease<br>132,741              | Cerebrovascular<br>160,264                  |
| 6  |  | Influenza & Pneumonia<br>55            | Heart Disease<br>111                       | Covid-19<br>501                         | Covid-19<br>2,254              | Liver Disease<br>4,938         | Diabetes Mellitus<br>7,546                | Diabetes Mellitus<br>18,002                | Chronic Low. Respiratory Disease<br>128,712 | Chronic Low. Respiratory Disease<br>152,657 |
| 7  |  | Chronic Low. Respiratory Disease<br>54 | Chronic Low. Respiratory Disease<br>93     | Congenital Anomalies<br>384             | Liver Disease<br>1,631         | Homicide<br>4,482              | Suicide<br>7,249                          | Liver Disease<br>16,151                    | Diabetes Mellitus<br>72,194                 | Alzheimer's Disease<br>134,242              |
| 8  |  | Cerebrovascular<br>32                  | Diabetes Mellitus<br>Influenza & Pneumonia | Diabetes Mellitus<br>312                | Diabetes Mellitus<br>1,168     | Diabetes Mellitus<br>2,904     | Cerebrovascular<br>5,686                  | Cerebrovascular<br>14,153                  | Unintentional Injury<br>62,796              | Diabetes Mellitus<br>102,188                |
| 9  |  | Benign Neoplasms<br>28                 | 50   | Chronic Low. Respiratory Disease<br>220 | Cerebrovascular<br>600         | Cerebrovascular<br>2,008       | Chronic Low. Respiratory Disease<br>3,538 | Suicide<br>7,160                           | Nephritis<br>42,675                         | Influenza & Pneumonia<br>53,544             |
| 10 |  | Suicide<br>20**                        | Cerebrovascular<br>44                      | Complicated Pregnancy<br>191            | Complicated Pregnancy<br>594   | Influenza & Pneumonia<br>1,148 | Homicide<br>2,542                         | Influenza & Pneumonia<br>6,295             | Influenza & Pneumonia<br>42,511             | Nephritis<br>52,547                         |

# Means of Suicide, United States 2020





# Suicide

“Suicide rates among teenagers fell sharply when schools were closed during the Covid-19 lockdown, but rose again when in-person schooling resumed, according to a new study. Returning from online to in-person education was associated with an increase in the rate of teen suicides of as much as 18%. The team estimate that the move to in-person school was associated with a 12-18% increase in teen suicides, with a preferred estimate of approximately 15%.

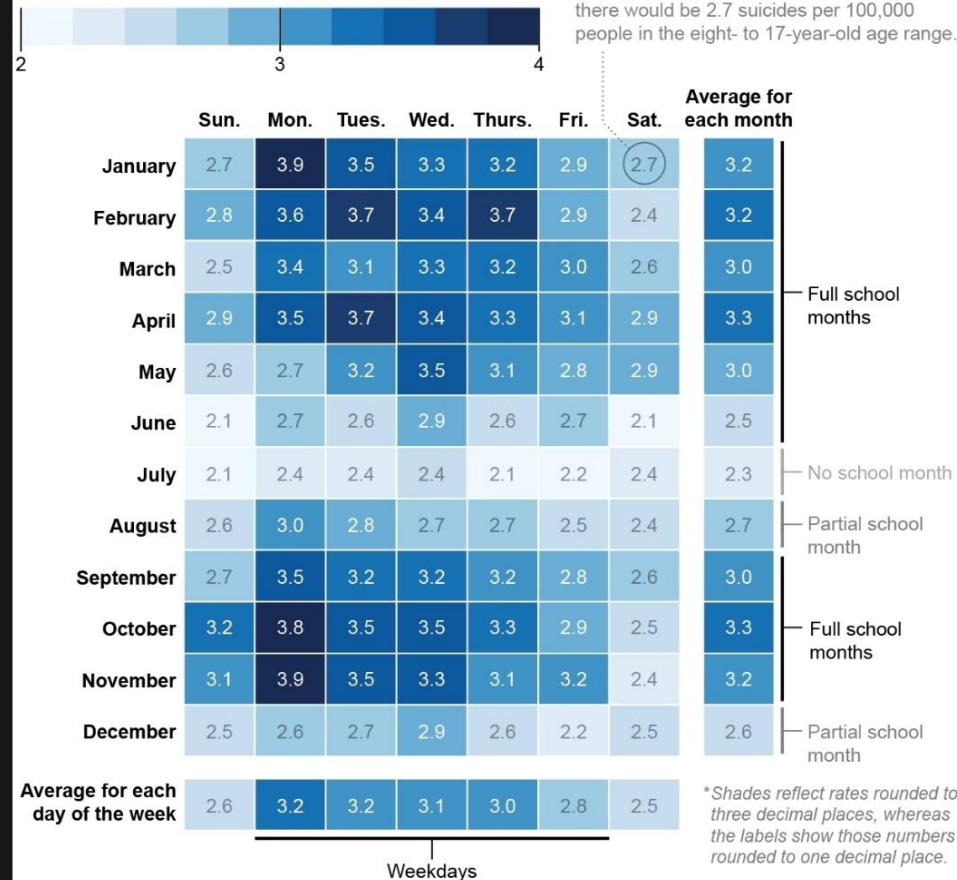
Ideas why: being at home fostered good relationships with parents, high rate of bullying at school ?

<https://www.forbes.com/sites/nickmorrison/2022/12/28/teen-suicides-fell-during-lockdown-rose-when-in-person-schooling-resumed-study-finds/?sh=ed87ab564d70>

Suicide Rates by Month and Day, Ages 8–17, 2000–2020

Shade of blue shows suicide rate for each day and month\* (number of suicides per 100,000 person-years)

This number means that if a year consistently followed the rate of Saturdays in January, there would be 2.7 suicides per 100,000 people in the eight- to 17-year-old age range.



<https://www.scientificamerican.com/article/childrens-risk-of-suicide-increases-on-school-days/?amp=true>



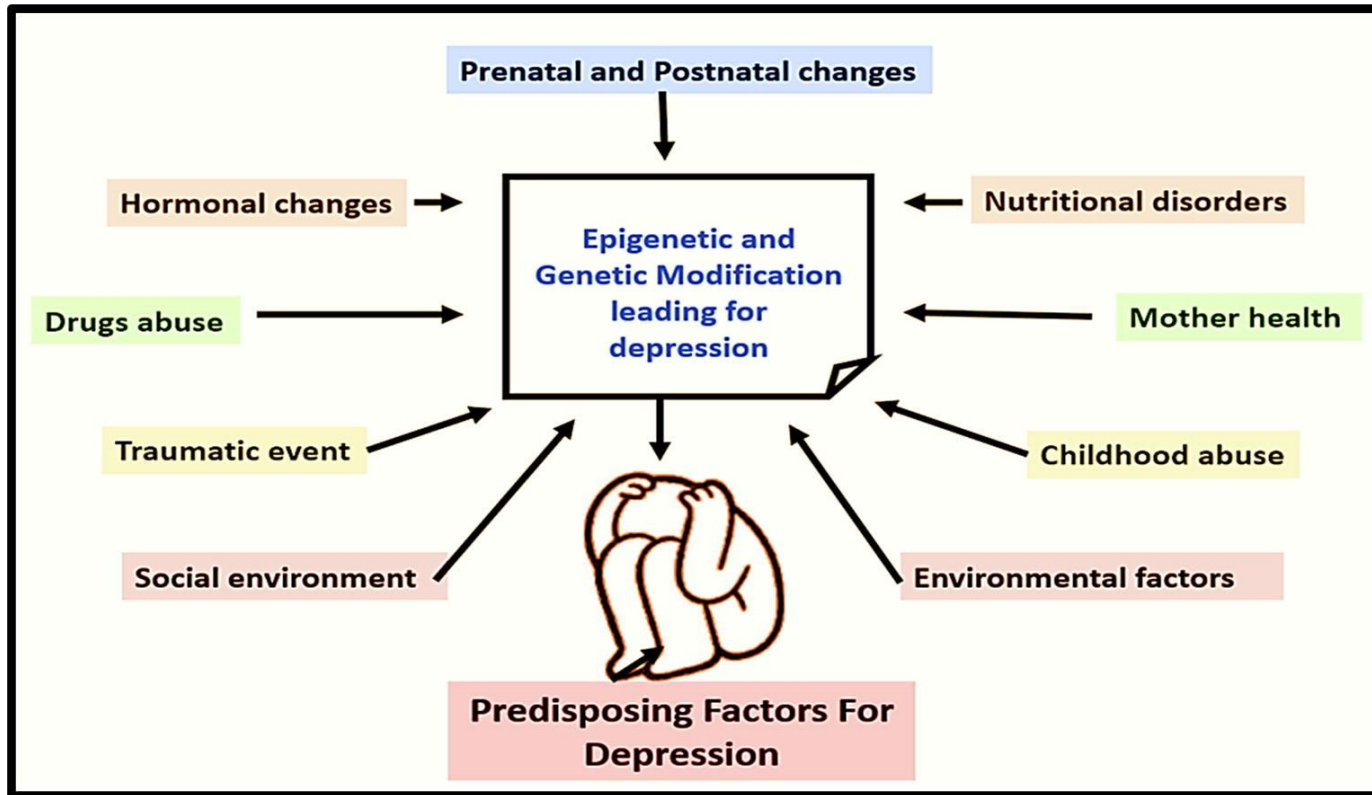
# Etiology

The single most predictive factor associated with risk of developing MDD is...

High family loading

Heritability for MDD is 40 % •  
Craddock et al 2005

# Etiology



Is it genetic ?

There's often a genetic predisposition but often it takes some other factor to activate the disorder.

## Clinical Course

- Looking at the studies:  
Median duration of MDD in clinically referred youth was 8 months
- Recovery by 2 years was significantly more likely for those who were short-term treatment responders (96.2%) than for others (79.1%)
- Slightly fewer than half of recovered adolescents (46.6%) experienced a recurrence by 5 years after baseline.



# Evaluation of Depression

# Child/Adolescent Depression Scales (Free)

## Depression Assessments

The following tools are specific for depression. Tools that screen for multiple conditions, including depression, anxiety, and others, are found in Broadband Mental Health Screens, above.

### Center for Epidemiological Studies Depression Scale for Children (CES-DC) (📎 37 KB) ⓘ

- 20 items about depression, youth-reported, 6-17 years. Free. Sensitivity 71%, specificity 57% (not optimal discrimination among depressed and non-depressed adolescents but included because provides an option for younger patients; National Assistive Technology Act Technical Assistance and Training (AT3) Center ⓘ).

### DSM-5 Online Assessment Measures (APA) ⓘ

- Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) Level 1 Cross-Cutting Symptoms Measures contains 25 questions to screen for depression, anger, irritability, mania, anxiety, somatic symptoms, inattention, suicidal ideation/attempt, psychosis, sleep disturbance, repetitive thoughts and behaviors, substance use. Parent (DSM-5 Parent-Rated Level 1 Symptom Measure—Age 6–17 (APA) (📎 367 KB)) and youth (DSM-5 Self-Rated Level 1 Symptom Measure—Age 11–17 (APA) (📎 250 KB)) versions. Use additional Level 2 screeners for further investigation into these areas when a Level 1 screen is positive, e.g., Severity Measure for Depression-Child Age 11-17, PHQ-A ⓘ Level 2, Depression, Parent/Guardian of Child Age 6, 17. Ages 6-17. Free.

### Kutcher Adolescent Depression Scale (KADS)

- Two versions: KADS-6 (6-Item Kutcher Adolescent Depression Scale (KADS-6) ⓘ) and KADS-11 (Kutcher Adolescent Depression Scale: KADS-11 (📎 126 KB) ⓘ, PDF; Kutcher Adolescent Depression Scale: KADS-11 ⓘ, online), 12-17 years, youth version. Can be used for monitoring of youth undergoing treatment. Ages 12-17 years. Free. Sensitivity 92%, specificity 71% (National Assistive Technology Act Technical Assistance and Training (AT3) Center ⓘ).

### Patient Health Questionnaire (PHQ) Screeners ⓘ

- PHQ offers multiple screens that range from 2-83 questions. The shorter versions pertain to depression. Free.
  - PHQ-A (Adolescent version of the PHQ-9) Patient Health Questionnaire Modified for Adolescents (PHQ-A) (📎 228 KB) 9 questions to screen for depression, ages 11-18. Overall sensitivity 75% and specificity 92% (National Assistive Technology Act Technical Assistance and Training (AT3) Center ⓘ).
  - PHQ-2: Patient Health Questionnaire 2 (PHQ-2) (📎 13 KB) ⓘ 2 questions to screen for depression, general population screen, can be used for ages 11 and older. Sensitivity 83-87%, specificity 78-92% (National Assistive Technology Act Technical Assistance and Training (AT3) Center ⓘ).
  - PHQ-4: 4 questions to screen for anxiety and depression, general population screen, can be used with ages 11 and older.
  - PHQ-9: 9 questions to screen for depression, general population screen, can be used with teens with cutoff score of 10. Sensitivity and specificity 88% for major depression (National Assistive Technology Act Technical Assistance and Training (AT3) Center ⓘ).

### Ask Suicide-Screening Questions (ASQ) Toolkit (NIMH) ⓘ

- 4 items, ages 10-24 years, administered verbally by nurse or clinician to youth (preferably without parent present) in approximately 20 seconds, available in multiple languages including English, Spanish, Arabic, (Mandarin) Chinese, Dutch, French, Hebrew, Italian, Japanese, Korean, Portuguese, Korean, Russian, Somali, and Vietnamese. Developed by the National Institute for Mental Health to prevent suicides in youth, the free toolkit includes the ASQ Suicide Risk Screening Tool (NIMH) (📎 208 KB) ⓘ as well as follow-up resources for positive screens (defined as one or more positive responses). For use in medical settings (emergency department, inpatient medical/surgical units, outpatient clinics/primary care). Sensitivity 97%, specificity 88% in an emergency department validation study. (Horowitz: 2012)

Phq9 = 12+

## Preschool Feelings Checklist

### PFC- Parent

- Age: 3 – 6
- Administered by: Parent
- 16 questions (yes/ no)
- Cost: None



## Screening for Depression

“A critical component of the screening process is an appreciation that a positive screen is not diagnostic, but rather, should prompt the screening provider to conduct a clinical assessment to better understand the depressive symptoms, prior to planning or initiating treatment. Harm may occur when screening tests are used to substitute a diagnostic assessment, as false positive screens may result in unnecessary initiation of antidepressant medications with associated risks to the patient including the emergence of ‘iatrogenic comorbidities’ ([Carvalho et al., 2016](#); [Fava et al., 2016](#)). **The reporting of depressive symptoms on a screening measure should trigger a clinic-based conversation with the patient to determine the most appropriate intervention, rather than an automatic referral for specialized psychiatric care.** While assessing distress, conversations with primary and secondary health care providers, treatment of poorly controlled physical symptoms and engagement of social work, spiritual care or other support services may all be of value in this circumstance to address factors that contribute to depressive symptoms as a final common pathway of distress ([Lo et al., 2010](#); [Thombs et al., 2018](#)).

| Screening tool          | Items | Time to complete (minutes) | Copyright |
|-------------------------|-------|----------------------------|-----------|
| Distress Thermometer    | 1     | <1                         | No        |
| 'Do you feel depressed' | 1     | <1                         | No        |
| PHQ-2                   | 2     | 1-2                        | No        |
| PHQ-9                   | 9     | 3-6                        | No        |
| HADS                    | 14    | 5-10                       | Yes       |
| BDI-II                  | 21    | 10-15                      | Yes       |
| CES-D                   | 20    | 10-15                      | No        |

PHQ: Patient Health Questionnaire; HADS: Hospital Anxiety and Depression Scale; BDI-II: Beck Depression Inventory-II; CES-D: Center for Epidemiologic Studies Depression Scale.

All listed scales have been tested in numerous languages and treatment settings (e.g. primary care, specialized clinics, community samples).

Rosenblat JD, Kurdyak P, Cosci F, et al. Depression in the medically ill. *Australian & New Zealand Journal of Psychiatry*. 2020;54(4):346-366. doi:10.1177/0004867419888576  
<https://journals.sagepub.com/doi/10.1177/0004867419888576>

# Developmental Aspects Make a Difference

| Table 1<br>Presentation of depression symptoms by age group |  |   |                                 |                           |
|---|--|---|---------------------------------|---------------------------|
| Symptom   | Preschool—   | School Age  | Adolescent                      | Adult                     |
| Dysphoria   | +++ but more time/activity variability, can be challenging to elicit | +++ more persistent than in younger children, but still variable      | +++ can present as isolation    | +++                       |
| Anhedonia   | +++ but varies in time—seems to not have much fun                    | +++ varies but less so over time—seems to lack or reports lack of fun | +++ may also present as boredom | +++                       |
| Irritability  | +++  | +++   | +++                             | ++                        |
| Acting Out  | +++  | +++   | +++                             | +                         |
| Decreased Energy  | +  | ++  | +++                             | +++                       |
| Sleep Disturbance   | +/-  | +/-   | +++                             | +++                       |
| Weight Loss/Appetite Change                                 | +  | +   | ++                              | +++                       |
| Other Somatic Complaints                                    | +++  | +++   | ++                              | +                         |
| Delusions   | Very rare  | Very rare   | +                               | ++ but increases with age |

+++ common, ++ less frequent, + infrequent, +/- variably present

Irritability is common in kids with depression (and anxiety) and less likely in adults

## Child and Adolescent Depression, An Issue of Child and Adolescent Psychiatric Clinics of North America

1st Edition - April 28, 2012

**Authors:** Stuart Goldman, Frances Wren

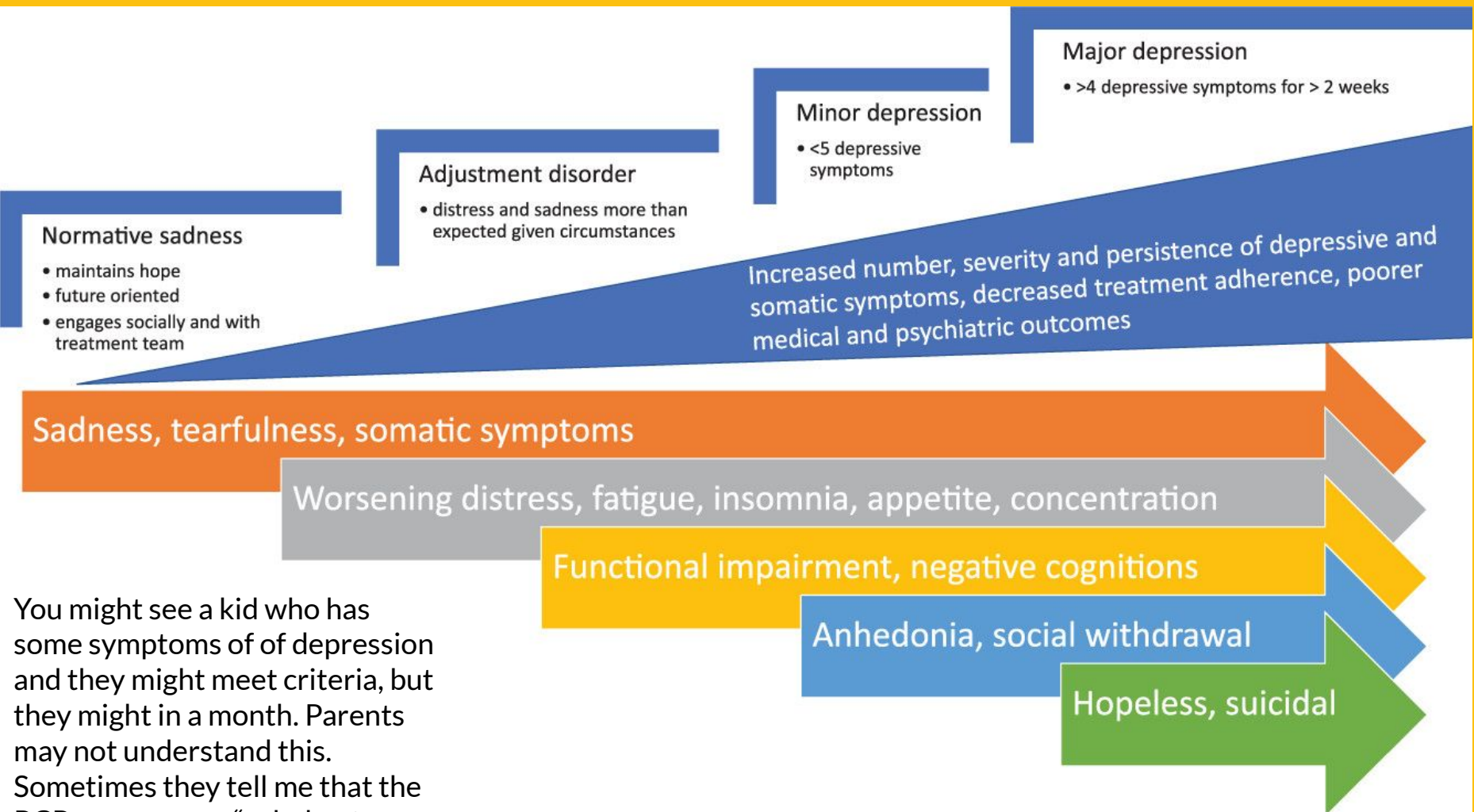
Hardback ISBN: 9781455738403

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eBook ISBN: 9781455743933



# When is it becoming Depression?



You might see a kid who has some symptoms of depression and they might meet criteria, but they might in a month. Parents may not understand this. Sometimes they tell me that the PCP or someone “ruled out depression”

And that may have been true but then they developed it later.

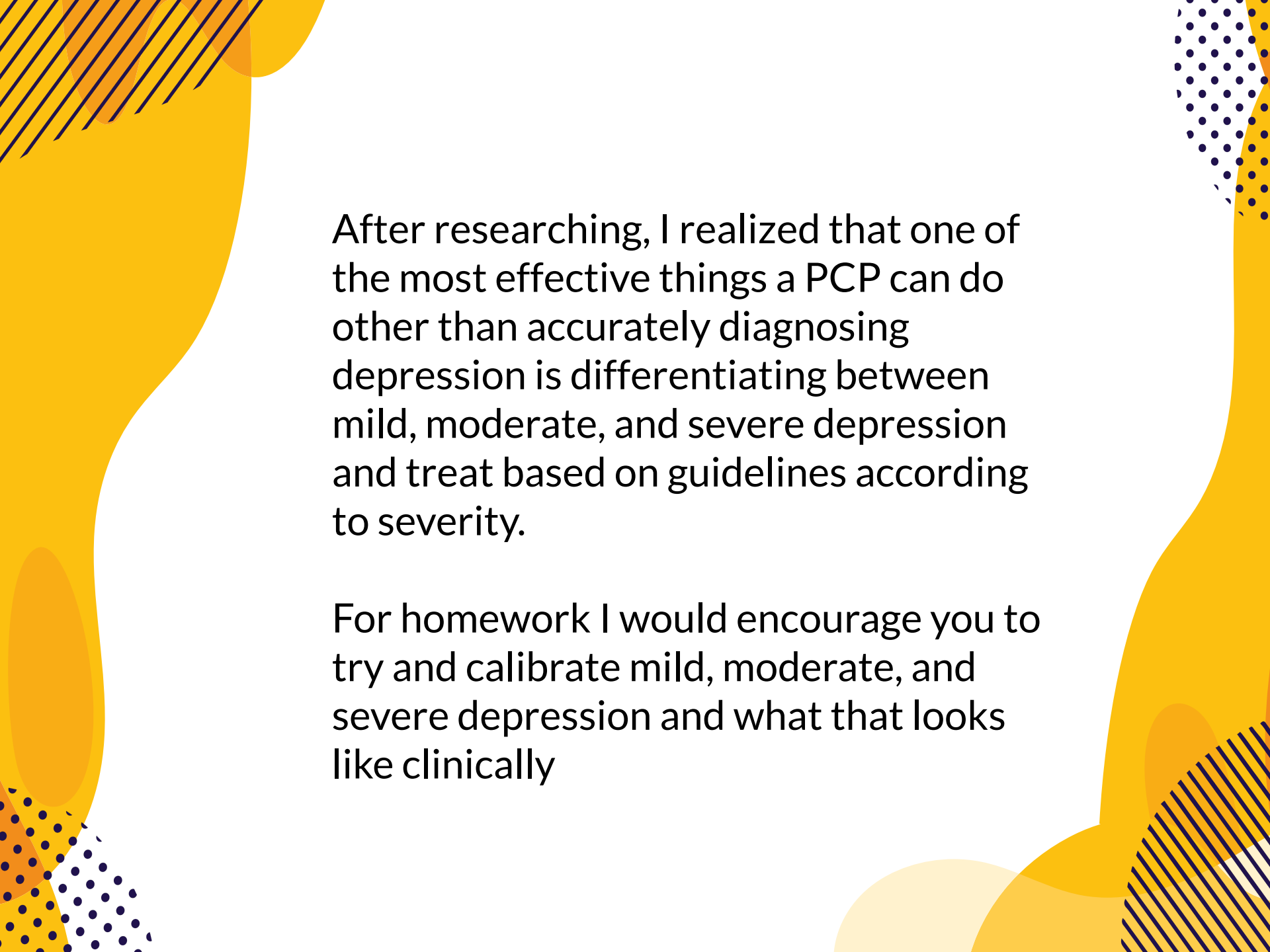
# When does it become a disorder?

- Persistent (duration)
- Severe (significant)
- Impaired functioning
- Subjective with significant distress

# Depressive Disorders

- **Major depressive disorder**
- Bipolar Disorder
- **Disruptive mood dysregulation disorder**
- **Persistent depressive disorder (dysthymia)**
- **Premenstrual dysphoric disorder**
- Substance/medication-induced depressive disorder
- Depressive disorder due to another medical condition
- Other specified depressive disorder
- Unspecified depressive disorder

Non bolded diagnoses = Not going to go over today in depth for one reason or another. If very interested let me know for future lectures. We will touch on them though



After researching, I realized that one of the most effective things a PCP can do other than accurately diagnosing depression is differentiating between mild, moderate, and severe depression and treat based on guidelines according to severity.

For homework I would encourage you to try and calibrate mild, moderate, and severe depression and what that looks like clinically



# **Major Depressive Disorder**

# Major Depressive Disorder

**TABLE 1** DSM-5 criteria for major depressive disorder and persistent depressive disorder

**Major depressive disorder (in children and adolescents, mood can be irritable)**

5 or more of 9 symptoms (including at least 1 of depressed mood and loss of interest or pleasure) in the same 2-week period; each of these symptoms represents a change from previous functioning

- Depressed mood (subjective or observed)
- Loss of interest or pleasure
- Change in weight or appetite
- Insomnia or hypersomnia
- Psychomotor retardation or agitation (observed)
- Loss of energy or fatigue
- Worthlessness or guilt
- Impaired concentration or indecisiveness
- Thoughts of death or suicidal ideation or suicide attempt

<https://www.psychiatrictimes.com/view/persistent-depressive-disorder-dysthymia-and-chronic-depression-update-diagnosis-treatment>

## Notes:

- Comes in many flavors - mild, moderate, severe, with psychotic features, single, recurrent, in remission, atypical, typical (melancholic)
- Parents often call sadness or low mood depression. It helps to clarify terminology.
- When I'm asking about previous depressive episodes I specify that by depression I mean depressed mood and sx for at least several days not just one or two bad days.
- Impairment in functioning is developmentally based. Little kids play less. Teens isolate more.
- I try and get specific info on SI. When did it start, how often does it occur, how long does it last, what triggers it, what makes it go away, is it active or passive, any self harm, any suicidal gestures and what are their reasons for living.

# Severity - mild, moderate, severe

“While recognising that severity is not a unitary dimension, practically it is useful to make a judgement of severity consisting, at least, of number of symptoms, severity of individual symptoms and functional impairment. This leads to a classification of depression into the following severity groupings based on DSM-IV criteria, which should be viewed as exemplars not discrete categories. In the guidelines the term depression refers to major depression:

**subthreshold depressive symptoms: fewer than five symptoms of depression**

**mild depression: few, if any, symptoms in excess of the five required to make the diagnosis, and the symptoms result in only minor functional impairment**

**moderate depression: symptoms or functional impairment are between ‘mild’ and ‘severe’**

**severe depression: most symptoms, and the symptoms markedly interfere with functioning; can occur with or without psychotic symptoms.”**

## PHQ-9 Score Interpretation

|  |
|--|
| <b>0 to 4 Points:</b> No depression                  |
| <b>5 to 9 Points:</b> Mild depression                |
| <b>10 to 14 Points:</b> Moderate depression          |
| <b>15 to 19 Points:</b> Moderately severe depression |
| <b>20 to 27 Points:</b> Severe depression            |

<https://www.ncbi.nlm.nih.gov/books/NBK82926/>





# **Bipolar Disorder**

# Bipolar Disorder

- It is not a depressive disorder. It used to be listed in mood disorders in the DSM earlier on. Now it's separate
- I would recommend that unless you're a psychiatrist or child psychiatrist you don't make this diagnosis (ESPECIALLY UNDER 16)
- The views of bipolar disorder in kids are evolving and there is still controversy and different schools of thought
- If you do want to make this diagnosis, I personally feel you should see the manic episode yourself or the signs are so obvious that there is literally nothing else it could be
- The two schools in psychiatry - it can happen in young kids and is underdiagnosed. It can't happen and is over diagnosed.
- People often call emotional dysregulation plus impulsivity bipolar disorder. It's kind of like saying you have the flu when you have a cold. The flu means something different to doctors than the general population. Same with the terms bipolar and manic
- If you diagnose, it's easier (but not required at all ) to call it if the manic episodes are really outside the norm for someone. Example: quiet shy pathologist happily married. When manic he strips naked at work, makes inappropriate sexual responses and gets violent. So someone normally mild mannered who needs seclusion when they get manic sticks out more
- Often we want there to be an Occam's razor in child psych ...bipolar disorder and autism often are what parents think the Occam's razor is. But what may look like bipolar disorder on the outside to some people is really just a bunch of symptoms and a bunch of disorders coming together to create a ton of dysregulation.

# Optional viewing for a low grade manic episode

To help calibrate it is helpful if you see what someone looks like in a full blow manic episode. But if not there are some good film representation out there.

NSFW Warning: there is swearing

Movie: silver linings playbook

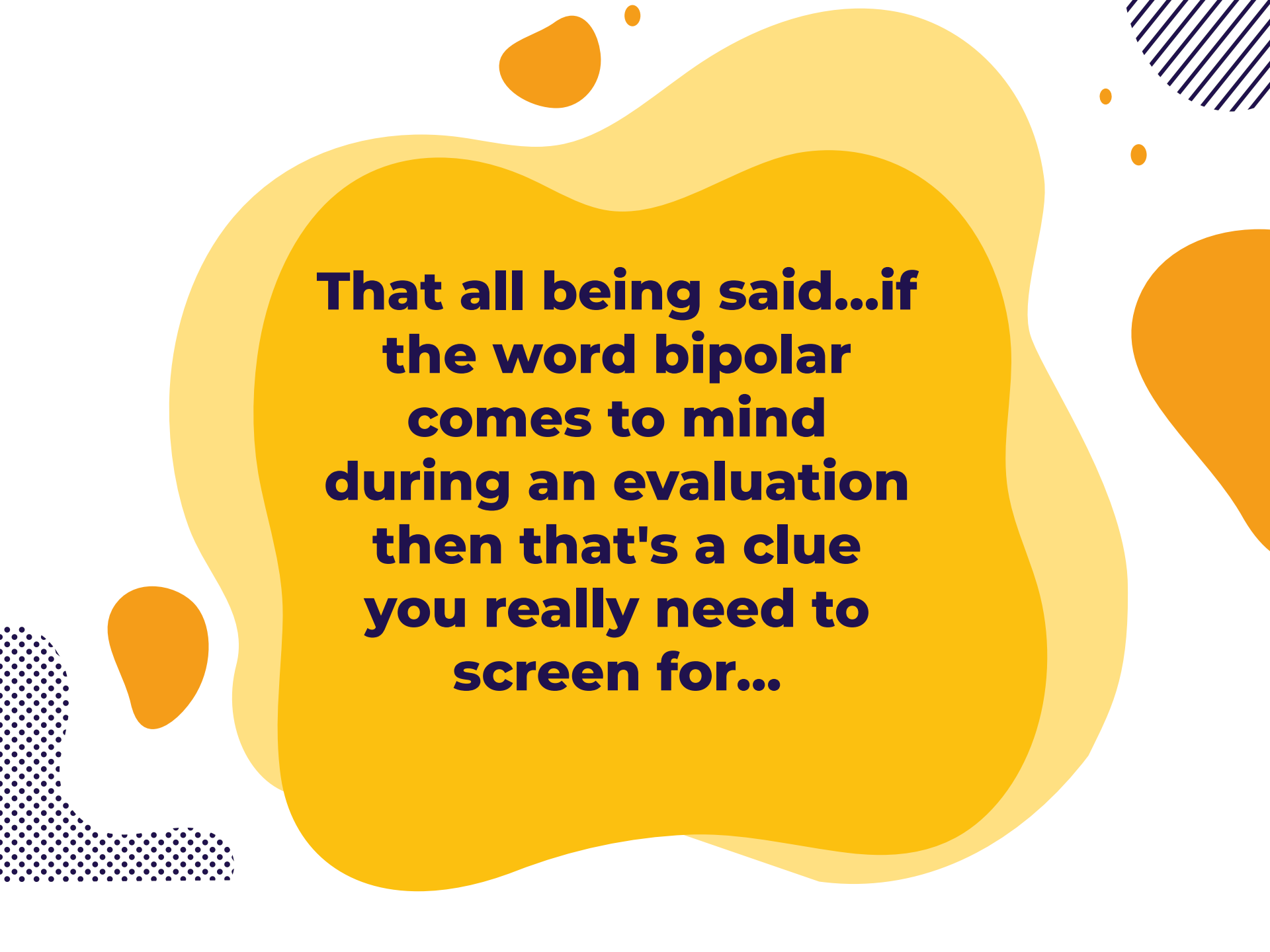
Example of manic behavior

Scene: [https://youtu.be/h\\_cSoU5kC70](https://youtu.be/h_cSoU5kC70)

What to note: staying up day and night to finish a book, chucks the book thru the window, wakes up his parents to go on an intense tirade about Hemingway. Note the intensity about hemmingway. All together it's too much .

This is different than the teen who can't sleep, stays up on their phone snap chatting all night and is tired but can't sleep. They are not running into their parents room going on a tirade, pacing back and forth, yelling in the middle of the night and breaking windows.

<https://www.vulture.com/2012/12/ask-a-psychiatrist-how-does-silver-linings-playbook-handle-mental-illness.html>



**That all being said...if  
the word bipolar  
comes to mind  
during an evaluation  
then that's a clue  
you really need to  
screen for...**



# **Disruptive Mood Dysregulation Disorder**

**DMDD**

# DMDD

This diagnosis was created and first seen in the DSM-5 edition. Part of the reason it was created was because we realized in child psychiatry we are not good at picking out which kids truly have bipolar disorder. However there is a subset of kids who are so extremely moody that they did not quite fit into any other category. Therefore DMDD was created.

Right now if you diagnose DMDD you cannot also diagnose ODD. Studies have shown that almost all kids with the DMDD also have ODD And therefore DMDD is seen as sort of a trump card diagnosis at this time.

That being said research is also starting to show that ODD and DMDD have different origins and so may actually be different types of disorders.

# DMDD

“While similar behaviors may overlap between bipolar disorder and DMDD, the symptoms of BD are contained within episodes. The symptoms of DMDD are ongoing. Additionally, bipolar is less common in children and adolescents. BD is usually a lifelong condition, whereas DMDD is more likely to “change” into major depressive disorder or generalized anxiety disorder later in life. Before DMDD became an official diagnosis in 2013, most children with DMDD were misdiagnosed with bipolar disorder. “

Points:

Ages 6-18, sx usually by age 10

DMDD and ODD cannot be concurrently diagnosed

Unlike ODD, sc must be present in two settings.  
Often one worse than the other.

## Disruptive Mood Dysregulation disorder (DMDD)

**DMDD symptoms usually begin before the age of 10. A child with DMDD experiences:**



**An irritable or angry mood most of the day, almost every day.**



**Severe temper outbursts (verbal or behavioral) that are out of proportion to the situation. These usually happen three or more times per week.**



**Issues with daily functioning due to irritability in more than one environment, such as at home, at school or with their peers.**





# **Persistent Depressive Disorder**

**PDD**

# PDD - previously known as dysthymia

**Persistent depressive disorder (in children and adolescents, mood can be irritable and duration must be 1 year or longer)**

Depressed mood for most of the day, for more days than not, for 2 years or longer

Presence of 2 or more of the following during the same period

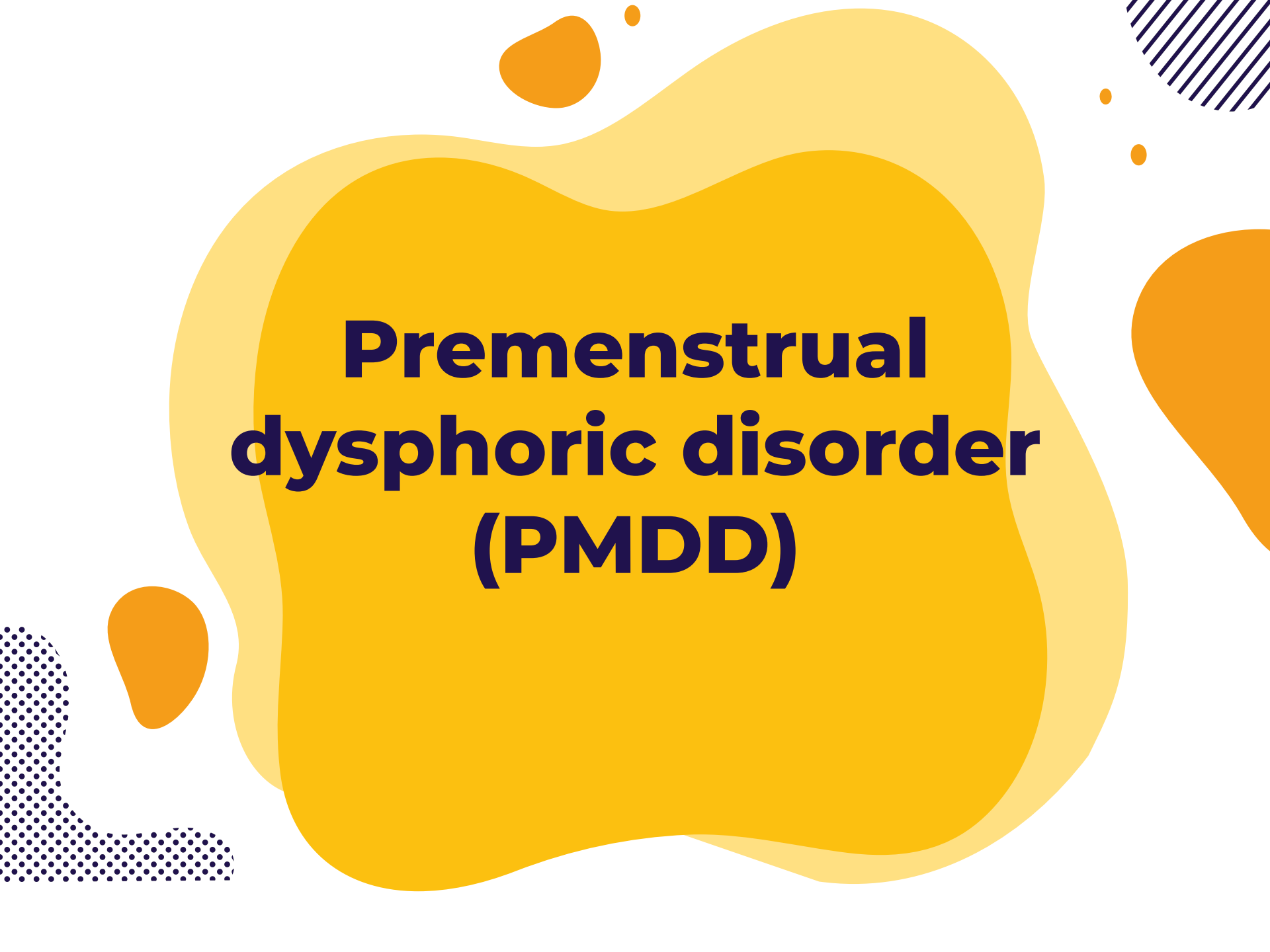
- Poor appetite or overeating
- Insomnia or hypersomnia
- Low energy or fatigue
- Low self-esteem
- Impaired concentration or indecisiveness
- Hopelessness

Never without symptoms for more than 2 months



## Tips

- Watch out for double depression (mdd on top).  $\frac{3}{4}$  ppl with pdd will get a double depression sometime in their life
- Sometimes seen by others as having a gloomy personality
- Often less severe and intense than MDD but more chronic, longer, predisposes to double depression and comorbid disorders which can make it more dangerous and severe
- As a psychiatrist when I evaluate pdd it's almost always in the context of double depression or worsening other disorders. Usually pdd is part of the mix by the time they get to me but rarely the only disorder
- Common peds clinical presentation: adolescent who has been down for many years and due to additional sx going on seeks different treatment. Often gloomy and/or cynical.



# **Premenstrual dysphoric disorder (PMDD)**

## DSM-5 criteria for premenstrual dysphoric disorder

**A.** In the majority of menstrual cycles, at least 5 symptoms must be present in the final week before menses, start to improve within a few days after the onset of menses, and become minimal or absent in the week after menses.

**B.** One (or more) of the following symptoms must be present:

1. Marked affective lability (eg, mood swing, feeling suddenly sad or tearful, increased sensitivity to rejection)
2. Marked irritability/anger or increased interpersonal conflicts
3. Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts
4. Marked anxiety, tension, and/or feelings of being keyed up or on edge

**C.** One (or more) of the following symptoms must additionally be present, to reach a total of 5 symptoms when combined with symptoms from Criterion B above:

1. Decreased interest in usual activities (eg, work, school, friends, hobbies)
2. Subjective difficulty concentrating
3. Lethargy, easy fatigability, or marked lack of energy
4. Marked change in appetite, overeating, or specific food cravings
5. Hypersomnia or insomnia
6. A sense of being overwhelmed or out of control
7. Physical symptoms such as breast tenderness or swelling, joint or muscle pain, a sensation of bloating, or weight gain

*Note: The symptoms in Criteria A–C must have been met for most menstrual cycles that occurred in the preceding year.*

**Adapted from:** American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. 2013.<sup>7</sup>

### Tips

- More severe and disabling than pms
- Sx should be tracked for a minimum of two cycles
- Pms and PMDD often start in late adolescence
- If you suspect PMDD you should screen for depression and SI.
- For patients and parents, good toolkit info: <https://iapmd.org/toolkit>
- Supportive measures and therapy for mild symptoms
- SSRIs for more severe symptoms. Fluoxetine, sertraline, paroxetine are approved for adult PMDD. Research studies limited for adolescents but indicate SSRIs are also appropriate and safe.

<https://pubmed.ncbi.nlm.nih.gov/23529867/>

<https://www.mdedge.com/familymedicine/article/216331/womens-health/evidence-based-tools-premenstrual-disorders>

<https://www.aafp.org/pubs/afp/issues/2002/1001/p1239.html>

<https://www.npwomenshealthcare.com/assessment-and-management-of-pms-and-pmdd-in-the-adolescent/>

<https://www.sciencedirect.com/science/article/abs/pii/S1538544222000566>

# Using apps to track symptoms

I think they can be great to help with mental health.

But apps that track periods may need more scrutiny at this time. Unfortunately they are not very protected and selling girls' user data about their cycles is profitable and of interest to many companies. There are concerns this data could be used against women for life insurance, etc.

“Period-tracking apps are often not covered under the Health Insurance Portability and Accountability Act, or HIPAA, though if the company is billing for health care services, it can be. Still, HIPAA doesn’t prevent the company from sharing de-identified data. If the app is free — and the company is monetizing the data — then “you are the product” and HIPAA does not apply, Savage said. A 2019 study published in the BMJ found that 79% of health apps available through the Google Play store regularly shared user data and were “far from transparent.” When it comes to marketing, a pregnant person’s data is particularly of high value and can be hard to hide from the barrage of cookies and bots. Some period-tracking apps, which often ask for health information besides menstrual cycle details, take part in the broader internet data economy, too. The data can be sold to third parties, such as big tech companies; or to insurance companies, where it could then be used to make targeting decisions, such as whether to sell you a life insurance policy, or how much your premium should be,” said Giulia De Togni, a health and artificial intelligence researcher at the University of Edinburgh in Scotland. “

<https://khn.org/news/article/period-tracking-apps-data-privacy/>

ASK KHN-POLITIFACT

## Should You Worry About Data From Your Period-Tracking App Being Used Against You?

By [Hannah Norman](#) and [Victoria Knight](#)

9 MONTHS AGO

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**POLITIFACT**

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Substance/medication-induced  
depressive disorder \*

Depressive disorder due to another  
medical condition \*

Other specified depressive disorder \*

Unspecified depressive disorder \*

## Things to Keep in Mind about the other Depressive Disorders

### Substance / medication induced depressive disorder

**-symptoms for at least 1 month, even after stopping the substance**

### Other specified depressive disorder

**Recurrent brief depression  
short duration depressive episode  
depressive episode with insufficient symptoms**

### Depressive disorder secondary to another medical condition

**directly related to medical condition  
most common in strokes, parkinson's, huntingtons**

### Unspecified Depressive disorder

**Depression but not quite MDD**



# Comparing Depressive Disorders

|   | MDD   | PDD (Dysthymia)              | DMDD  | PMDD  |
|---|---|------------------------------|---|---|
| <b>Symptoms</b>   |   |                              |   |   |
| Mood (Note: can be depressed, irritable or angry and can fluctuate) | Depressed mood  | Depressed mood               | Severe recurrent temper outbursts<br>Irritable mood | Mood swings<br>Depressed mood<br>Irritable or angry mood    |
| Anhedonia   | +   | –                            | –   | +   |
| Psychomotor symptoms  | Agitation or retardation  | –                            | –   | –   |
| Anxiety/tension   | –   | –                            | –   | +   |
| Suicidal ideation   | Recurrent thoughts of death or suicidal ideation, or attempt, or plan | –                            | –   | –   |
| Appetite changes  | Significant increase or decrease in weight or appetite                | Poor appetite, or overeating | –   | Marked change in appetite, over-eating or specific cravings |
| Insomnia/hypersomnia  | +   | +                            | –   | +   |
| Low energy/fatigue  | +   | +                            | –   | +   |
| Poor Concentration  | +   | +                            | –   | +   |
| Low Self-esteem   | –   | +                            | –   | –   |
| Negative Cognitions   | Worthlessness or excessive guilt                                      | Hopelessness                 | –   | Overwhelmed or out of control                               |



**Treatment**

# PCP prescribing practices

“Few PCPs (25% for moderate, 32% for severe) recommended an antidepressant. Compared with treatment recommendations for moderate depression, severe depression was associated with a greater likelihood of child psychiatry referral (OR 5.50[95% CI 2.47-12.2]  $p < .001$ ). Depression severity did not affect the likelihood of antidepressant recommendation (OR 1.58[95% CI 0.80-3.11]  $p = .19$ ). Antidepressants were more likely to be recommended by PCPs with greater depression knowledge (OR 1.72[95% CI 1.14-2.59]  $p = .009$ ) and access to an on-site mental health provider (OR 5.13[95% CI 1.24-21.2]  $p = .02$ ) and less likely to be recommended by PCPs who reported higher provider burden when addressing psychosocial concerns (OR 0.85[95% CI 0.75-0.98]  $p = .02$ ).

PCPs infrequently recommended antidepressants for adolescents, regardless of depression severity. Continued PCP support through experiential training, accounting for provider burden when addressing psychosocial concerns, and co-management with mental health providers may increase PCPs' antidepressant prescribing.”



## NIH Public Access

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## Primary Care Providers' Initial Treatment Decisions and Antidepressant Prescribing for Adolescent Depression

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# TADS Study Treatment for Adolescents with Depression Study

- Upward of 60%–70% of teens with moderate-severe depression will respond to medication or medication and CBT.
- Younger, less impaired, and less comorbid patients do better with treatment generally
- Med+ Therapy>Med Alone>Therapy Alone in effectiveness for treating depression.
- Taking both benefit and risk into account, the benefit to risk ratio is 17 to 1 for the combination of fluoxetine and cognitive-behavioral psychotherapy and 5 to 1 for fluoxetine alone. The more robust benefit to risk ratio for combination treatment stems from its greater impact on symptoms of MDD and on a reduction in harm-related adverse events relative to patients treated with fluoxetine alone.

Funded by the National Institute of Mental Health, coordinated by the Duke Clinical Research Institute, and conducted in 13 academic and community centers in the United States, the Treatment for Adolescents with Depression Study (TADS) is a randomized controlled trial that evaluates the effectiveness of four treatments for adolescents with moderate to severe major depression. These are clinical management with fluoxetine, cognitive-behavioral psychotherapy (CBT), their combination (fluoxetine plus CBT), and clinical management with placebo. Medications were administered double-blind; cognitive-behavior therapy and combined treatment were administered unblinded. Blinding for the primary outcomes was maintained by means of an Independent Evaluator.

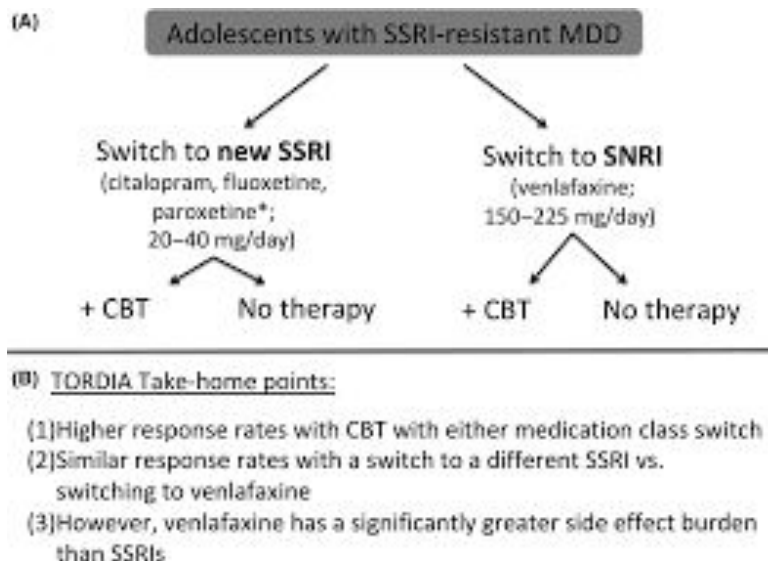
Rates of response defined as much or very much improved were: 71.0% for the combination of fluoxetine and CBT, 60.6% for fluoxetine alone, 43.2% for cognitive-behavioral psychotherapy alone, and 34.8% for placebo. Thus, the combination of fluoxetine and cognitive-behavioral psychotherapy appears to produce the greatest improvement in symptoms of major depression. Fluoxetine alone is effective, but not as effective as the combination of fluoxetine and CBT. Cognitive-behavioral psychotherapy alone is less effective than fluoxetine and not significantly more effective than placebo.

Almost 30% of TADS participants had suicidal ideation at the start of the study; 2% had intense suicidal ideation. Suicidality decreases substantially over 12 weeks of treatment. **Improvement in suicidal ideation is greatest for the combination of fluoxetine and CBT and least for fluoxetine alone.** Importantly, fluoxetine does not appear to increase suicidal ideation. In contrast, harm-related behavioral events though uncommon were more common in patients receiving fluoxetine as follows: fluoxetine (11.9%), the combination of fluoxetine and CBT (8.4%), cognitive-behavioral psychotherapy (4.5%) and placebo (5.4%). **Thus, consistent with its impact on suicidal ideation, cognitive-behavioral psychotherapy may protect against these events in patients taking fluoxetine.** Only 1.6% of patients (7 or 439) patients made a suicide attempt; there were no completed suicides.

Walkup JT. Treatment of depressed adolescents. *Am J Psychiatry*. 2010;167(7):734-737. doi:10.1176/appi.ajp.2010.10040566  
<https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2010.10040566>

[https://www.aacap.org/aacap/families\\_and\\_youth/Resources/Psychiatric\\_Medication/The\\_Treatment\\_for\\_Adolescents\\_with\\_Depression\\_Study\\_TADS.aspx](https://www.aacap.org/aacap/families_and_youth/Resources/Psychiatric_Medication/The_Treatment_for_Adolescents_with_Depression_Study_TADS.aspx)

## *TORDIA STUDY* Treatment of Resistant Depression in Adolescence



TORDIA enrolled teens ages 12–18 years (N=344) who had failed a previous trial of an SSRI and randomly assigned them to a medication switch only (another SSRI or venlafaxine) or a medication switch plus cognitive behavioral therapy (CBT) (another SSRI plus CBT or venlafaxine plus CBT). Subjects were treated for 12 weeks, and then week-12 responders were continued in their assigned arms and followed until week 24.

TORDIA suggests that of those who fail that first test of medication, approximately 40% will remit to the next antidepressant trial

<https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/jcpp.13202>

## ADAPT STUDY Adolescent Depression Antidepressant and Psychotherapy Trial

- **This study was for the really, really depressed kids** - it recruited nonresponders to a brief intervention (N=128) and those too ill for the brief intervention or already on medication (N=85) were evaluated, and those appropriate for entry (N=208) were randomly assigned 1:1 to an SSRI or an SSRI plus CBT.
- **Decent response rates, but lower than other studies, probably because they were the really depressed kids.** Response rates at 12 weeks were 41.6% in combined treatment and 43.6% in SSRI only treatment. The lower 12-week response rates relative to TADS may reflect the more severe baseline status of ADAPT subjects or may reflect the exclusion of brief intervention responders, which may have reduced the overall number of responders in the main trial (N=34).
- There was significant recovery at all time points in both arms. **The findings demonstrated no difference in treatment effectiveness for SSRI + CBT over SSRI only for the primary or secondary outcome measures at any time point.** This lack of difference held when baseline and treatment characteristics were taken into account (age, sex, severity, co-morbid characteristics, quality and quantity of CBT treatment, number of clinic attendances). The SSRI + CBT group was somewhat more expensive over the 28 weeks than the SSRI-only group ( $p = 0.057$ ) and no more cost-effective.
- **One big take away:** Modification is advised for those presenting with **moderate (6-8 symptoms) to severe depressions** (>8 symptoms) and in those with either overt suicidal risk and/or high levels of personal impairment. In such cases, **the time allowed for response to psychosocial interventions should be no more than 2-4 weeks, after which fluoxetine should be prescribed.**

<https://acamh.onlinelibrary.wiley.com/doi/abs/10.1111/jcpp.13202>

[https://www.researchgate.net/publication/5388172\\_A\\_randomised\\_controlled\\_trial\\_of\\_cognitive\\_behaviour\\_therapy\\_in\\_adolescents\\_with\\_major\\_depression\\_treated\\_by\\_selective\\_serotonin\\_reuptake\\_inhibitors\\_The\\_ADAPT\\_trial](https://www.researchgate.net/publication/5388172_A_randomised_controlled_trial_of_cognitive_behaviour_therapy_in_adolescents_with_major_depression_treated_by_selective_serotonin_reuptake_inhibitors_The_ADAPT_trial)



# Big Therapy Points From the Studies

“What is the role of psychotherapy in the treatment of teen depression?”

- In the TADS acute phase, CBT alone was not significantly more effective than medication management with placebo, except in those who had milder symptoms and shorter duration of illness and in those whose family had higher incomes.
- CBT and medication was better than medication alone on some outcomes but not for the more severely affected, where the addition of CBT to medication did not offer additional benefit.
- TADS did identify that the addition of CBT to medication may have a protective effect on the risk for suicidality observed in the medication alone group.
- In the ADAPT trial, the addition of CBT to medication did not significantly improve outcome and did not identify either a risk for increased suicidality in those on medication or a protective effect of CBT on suicidality.
- In the TORDIA acute phase, the groups getting combined treatment had an approximately 10% greater response rate, but this between-group difference did not persist to week 24.
- TORDIA, like ADAPT, did not find a signal for SSRI-associated suicidality or for the protective effects of CBT.
- There is probably a role for CBT alone for milder and shorter duration depressive illness and in those who might be considered ideal candidates for psychotherapy.
- However, it is very difficult to argue that CBT is not helpful at all for those with more severe depression, but the data do not support either the use of CBT as first-line treatment or the utility of CBT as an adjunct to medication for severely ill patients. The data from the ADAPT trial is particularly clear on this point.”

Walkup JT. Treatment of depressed adolescents. *Am J Psychiatry*. 2010;167(7):734-737.

doi:10.1176/appi.ajp.2010.10040566 <https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2010.10040566>



# Big Medication Points From the Studies

“What should we expect from medication treatment?”

- There is a group of depressed patients who have not been exposed to antidepressant medication who respond rapidly to treatment.
- Even among those who have failed one antidepressant, there is a group of patients who respond quickly to a switch in medication, even as early as week 6. T
- here is probably little reason why these teens should not routinely be identified and successfully treated to remission and recovery.
- In all of these clinical trials, the clinic visits were frequent and dose adjustments brisk. Maybe kids need more aggressive treatment rather than the normal “start low and go slow” approach.
- For those who are more complex and who may take longer to remit, it is probably more important to adjust dosing quickly and to use adequate doses to either establish the capacity to respond or to take the next step, a switch in antidepressant treatment.
- How long to wait before switching antidepressants is not fully established, but remitters usually demonstrate improvement by 8–10 weeks.
- Minimal response or failure to respond by 8–10 weeks does not preclude later improvement, but clinicians and patients should not let grass grow under their feet and should be prepared for the management of resistant depression, a la TORDIA, early in treatment.”


# Big Take Aways

Moderate/Severe Depression - Need meds and therapy to be most effective

If kids fail 1 SSRI - you can switch to another SSRI or venlafaxine (SNRI). The only difference is that venlafaxine is most likely to have more side effects

Meds and therapy are effective for depression

Meds do not contribute to suicidal actions and are considered safe



“Perhaps the most important step in improving outcomes for teen depression is to make sure that teens get to the clinic and get there early in their course of illness. There has been a lot of public chatter about how antidepressants are not effective or are harmful for teens that may be keeping teens and their families away from treatment. Investigator-initiated studies such as TADS, APADT, and TORDIA are unequivocally clear that treatment for teen depression that includes medication is effective and can be implemented safely.



Hopefully, broadly disseminating the results of TORDIA, TADS, and ADAPT can improve outcomes for depressed teens.”

# So when should you recommend meds

- *Moderate to severe depression (meds in combination with therapy most effective)*
- Patient unable to participate in therapy due to severity of symptoms
  - Prominent daily impairment or avoidance
- Symptoms that do not respond a few months of therapy
- Severe physiological symptoms
- Lack of availability of evidence-based therapy interventions

# Medications

- Takes 4-6 weeks to reach effectiveness. Should be gradually improving theoretically until that point.

**FIGURE 2 FDA-approved pediatric age ranges and indications for antidepressant medications**

|                           | Age Range in Years |   |   |   |    |    |    |    |    |    |    |    |
|---------------------------|--------------------|---|---|---|----|----|----|----|----|----|----|----|
|                           | 6                  | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Clomipramine <sup>2</sup> |                    |   |   |   |    |    |    |    |    |    |    |    |
| Duloxetine <sup>3</sup>   |                    |   |   |   |    |    |    |    |    |    |    |    |
| Escitalopram <sup>4</sup> |                    |   |   |   |    |    |    |    |    |    |    |    |
| Flouxetine <sup>a5</sup>  |                    |   |   |   |    |    |    |    |    |    |    |    |
| Fluvoxamine <sup>6</sup>  |                    |   |   |   |    |    |    |    |    |    |    |    |
| Imipramine <sup>7</sup>   |                    |   |   |   |    |    |    |    |    |    |    |    |
| Sertaline <sup>8</sup>    |                    |   |   |   |    |    |    |    |    |    |    |    |

■ MDD   
 ■ GAD   
 ■ OCD   
 ■ childhood enuresis

<sup>a</sup>Flouxetine is FDA approved for the treatments of MDD in pediatric patients aged to 18 years.

Abbreviation: FDA, Food and Drug Administration; GAD, generalized anxiety disorder; MDD, major depressive disorder; OCD, obsessive-compulsive disorder.

From Centers for Medicare and Medicaid Services.<sup>12</sup>

# Medications - Dosing

**Table 3. Recommended Initial and Maximum Dose in Children and Adolescents<sup>10-12</sup>**

|                                  | Recommended Initial Dose* (mg) | Recommended Maximum Dose* (mg) |
|----------------------------------|--------------------------------|--------------------------------|
| Citalopram                       | 10-20                          | 40                             |
| Escitalopram                     | 5-10                           | 20                             |
| Fluoxetine                       | 5-20                           | 20-80                          |
| Paroxetine** (immediate release) | 10-20                          | 50                             |
| Sertraline                       | 12.5-50                        | 200                            |

Doses for MDD or depression were used if listed and other indication doses were used if no MDD

Younger kids, more sensitive to meds, fearful of meds, more mild symptoms = start with the lower end of starting dose

Older kids, less sensitive to meds, more comfortable with taking meds, more severe depression = start with higher end of starting dose

Utilize shared decision making especially when you are unsure which dose to start with. Parents and kids get input.

## Characteristics of commonly used antidepressants<sup>a</sup>

|   | Pediatric            |                           |                 | Adult                |                           |
|---|----------------------|---------------------------|-----------------|----------------------|---------------------------|
|   | Starting dose (mg/d) | Typical dose range (mg/d) | FDA indications | Starting dose (mg/d) | Typical dose range (mg/d) |
| <b>Selective serotonin reuptake inhibitors</b>      |                      |                           |                 |                      |                           |
| Citalopram  | 10 to 20             | 20 to 40                  | —               | 20                   | 40                        |
| Escitalopram  | 5 to 10              | 10 to 40                  | MDD             | 10                   | 20 to 40                  |
| Fluoxetine  | 10 to 20             | 20 to 80                  | MDD, OCD        | 20                   | 20 to 80                  |
| Fluvoxamine   | 25 to 50             | 50 to 300                 | OCD             | 100 to 300           | 100 to 300                |
| Paroxetine  | 10 to 20             | 20 to 60                  | —               | 10 to 20             | 40 to 60                  |
| Sertraline  | 25 to 50             | 100 to 200                | OCD             | 50                   | 150 to 250                |
| <b>Serotonin-norepinephrine reuptake inhibitors</b> |                      |                           |                 |                      |                           |
| Venlafaxine   | 37.5                 | 150 to 225                | —               | 37.5 to 75           | 75 to 375                 |
| Duloxetine  | 30                   | 40 to 60                  | GAD             | 20 to 60             | 20 to 80                  |
| Desvenlafaxine                                      | 25                   | 25 to 100                 | —               | 50                   | 50 to 400                 |
| <b>Atypical antidepressants</b>                     |                      |                           |                 |                      |                           |
| Bupropion   | 100                  | 150 to 300                | —               | 100 to 150           | 150 to 300                |
| Mirtazapine   | 7.5 to 15            | 15 to 45                  | —               | 15                   | 15 to 45                  |
| Vilazodone  | Not studied          |                           | —               | 10                   | 10 to 40                  |
| Vortioxetine  | 5                    | 5 to 20                   | —               | 10                   | 10 to 80                  |
| <b>Tricyclic antidepressants</b>                    |                      |                           |                 |                      |                           |
| Clomipramine  | 25                   | 50 to 200                 | OCD             | 25                   | 100 to 250                |
| Desipramine   | 25 to 50             | 50 to 200                 | —               | 100 to 200           | 150 to 300                |
| Nortriptyline                                       | 30 to 50             | 30 to 150                 | —               | 100                  | 75 to 150                 |
| Imipramine  | 10                   | 50 to 150                 | Enuresis        | 25 to 75             | 150 to 300                |

<sup>a</sup>All information in this Table is based on the FDA-approved prescribing information for each medication.

GAD: generalized anxiety disorder; MDD: major depressive disorder; OCD: obsessive-compulsive disorder; PD: panic disorder; PTSD: posttraumatic stress disorder; SAD: social anxiety disorder

# When the first medication doesn't work

- Because more than **a third of kids** — between **55 and 65 percent** — don't respond to the initial antidepressant they take, it's not unusual to try a second medication. Kids who don't respond to the first often do find success with a different antidepressant. Therapy may also be added if it hasn't been tried.
- If a child does not have a clear response to the medication — around 40 percent reduction in symptoms — after six weeks, a switch should be considered.
- Examples:

Prozac 20mg started for a 15 year old. 6 weeks later there has been no improvement at all. You should switch the antidepressant. **You can switch to another SSRI OR you can switch to an SNRI (venlafaxine).** Kids only need to fail one SSRI to technically switch to venlafaxine. Going to venlafaxine vs another SSRI are equally as effective in studies - however venlafaxine does have higher risk for side effects and patients wanting to stop the medication.

Prozac 20mg started in a 15 year old. 6 weeks later maybe 20 percent improvement. Family thinks they may see a few better days, teen isn't sure but maybe feels a little bit better at times. Could be good weather, hanging out with friends, or meds. **Discuss increasing medication one more time with patient vs switching and use shared decision making.**

Prozac 20mg started in a 15 year old. 6 weeks later maybe 40 percent improvement. Parent and kid both notice some improvement and are surprised that things are a little bit better. Kid is getting out more, arguing less, getting out of bed easier. Still having SI and really down days sometimes though. **Increase prozac** to 30mg (or even 40mg potentially).



# Pros and Cons of how to switch - direct vs cross taper

**TABLE 2. Advantages and disadvantages of various switching strategies<sup>5,9</sup>**

| Switching approach  | Method   | Advantages   | Disadvantages  |
|---|--|--|--|
| Direct  | <ol style="list-style-type: none"> <li>1. Stop old antidepressant</li> <li>2. Start new antidepressant the next day at therapeutic dose (equivalent to old antidepressant)</li> </ol>  | No washout period required; may hasten response by attaining target dose more rapidly  | Limited use to specific drug classes; risk of drug interactions; may precipitate discontinuation syndrome, depending on agents utilized  |
| Cross-taper   | <ol style="list-style-type: none"> <li>1. Gradually reduce and stop old antidepressant</li> <li>2. At the same time, start new antidepressant at low dose while tapering down old antidepressant</li> <li>3. Either titrate new antidepressant to therapeutic dose while old agent is being tapered or increase new antidepressant to therapeutic dose once old antidepressant is stopped</li> </ol> | Reduces symptom recurrence; minimizes withdrawal symptoms; no washout period required, therefore beneficial for higher-risk patients | Risk of drug interactions; may take a long time to successfully taper old antidepressant, depending on how rapidly new antidepressant is titrated  |
| Modified cross-taper when antidepressant medications interact | <ol style="list-style-type: none"> <li>1. Gradually reduce and stop old antidepressant</li> <li>2. May consider a drug-free washout period over 2-4 days (or 2-5 weeks for MAOIs)</li> <li>3. Start new antidepressant at typical starting dose</li> </ol>   | Low risk of drug interactions  | Risk of withdrawal symptoms; washout period plus time for new antidepressant to reach efficacy increases risk of potentially life-threatening exacerbation of illness/relapse; may take a long time to successfully taper old antidepressant |

I usually cross taper over 1-3 weeks. I tell patient/parent the pros and the cons of faster taper vs slower and get their opinion.

I usually cross taper by cutting the dose in half/doubling each week.

When low dose and when patient is not sensitive to med changes - could consider just stopping. Example could cross taper prozac 20mg to 50mg sertraline or stop one and start another the next day.

*TABLE 2. Advantages and disadvantages of various switching strategies*

# Medications - First Line SSRIs

**Fluoxetine** has the most evidence in child psychiatry literature (it has been around longest and studied the most)

Pros: research, long half life, provides energy, weight neutral

Cons: can be activating

**Sertraline and escitalopram** have a great evidence base as well.

Pros: more 'mellow', calming, interacts with fewer meds

Cons: less weight neutral for many

# What is the only SSRI contraindicated?

## Paroxetine/Paxil

Only indicated if child comes to you and is doing well on this. Otherwise it is the only medication which has evidence that it increases suicidal gestures in children/adolescents

**PLEASE DON'T START THIS** in children and adolescents.

# The (in)famous black box warning

SSRIs increase suicidal ideation in kids.

Previous studies are old - showed suicidal ideation went up by 1-2% in the population

No increase in gestures, just thoughts

SSRIs are thought to be protective against suicide once maintenance dose achieved

If there are NEW or CONCERNING suicidal thoughts, the medication can be stopped and parent should follow up with doctor

# Common side effects

Headaches, stomachaches, general GI problems, sexual SE, weight gain, sleepiness

Behavioral activation - way more commonly seen in kids than adults. Can be a sense of restlessness, agitation, anxiety. The younger the kids the more likely to be behavioral problems. Wait it out if possible but if the symptoms are too severe go down on the dose

# Antidepressants and the growing brain

“We conclude that there is currently little evidence to indicate that the human adolescent brain is at developmental risk from SSRIs.”

<https://pubmed.ncbi.nlm.nih.gov/25744620>

## Depression and the growing brain

More and more studies are showing that depression has an effect on the brain at all ages. The main finding is a decrease in gray matter.

“According to the study, which followed children diagnosed with major depressive disorder between the ages of three and six, early childhood depression is associated with disruptions in brain development that continue into early adolescence. Periodic brain imaging revealed that in comparison with children unaffected by the disorder, children who had suffered from depression in their preschool years had lower volumes of gray matter—which contains the neural connections through which brain cells communicate—in the cortex of their brains. This change may have a lasting effect on emotional processing and make a child vulnerable to problems later in life, the researchers say.”

<https://www.bbrfoundation.org/content/early-childhood-depression-may-impact-brain-development-later-years>

# When to stop antidepressants

Remission of symptoms for 6-12 months

If multiple depressive disorders in the past, if they have been treatment resistant, if multiple suicide attempts then SSRIs may be beneficial for longer

This is usually done through shared decision making whether or not to stay on



# DMDD is different for Treatment

Research is still ongoing. Right now research indicates that treating comorbid ADHD with stimulants is the best way to treat DMDD. There is some promising evidence for SSRIs.

However any medication that would typically be used for the symptoms could be used. For example if aggression is a main symptom, consider an atypical antipsychotic



# **The parent part**



# **The magic of psychoeducation...**

**It is not only good for you to  
know, but good for them to  
know. Psychoeducation  
provides knowledge,  
prevention, and intervention**

## Models of psychoeducation

- ▶ **Information model**

- ▶ The focus is on providing families knowledge about psychiatric illness and their management.

- ▶ **Skill training model**

- ▶ The skill training model focusses on developing certain skills so that the family members can manage the illness more effectively.

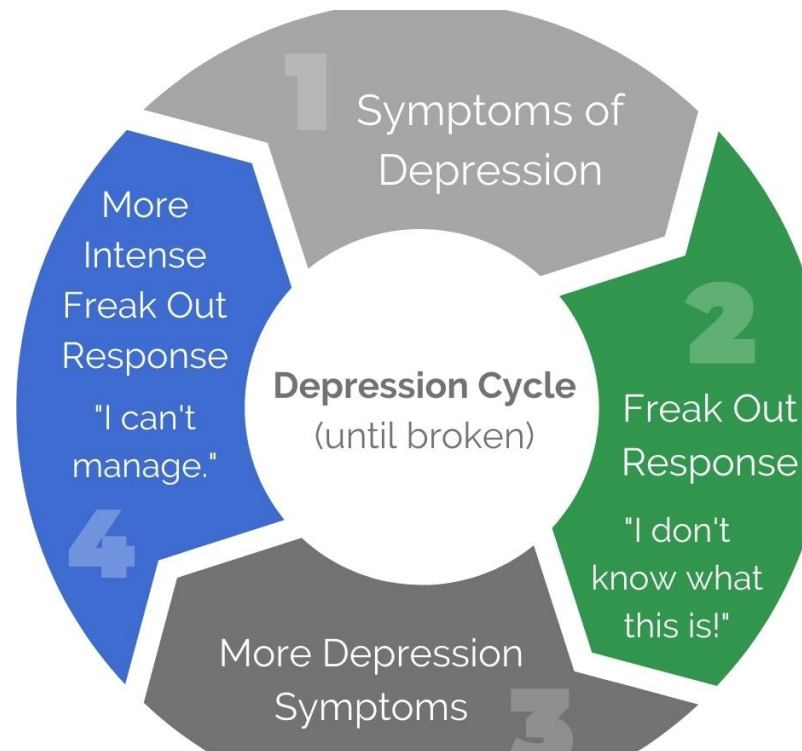
- ▶ **Supportive model**

- ▶ The supportive model mainly involves taking help of support groups for engaging the family members of the patients in sharing their feelings.

- ▶ **Comprehensive model**

- ▶ The comprehensive model uses a combination of the previous three models

# Psychoeducation can help break the cycle



# PSYCHOEDUCATION

Psychoeducation encourages patients to become experts on their own depressive disorder. A person can make optimal therapy decisions more easily in collaboration with their treating specialist when they have an understanding of their symptoms, the course of their disorder and the possible treatment options.

## WHY PSYCHOEDUCATION?



### GOAL

To promote competent, independent management of the disorder and to promote collaboration between the patient and their treating healthcare specialists.

### EFFECT

Survival curves for recurrence with depression



Together, psychoeducation and psychiatric therapy can result in significantly better treatment outcomes.

## HOW TO INVOLVE THE PATIENT IN DEPRESSION THERAPY



The patient should receive evidence-based explanations of the symptoms, course and treatment of depression.



Shared decision-making: the psychiatrist and patient should explore potential treatment strategies together.



Psychoeducation results in increased patient knowledge and improved collaboration with treating healthcare specialists.

Source:



## Challenges to parent recognition of their child's depression

% of parents citing barrier

Hard to tell normal ups and downs from depression 40%

Youth is good at hiding feelings 30%

We don't talk about feelings much 14%

Don't spend much time with my youth 7%

Not sure what signs of depression are 4%



Source: C.S. Mott Children's Hospital National Poll on Children's Health, 2019

## Highlights

1 in 4 parents say their middle or high school age-child knows a peer or classmate with depression.

Though most parents are confident they would recognize depression in their middle or high school-age child, two-thirds cite barriers to recognizing signs and symptoms.

7 in 10 parents think schools should screen all students for depression; 6th grade is the most preferred age to begin depression screening.



# When the parent or patient disagrees with the diagnosis

What I do:

1. Ask them why.
2. Admit maybe I did miss something and investigate if they bring new info to light.
3. I continue to disagree then I tell them this is from my perspective of the clinical presentation at this time. A snapshot of the presentation, as much as we try can't always get absolutely everything going on in it
4. I always let them know things can change and also I can change my mind. It helps to be curious, open minded and willing to see all sides.
5. If they really don't agree and we are at an impasse then I sometimes refer or reach out to other sources to get info (maybe send to psychology or check in with the school)

Example: Maybe a parent keeps thinking their child has depression but I think it's anxiety and inattentive ADHD. I tell the parent I do not see enough to diagnose depression now but it doesn't rule it out for the future and also if I'm just seeing the kid for the first time, I admit I need to get to know them and could change what I think later.

# System psychoeducation

The Mental Health world is very confusing. There are a lot of blurry lines and often it comes down to what resources are local. PCPS can help by talking to families about the different roles of mental health providers - psychiatrist, vs psychologist vs therapist.

Families need help with addressing gaps in care, miscommunication and advocacy. It helps to walk them through how to talk to professionals, when to trust professionals, how to ask question and so on. They benefit from extra coaching and guidance.

For example: could the patient have returned to the therapist? Could the parent have asked to be more involved with the patient's therapist? Could the parent question what type of therapy is being done and make sure they are all on the same page for problems and treatment?

# Prevention of onset or recurrence of depression

1. Improve risk factors such as sub-syndromal symptoms of depression, underlying psychiatric disorders (anxiety), ongoing stressful situations, parental psychopathology, marital discord, substance abuse; treat depressed moms early and vigorously
2. Stop the cycle of: depression; that makes child irritable; increases interpersonal conflict; other distance themselves from depressed child; loneliness and lack of support worsens
3. Help the parents treat their own mental health problems. Anywhere from getting them help so that they can see a psychiatrist or therapist or even have them learn coping skills so they can practice them in front of their children and role model.



# **The school part**

# School staff can

Offer support and encouragement

Let them know when you see small improvements or effort even if small

Encourage their interests

Incorporate mindfulness and physical exercise in the classrooms in small chunks

Offer to be there if they need something or need to talk

Provide psychoeducation

Remind kids we have real treatments and people can get better

Connect them to others. Encourage healthy relationships. Offer resources and reach out to others for them

# Something everyone can do - Applying the QPR method.

Example from usf-



QPR

## Question:

1. Have you been unhappy or overwhelmed lately?
2. I'm worried about you and would like to know if I can help.
3. Are you thinking about hurting yourself?

## Persuade:

1. Are you willing to get support from a counselor or someone else?
2. Can I find you help?

## Refer:

**Students:** Would you be willing to walk to CAPS with me or call 415.422.6352 to make an appointment?

**Faculty/Staff:** Would you be willing to call CONCERN at 1800.344.4222 for help finding a therapist?



# What you can do to start small

- Ask - Are you Depressed? Yes and I don't know are positive screeners. No is no for the most part
- Give a Phq9 then review with patient and/or go over SIGECAPS
- Ask - are you suicidal? do you want to die? how you ask isn't as important as just asking
- Provide hope
  - using psychoeducation - we have lots of treatments and they are effective. We will get you feeling better
  - Using positive statements "I want you to live"
- Help parents get their own mental health treatment
- coach parents on using coping skills for themselves so that they can practice in front of/with their child
- Provide psychoeducation in general about depression. Knowledge is power and can help with treatment of depression in itself
- Provide tips for a safer home environment - lock up meds, dispose of unnecessary meds, lock up or remove guns
- know how and when to prescribe antidepressants
- consider your own views on depression, medications and suicide and then how they might impact your treatment



# Some Resources



[ONLINE TRAINING](#)

[IN-PERSON TRAINING](#)

[BECOME AN INSTRUCTOR](#)

[ABOUT QPR](#)

Question.  
Persuade.  
Refer.

*Three steps anyone can learn  
to help prevent suicide.*

**HOPE**  
SQUAD

QPR and Hope Squad® partner to prevent suicide

[Read More](#)



**The Forever Decision**

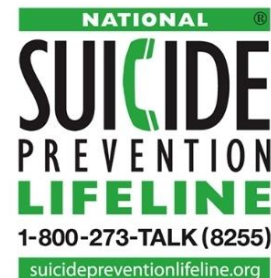
PAUL G. QUINNETT

Free download of **Paul Quinnett's** book

[Download PDF](#)



## The National Suicide Prevention Lifeline is now: 988 Suicide and Crisis Lifeline



988 has been designated as the new three-digit dialing code that will route callers to the National Suicide Prevention Lifeline. While some areas may be currently able to connect to the Lifeline by dialing 988, this dialing code will be available to everyone across the United States starting on July 16, 2022.

# Optional reading

Child and Adolescent Depression: A Review of Theories, Evaluation Instruments, Prevention Programs, and Treatments

<https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00543/full>

How to go about interviewing psychiatric symptoms in PCP settings

[The Psychiatric Review of Symptoms: A Screening Tool for Family Physicians | AAFP](#)

Depression in Preschoolers -

<https://www.contemporarypediatrics.com/view/diagnosing-depression-preschoolers>

Medication Dosing

<https://www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/Medicaid-Integrity-Education/Pharmacy-Education-Materials/Downloads/ad-pediatric-dosingchart11-14.pdf>

Learning about prevention in schools

<https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366%2819%2930440-7/fulltext>



# Thank you

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